



FINAL EVALUATION REPORT

AGRICULTURE AND FISHERIES
EXTENSION (AFE) RESULTS-
BASED MONITORING AND
EVALUATION (RBME) STUDY



2024

Submitted by:
Asian Social Project Services, Inc.

Submitted to:
Agricultural Training Institute



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November 12, 2024

ENGR. REMELYN R. RECOTER, MNSA, CESO III

Director IV

Agricultural Training Institute

ATI Bldg., Elliptical Road, Diliman, Quezon City

Subject: Submission of Deliverable 4: Final Evaluation Report for Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) Study

Dear **Director Recoter**:

Greetings from the Asian Social Project Services, Inc. (ASPSI)!

As part of ASPSI's contractual obligation for the above project, we are pleased to submit the attached revised Deliverable 4. Final Evaluation Report for Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) Study. This report contains the executive summary, rationale and objectives, review of literatures, methodology, results and discussions, and summary, conclusions and recommendations, which considered the comments and suggestions on the Final Evaluation Report we received from ATI last November 11, 2024.

For easy reference, please see below the matrix showing ATI comments and ASPSI response included in the report.

We hope that this Deliverable 4 merits your kind approval.

Thank you very much.

Very truly yours,

ERNESTO O. BROWN, PhD

Project Team Leader

Noted by:

JUVY C. ROCAMORA

President, ASPSI

Response to ATI comments on the Final Evaluation Report for the AFE RBME Study

ATI Comment	ASPSI Response
<p>For Tables 6 and 7, may we request that the results of the current study be separated from the data of ATI in-house studies, and that a comparative analysis of the results be provided.</p>	<p>Table 6 (consolidated AFE results indicators for 2018-2022) was deleted in the report as this has no more value to the discussion. The yearly AFE results indicators presented in Table 7 (Table 6 in the revised final report) will suffice.</p> <p>The AFE results indicators for 2018-2022 (Table 6) are based from the 2018-2022 survey result, except indicators 1,2, and 3, which are based from the ATI RBME reports.</p> <p>To provide some insights, recommendations for the generation of data for the AFE results indicators were included in the final report (see Table 7).</p>
<p>Despite having the sample size for each year, we still could not find any explanation for the yearly results from 2018 to 2022 or a comparative analysis of the current study.</p>	<p>Comparative analysis of the results of the AFE RBME study was included in the final report (see page 14).</p>

**Agriculture and Fisheries Extension (AFE)
Results-Based Monitoring and Evaluation (RBME) Study**

**AGRICULTURAL TRAINING INSTITUTE
(ATI)**

**Deliverable 4
FINAL EVALUATION REPORT**

**ASIAN SOCIAL PROJECT SERVICES, INC.
(ASPSI)**

November 12, 2024

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LIST OF ACRONYMS

ATI	Agricultural Training Institute
AEW	Agricultural Extension Worker
AFE	Agriculture and Fisheries Extension
BASC	Bulacan Agricultural State College
CALABARZON	Cavite, Laguna, Batangas, Rizal, and Quezon
CAPI	Computer Assisted Personal Interviewing
CAR	Cordillera Administrative Region
CBSUA	Central Bicol State University of Agriculture
COS	Contract of Service
DA	Department of Agriculture
DAC	Development Assistance Committee
DAP	Development Academy of the Philippines
DBM	Department of Budget and Management
DENR	Department of Environment and Natural Resource
DIME	Digital Imaging for Monitoring and Evaluation
DOST	Department of Science and Technology
DSWD	Department of Social Welfare and Development
DTI	Department of Trade and Industry
FAO	Food and Agriculture Organization of the United Nations
GAA	General Appropriations Act
GAHP	Good Animal Husbandry Practice
GAP	Good Agricultural Practice
GMP	Good Manufacturing Practice
GSIS	Government Service Insurance System
HACCP	Hazard Analysis Critical Control Points
IEC	Information, Education, and Communication materials
ILO	International Labor Organization
IPM	Integrated Pest Management
ITCPH	International Training Center on Pig Husbandry
JO	Job Order
KII	Key Informant Interviews
KMME	Kapatid Mentor ME
KOICA	Korea International Cooperation Agency
LGU	Local Government Unit
M&E	Monitoring and Evaluation
MAO	Municipal Agriculture Office
MIMAROPA	Mindoro Occidental, Mindoro Oriental, Marinduque, Romblon, and Palawan
MSME	Micro, Small, and Medium Enterprise
NAT	National Achievement Test
NC	National Competency
NCC	National Competency Certificate
NEDA	National Economic and Development Authority
NEPF	National Evaluation Policy Framework
NGAs	National Government Agencies
NGO	Non-Governmental Organization
OA	Organic Agriculture

OCA	Organizational Capacity Assessment
OECD	Organization for Economic Co-operation and Development
Pag-IBIG	Pagtutulungan sa Kinabukasan, Ikaw, Bangko, Industriya at Gobyerno
PAO	Provincial Agriculture Office
PAPs	Programs, Activities, Projects
PDP	Philippine Development Plan
PhilHealth	Philippine Health Insurance Corporation
PMEU	Planning, Monitoring and Evaluation Unit
PO	Private Organization
RBM	Results-Based Management
RBME	Results Based Monitoring and Evaluation
RCEF	Rice Competitiveness Enhancement Fund
SDGs	Sustainable Development Goals
SOCCSKSARGEN	South Cotabato, Cotabato, Sultan Kudarat, Sarangani, and General Santos City
SSS	Social Security System
SUCs	State Universities and Colleges
TESDA	Technical Education and Skills Development Authority
TNA	Training Needs Assessment
TOC	Theory of Change
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development

EXECUTIVE SUMMARY

The study was conducted to evaluate the Agriculture and Fisheries Extension (AFE) Results Based Monitoring and Evaluation (RBME) System. The system consists of a theory of change (ToC) and results framework of 28 indicators designed to measure whether the DA-ATI interventions in terms of programs, activities and projects (PAPs) translate to higher order outcomes and impact. The evaluation specifically aimed at reviewing and enhancing the results framework; identifying issues and challenges encountered during implementation; and recommending policy options to further improve the DA-ATI programs.

The study employed concurrent mixed method approach, which involved parallel collection of both quantitative and qualitative data and convergent analysis to provide equal weights on the quantitative and qualitative aspects of project performance and impact. To determine the results of DA-ATI's PAPs, the study validated the RBME results in the field by reviewing outputs and outcomes based on OECD-DAC criteria of relevance, effectiveness, efficiency, sustainability, and impact.

Descriptive analysis was employed to summarize and describe the main features of the dataset such as central tendency, dispersion and distribution. Inferential analysis was used to determine whether significant differences exist between the variable means in two time periods (paired t-test for before and after) and binary logistic regression to determine the factors affecting the adoption of the technologies and practices promoted by DA-ATI. Thematic analysis was employed as a qualitative method to identify, analyze and build narratives on themes emerging from the data.

The study found limited uniformity in the conceptual understanding and operationalization of the AFE RBME across regions, especially its ToC and Results Framework. While some staff particularly those involved in the earlier workshops were familiar with the System, a number of regional staff particularly those who were newly hired lack formal orientation and understanding of the System. The implementation across regions followed a structured yet diverse approach based on central guidelines but adapted to each region's specific needs. However, all regional centers appreciate the importance of RBME especially in evaluating the effectiveness of DA-ATI interventions, determination of technology adoption rates and the achievement of higher order outcomes and impact. It is also an important tool in determining stakeholder's perception and feedback about the various programs being implemented.

The various regions employed different approaches to RBME implementation depending on the logistical challenges and available resources. Regional centers varied widely in terms of capacity to manage the System. Some regional centers faced manpower shortages and lack of expertise, indicating a need for more staff and training to support the growing demands of RBME. Other regional centers have addressed capacity issues by outsourcing data collection to academic institutions to cope with the limited capacity of the Center and also to avoid bias. In regions where data collection was done by the Center's M&E officers, assistance was sought from agricultural extension workers to serve as enumerators.

A review of the RBME reports from 2016-2017 and 2018-2022 show that the values for the set of indicators on increase access declined in the latter period largely due to the pandemic restrictions, while indicators measuring improved attitudes, skills and knowledge of clients remained stable with 90% of clients reporting improvement in knowledge and high satisfaction level with the interventions provided. Indicators on client productivity including farm

diversification, value adding and increased income remained consistent in both periods. As in other M&E systems, the most important concern in the AFE RBME system is the credibility of the results generated from this platform. In general, the key informants interviewed as part of the study still believe that the system is robust and the integrity of the data collected remains solid.

The main challenges in AFE RBME implementation revolved around the inadequacy of manpower. The strategy of outsourcing the survey activities is being employed already by a number of regional centers, albeit this cannot be relied upon completely as financial resources to fund this are also limited. The hiring of contractual staff to complement the few regular staff somehow works, but the smooth implementation of the program is affected as it is difficult to build institutional knowledge of the System due to high turnover rate of contractual personnel.

The study also found that the DA-ATI beneficiaries are just as satisfied with the service they received as those received from other government agencies. They reported ease in accessing the extension services. In fact, DA-ATI fares better than other National Government Agencies (NGAs) and LGUs as fewer respondents reported having difficulty in accessing the services provided. As could be expected however, the private sector extension service providers (agro-chemical companies) enjoy the highest client satisfaction when pitted against government agencies, including DA-ATI. These private players are more operationally agile unlike government agencies, which have to comply with government prescribed regulations in their operation.

A significant number of beneficiaries (40%) reported to have adopted the technologies/improved practices they learned from the various trainings of DA-ATI. Such adoption resulted to increased yield as reported by almost 35% of beneficiaries, improved quality of plants and animals (23%), less pests and diseases (20%) and lower input use (15%). Those who did not adopt the technologies reported they were constrained by high input prices (21%), non-availability of inputs (15%), difficulty in application (7%), and irrelevance of the technology in the particular circumstances of their farms (32%).

Majority of the beneficiaries claimed the ATI interventions helped them develop skills that are empowering and make them more resilient. These include skills on business management, workforce management and record keeping; communication and negotiation as well as mindset improvement. The interventions also covered market development and expansion, social media or online selling and technical skills on value adding (e.g., meat and fruit processing), farm management, product development, certifications, as well as new technical skills such as artificial insemination and organic agriculture, among others.

The study determined the level of adoption for the various types of technologies promoted by DA-ATI through trainings and other platforms. The levels of adoption were categorized into three: high, partial and non-adoption. Results show that there is an almost equal percentage of beneficiaries reporting full and partial adoption, with minor percentages reporting non-adoption. The study found very high adoption index (0.65 to 0.80) regardless of commodity indicating the effectiveness of the DA-ATI interventions in influencing farmers to shift to technologies and practices that can improve farm performance.

The results of the binary logistic regression analysis indicate that several factors, including sex, commodity type, type of ATI intervention, and specific ATI regional centers (Ilocos Region, Western Visayas, Davao, and SOCCSKSARGEN), significantly influence technology adoption. Specifically, female farmers are 37.83% less likely to adopt the technology or practice compared to male farmers. Additionally, those who received interventions focused on non-crop commodities from ATI are 54.25% less likely to adopt the technology or practice than their counterparts who received crop-focused interventions.

Moreover, farmers who participated in both training and other interventions from ATI are 2.0888 times more likely to adopt the technology or practice than those who attended training only. Farmers trained in the ATI-Northern Mindanao show an 8.8403 times higher likelihood of adoption compared to those trained in ATI-Cordilleras. Similarly, those trained in ATI-Central Luzon are 8.6481 times more likely to adopt the technology or practice than those from ATI-Cordilleras.

Conversely, farmers trained in ATI-Davao are 1.4631 times less likely to adopt the technology or practice compared to those trained in ATI-Cordilleras, and farmers trained in ATI-SOCCSKSARGEN are 7.5685 times less likely to adopt compared to those trained in ATI-Cordilleras.

Conclusions and Recommendation

The study concludes that the AFE RBME System has generally been relevant and effective as evidenced by the favorable feedback from its beneficiaries, the high rate of adoption of technologies/practices promoted and enhanced empowerment and resilience of its clients. The System continues to be perceived as robust and the integrity of the data collection process remains solid. However, the system is beset with operational issues which could undermine efficiency and sustainability. Among others, these include the lack of uniformity in the conceptual understanding of the System and its elements, primarily the ToC and results framework; limited technical capacity to manage the System; and the persistent manpower shortages being experienced in most regional offices. The disparity in regional capacities to effect technology adoption as empirically validated by the binary logistic regression model, probably reflects already the regional disparity in the capacity to manage the AFE RBME System.

Capacity issues, particularly related to manpower and limited expertise, figured prominently as among the significant barriers to more effective operationalization of the AFE-RBME System. Some regional centers addressed this by outsourcing data collection to academic institutions, while others utilized agricultural extension workers as enumerators. However, reliance on outsourcing is limited by financial constraints, and the high turnover of contractual staff undermines institutional knowledge of the system.

The study recommends the following measures and action points:

Recommendations

1. Conduct an in-depth organizational capacity assessment (OCA) to determine capacity gaps and disparity across regional centers in the management and implementation of the AFE-RBME System. In addition to gauging organizational and technical capacity, the assessment should consider geographical coverage in terms of size and accessibility as these are important determinants of the cost of data collection.

2. Strengthen staff capacity and training. A comprehensive orientation and training program should be developed and implemented for all ATI staff especially the new ones including contractual staff. A periodic (e.g, annual or biennial) ATI wide conference involving the regional staff handling the RBME System should be held for the review of the System and sharing of lessons learned and best practices.
3. Continual improvement should be pursued by regularly examining the ToC, results framework, and basic assumptions of the RBME System. While the study found these elements as still logical and feasible, constant assessment will enable updating the various elements to keep up with the challenges emerging in the course of implementation.
4. Employ more gender responsive approaches in the delivery of DA-ATI interventions. The study found that female beneficiaries are 39% less likely to apply the technologies promoted compared to male beneficiaries. Such disparity highlights the need for designing and implementing interventions more relevant to female farmers.
5. Strengthen the role of DA-ATI in the provision of input support. The study found that technology adoption is constrained by high input cost and accessibility. While DA-ATI is primarily focused on knowledge dissemination through trainings and other extension service modalities, the Institute may consider closely collaborating with other government agencies and private partners for the provision of input support and enhancing the accessibility of inputs especially for small farmers.
6. Expand and sustain interventions designed to enhance empowerment and resilience. The study found that the DA-ATI interventions have considerable positive impact on empowerment and resilience of farmers, with many expressing higher confidence in dealing with crisis situations. As agriculture-based livelihoods are inherently vulnerable to various shocks, the interventions proven to improve empowerment and resilience should be expanded and sustained. These include interventions to improve market access, certification and value adding, among others.

Specific Action Points

The specific action points are detailed in the conclusion/recommendation section of the report and include among others, the engagement of an independent consultant or academic institution to conduct the OCA, the designing of a comprehensive training and orientation program, instituting a biennial review cycle for the RBME, creation of gendered targeted training program, and the development of formal partnerships with agricultural input providers.

A. RATIONALE AND OBJECTIVES

The Agriculture and Training Institute (ATI) is the training arm of the Department of Agriculture (DA) mandated to lead in the formulation of national agriculture and fisheries extension (AFE) program; prepare an integrated plan for publicly- funded training programs in agriculture and fisheries; formulate and issue guidelines in planning, implementing, monitoring and evaluating AFE programs; and assist the local government units extension system by improving their effectiveness and efficiency through capability building and complementary extension activities such as technical assistance, training of LGU personnel, improvement of physical facilities, extension cum research and information support services.

To properly and systematically account for the results of the Institute’s policies, programs, projects and activities, ATI uses its AFE Results-Based Monitoring and Evaluation (RBME) System. The system strengthens the transparency and accountability aspects of ATI’s operation by providing a mechanism to ascertain whether resources used are well spent and have attained their intended results. The system also helped promote learning in the organization as it demonstrates the why’s and how’s of the success of the interventions, thereby informing policy and program planning.

The AFE RBME system involves tracing how ATI interventions and activities lead to immediate, intermediate and long-term outcomes, and how these contribute to the attainment of societal goals of food security, poverty reduction and increased social equity (**Table 1**). A total of 28 indicators were identified to provide evidence to the attainment of these outputs and outcomes (**Annex 1**). Annual data collection, processing and analysis were done in the ATI Training Centers.

Table 1. The AFE Theory of Change Model

INPUT	ACTIVITIES	OUTPUT	IMMEDIATE	INTERMEDIATE	LONG TERM	SOCIETAL GOALS
Manpower	Provide knowledge products and services	Knowledge products and services provided	Increased access to interventions	Increased productivity of clients	Increased competitiveness of clients	Food security
Money	Provide capability building activities	Capability building activities provided	Improved attitude, skills, and knowledge of clients	Increased empowerment of clients		Poverty reduction
Machineries	Establish partnerships	Partnerships established		Improved provision of interventions		Increased resiliency of clients
Methods	Develop AFE innovations	AFE innovations developed				
Time	Provide climate change initiatives	Climate change initiatives provided				
	Provide enabling environment	Enabling environment provided				

With the RBME system fully operationalized at ATI, it would be useful to determine the results of the ATI programs, activities and projects (PAPs) as gauged against the set of indicators/parameters prescribed in its RBME system. Such evaluation would not only provide evidence-based demonstration of the relevance and overall significance of ATI's PAPs, but may generate important insights on how to further improve ATI's RBME system.

In general, the study aimed to determine the results of the ATI programs, projects and activities based on the existing parameters from the AFE RBME ToC model. Specifically, it aimed to:

1. Review and enhance the AFE results framework, including the guidelines and tools;
2. Identify issues and challenges encountered during the implementation; and
3. Recommend policy options to further improve the ATI programs.

B. REVIEW OF LITERATURES

Results-based monitoring and evaluation (RBME) is a framework that helps development practitioners and stakeholders to measure and assess the performance and impact of their policies, programs, and projects. It is based on the principles of results-based management (RBM), which aims to improve decision-making, accountability, and learning by focusing on the outcomes and impacts of interventions rather than the inputs, activities, and outputs.

The National Economic and Development Authority (NEDA) has developed a comprehensive guide for government agencies on how to design, conduct and use evaluation to improve public sector performance and accountability. It introduces the National Evaluation Policy Framework (NEPF) which aims to institutionalize a culture of evaluation in the government (NEDA and DBM, July 2010). Along this is a chapter from the Philippine Development Plan (PDP) 2023–2028 titled “Plan Implementation, Monitoring, and Evaluation”, which outlines the strategies, mechanisms, and tools for implementing, monitoring, and evaluating the PDP 2023–2028, the medium-term development plan of the country. It also discusses the role of various stakeholders, including the private sector and civil society, in ensuring the achievement of the PDP goals and objectives. It also explains how the results-based M&E can help to enhance the relevance, effectiveness, efficiency, impact, and sustainability of interventions (PDP 2023-28, Chapter 16).

Moreover, a project by the Development Academy of the Philippines (DAP) called Project DIME, which stands for Digital Imaging for Monitoring and Evaluation utilizes existing technologies such as satellite imagery, drones, and geotagging for M&E of government projects and also engages citizens and civic organizations through participatory monitoring (DAP Project DIME, 2021). The Department of Social Welfare and Development (DSWD) implemented its national monitoring and evaluation systems, social protection and the SDGs and highlights the experiences, challenges and the way forward for DSWD in setting up its monitoring and evaluation system. The initial years were met with resistance and even indifference as officials were yet to be convinced and human capacities and processes were not yet developed to implement such reforms. Results-based thinking had to be integrated not just into M&E, but more so into the DSWD management processes from planning to budgeting and performance management, to be able to sustain the reform. International development partners played an important role but political will from officials and staff was most critical. In the advent of the Sustainable Development Goals (SDGs), new challenges arise not just for the DSWD M&E system but for the whole of national government (Alday and Sebastian, 2017).

A report by the World Bank (2019) titled “PHILIPPINES: Assessing the Effectiveness of MSME and Entrepreneurship Support” evaluated the MSME programs implemented by the Department of Trade and Industry (DTI) and the Department of Science and Technology (DOST) using a RBME framework. It also provides recommendations for improving the design, implementation, and coordination of MSME support policies and programs. Also, a report by UNDP (2021) titled “Evaluability Assessment of the Micro, Small, and Medium Enterprise (MSME) Development Plan and Priority Programs under the MSME Development Plan with a Process Evaluation of Government Support” presented the findings of an evaluation of three MSME programs: Kapatid Mentor ME (KMME), Pondo sa Pagbabago at Pag-asenso (P3), and Negosyo Center. It uses a RBME framework based on the ToC, evaluability assessment, and impact pathway analysis.

A study by Gumz and Parth (2007) compared the project monitoring practices in three industry sectors: government, NGOs, and construction. They proposed a nine-step process for monitoring projects using an RBME framework, and discussed the benefits and challenges of applying it. A study by Kusek and Rist (2004) presented a comprehensive handbook for development practitioners on how to design and build an RBME system. They outlined a ten-step model that covers the readiness assessment, the design, the management, and the sustainability of such systems.

Another study by FAO (2019) provided an overview of the concepts and methods of planning, monitoring, and evaluation for learning and performance improvement in agricultural development. It explained how RBME can help to enhance the relevance, effectiveness, efficiency, impact, and sustainability of interventions. A research study by Okello (2021) examined the nexus between M&E data management and project performance with a focus on infrastructural projects. They analyzed relevant models, theories, and empirical literature on M&E data management and project performance, and suggested some best practices for improving data quality and utilization.

The validation study titled Monitoring and Evaluation Framework to Track and Assess the Results of Interventions Aimed at Changing Attitudes and Social Norms Towards Children with Disabilities in Europe and Central Asia (2019) aims to track and assess the results of interventions aimed at changing discriminatory attitudes and social norms towards children with disabilities. It is part of a package of materials developed by Drexel University and the UNICEF Europe and Central Asia Regional Office. It provides guidance on how to measure changes in attitudes and social norms using quantitative and qualitative methods. On the other hand, the Philippines: National Climate Change Action Plan RBME System aims to monitor and evaluate the progress and impacts of the climate change adaptation and mitigation interventions in the country. It also discusses the institutional arrangements, data sources, and challenges for implementing the system.

The project titled Monitoring and Evaluation Tool of the Department of Education in the Case of Iligan City Division Philippines describes and analyzes the M&E tool used by the Department of Education in Iligan City, which is based on the results-based performance management system (Salvador and Canencia, 2015). It also evaluates the effectiveness, efficiency, and usefulness of the tool for planning, budgeting, and decision-making. The study used the descriptive – evaluative method and analyzed both descriptive and inferential statistics. General findings revealed that monitoring and evaluation tool was not piloted in the field at the same time performance indicators were not known by the teachers. It is also noted that teacher’s overall very satisfactory (VS) rating does not correspond to National Achievement Test (NAT)

rating for the last (4) four years. Subsequently, a localized Monitoring and Evaluation tool was created with proper information dissemination and piloting so that teachers are aware of what to do during the class observation. Moreover, monitoring and evaluation must come up with skills indicators that would measure the skills transfer to ensure performance development of students that can compete globally.

C. METHODOLOGY

1. CONCEPTUAL FRAMEWORK

Viewed against the RBME framework employed in most development programs (**Figure 1**), the AFE RBME study may be situated along the evaluation stage, specifically the stage of managing and using evaluation results. In the case of AFE RBME study, evaluation can yield a number of valuable insights on the robustness of the design logic, the appropriateness of the strategies and the extent by which stakeholders subscribe to such strategies, among others. The insights and specific lessons from the evaluation can then be used for specific adjustments along the RBME cycle for a true results-based monitoring and evaluation of the plans/programs.

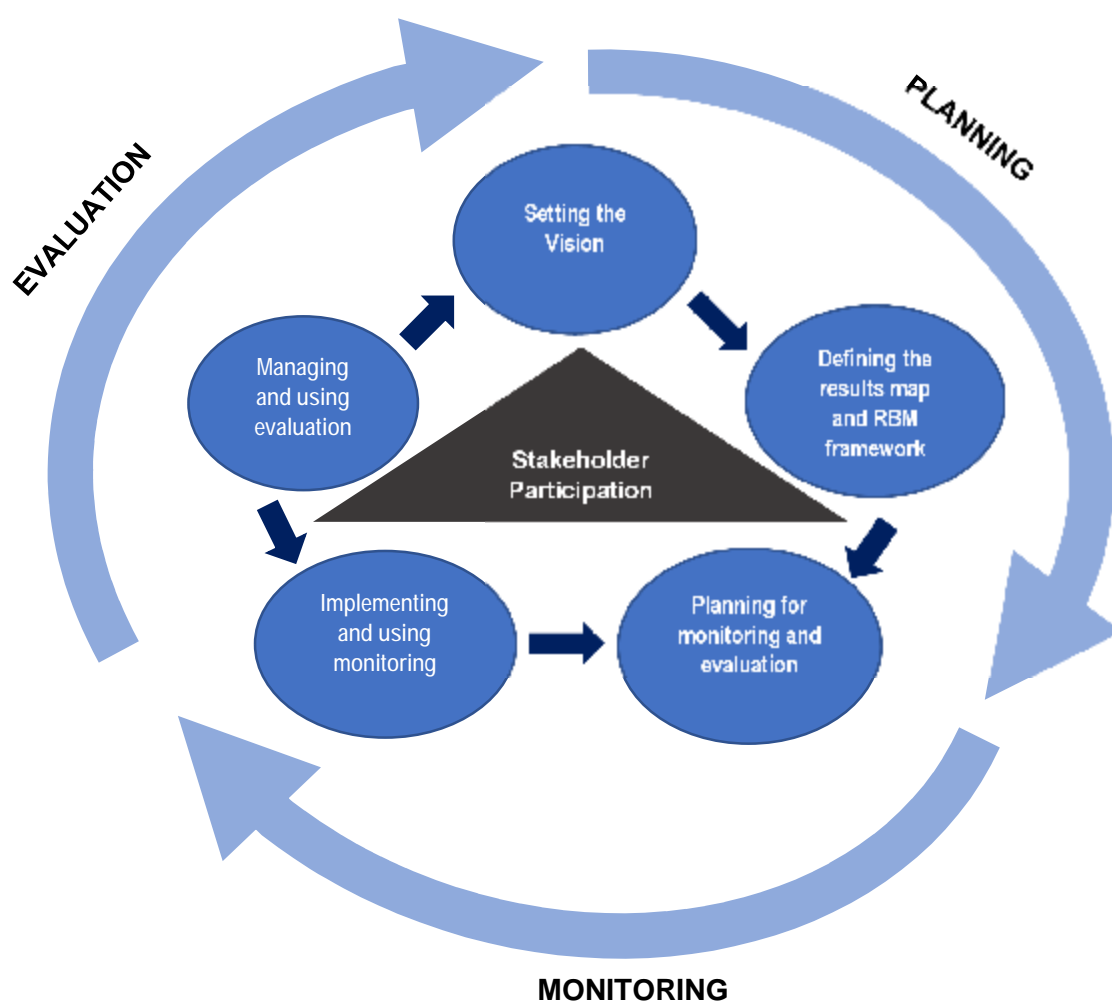


Figure 1. Results-based Monitoring and Evaluation Framework

The evaluation study was cast along the ToC and impact pathway framework (**Figure 2**). This is ideal considering that the AFE programs and projects are built around a set of results frameworks believed to be necessary for the achievement of the plan’s long-term goals. The results framework (or impact pathway) is a logical order of and assumptions about the activities and events relating to the inputs to be used, the process to be employed, the outputs to be produced, the outcomes to be generated and the impact to be made. The causal relationship between one activity or event with another depends largely on the overall context and specific circumstances within which the process of change is to take place.

A ToC defines all the building blocks required in a given context and circumstances that may bring about the achievement of a desired change. As a planning and evaluation framework for social change, it requires participants to be clear on long-term goals, identify measurable indicators of success, and formulate actions to achieve the goals. It differs from logic models as it requires stakeholders to articulate underlying assumptions which can be tested and measured, and shows a causal pathway (i.e. impact pathway) from here to there by specifying what is needed for the goals to be achieved.

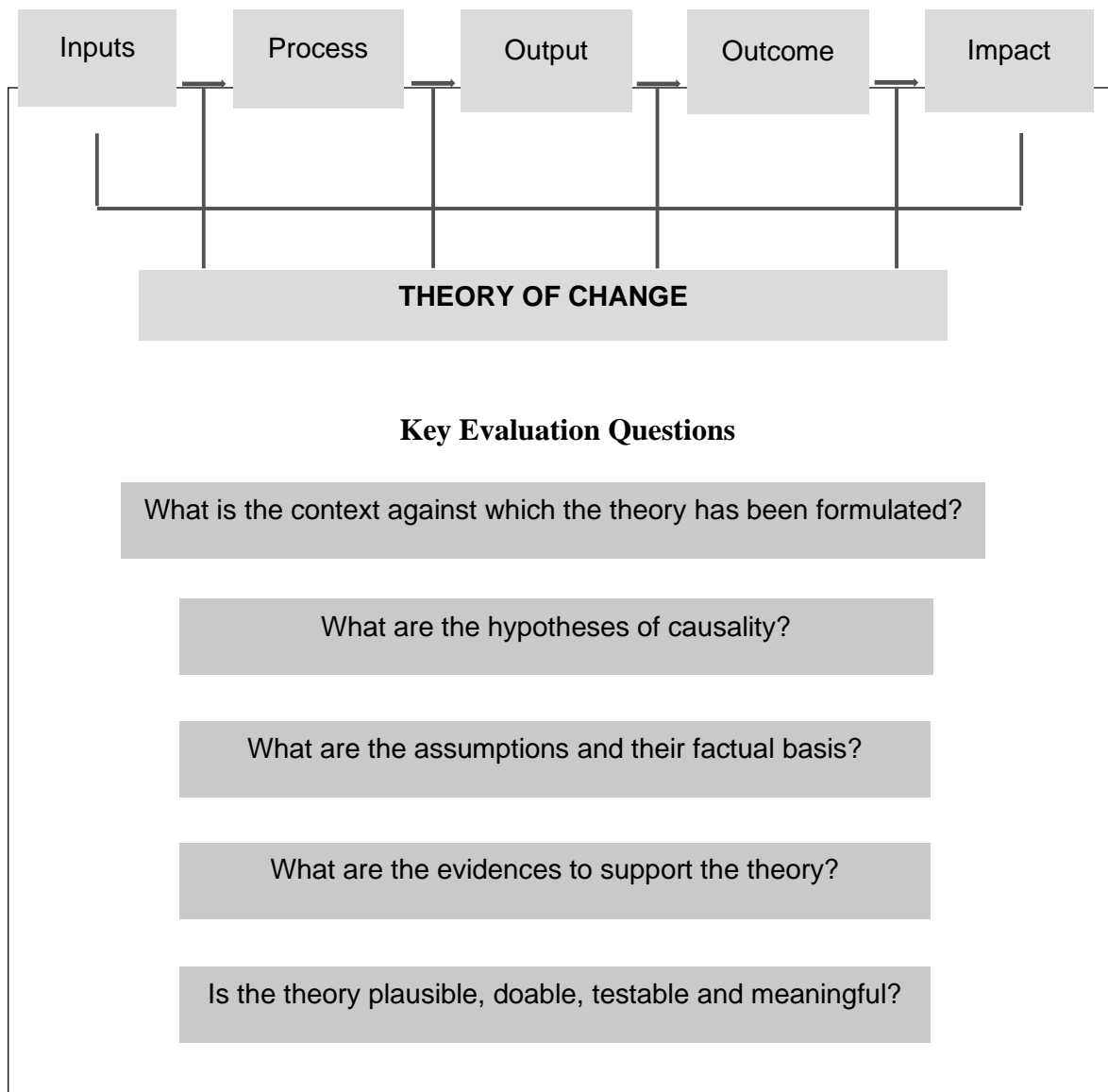


Figure 2. Theory of Change and Evaluation Key Questions

In the AFE RBME study, the examination of the ToC entailed answering at least five key questions relating to: (1) the context of the plan; (2) the hypotheses of change; (3) explicit and implicit assumptions; (4) evidences to support the theory; and (5) whether the theory is plausible, doable, testable and meaningful.

A ToC should be plausible, doable, testable and meaningful for planned interventions to succeed. Plausibility relates to the logic of the model and whether or not the various stakeholders believe the model is correct. A doable theory is one where human, political and economic resources are seen as sufficient to implement the strategies of the theory. Testability necessitates that stakeholders believe there are credible ways to discover whether the results are as predicted. Finally, the change being pursued should be important and the magnitude significant enough for the theory to be meaningful.

2. ANALYTICAL PROCEDURE

The study employed concurrent mixed method approach, which involved parallel collection of both quantitative and qualitative data and convergent analysis to provide equal weights on the quantitative and qualitative aspects of project performance and impact. Both primary and secondary data were used. Primary data were collected through a survey of DA-ATI beneficiaries (900 farmers and 658 agricultural extension workers (AEWs) using telephone/online and face-to-face Computer Assisted Personal Interviewing (CAPI) based on pre-tested structured questionnaires. Key informant interviews (KIIs) of 26 representatives from the DA-ATI central and regional offices were also carried out to gather information related to the development and operation of the AFE RBME System. Secondary data were obtained from the AFE RBME data base and from available reports.

2.1 Determination of results of ATI programs, projects and activities (PPAs) based on existing parameters from the AFE RBME ToC Model

To determine the results of the ATI programs, projects and activities, the study validated the RBME results in the field by reviewing outputs based on parameters of relevance, effectiveness, efficiency, sustainability, and impact. The validation was done with LGU extension workers and farmers trained by ATI, using the indicators enumerated in the AFE results indicators table (**Annex 1**). Changes along these indicators were measured by looking at values across time (2018-2022) or comparing baseline values with annual values. These indicators include the following and summarized in **Table 2**:

- ü Relevance to determine whether the interventions are consistent with national or local development plans and priorities, and needs of the clients.
- ü Effectiveness to ascertain if the interventions addressed the needs of the clients; also look at accomplishments in terms of targets vs outputs year on year and total.
- ü Efficiency to see if the interventions were carried out at the time they are needed, and at the least possible cost.
- ü Sustainability to evaluate if interventions introduced are still being practiced long after these have been introduced.
- ü Impact to see if the interventions resulted to changes in income and welfare of the clients.

Table 2. AFE results indicators to be examined

Group	Indicators
Farmers	<ul style="list-style-type: none"> • Change in attitudes, skills, and knowledge by looking at the perceived change in knowledge based on the provided intervention, post test scores, TESDA National Competency Certifications on agriculture and fisheries related subjects, adopters of new technologies and practices, and farmer's rating on the interventions; • Change in productivity of clients by looking at proportion of clients using diversified farming techniques, those venturing into value addition of products, and those showing improved practices resulting in increased income. • Empowerment of clients by examining proportion of clients who became agripreneurs, including the marginalized clients; • Resiliency by determining proportion of clients with personal, crop and livestock insurance, and increased confidence in coping from unfortunate events, adopted adaptation and mitigation measures, and adaptability • Change in competitiveness through certifications in GAP, OA, GAHP, Halal, GMP, HACCP and others; supplying institutional and commercial buyers and exports.
Extension workers	<ul style="list-style-type: none"> • Changes in attitude, skills, and knowledge by measuring increase in knowledge based on provided intervention, post-test scores, TESDA National Competency Certifications on agriculture and fisheries related subjects, implementation of the trainee's action plans, and satisfaction rating • Empowerment of clients through employment to AF-related jobs or promotions; • Resiliency of clients through alternative AF-related job competencies.
Other clients	<ul style="list-style-type: none"> • Changes in services and systems and procedures by examining how interventions were implemented, based on ratings on interventions in terms of relevance, timeliness and absorptive capacity of partner and implementing institutions. • Empowerment of clients through increased number of learning sites elevated into schools for practical agriculture and number of schools and farm tourism sites.

2.2 Descriptive and Inferential Analysis

Descriptive analysis was employed to summarize and describe the main features of the dataset such as central tendency, dispersion and distribution. Inferential analysis was used to determine whether significant differences exist between the variable means in two time periods (paired t-test for before and after) and binary logistic regression to determine the factors affecting the adoption of the technologies and practices promoted by DA-ATI.

Logit Model for Technology Adoption

$$\text{logit (Adoption)} = \beta_0 + \beta_1 \text{AGE} + \beta_2 \text{SEX} + \beta_3 \text{HHS} + \beta_4 \text{ED} + \beta_5 \text{YF} + \beta_6 \text{FO} + \beta_7 \text{CT} + \beta_8 \text{ATI} + \beta_i \text{R}_{is} + e$$

Variables	Variable Definition
Adoption	Adoption dummy variable (0 if non-adopter; 1 if adopter)
AGE	Age of respondent
SEX	Sex dummy variable (0 if male; 1 if female)
HHS	Household size
ED	Years of formal education
YF	Years in farming
FO	Farm ownership dummy (0 if non-owner; 1 if owner)
CT	Commodity type dummy (0 if crops; 1 if non crops)
ATI	ATI intervention dummy (0 if training only; 1 if training plus other intervention)
R _{is}	Regional center dummy where i is from 9 to 24 since there are 16 regional centers including ITCPH
e	Error term

2.3 Thematic Analysis

Thematic analysis was employed as a qualitative method to identify, analyze and report patterns or themes emerging from the data. This was used mainly in summarizing and drawing insights from the various KII results involving the DA-ATI central and regional offices.

3. SAMPLE SIZE DETERMINATION

The respondents of the study are the agricultural extension workers of the LGUs and the farmers who were trained by the ATI from 2018 – 2022. To determine the sample size, Slovin’s formula was applied with an 8% margin of error:

$$n = \frac{N}{1+Ne^2}$$

where :

n = sample size

N = population size

e = margin of error at 8%

Based on the above formula, the calculated sample size was 1,265 respondents – 705 farmers and 560 AEWs (**Table 3**).

Table 3. Computed sample size based on Slovin’s formula with 8% margin of error

Year	Population of Farmers Trained	Population of AEWs Trained	Total Population Size	Sample Size for Farmers	Sample Size for AEWs	Total Sample Size
2018	2,445	872	3,317	147	133	280
2019	933	235	1,168	134	94	228
2020	956	252	1,208	135	97	232
2021	1,093	294	1,387	137	103	240
2022	4,969	863	5,832	152	133	285
Grand Total	10,396	2,516	12,912	705	560	1,265

Upon completion of the survey, 900 farmer respondents and 658 AEW respondents have been interviewed or a total of 1,558 survey respondents. **Table 4** presents the number of completed survey respondents by year.

Table 4. Number of survey respondents by year

Year	Sample Size for Farmers	Sample Size for AEWs	Total Sample Size	Completed Interviews for Farmers	Completed Interviews for AEWs	Total Completed Interviews
2018	147	133	280	178	160	338
2019	134	94	228	97	77	174
2020	135	97	232	92	80	172
2021	137	103	240	105	102	207
2022	152	133	285	428	239	667
Grand Total	705	560	1,265	900	658	1,558

4. MAJOR OBSERVATIONS ON THE DATA COLLECTION PROCESS

Problems and challenges were encountered during the conduct of survey interviews with farmers and AEWs. Some respondents had difficulty recalling the information about the training they attended, especially those who were trained in 2018. This was further exacerbated by some respondents who participated in more than one training as they cannot differentiate one training from the others. Another challenge was the difficulty of contacting the respondents as many of them have incorrect, deactivated, or missing contact details. There were also issues with cell site reception making it difficult for the survey enumerators to conduct smooth phone interviews. In the face-to-face survey interviews, some respondents have already moved to different houses/locations, and some cannot be located from the address given.

To address the issue of recalling the training information and ensure that accurate and reliable information are obtained from the respondents, it is recommended to conduct the evaluation or assessment one year or at most two years after the intervention. It would also be helpful to conduct follow up check ins with those who were trained to ensure that the training they participated in would not be forgotten.

D. RESULTS AND DISCUSSIONS

1. EVALUATION OF THE AFE RBME SYSTEM: DESIGN FRAMEWORK AND OPERATIONAL PERFORMANCE

1.1 Overview of the AFE RBME System

The AFE RBME system is an integral part of ATI's overall M&E system designed to track outputs, outcomes and impact of ATI's interventions. Output level monitoring constitutes the first level in the M&E system and involves tracking and evaluating the agency's targets and achievements. It includes procedures for submitting reports to the DA and other oversight bodies which, among others, include training and activity completion reports, monthly physical reports as well as narrative and other reportorial requirements of the DA. The RBME system comprises the second level and entails the monitoring and evaluation of outcomes through regular data collection from farmers and AEWs to assess the effectiveness of ATI interventions. This component evaluates whether ATI's policies, programs, and projects have achieved their intended outcomes and produced positive results for beneficiaries. It aims to enhance ATI's understanding of intervention effectiveness, promote accountability, and report performance transparently to the public. Impact evaluation constitutes the third component and is done both internally and through independent external evaluators.

The AFE RBME system is anchored on a ToC and results framework consisting of 28 identified results indicators (Annex 1) that generally gauge whether the outcomes which the ATI interventions are intended to generate have actually been realized. In a nutshell, the system theorizes that improving client's access to agricultural extension interventions will lead to improvement in attitude, skills and knowledge, which in turn will result to increased productivity, empowerment, resiliency and competitiveness of the farming sector. The set of indicators are designed to capture changes over time in the various elements of this logic model. Specifically, the AFE RBME system aims to:

- a. Organize the data and information of the ATI as it encourages better management and storage of information, particularly for the data needs of the RBME system;
- b. Make recommendations aimed to prompt the examination of existing problems and issues and to improve the delivery of programs and services; and
- c. Communicate with the general public and other stakeholders the results of the interventions conducted by the ATI and its partners over the past years.

The AFE RBME is a continual process of gathering and assessment of information. Monitoring is concerned with the regular gathering of information to assist in timely decision making at each step in the intervention process while evaluation is concerned with the assessment of achievement of milestones/outcomes following the results framework. The AFE RBME system is an internal process designed to shed light on the questions of “so what?”, “how?” and “why?” which are fundamental inquiries involving government programs which use public funds. The primary approach consists of periodic client surveys at the regional level typically administered by the Planning, Monitoring and Evaluation Unit (PMEU) of ATI’s regional centers. Among others, the survey gathers information on extension intervention received by the respondents (AEWs and farmers), use and application of the knowledge derived, farm productivity, resilience and competitiveness. These data are processed and analyzed and the results are used to inform the planning and delivery of subsequent activities/interventions.

1.2 Review of Design and Operational Performance

The study examined the development and implementation of the AFE RBME System to provide context on the evaluation of the outcomes and impact of the various PAPs, which the System was designed to track. This was done through comprehensive review of relevant documents and KIIs of ATI personnel involved in the development and implementation of the System itself. The relevant documents reviewed are listed in **Annex 2** while the list of KII respondents from the central and regional offices are provided in **Annex 3**. Among others, the examination delved into the development of the AFE RBME ToC, the operationalization of the System, the level of appreciation and understanding of personnel who are tasked to manage the System as well as the implementation challenges being encountered by these personnel.

Development and Management of the AFE RBME System

The development of the AFE RBME System was initiated in 2016 and took off from the development of the ToC as a first step. This was facilitated by an external expert who guided the various regional centers and stakeholders in navigating the intricacies of the whole process. The changes which the AFE system intends to achieve for its clients were identified and the various pathways by which such changes can be achieved given the context and circumstances of the clients and the explicit and implicit assumptions that must be realized were clarified during the workshops.

The ToC framework was established to track the inputs, outputs, outcomes, and impacts of ATI’s activities, primarily focusing on training programs for farmers and Local Government Unit (LGU) extension workers. These indicators measure not only the number of training and participants but also the real-world application of the knowledge gained, such as the certification of farms and agricultural practices that benefit local and international markets. The System was initially designed to track over 100 indicators which were then reduced to 28 by the time it was operationalized in 2018.

However, results of KIIs revealed limited uniformity in the understanding and implementation of the ToC and RBME across regions. While some staff especially those involved in the earlier workshops were familiar with the System, a number of regional staff particularly those who were newly hired lack formal orientation or were involved only after its implementation. This disparity underscores the need for continuous training and formal turnover processes to ensure that the ToC and RBME are effectively utilized across all ATI centers.

While regions like CALABARZON and Central Visayas are more familiar with the system and have been actively involved in its development, other regions such as Davao and Northern Mindanao are less informed, often relying on central office directives without a comprehensive understanding of the ToC framework.

On the Implementation of the AFE RBME System

The implementation across various regions of the country follows a structured yet diverse approach based on central guidelines but adapted to each region's specific needs. Following the guidelines from the Department of Budget and Management (DBM), at least 3% of ATI's budget is allocated for M&E. This is used mainly in the conduct of annual survey to gather information on the indicators being tracked. The sampling for this survey is based on Slovin's formula at 95% confidence level and 5% margin of error. Data collection span from March to August with report preparation expected to be completed by September. The PMEU in each region leads the data collection and analysis.

The various regions employ different approaches to RBME implementation depending on the logistical challenges and available resources. Some regions outsource the data collection to academic institutions such as Bulacan Agricultural State College (Central Luzon), CBSU (Bicol) and JH Cerilles State College (Zamboanga). This is to cope with the limited capacity of the Center and also to avoid bias. In regions where data collection is done by the Center's M&E officers, assistance is sought from agricultural extension workers to serve as enumerators. Data is processed in Excel and submitted to the Central Office in the required format.

The study found that various regions varied widely in terms of capacity to manage the System. The regional centers in Cordilleras and Cagayan appear to have adequate staff as they were able to leverage their partnerships with the LGUs. Regions like Ilocos faced manpower shortages and a lack of statistical expertise, indicating a need for more staff and training to support the growing demands of RBME. On the other hand, regions like Western Visayas and Eastern Visayas have addressed capacity issues by outsourcing data collection and partnering with universities and extension workers.

Purpose of the RBME System

The AFE RBME System serves multiple purposes across its regional centers, primarily focused on assessing the effectiveness, outcomes, and impact of ATI's interventions. A key informant from the ATI Central Office said the system is designed to provide credible information on both immediate and long-term results, particularly to support evidence-based policymaking. The study found that about half of ATI's middle management actively uses the RBME system for this purpose.

The System is crucial for evaluating effectiveness according to key informants from Cordilleras and Ilocos ATI regional centers. According to these key informants, the System enables the assessment of adoption rates of technologies promoted by their centers. In ATI Cagayan Valley, a key informant claimed they use the System to track the results and impact of trainings over the past three years, while in CALABARZON, it also aids in understanding stakeholder perceptions, particularly in adapting to online training during the pandemic.

According to the key informants from the regional centers in MIMAROPA and Bicol regions, their centers employ the System to comply with government and funder requirements by providing data that demonstrate the tangible outputs of ATI's assistance. For the key informant in Eastern Visayas, RBME forms the basis for evidence-based decision-making, ensuring that future programs are grounded in the results of past interventions. This system helps improve the relevance and effectiveness of ATI's initiatives.

For key informants in Zamboanga, Northern Mindanao, and Davao, the System evaluates the effectiveness of training, particularly the practical application of knowledge by participants. For SOCCSKSARGEN, RBME is seen as a pathway from inputs to desired changes, while in Caraga, it monitors budget effectiveness, evaluating if interventions benefit clients and can be replicated by other agencies.

On the whole, RBME allows ATI to measure the outcomes of its programs, make informed adjustments, and ensure that their interventions meet the intended objectives.

Sufficiency of Financial and Human Resources for RBME

The ATI operates with varying levels of resource allocation across its regional centers, despite an overall increase in its budget from PHP 1.8 billion to PHP 2 billion through the General Appropriations Act (GAA) and special projects (e.g., RCEF, coconut). Nevertheless, the study found significant challenges in the inadequacy of human resources, not to mention some common operational constraints.

At the Central Office, enough budget is allocated for data collection, with centers receiving an average of P 350,000 per year. Some centers outsourced their data collection, while others incorporated it into their field activities. A key informant from ITCPH pointed out to the insufficiency of resources for facility maintenance despite adequate budget allocation for training under the National Livestock Program.

A key informant from regional office in Ilocos reported that despite the increase in budget and targets, its human resources have not grown in proportion, leading to staff multitasking. Mobility problem was reported by a key informant from regional office in Central Luzon as they operate with only three vehicles thus, had to resort to vehicle rentals. In the Cordillera Regional Center, the key informant shared they rely heavily on Job Order (JO) personnel due to limited permanent staff. This has adverse implications on operation as relatively high turnover of staff disrupts important activities. Interestingly, the key informant from the Cagayan Valley Regional Center stated they have sufficient human resources as they benefit from strong partnerships with other government agencies, ensuring smooth operations.

In CALABARZON, human resources are well-trained and effectively managed, while MIMAROPA struggles with the growing number of activities—rising from 60 in 2016 to 210 in 2024—without a corresponding increase in regular staff. The center hires Contract of Service (COS) personnel, but their qualifications do not match those of the technical staff, and funding for trainings varies widely depending on the source.

Manpower shortage is also being experienced by regional centers in Bicol and Western Visayas. Similar to other regional centers, they cope with this through outsourcing of technical expertise and reliance on COS personnel. The key informant from the Eastern Visayas Regional Center shared that they are collaborating with learning site cooperators to manage their workloads. Nonetheless, the increasing number of activities continues to strain human resources. Similar constraints on human resources are also reportedly being experienced by the regional centers in Zamboanga, Davao, and CARAGA.

Challenges in Implementing the AFE RBME System

The study found that the main challenges in implementation revolve around the inadequacy of manpower. The strategy of outsourcing the survey activities is being employed already by a number of regional centers, albeit this cannot be relied upon completely as financial resources to fund this are also limited. The hiring of contractual staff to complement the few regular staff somehow works, but the smooth implementation of the program is affected. Owing to high turnover rate of contractual personnel, institutional knowledge is difficult to build and sustained proficiency in the conduct of the various activities cannot be assured.

In a number of regions significant logistical barriers exist due the remoteness of areas where surveys are conducted, such as in the case of Cordilleras and Davao. Survey activities are costly in these areas, especially when interviews have to be conducted face-to-face. The impact of the pandemic also figured prominently among the challenges, although this was limited to the early period of operationalization of the RBME System. With regard to budget, the study found that some regions were able to manage well with the allocated budget. However, some regions, such as in Central Luzon face financial constraints that limit their ability to collect and validate data.

Credibility of RBME Results

As in other M&E systems, the most important concern in the AFE RBME system is the credibility of the results generated from this platform. In general, the key informants interviewed as part of the study still believe that the system is robust and the integrity of the data collected remains solid. Especially with the practice of outsourcing the data collection to independent external parties, there is no reason to doubt the credibility of the data collected.

It should be noted that the deviations between the results from the ATI in-house team and the ASPSI survey are to be expected as no two surveys can come up with exactly the same values. Nevertheless, the patterns revealed in the in-house team survey and the ASPSI survey conducted in this evaluation are the same.

However, there are key informants who suggested the need for more validation activities to further guarantee the integrity of the data collection process. The key informant from MIMAROPA suggested that sample size should be increased especially in regions of large geographical coverage and highly diverse beneficiaries. A key informant from CALABARZON suggested the need for iterative data review and the establishment of continuous feedback loops to further strengthen the AFE RBME System.

2. COMPARATIVE ANALYSIS OF THE RESULTS OF THE AFE RBME SYSTEM

The results framework consists of seven sets of indicators tracked using 28 metrics. The indicators are: (1) increased access to interventions; (2) improvement in attitude, skills and knowledge; (3) improved provision of interventions; (4) increased productivity; (5) increased empowerment; (6) increased resilience; and (7) increased competitiveness.

Table 5 summarizes the RBME results indicators for 2015-2017, collated from the Annual RBME reports of ATI. The annual RBME report is a compilation of the surveys conducted by the regional training centers, which were submitted to ATI Central Office. **Table 6** shows the AFE results indicators for 2018 to 2022. The values presented are from the survey conducted with farmers and AEWs, as well as from the ATI annual reports. Discussions were made by comparing the values in Tables 5 and 6 to generate insights on how data may be generated, such that it would provide an honest and accurate depiction of the performance of the AFE system.

For the first set of indicators, increased access to AFE interventions (indicator 1), the values for 2018-2022 were generally higher than in 2015 to 2017. Clients served in 2015 was reported at 100,949 and 95,647 in 2015. In comparison, clients served during the survey period exceeded 133,000, except in 2020 where it was at its lowest at 83,396. In terms of marginalized farmers served, the period 2018-2022 had higher percentages from 16% in 2018 to 46% in 2022, compared to only 5% in 2015 and 2% in both 2016 and 2017.

For the second set of indicators, improved attitude, skills, and knowledge of clients, most of the values are comparable for the two time periods for some indicators. In particular, for indicator 4 (percent of clients with increased knowledge), the values were maintained at over 90%. For indicator 5 (passing the post-test), a slightly higher values were observed during the survey period at over 90% in 2021 and as high as 95% in 2018, compared to 81% in 2015, 92% in 2016 and 89% in 2017. This could indicate effectiveness of means of knowledge transfer. Indicator 6 (number of clients with certified skills competencies) requires actual number, hence reporting should be based on records and not on survey. The current study, however, tried to generate this information from the survey and found that about 20% to 28% of beneficiaries reported to have acquired certifications. For the 2015-2017 period, the indicator number was increasing from 481 in 2015 to 994 in 2017. For indicator 7 (percent adopters based on action plan), the 2015-2016 figures show that about half of the clients were considered adopters based on their action plan, increasing to 70% by 2017. For the current survey, the respondents were first asked whether they had action plans, and less than half answered yes. Of those who answered yes, more than 80% said they have adopted the technologies learned from their trainings. Consequently, when the two time periods were compared, the percent adopters of technologies based on their action plans were actually less in 2018-2022 (ranging from 30-40% of total) compared to 2015-2017. Indicator on satisfaction of interventions remain high at more than 90%, with clients rating ATI 98-99% in 2015-2017 and 92% - 96% during the survey period.

Table 5. AFE results indicators, 2015-2017*

Year of intervention	2015			2016			2017		
Result Indicator	Farmers	AEWs	Total	Farmers	AEWs	Total	Farmers	AEWs	Total
Number of respondents	2,067	760	2,827	955	240	1,195	883	246	1,129
Increased access to AFE interventions									
1. # of clients served			100,949						95,647
2. % of marginalized clients trained			5.15			2.00		2.00	
3. % of area coverage			88.00			85.00		77.00	
Improved attitude, skills, and knowledge of clients									
4. % of clients saying that they have an increased knowledge	98.92	99.47	99.04	99.00	100.00	99.00	97.00	94.00	96.00
5. % of clients passing the Post-test			81.50			92.00			89.00
6. # of clients certified with skills competencies			481			972			994
7. % of adopters based on action plan	48.14	64.34	52.49	48.00	72.00	53.00	68.00	79.00	70.00
8. % of clients that adopted new AF technologies	91.24	93.55	91.86	94.00	95.00	94.00	94.00	94.00	94.00
9. % of clients satisfied with the intervention they received	98.55	99.47	98.80	100.00	99.00	99.00	99.00	99.00	99.00
Improved provision of interventions									
10. % of clients saying that the intervention is relevant	98.11	99.34	98.44	99.00	99.00	99.00	99.00	99.00	99.00
11. % of accomplished interventions as scheduled			100.00			91.00			96.00
12. % absorptive capacity			95.06			93.00			90.00
Increased productivity of clients									
13. % of clients engaged in diversified farming	59.46	35.13	52.92	46.00	43.00	46.00	62.00	54.00	60.00
14. % of clients engaged in value-adding	19.35	12.24	17.44	28.00	19.00	26.00	27.00	18.00	25.00
15. % of clients with increased income	51.32	60.26	71.88	81.00	62.00	77.00	82.00	59.00	77.00
Increased empowerment of clients									
16. % of clients turned into agripreneurs	27.04	28.68	27.48	28.00	21.00	28.00	45.00	38.00	44.00
17. % of marginalized clients turned into agripreneurs	31.88	19.29	29.86	10.00	4.00	9.00	30.00	12.00	26.00
18. % of clients employed in AF related job or promoted to a higher position		24.61	24.61		27.00	27.00		33.00	33.00
19. # of Schools for Practical Agriculture assisted			16			20			19
20. # of farm tourism sites assisted			20			14			14
Increased resiliency of clients									
21. % of clients with social protection	76.92	92.24	81.04	75.00	92.00	78.00	88.00	93.00	89.00
22. % of clients saying that they are confident of coping from unfortunate events	88.05	91.98	89.10	92.00	93.00	92.00	94.00	95.00	94.00
23. % of clients that have coped with unfortunate events by applying adaptation and mitigation measures	46.35	46.32	46.34	49.00	55.00	50.00	58.00	58.00	58.00
24. % of clients with alternative AF-related job competencies	72.18	69.34	71.42	68.00	80.00	71.00	84.00	79.00	83.00
Increased competitiveness of clients									
25. % of farms certified	5.13	1.32	4.10	7.00	2.00	6.00	5.00		4.00
26. % of products certified by an accreditation body	3.34	1.18	2.76	3.00	1.00	3.00	3.00		2.00
27. % of clients producing demand-driven products	11.18	11.71	11.32	8.00	10.00		16.00	11.00	
28. % of clients engaged in the overseas market	0.29		0.21	2.00			1.00		

*based from the ATI RBME reports

Table 6. AFE results indicators by year, 2018-2022*

Year of intervention	2018			2019			2020			2021			2022		
Result Indicator	Farmers	AEWs	Total	Farmers	AEWs	Total	Farmers	AEWs	Total	Farmers	AEWs	Total	Farmers	AEWs	Total
Number of respondents	178	160	338	97	77	174	92	80	172	105	102	207	428	239	668
Increased access to AFE interventions															
1. # of clients served 1/	80,387	20,097	133,979	84,356	22,687	138,808	49,712	7,719	83,396	87,714	19,531	149,447	8,783	17,821	135,650
2. % of marginalized clients trained 1/			16.00			23.00			31.00			28.00			46.00
3. % of area coverage 1/	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	67.0	No Data	No Data	No Data
Improved attitude, skills, and knowledge of clients															
4. % of clients saying that they have an increased knowledge	96.50	98.30	97.00	91.70	100.00	93.40	88.50	98.90	90.70	93.10	99.30	94.40	94.60	99.40	95.30
5. % of clients passing the Post-test		95.10	95.10		96.40	96.40		95.70	95.70		90.60	90.60		92.00	92.00
6. # of clients certified with skills competencies	23.40	44.10	28.80	22.60	25.30	23.10	19.60	25.00	20.70	30.50	37.20	31.90	28.3	32.6	28.9
7. % of adopters based on action plan															
% of clients with action plan	42.70	55.00	45.90	34.00	46.90	36.60	33.30	47.30	36.20	43.70	57.10	46.50	47.00	64.30	49.60
% adopters based on action plan	84.40	75.00	81.90	85.50	80.10	84.40	94.00	66.50	88.30	84.00	81.80	83.50	86.70	79.60	85.60
8. % of clients that adopted new AF technologies	49.50	96.10	61.80	52.40	96.50	61.30	56.10	97.80	64.80	53.10	92.0	61.30	51.20	94.00	57.50
9. % of clients satisfied with the intervention they received	91.70	96.30	92.90	96.30	97.80	96.60	93.50	96.30	94.10	94.60	97.6	95.20	94.10	96.80	94.50
Improved provision of interventions															
10. % of clients saying that the intervention is relevant	87.20	79.50	85.20	88.50	73.80	85.50	90.10	87.80	89.60	87.20	91.0	88.00	91.80	94.40	92.20
11. % of accomplished interventions as scheduled	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
12. % absorptive capacity	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
Increased productivity of clients															
13. % of clients engaged in diversified farming	77.80		77.80	83.50		83.50	70.50		70.50	67.50		67.50	76.70		76.70
14. % of clients engaged in value-adding	19.10		19.10	18.20		18.20	13.10		13.10	14.20		14.20	12.50		12.50
15. % of clients with increased income	43.30		43.30	69.80		69.80	46.00		46.00	67.80		67.80	82.40		82.40
Increased empowerment of clients															
16. % of clients turned into agripreneurs	61.90		61.90	64.30		64.30	48.80		48.80	64.30		64.30	63.60		63.60

Year of intervention	2018			2019			2020			2021			2022		
Result Indicator	Farmers	AEWs	Total	Farmers	AEWs	Total	Farmers	AEWs	Total	Farmers	AEWs	Total	Farmers	AEWs	Total
17. % of marginalized clients turned into agripreneurs	No Data			No Data			No Data			No Data			No Data		
18. % of clients employed in AF related job or promoted to a higher position		26.70	26.70		25.50	25.50		26.10	26.10		29.10	29.10		35.20	35.20
19. # of Schools for Practical Agriculture assisted	No Data			No Data			No Data			No Data			No Data		
20. # of farm tourism sites assisted	No Data			No Data			No Data			No Data			No Data		
Increased resiliency of clients															
21. % of clients with social protection	79.30	89.90	82.10	100.00	93.50	98.70	71.60	96.40	76.80	87.30	96.10	89.20	77.90	96.00	80.60
22. % of clients saying that they are confident of coping from unfortunate events	59.90		59.90	49.50		49.50	51.50		51.50	53.90		53.90	57.60		57.60
23. % of clients that have coped with unfortunate events by applying adaptation and mitigation measures	67.90		67.90	68.70		68.70	56.40		56.40	72.70		72.70	73.80		73.80
24. % of clients with alternative AF-related job competencies		17.70	17.70		15.70	15.70		23.30	23.30		16.50	16.50		28.80	28.80
Increased competitiveness of clients															
25. % of farms certified	85.00		85.00	65.90		65.90	72.10		72.10	70.30		70.30	86.70		86.70
26. % of products certified by an accreditation body	No Data			No Data			No Data			No Data			No Data		
27. % of clients producing demand-driven products	No Data			No Data			No Data			No Data			No Data		
28. % of clients engaged in the overseas market	No Data			No Data			No Data			No Data			No Data		

*based from the 2018-2022 survey data, except indicators 1,2, and 3, which are based from the ATI RBME reports

For the third set of indicators, improved provision of interventions, particularly for indicator 10 (relevance of interventions), the current survey data showed a slightly lower rating of 85% to 92% from 2018 to 2022 compared to 98% and 99% for previous years. Indicators 11 and 12 are derived from ATI reports. Indicator 11 (percent of accomplished interventions as scheduled) refers to the adherence of ATI to its workplan in terms of time, and data shows that although this has fluctuated, the number remains high at above 90%. Indicator 12 (percent absorptive capacity) refers to ATI's ability to spend its allocated budget. For this indicator, the trend is maintained at over 90%. There are no data generated or gathered for indicators 11 and 12 for 2018-2022.

The next set of indicators on productivity were tracked using three metrics: (1) diversified farming (indicator 13); (2) value adding (indicator 14); and (3) increased income (indicator 15). Source of data for these indicators for the current survey was from farmers only, as the agricultural extension workers are expected to be not generally engaged in farming or value adding, and the increases in their incomes would normally come from their salaries. For indicator 13, the values were fluctuating but generally higher in the current survey than in the ATI previous survey. For indicator 14 (percent of farmers engaged in value-adding), the values were generally low, and the trend was also fluctuating. For the ATI previous survey, the values ranged from 17%, 26% and 25% while for the current survey, the values were even decreasing from 19% in 2018 to only 12% in 2022.

The empowerment of clients indicator was gauged against five metrics: (1) agripreneurship – all clients (indicators 16); (2) agripreneurship – marginal clients (indicator 17); (3) promotion (indicator 18); (4) assistance to schools for practical agriculture (indicator 19); and (5) tourism sites (indicator 20). For indicator 16, the current survey covered only for farmers, and the data shows higher percentages between 48% to 64%. No data was collected for marginalized farmers for indicator 17. For indicator 18 on promotions, the current survey covered AEWs only. The values, which ranged from 26% to 35%, did not vary much in the previous years. No data was available for indicators 19 and 20 for the current study.

On increased resiliency indicators, indicator 21 (social protection of clients) had the same trend for farmers and extension workers for both periods. For farmer-clients saying they were confident of coping from unfortunate events (indicator 22), the percentage for the current year was lower, ranging from 49% to 59%, specifically for farmers only, compared to 89% to 94% for 2015-2017. Inversely, however, the percentage of clients saying that they had coped with these events by applying what they learned (indicator 23) was higher at 56% to 73% for the current survey compared to only 46% to 58% for 2015-2017. For indicator 24 (percent of clients with alternative AF-related job competencies, the current survey gathered data for AEWs only, and the result for this indicator was significantly lower at 15% to 28% compared to more than 70% from previous years.

Finally, the indicators for competitiveness were tracked against four metrics: (1) farm certification (indicator 25); (2) product certification (indicator 26); (3) production of demand driven products (indicator 27); and engagement in overseas market (indicator 27). The metric values showed impressive achievement on farm certification with current year value remarkably much higher than the previous years. However, data were not available for the three other markets due to difficulty in getting the data from survey. There is also a need to clarify the term “demand driven products” and seek data sources other than survey to track the indicator of competitiveness.

In general, the differences in values of the indicators may be attributed in the way the data were generated. Some recommendations for the generation of data for the AFE results indicators include (**Table 7**):

Table 7. Recommendations for the AFE results indicators data generation

Indicator Number	Recommendation
Indicator 6	Value should be based on actual record and not on survey.
Indicator 7	Consider excluding AEWs since their action plans after their trainings with ATI should not be about adoption of technologies, but on how they will move forward in extending to the farmers the technologies they learned. In addition, the percentage should be based only on clients with action plans. For farmers, action planning is not actively done nor followed through by ATI.
Indicator 8	The indicator is appropriate only for farmers. However, measuring adoption of “new” technologies may prove to be a challenge. Defining what is “new” should be clear.
Indicators 13, 14, and 15	These are appropriate for farmers only since we do not expect AEWs to actively engage in farming, in general. If productivity of AEWs need to be measured, other indicators should be developed.
Indicators 16 and 17	These indicators are appropriate for farmers only since we do not expect AEWs to become entrepreneurs, in general.
Indicators 22 and 23	These indicators are appropriate for farmers only.
Indicator 24	This indicator may be appropriate for AEWs only.
Indicator 25	This indicator may be appropriate for farmers only.
Indicators 26, 27, and 28	A separate monitoring system would be more accurate other than from surveys; and a clearer definition of “demand-driven products” would help in identifying this data.

3. BENEFICIARY FEEDBACK ON RBME INTERVENTIONS: RESULTS FROM FARMERS AND EXTENSION WORKERS INTERVIEW

3.1 Results from Farmers Interview

3.1.1 Profile of Beneficiaries

3.1.1.1 Demographic Profile

Farmer-beneficiaries of ATI programs were 47 years of age on average, with majority falling within the age range of 35 to 54 years. About 18% are relatively young (34 years old and below), but a larger percentage (27%) are of advanced age (55 years old and above) (**Table 8**).

There are just as many males as females indicating a good gender balance in beneficiary selection. Majority (78%) of the respondents are married with an average household size of 4. The beneficiaries are of high educational level with 39% reaching bachelor’s or undergraduate level, and 13% with master’s level degree. About one-third (29.5%) reached secondary education and very few (merely 0.3%) have no formal education. Majority of the respondents are of the Visaya and Tagalog ethnic origins while the rest are Ilocano, Cebuano, Waray, and Bicolano.

Table 8. Socio-economic profile of farmer-beneficiary respondents

Characteristics	Percent
Age (years)	
18-24	2.4
25-34	15.2
35-44	25.6
45-54	29.8
55-64	17.4
65 - 74	8.6
Above 75	1.0
<i>average (years)</i>	<i>46.8</i>
Gender	
Male	48.7
Female	51.3
Civil Status	
Single/Never been married	18.9
Married	71.2
Common Law/live-in	2.9
Widowed	5.7
Separated	1.2
Household Size	
1 to 3	32.1
4 to 6	58.0
7 and above	9.9
<i>Average (number)</i>	<i>4.4</i>
Highest Educational Attainment	
Early childhood education	0.4
Primary Education	7.4
Lower secondary education	10.4
Upper secondary education	19.1
Post-secondary non-tertiary	6.7
Short-cycle tertiary education	3.2
Bachelor level education or equivalent	38.7
Master level education or equivalent	13.7
Doctoral level education or equivalent	0.1
No formal education	0.3
Ethnicity	
Tagalog	24.4
Bisaya	26.7
Ilocano	14.3
Cebuano	4.2
Ilonggo	5.4
Bikol	6.5
Waray	4.6
Kapampangan	0.7
Maguindanao	0.6
Pangasinan	0.6
Others	12.1

3.1.1.2 Farm Characteristics

The beneficiaries typically are small crop farmers while others raise livestock and poultry. Average rice farm size was just about a hectare while that for corn and vegetables were 0.4 and 0.2 hectare respectively (**Table 9**). Perennial crops are mostly scattered in the farm with aggregate average area ranging from 0.1 hectare for fruit trees to 0.4 hectare for coconut. Relatively large farmers, albeit few in number, their farms have an average of 16 hectares of rice, 10 hectares of corn, 10 hectares of vegetables and 15 hectares of coconut, banana, and fruit trees. Those tending livestock have either or a combination of one (1) head of cattle or carabao, two (2) heads of goat, and four (4) heads of swine. There are also relatively large livestock growers with an average herd size of 22 cattle, 30 carabaos and 60 goats. For poultry, the average number of head for chicken and ducks are 28 and 8, respectively, with the largest reaching 3,000 and 700 respectively.

Table 9. Area planted to crops (in hectares) and number of animals raised (head)

Crops Area			Number of Animals Raised		
Crop	Average	Highest	Animal	Average	Highest
Rice	1.0	16.0	Pigs	4.0	200.0
Corn	0.4	10.0	Chicken	28.0	3,000.0
Vegetables	0.2	10.0	Duck	8.0	700.0
Coconut	0.4	15.0	Carabao	1.0	30.0
Banana	0.2	15.0	Goat	2.0	60.0
Cacao	0.1	8.0	Cattle	1.0	22.0
Fruit trees	0.1	15.0			
Others	0.1	10.0			

3.1.1.3 Farming Experience and Tenure

Majority of the beneficiaries have been farming for more than 10 years (**Table 10**), although a large number (43%) have less than 10 years farming experience. Sixty percent are landowners and majority are members of organizations, 64.8% of which are farmer organizations.

Table 10. Farming experience and tenure of beneficiaries

Characteristics	Percent
Number of years in farming	
0 to 10	42.7
11 to 20	30.4
21 to 30	15.5
31 to 40	9.9
More than 51	1.4
<i>Average (years)</i>	<i>16.5</i>
Member of an organization	
Farmer Organizations	64.8
Non-farm organizations	19.4
Tenurial Status	
Owner	60.5
Tenant	28.3
Leasehold/Rentee	3.1
Others	8.1

3.1.2 Access to Agriculture and Fisheries Intervention

3.1.2.1 Intervention Accessibility

Farmers received interventions from multiple extension service providers, namely DA-ATI, other government agencies as well as the private sector. Most of these were on rice (58%), corn (22%), vegetables (29%), perennial crops (less than 10%), swine and chicken (less than 10%), and aquaculture (2%) (**Table 11**). A significant percentage (almost 38%) of ATI beneficiaries reported they also received extension assistance from other government agencies as well as from the private sector, mostly agro-chemical companies (**Table 12**). Other government agencies providing extension assistance were the Provincial and Municipal Agricultural Offices and DA agencies other than ATI (**Table 13**). Training was the main form of intervention while others provided equipment support, production inputs, and even cash grants (**Table 14**).

Table 11. Commodity focus of interventions received from ATI, other government agencies, and private organizations

Commodity	Percent
Rice	58.1
Corn	22.5
Vegetables	28.6
Coconut	5.9
Banana	7.2
Fruit trees	8.0
Chicken	9.8
Swine	7.3
Aquaculture	2.0
Others	19.0

Table 12. Percent of farmer beneficiaries receiving interventions from private companies and government agencies other than DA-ATI

Receiving interventions	Percent
Yes	37.7
No	62.3

Table 13. Percent of farmers receiving interventions

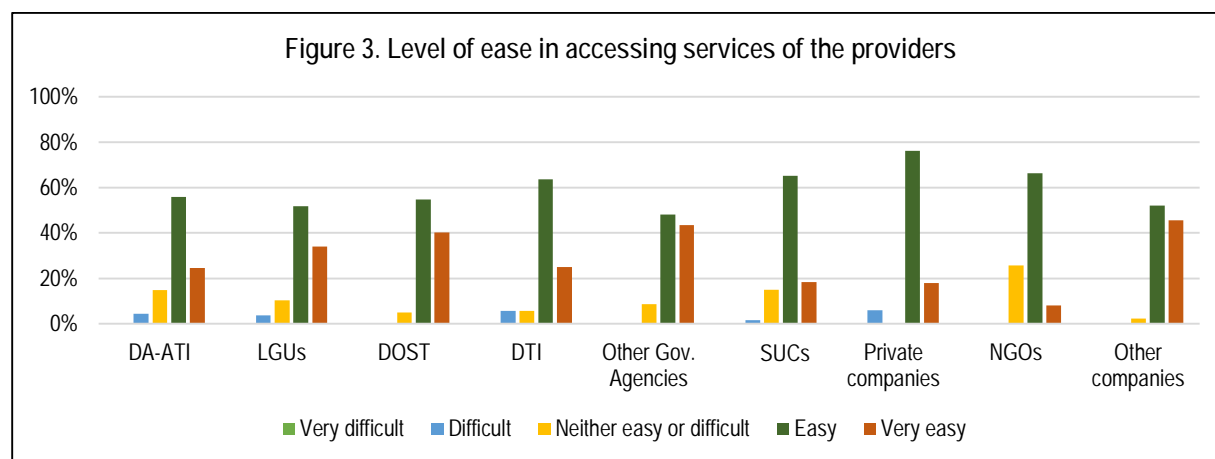
Agency	Percent
Other DA Agencies	42.3
DOST	11.1
DTI	20.9
LGU (MAO/PAO)	79.1
SUC	16.6
Private companies	13.7
NGOs	7.3
Cooperatives/POs	18.2
Others	10.1

Table 14. Beneficiaries receiving interventions from various agencies (percent reporting)

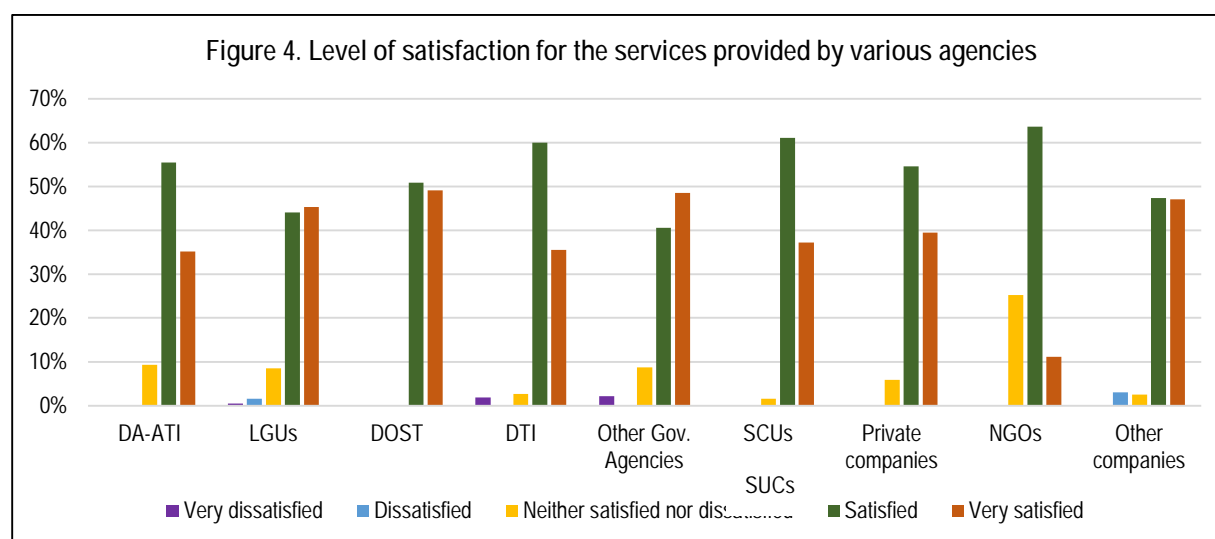
Interventions	DA-ATI	DOST	DTI	LGU (MAO/PAO)	SUC	Private Companies	NGOs/ POs	Other Government Agencies	Other Companies/ Agencies
Training	43.2	58.0	59.7	36.6	52.7	36.8	54.8	40.6	36.6
School on the Air	2.7	10.2	3.1	2.5	11.0	1.4		1.1	3.3
E-extension program/e-learning	3.5		3.1	1.9		4.3	5.2		2.2
Advisory services	3.1		2.9	5.1	4.4	8.0		1.7	3.7
IEC Materials	8.5	2.4	5.5	7.2	8.0	4.7	8.7	2.5	3.7
Machineries/equipment		4.6	1.8	9.1	4.2	1.1		9.1	13/3
Production inputs		18.3	9.0	21.7	8.3	26.3	14.6	15.1	22.5
Cash grants/loans		1.5	1.8	4.3		2.5	5.5	18.5	5.8
Market linkage	3.1	5.1	6.4	4.1		3.9	3.4	3.7	
Others	5.5		6.7	7.4	11.5	11.1	7.8	7.8	8.8

3.1.2.2 Satisfaction Feedback

The satisfaction of beneficiaries in terms of level of ease or difficulty in accessing the services of the providers mentioned in the previous tables is shown in **Figure 3**. Overall, the beneficiaries rated the accessibility to be easy or very easy. The private companies dealing on seeds, fertilizers, and other chemicals and projects funded by international donors like Korea International Cooperation Agency (KOICA), United States Agency for International Development (USAID), US Peace Corps, International Labor Organization (ILO), and Swiss Condor garnered the highest easy/very easy rating, followed by the NGOs, DTI, DOST, and SUCs. DA-ATI also got a high rating, after SUCs. This may be because the interventions from other agencies included tangibles like equipment or machineries, cash grants or loans, as well as production inputs. In addition, these private companies and international donors are more operationally agile, unlike government agencies, which must comply with government prescribed regulations on their operations.



In terms of farmer's level of satisfaction for the services provided, **Figure 4** shows that beneficiaries were, overall, satisfied and very satisfied. DOST, private companies, and DTI had very high total ratings. DA-ATI also had a satisfied/very satisfied rating of 91%, with NGOs ranking the lowest at 75%.



3.1.2.3 Beneficiary Feedback on ATI Interventions

The DA-ATI implements a number of programs nationwide. For this survey, the specific interventions received by the beneficiaries are shown in **Table 15**. An overwhelming majority (93%) reported being beneficiaries of trainings from the Institute. Other services or interventions were also reported, albeit by small number of beneficiaries. The following sections report the beneficiary feedback on the effectiveness, timeliness, impact, empowerment, and resiliency achieved by beneficiaries, as a result of these interventions.

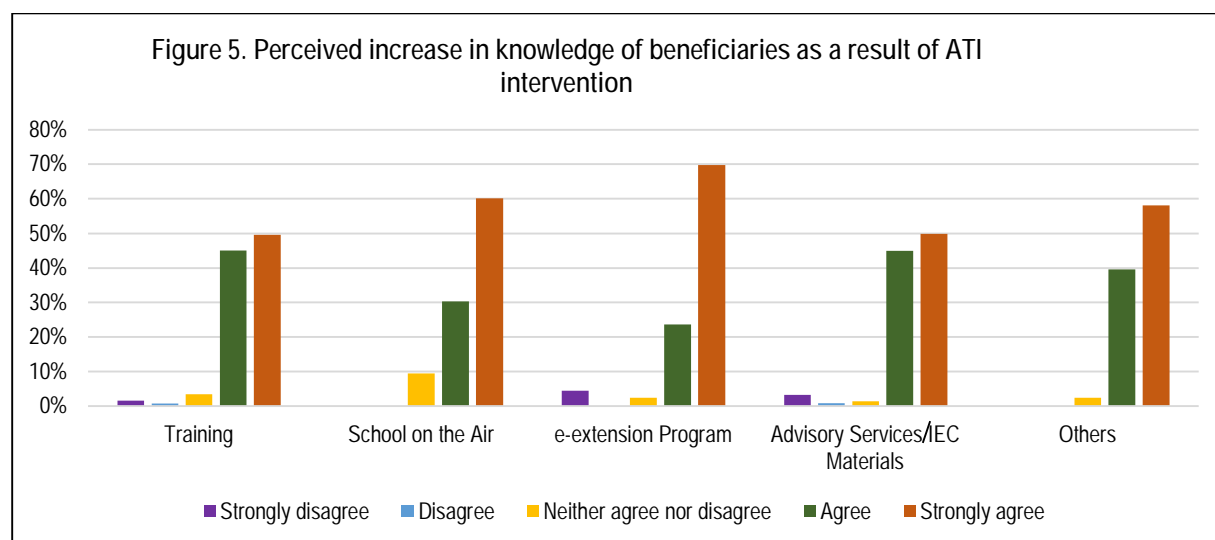
Table 15. Specific intervention received by farmers from ATI

Intervention	Percent
Training	93.0
School on the Air	7.5
E-extension program	5.0
Advisory services	9.0
Others	2.8

3.1.2.3.1 Effectiveness of DA-ATI Interventions

Effectiveness was gauged in terms of improvement in knowledge and adoption of technologies/practices promoted by DA-ATI. As a perception survey, the 5-point Likert Scale was employed which entailed determining the level of the respondent’s agreement/disagreement to positive statements designed to capture certain evaluation parameters.

The study found that majority of beneficiaries highly agree that the various interventions of DA-ATI improved their knowledge on the various areas covered by the interventions (**Figure 5**). Regardless of the type of interventions, the Likert response distribution was skewed to the right indicating that majority of the responses were towards the higher values (i.e., high agreement).



Some of the ATI trainings were intended to help the beneficiaries acquire accreditation, including the National Competency Certificate. Survey results show that about 26% of beneficiaries reported to have gained accreditation with the help of these trainings (**Table 16**). A little over half of these beneficiaries attained Level II, while about a third attained Level I, a tenth attained Level III and about 5% attained Level IV.

Table 16. DA-ATI training resulted to NC certification as reported by beneficiaries

Resulted to NCC	Percent
Yes	26.1
No	73.9
Level of Certification	
Level I	32.1
Level II	51.0
Level III	11.3
Level IV	5.6

An innovative approach of DA-ATI especially involving trainings was to require the participants to formulate action plans to gauge how the participants intend to apply the knowledge gained. The study found that almost half of the participants (43%) complied with this requirement (**Table 17**). Moreover, almost 86% of the participants claimed to have actually implemented their respective action plans. These action plans resulted to increase yield and improved crop and animal health as reported by 40% of the respondents. About 15% also reported improved efficiency in input use.

Table 17. Number of farmer-beneficiaries formulating and implementing action plans and their results, and reasons for non-implementation

Item	Percent
Formulated action plan	
Yes	43.1
No	56.9
Implemented action plan	
Yes	86.4
No	13.6
Result of implementation of the action plan	
increased yield	40.0
healthy plants/animals	21.0
less pests and diseases	16.0
less use of inputs	15.0
others	8.0
Reasons for not implementing the action plan	
costly inputs	20.0
unavailable inputs	11.0
difficult to use	4.0
did not understand how to use	8.0
not applicable/not relevant in the farm	10.0
others	47.0

Table 18 provides the types of technologies or improved practices promoted by DA-ATI. The study found that more than half of the beneficiaries were recipients of trainings on the production of rice, corn, vegetables, backyard gardening, organic farming, and good agricultural practices. A little less than 30% were recipients of trainings on postharvest such as product cleaning, sorting, and grading. Entrepreneurship trainings, which covered farm business school, climate smart business school, and financial literacy were also reported by 43%, 21%, and 23%, respectively.

Table 18. Technology or improved practice intervention by ATI received by farmers

Technology or improved practice	Percent
Rice production technologies	72.4
Corn production technologies	52.6
Vegetable farming	63.6
Diversified farming	48.5
Backyard gardening	50.3
Organic farming	56.9
Pest management	57.4
Good Agriculture Practice	54.8
Climate smart technologies	36.7
Mulching/Vermicomposting	42.5
Sloping Agricultural Land Technology	30.4
Modern livestock technology	32.6
Animal husbandry	34.5
Animal waste management	36.6
Product processing	30.7
By-product utilization	24.1
Farm machinery operation	40.8
Other commodity-based production technology (specify)	19.1
Product cleaning	23.6
Product sorting	23.8
Product grading	28.5
Entrepreneurship training	
<i>Farm business school</i>	43.5
<i>Climate smart business school</i>	21.4
<i>Farmer business development and farm record keeping</i>	32.6
<i>Financial literacy</i>	23.6
<i>Kapatid Mentor ME</i>	10.2

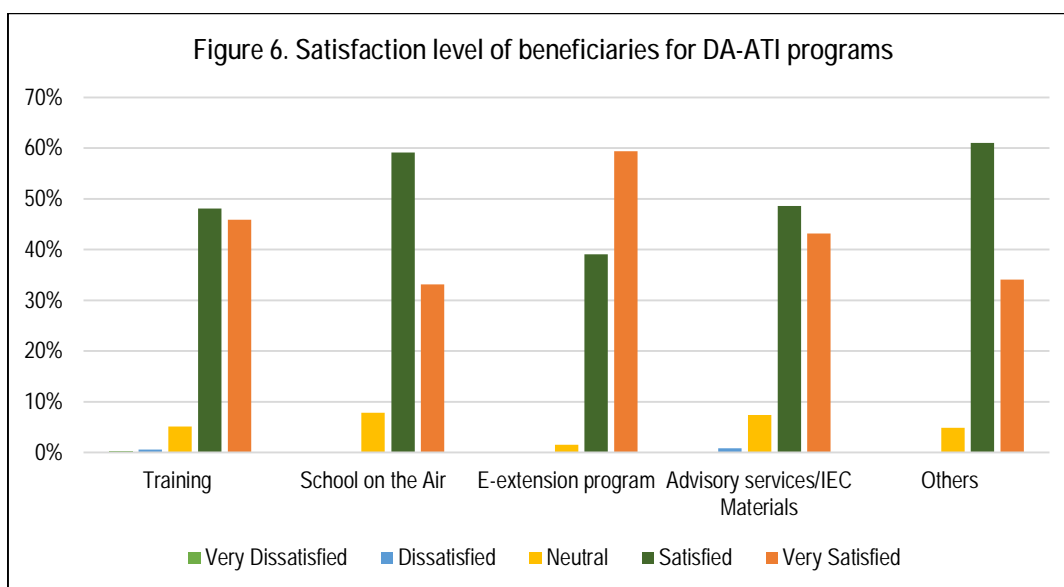
A significant number of respondents (51.5%) reported to have adopted the technologies/improved practices they learned from the various trainings (**Table 19**). Such adoption resulted to increased yield as reported by almost 35 % of beneficiaries, improved quality of plants and animals (23%), less pests and diseases (20%) and lower input use (15%). Those who did not adopt the technologies reported they were constrained by high input prices (21%), non-availability of inputs (15%), difficulty in application (7%), and irrelevance of the technology or improved practice in particular circumstances of their farms (32%).

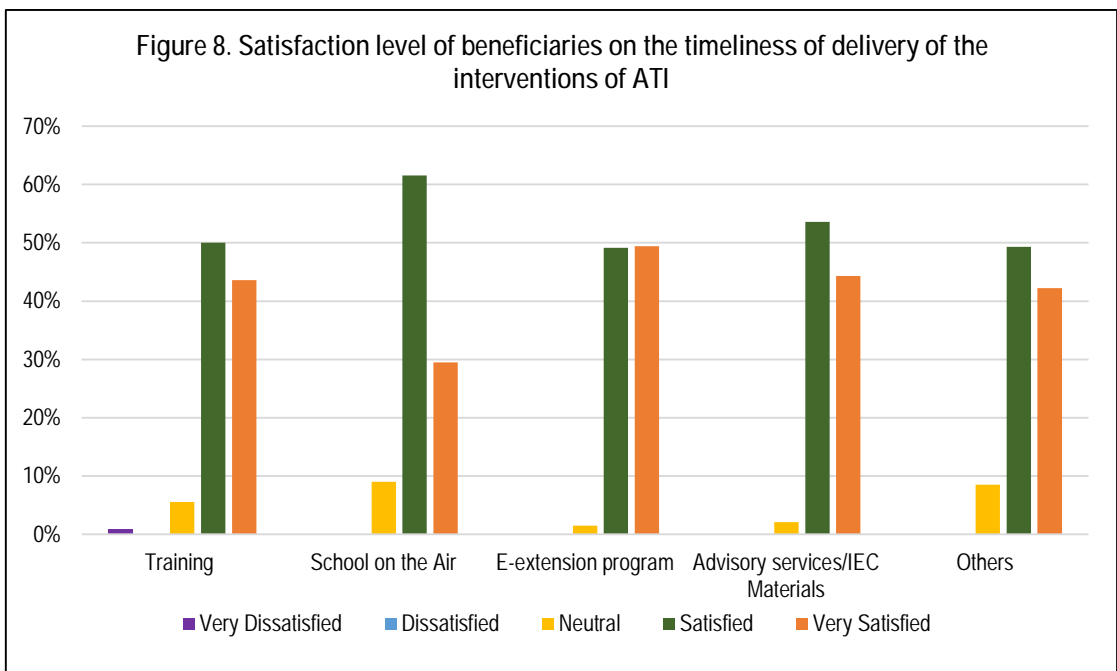
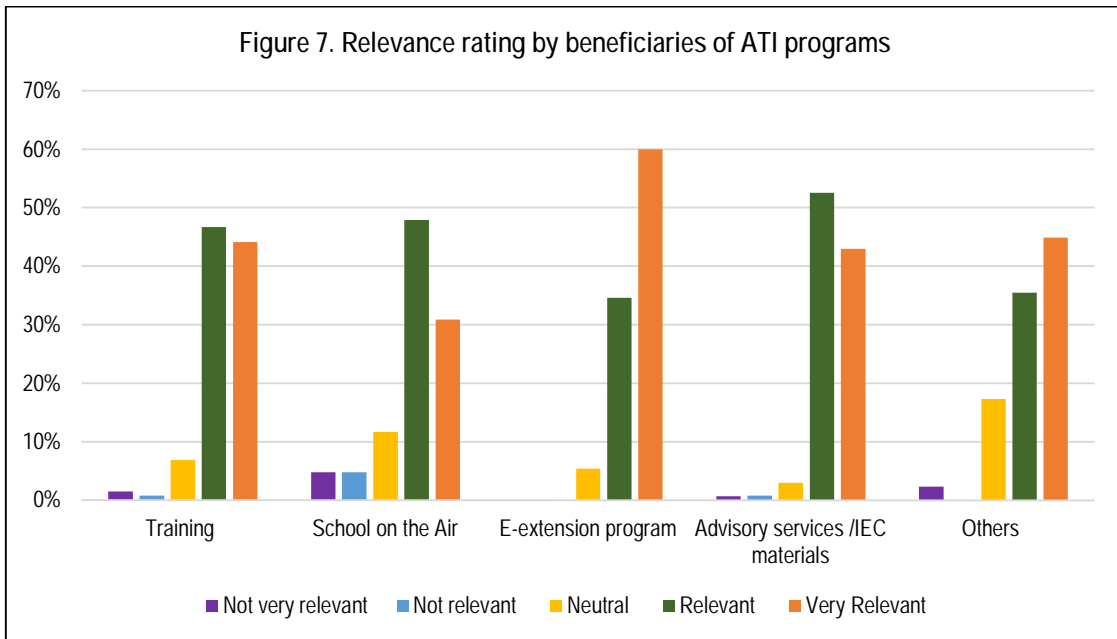
Table 19. Farmers reporting adopting the technology or improved practice

Item	Percent
Yes	51.5
No	48.5
Results from adopting technology or practice	
Increased yield	34.8
healthy plants/animals	23.1
less pests and diseases	20.2
less use of inputs	15.2
others	6.8
Reasons for not adopting	
costly inputs	21.7
unavailable inputs	15.4
difficult to use	7.2
did not understand how to use	3.5
not applicable/not relevant in the farm	32.6
others	19.5

3.1.2.3.2 Relevance of DA-ATI Interventions

The beneficiaries of DA-ATI programs were generally satisfied with the assistance provided with 90% of respondents expressing they were satisfied or very satisfied (**Figure 6**). They reported that the programs were relevant to their needs (**Figure 7**). In particular, the e-extension program was rated very relevant among the programs, while the school on the air was also rated favorably. The programs also received favorable rating on timeliness with more than 90% of respondents reporting the interventions were carried out in a timely manner (**Figure 8**).





3.1.2.3.3 Changes in Yield, Price, Quality, and Income

Qualitative and quantitative approaches were used to determine the changes in yield, price, and quality resulting from the DA-ATI interventions. The former involved directly asking the beneficiaries whether improvements in these variables were experienced and whether these can be attributed to the subject interventions. The latter involved the use of statistical test (t-test) to determine whether significant differences exist between the baseline and current (i.e., with intervention) values of the variables. It should be noted that the survey responses were based on recall especially of the baseline conditions (actual baseline data are not available). The results should therefore be viewed as indicative rather than conclusive.

As part of quantitative approach, a technology adoption function was also specified and estimated as detailed in an earlier section of this report. Since changes in yield, quality or prices (due to quality premium) attributable to DA-ATI can only actually be realized if the technologies were adopted, the results of the technology adoption function could provide greater empirical indication on whether the changes claimed by the beneficiaries could be attributed to the DA-ATI programs.

The study found that majority of the respondents involved in crop production reported increase in yield (**Tables 20 and 21**). In contrast, yield improvement has not been reported by those engaged in livestock and poultry. This could be due to the backyard nature of livestock production where very few heads especially of large ruminants are raised. In the case of those engaged in swine production, the problem brought about by the African Swine Fever (ASF) probably constrained the beneficiaries from realizing yield improvement from the DA-ATI interventions.

Improvement in prices were also reported by the crop beneficiaries of DA-ATI program, except those engaged in fruit production. All of the respondents engaged in livestock and poultry reported increase in prices. Regardless of commodities, majority of respondents also reported improvement in the quality of their produce. The improvement in quality may have partly caused the improvement in price received, albeit this should be viewed with caution as the respondents did not specifically mention whether or not they received price premium for the improvement in quality. There are myriads of factors determining price changes not to mention that prices inherently exhibit an upward trend over time. Interestingly, the large majority of beneficiaries also reported improvement in income.

Table 20. Farmers reporting changes in price, yield, quality of harvest, and income of farmer-beneficiaries after ATI intervention (percent reporting)

Commodity	Price ¹			Yield ²			Quality			Income		
	Improve/ Increase	Decrease	No Change	Improve/ Increase	Decrease	No Change	Improve/ Increase	Decrease	No Change	Improve/ Increase	Decrease	No Change
rice	81.6		18.4	92.3	5.3	2.4	91.2	8.8		81.4	6.1	12.5
corn	100.0			85.8	14.2		80.4	12.1	7.5	85.8	14.2	
vegetables	59.8		40.2	70.7		29.3	78.4	8.3	13.3	77.1		22.9
fruits			100.0	100.0			100			25.7		74.3
pigs	100.0			28.4		71.6	28.4		71.6	28.4		71.6
chicken	100.0					100.0	100.0			100.0		
goats	100.0					100.0	100.0		50.3	100.0		50.3
Others	72.7		27.3	63.9		36.1	72.7	27.3		72.7		27.3

1 Price of commodity per kg

2 Yield per cropping per hectare, or per head per season for animals

Table 21. Estimated price, yield, and income of farmer-beneficiaries before and after ATI intervention, by commodity (average values)

Source of change in productivity	Price ¹		Yield ²		Income ³	
	Before	After	Before	After	Before	After
rice	13.9	41.8	11,343.0	49,618.0	11,150.0	87,926.0
corn	9.4	28.2	62.6.0	425.0	58.0	440.0
vegetables	21.0	55.5	18,898.0	49,684.0	16,313.0	52,277.0
fruits	161.5	242.2	77.3	500.0	29,062.0	100,000.0
pigs	17,912.0	25,000.0				

¹Price/kg or head

²Yield (estimate per cropping per hectare, or per head per season for animals)

³Income (estimate per cropping per hectare)

3.1.2.3.4 Empowerment and Resiliency

3.1.2.3.4.1 Coping with Crisis Situations

Empowerment and resiliency are two of the higher order outcomes being targeted by ATI through their various programs. Majority of the beneficiaries (62%) claimed the ATI interventions provided them the skills and opportunities to become entrepreneurs (**Table 22**). These include skills on business management, workforce management record keeping; communication and negotiation as well as mindset improvement. The interventions also covered market development and expansion, social media or online selling and technical skills on value adding (e.g., meat and fruit processing), farm management, product development, certifications, new technical skills such as artificial insemination and organic agriculture, among others.

Table 22. DA-ATI intervention provided skills and opportunities for beneficiaries to become entrepreneurs

Item	Percent
Yes	62.0
No	38.0

The farmers' vulnerability to risks are exacerbated by their inability to access protection for themselves and their livelihoods. For farmers, the common forms of social protection include social security (SSS), housing (Pag-IBIG), health (PhilHealth), crop insurance, as well as life and medical insurance (**Table 23**). Beneficiaries already have some forms of protection before they received interventions from ATI. About 57% have PhilHealth coverage, 43% have SSS insurance and 30% have crop insurance. After the intervention, those with no existing protection, especially for SSS, Pag-IBIG, and PhilHealth were able to avail them. To some extent, ATI was able to provide assistance in availing this social protection, particularly for crop insurance, as reported by about 61% of the beneficiaries.

Table 23. Respondents with social protection before and after ATI intervention (percent reporting)

Social Protection	Before	After	ATI helped in availing social protection
SSS	42.9	25.5	16.1
Pag-IBIG	25.7	14.1	7.5
PhilHealth	57.2	36.6	6.2
Crop insurance	29.7	29.5	60.8
Other forms of social protection	34.8	27.4	9.4

Agriculture-based livelihoods are inherently prone to crisis or unfortunate events such as those listed in **Table 24**. About 47% experienced typhoon, drought (46%), pests and diseases (28%), flooding (26%), among others. Interestingly, majority of the beneficiaries expressed having greater confidence in coping with crisis situations due to the trainings provided by the DA-ATI (**Table 25**). School on the air figured prominently as influential in improving crisis resilience by majority (75%) of the beneficiaries. This was followed by e-extension program (58%) and trainings (57%).

Table 24. Causes of crisis situations

Event/Crisis	Percent
Typhoon	46.8
Flooding	26.3
Drought	36.3
Pests and diseases	28.8
Decrease in output prices	9.0
Increase in input prices	7.3
Family emergencies	3.7
Others (specify)	3.2
None	18.0

Table 25. Improvement in coping with crisis situations

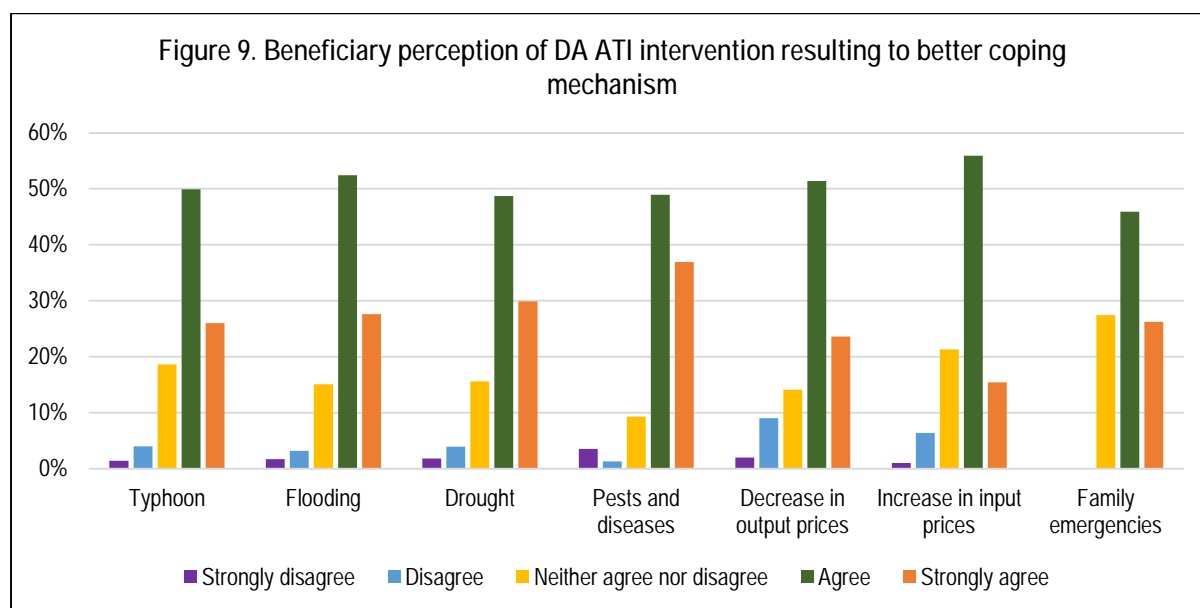
Type of intervention	Percent
Total yes response	56.5
Training	57.1
School on the Air	74.6
E-extension program	57.8
Advisory services/IEC materials	34.9

School on the air are more structured and has longer duration than trainings thus, farmers would understandably have more knowledge gained on how to deal with crisis in their farms from this program compared to other interventions. Among the important knowledge they have gained were on water management and use of deep wells during drought, the importance of savings for emergencies, availing crop insurance, how to manage pests and disease outbreaks, reporting of calamities to authorities such as the DA and LGUs for help and early harvesting of crops in case of typhoons.

The coping mechanisms of beneficiaries before and after receiving ATI interventions were compared to see if these interventions have effects on farmers behavior. **Table 26** shows that more beneficiaries were availing crop insurance as well as requesting assistance from government agencies including LGUs after the interventions to deal with typhoons, and flooding. During drought, more beneficiaries were into adjusting their planting calendars, used drought tolerant varieties, mulching, drip irrigation, and practiced hand watering. More beneficiaries also practiced spraying and use of IPM to deal with pests and disease outbreaks. For increases in prices and family emergencies, more beneficiaries resorted to loans as a coping mechanism. Overall, the beneficiaries believe that the interventions from ATI resulted to better coping mechanisms in crisis situations (**Figure 9**).

Table 26. Coping mechanisms of farmer beneficiaries in dealing with crises before and after ATI intervention (percent reporting)

Crisis/Coping Mechanism	Before ATI Intervention	After ATI intervention
Typhoon		
early harvest of crops	39.0	35.5
avail crop insurance	19.3	26.9
ask for assistance from LGUs/government agencies	15.8	19.8
no action	26.0	17.8
Flooding		
early harvest of crops	41.1	38.3
avail crop insurance	18.0	26.7
ask for assistance from LGUs/government agencies	20.8	24.0
no action	20.1	11.0
Drought		
delayed planting	33.7	22.2
adjustment of planting calendar	16.2	21.1
use drought tolerant varieties	7.6	9.1
practice mulching	3.3	4.1
use drip irrigation	11.5	15.8
hand watering	13.2	14.7
ask for assistance from LGUs/government agencies	6.9	6.8
others	7.6	6.3
Pests and Diseases		
spraying	71.8	71.4
IPM	5.1	13.0
others	9.4	10.8
no action	13.8	4.8
Decrease in output prices		
look for other markets	42.7	46.0
did not sell	27.9	24.6
sell in the usual market	29.4	29.4
Increases in input prices		
look for other sources	75.0	70.8
loans	25.0	29.2
Family emergencies		
use social protection (PhilHealth, etc)	34.7	33.6
loans	24.9	31.8
request assistance from government agencies	32.0	27.1
others	8.5	7.4



3.1.2.3.4.2 Farm Certifications

Having duly certified farms (e.g., GAP) contribute to empowerment in various ways. Foremost of these are through better access to market and improved bargaining power. The DA-ATI provides trainings with topics related to certifications of farms, including Good Agricultural Practice (GAP), Organic Agriculture (OA), Good Animal Husbandry Practice (GAHP) and others. In regional training centers, ATI also provides technical assistance for farmer and walk in clients and aspiring certifiers for Participatory Guarantee System for GAP.

Before receiving ATI interventions, about 30% of beneficiaries applied for GAP, 32% applied for OA certification, and 13% for GAHP (**Table 27**). While the DA-ATI interventions did not increase the number of farmers applying for these certifications, majority of the beneficiaries reported that the interventions helped increase their chances of approval (**Table 28**). The success rate was 81% for GAP, 78% for OA and 86% for GAHP. According to these beneficiaries, ATI introduced the concept of certification, importance, benefits, and the application process through orientations, seminars, discussions, and provision of materials. In some areas, the ATI followed up on with the farmers on the status of their application.

Table 27. Farmer-beneficiaries applying for farm certifications before and after DA ATI Intervention (percent reporting)

Certification	Before	After	ATI intervention helped in getting the certification
Good Agriculture Practice (GAP)	29.6	33.4	73.7
Organic Agriculture (OA)	32.4	31.2	59.5
Good Animal Husbandry Practice (GAHP)	13.4	14.6	71.4
Others	24.6	20.8	67.8

Table 28. Percent of farmer-beneficiaries able to get farm certification

Certification	Percent
Good Agriculture Practice (GAP)	81.0
Organic Agriculture (OA)	78.0
Good Animal Husbandry Practice (GAHP)	86.3

3.1.3 Technology Adoption

The study placed special emphasis on the assessment of technology adoption as this is considered by the DA-ATI to play a pivotal role in the AFE RBME ToC. Indeed, the link between the provision of interventions and the higher order outcomes and impact would be severed if the technologies and improved practices would not be adopted by the target clients.

In the current context of the DA-ATI programs, technology adoption can be influenced by a number of factors including the inherent nature of the technology being promoted, the different characteristics of the target farmers, and the effectiveness of the delivery system, among others. The study therefore formulated and estimated a model that would capture these varied influences (see section on methodology).

The study determined the level of adoption for various types or groups of technologies, interventions, or practices promoted by the DA-ATI through trainings and other platforms (**Table 29**). Note that these technologies, interventions, or practices mentioned were grouped according to type, and not reported as individual technology or practice. The levels of adoption were categorized into three: high, partial, and non-adoption.

Table 29. Level of adoption of technologies/interventions/practice received from DA-ATI

Technology/Intervention/Practice	Did not receive/ NA	Level of adoption			Adoption index*
		High/ Full (2)	Partial/ Not full (1)	None (0)	
Rice production technologies	2.5	57.1	38.4	2.1	0.78
Corn production technologies	3.8	43.9	50.6	1.7	0.72
Vegetable farming	3.5	42.6	52.3	1.5	0.71
Diversified farming	2.5	41.6	55.9		0.71
Backyard gardening	1.4	43.3	53.5	1.8	0.71
Organic farming		48.9	48.7	2.4	0.73
Pest management		53.4	44.2	2.4	0.76
Good Agriculture Practice	1.5	48.9	48.6	1.0	0.74
Climate smart technologies		52.5	45.6	1.9	0.75
Mulching/Vermicomposting		52.7	47.3		0.76
Sloping Agricultural Land Technology		46.8	53.2		0.73
Modern livestock technology		41.9	55.3	2.7	0.70
Animal husbandry		58.8	41.2		0.79
Animal waste management		52.7	47.3		0.76
Product processing		49.8	50.2		0.75
By-product utilization	6.0	43.2	50.8		0.73
Farm machinery operation	4.2	44.1	49.9	1.7	0.72
Other commodity-based production technology		41.5	58.5		0.71
Product cleaning		34.4	61.0	4.6	0.65
Product sorting		37.1	62.9	4.6	0.66
Product grading		46.1	53.9		0.73
Entrepreneurship trainings					
<i>Farm business schools</i>		46.1	50.9	3.0	0.72
<i>Climate smart business school</i>		45.4	54.6		0.73
<i>Farmer business development and farm record keeping</i>		41.4	53.4	5.2	0.68
<i>Financial literacy</i>		47.5	52.5		0.74
<i>Kapatid Mentor ME</i>	7.7	55.5	36.7		0.80
Others	4.9	34.1	56.8	4.2	0.66

*adoption index = (obtained adoption score/maximum obtainable score) X 100

Each row in the table sums to 100%, meaning the reported percentages should be interpreted for each type or group of technology, intervention, or practice. Results show that there is an almost equal percentage of beneficiaries reporting full and partial adoption, with minor percentages reporting non-adoption (Table 28).

The responses were further used to calculate the adoption index for each type of technology or practice. The adoption index, indicating extent of adoption at the time of the survey, is computed by obtaining the score for each type of technology against the maximum obtainable score. Responses for full adoption were assigned a score of 2, partial adoption a score of 1, and non-adoption a score of 0. The index is obtained by dividing the score obtained from these ratings, with the maximum score. The maximum score is the highest possible score had all recipients of the ATI program for the subject technology fully adopted said technology. The study found very high adoption index (0.65 to 0.80) for those adopting the technology, intervention or practice, regardless of commodity indicating the effectiveness of the DA-ATI interventions in influencing farmers to shift to technologies and practices that can improve farm performance.

Moreover, binary logistic regression analysis was used to model the likelihood of a farmer adopting a technology or practice based on several independent variables. This statistical technique that examines the relationship between a binary outcome – such as whether adopts a given technology or practice (coded as 1) or not (coded as 0) – and a set of independent variables. In this study, these independent variables included age, sex, household size, highest educational attainment, years in farming, farm ownership, commodity type, type of ATI intervention attended, and ATI training center where the intervention was conducted.

The model works by calculating the log odds of the adoption occurring, which translates into how each independent variable affects the likelihood of adoption. Each coefficient in the model corresponds to an odds ratio for a specific variable, which tells how the likelihood of adoption changes with each unit increases in that variable. An odds ratio greater than 1 indicates a positive effect on the adoption likelihood by the value of the odds ratio, expressed as a percentage. Conversely, an odds ratio less than 1 indicates a negative impact on the adoption likelihood by 1 minus the odds ratio, also expressed in percentage.

The results of the binary logistic regression analysis (**Table 30**) indicate that several factors, including sex, commodity type, type of ATI intervention, and specific ATI regional centers (Ilocos Region, Western Visayas, Davao, and SOCCSKSARGEN), significantly influence technology and practice adoption.

Specifically, female farmers are 37.83% less likely to adopt the technology or practice compared to male farmers. Additionally, those who received interventions focused on non-crop commodities from ATI are 54.25% less likely to adopt the technology or practice than their counterparts who received crop-focused interventions.

Moreover, farmers who participated in both training and other interventions from ATI are 2.0888 times more likely to adopt the technology or practice than those who attended training only. Farmers trained in the ATI-Northern Mindanao show an 8.8403 times higher likelihood of adoption compared to those trained in ATI-Cordilleras. Similarly, those trained in ATI-Central Luzon are 8.6481 times more likely to adopt the technology or practice than those from ATI-Cordilleras.

Table 30. Results of binary logistic regression

	Estimate	Odds	Std. Error	t-value	p-value
Intercept	-1.0734	0.3418	0.6361	-1.6874	0.0919 ^{ns}
Age	0.0084	1.0084	0.0092	0.9104	0.3629 ^{ns}
Sex: Female	-0.4753	0.6217	0.1752	-2.7126	0.0068 [*]
Household size	-0.0124	0.9877	0.0523	-0.2368	0.8128 ^{ns}
Highest educational attainment (<i>reference: no formal education/ elementary education</i>)					
High school education	0.6283	1.8744	0.3313	1.8961	0.0583 ^{ns}
Vocational/ Associate degree	0.2609	1.2981	0.3925	0.6646	0.5065 ^{ns}
At least college degree	0.4344	1.5441	0.3373	1.2880	0.1981 ^{ns}
Years in farming	-0.0025	0.9975	0.0096	-0.2573	0.7970 ^{ns}
Farm ownership: Farm owner	-0.3052	0.7370	0.1906	-1.6013	0.1097 ^{ns}
Commodity type: Non-crops	-0.7821	0.4575	0.2391	-3.2710	0.0011 [*]
Type of ATI intervention: Training plus other intervention	0.7366	2.0888	0.2636	2.7947	0.0053 [*]
International Training Center on Pig Husbandry	0.9131	2.4921	0.5360	1.7036	0.0888 ^{ns}
Ilocos Region	2.1046	8.2040	0.4150	5.0708	<0.0001 [*]
Cagayan Valley	0.4769	1.6110	0.4256	1.1206	0.2628 ^{ns}
Central Luzon	2.1573	8.6481	0.5572	3.8718	0.0001 [*]
CALABARZON	1.0330	2.8096	0.4641	2.2257	0.0263 [*]
MIMAROPA	1.5990	4.9482	0.3925	4.0740	0.0001 [*]
Bicol	0.2000	1.2214	0.4511	0.4433	0.6576 ^{ns}
Western Visayas	2.1254	8.3764	0.4094	5.1914	0.0000 [*]
Central Visayas	1.1395	3.1253	0.3759	3.0316	0.0025 [*]
Eastern Visayas	0.7261	2.0670	0.3544	2.0486	0.0408 [*]
Zamboanga Peninsula	0.4643	1.5909	0.4448	1.0438	0.2969 ^{ns}
Northern Mindanao	2.1793	8.8403	0.6610	3.2971	0.0010 [*]
Davao	-0.3806	0.6835	0.3683	-1.0334	0.3017 ^{ns}
SOCCKSARGEN	-2.0240	0.1321	0.6631	-3.0522	0.0023 [*]
Caraga	0.6217	1.8621	0.3190	1.9489	0.0516 ^{ns}

ns – not significant at 5% level of significance, * – significant at 5% level of significance

Conversely, farmers trained in ATI-Davao are 1.4631 times less likely to adopt the technology or practice compared to those trained in ATI-Cordilleras, and farmers trained in ATI-SOCCKSARGEN are 7.5685 times less likely to adopt compared to those trained in ATI-Cordilleras.

3.2 Results from AEWs Interview

3.2.1 Socio-Demographic Profile of Agricultural Extension Workers

The study surveyed 658 AEWs who participated in the DA-ATI trainings designed to enhance the knowledge and skills of these change agents. The respondents were on average 41.5 years old, majority (almost 53%) were female and mostly (71.4%) married. About 55% have bachelor's degree while one-third have master level education, and a few had doctoral degrees. Only a small percentage are high school and vocational education graduates. Almost a third (33.8%) were of Tagalog origin followed by Bisaya/Binisaya (24.3%), Ilocano (15.2%) and Bikol (6.7%). More than one-third are members of farmers organization while one-fifth are members of non-farm organizations (**Table 31**).

Table 31. Socio-economic profile of agricultural extension workers

Item	Number	Percentage Reporting
Number of respondents	658	
Age		
Average (in years)	41.5	
Youngest	24	
Oldest	75	
Mode	42	
Range (percent reporting)		
18 to 24		0.20
25 to 34		32.00
35 to 44		32.10
45 to 54		18.50
55 to 64		14.10
65 to 74		3.00
75 +		0.10
Sex Distribution		
Male		47.00
Female		52.70
Marital Status		
Single/ Never Married		24.30
Married		71.40
Common law/Live In		0.60
Widowed		2.70
Separated		1.10
Ethnicity		
Tagalog		33.80
Bisaya/ Binisaya		24.30
Ilocano		15.20
Cebuano		1.30
Ilonggo		4.30
Bikol/ Bicol		6.70
Waray		4.30
Kapampangan		1.40
Maguindanao		0.10
Pangasinan		0.20
Others		8.30
Membership to		
Farmer organization		36.9
Non-farm organization		21.5
Highest Educational Attainment		
Early Childhood Education (Preschool, Kindergarten)		0.00
Primary Education (Elementary School)		0.10
Lower Secondary Education (Middle School, Junior High School)		0.90
Upper Secondary Education (High School, Senior High School)		3.70
Post-secondary Non-tertiary Education (Vocational Training)		2.80
Short-cycle Tertiary Education (Associate Degree)		2.50
Bachelor Level Education or Equivalent (Undergraduate Education)		55.00
Master Level Education or Equivalent (Graduate Education, Master's Degree)		33.60
Doctoral Level Education or Equivalent Education		1.50
Household size		
Average (in years)	4.4	
Maximum	13	

Item	Number	Percentage Reporting
Minimum	1	
Mode	4	
Range (percent reporting)		
1 to 3		31.70
4 to 6		55.80
7 and above		12.50
Number of working family member		
One		35.90
Two		44.80
Three		12.10
Four and above		7.20
Sources of income (percent)		
Government employment		94.20
Farming		28.40
Non-farm business		9.90
Average monthly gross income (pesos)		
<i>Respondent</i>		
Government	22,982.00	
Farming	19,903.40	
Non-farm Business	20,316.20	
<i>Working family member</i>		
Government	9,922.90	
Farming	1,669.40	
Non-farm Business	3,784.70	
Number of years as extension workers		
Less than 1 year		2.60
1 to 5		26.40
6 to 10		37.50
11 to 15		12.60
16 to 20		7.30
21 to 25		4.30
26 to 30		4.10
More than 30		5.20
Average years	10.90	
Median	8.00	
Minimum	0.00	
Maximum	42.00	
Mode	5.00	
Status of appointment		
Permanent		72.30
Contractual		14.70
On job contract		13.00

The major source of income among AEWs is government employment but apart from this, there are others who are engaged in farming and non-farm businesses. The monthly gross income from government employment is P22,982 on average. Earnings from non-farm businesses is P20,316 monthly. Other family members employed in government reported an average income of less than P10,000, while P1,669 for those engaged in farming and P3,785 from non-farm activities.

The AEWs have been in service for an average of 10.9 years. The third, which comprised the majority, have been working between 6 to 10 years, and one to five years for 26.4% of the AEWs. A few (5.2%) have been in the service for more than 30 years. The majority have permanent positions (72.3%), while all others are under contract (14.7%) and job contract (13%) arrangements.

3.2.2 Access to Agriculture and Fisheries Extension Services

The succeeding discussions describe what typify the extension services available to AEWs. DA-ATI, in particular, is tasked to fill the extension services gap since the devolution of these services to LGUs. Other agencies like DOST, DENR and SUCs are also providing extension services, along with farmer organizations.

Agricultural extension workers have been filling the extension and training gap since the devolution of agricultural services to the LGUs. Filling the knowledge gap on the extension services available in national agencies and private sources requires conscious effort on the part of AEWs. Awareness of information sources, extension and advisory services, and ease of access to these services are crucial for the AEWs, given their role in delivering agricultural and fisheries extension services to their local communities.

Awareness of extension service providers. There are several extension service providers, and this includes government agencies like DA-ATI, DOST, DENR, state universities and colleges and private firms. The prominent among them, however, are the DA-ATI and the LGUs (MAO and PAO) as shown in **Table 32**. There was low level of awareness on the extension services provided by DOST, DENR, SUCs, and the private sector. The AEWs are either “not aware” or “slightly aware” of the extension services provided by these agencies. Similarly, only a few are aware of the services provided by other farmers and farmers’ organization within their community.

Table 32. Awareness about the services provided by various service providers

Service Provider	Not aware	Slightly aware	Moderately aware	Very aware	Extremely aware	Average rating a/
	percentage of respondents reporting					
DA-ATI	0.9	1.9	10.0	46.0	41.1	4.2
DENR	39.6	10.9	18.7	19.3	11.5	2.5
DOST	44.4	9.2	18.8	18.2	9.5	2.4
SUC	49.8	7.9	12.5	20.5	9.3	2.3
Private firm	71.3	5.1	9.1	10.1	4.3	1.7
PAO	19.0	3.4	10.1	33.7	33.8	3.6
MAO	16.9	1.9	7.1	32.0	42.1	3.8
Other farmers	64.1	3.2	8.0	15.1	9.7	2.0
Farmer Organizations	57.7	2.9	6.5	21.4	11.6	2.3
Other service providers	78.9	1.7	4.9	7.1	7.5	1.6

a/ rating:

1-not aware; 2-slightly aware; 3-moderately aware; 4-very aware; 5-extremely aware

Extension and other services accessed. DA-ATI has several extension service programs, and these are commonly accessed by the AEWs, most especially training, IEC materials, and school on the air (**Table 33**). The AEWs also accessed the extension services of municipal and provincial agricultural offices, especially training and advisory services. DOST, DENR, other farmers and farmer organization have low access rating for their extension services.

Table 33. Extension intervention and advisory services accessed from service providers (in percentage of respondents reporting)

Extension Services	DA-ATI	DENR	DOST	SUC	Private firm	PAO	MAO	Other farmers	Farmer organizations	Other service providers
School on the air	27.6	5.1	4.8	4.1	0.9	14.7	15.1	2.2	2.3	0.4
e-Learning - free online courses	18.7	5.3	4.3	3.1	1.5	6.4	8.9	0.5	2.9	0.4
e-Farming - Farm Business Advisory Services via the Farmers' Contact	18.8	4.3	2.8	1.4	1.4	10.6	10.6	2.4	3.3	
Webinars on various agricultural technologies	22.8	3.5	4.4	2	1.5	9.4	10.6	0.4	2.2	0.3
Rice Crop Manager Advisory Service (RCMAS)	23.4	2.7	1.7	1.2	0.9	13.3	15.6	2.0	3.9	0.8
IEC materials	32.7	5.6	6.3	4.9	3	20.7	20.2	0.9	3.7	2.5
Advisory services	23.0	5.0	5.6	3.2	3	16.6	20.3	3	5.6	2.4
Training	82.0	15.6	16.1	24.9	9.4	58	59.1	11.8	18.3	8.4
e-Farming - Farm Business Advisory Services via the Farmers' Contact	-	-	-	-	-	-	-	-	-	0.8
Others	2.1	1.9	4.4	4.1	2.4	3.3	3.4	2.0	2.0	2.2
None	5.1	30.6	25.5	16.3	13.3	13.5	12.2	18.2	16	8.7

Apart from training, IEC materials, school on the air and other services, AEWs accessed agricultural-related services like cash grant, farm inputs, farm machinery, farm animals and livelihood projects mostly from the DA-ATI, MAO, and PAO (Table 34). Farm inputs, livelihood projects, farm animals, and farm machinery/equipment were the most sought after. A high percentage of AEWs, however, did not access any of these services.

Table 34. Other services accessed from service providers (in percentage of respondents reporting)

Other services accessed	DA-ATI	DENR	DOST	SUC	Private firm	PAO	MAO	Other farmers	Farmer organizations	Other service providers
Livelihood projects	25.9	7.8	7.7	4.9	3.0	20.9	27.4	5.7	7.7	2.6
Cash grant	15.0	2.1	5.1	1.4	1.7	11.1	14.2	3.2	4.7	2.3
Farm inputs	38.8	10.3	5.3	5.2	8.2	37.4	45.7	8.2	11.1	6.1
Farm animals	24.7	6.4	3.9	2.1	1.1	21	28.7	4.3	4.2	1.7
Machinery/ equipment	21.0	4.5	8.9	1.5	1.2	23.9	23.2	2.9	8.9	3.0
Market linkage	10.9	1.0	3.1	1.4	2.3	9.6	13.4	1.8	3.1	0.8
Did not access any	41.2	38.8	35.1	36.8	15.2	25.5	21.3	21.7	18.8	9.7

Ease of access to service providers. This is rated from 1 (very difficult) to 5 (very easy). MAO is the easiest to access with a rating of 4.4, followed by DA-ATI and PAO both of which have a rating of 4.3 (Table 35). In fact, about one half of the respondents find it “easy” to “very easy” to access the services. A satisfactory access rating of 4.1 is also reported for the SUCs, other farmers and farmer organizations with half of the respondents finding it “easy” to access these providers. Other organizations may be “somewhat easy” to access.

Table 35. Level of easiness or difficulty in accessing the service providers (in percent of respondents reporting)

Service provider	Very difficult	Difficult	Neither easy or difficult	Easy	Very easy	Average Rating a/
DA-ATI	0.00	1.30	7.20	50.80	40.80	4.3
DENR	0.00	0.30	29.30	56.10	14.30	3.8
DOST	0.00	1.50	26.40	55.70	16.40	3.9
SUCs	0.00	0.60	16.90	57.50	25.10	4.1
Private firm	0.00	3.40	26.90	44.30	25.40	3.9
PAO	0.10	0.50	7.90	47.20	44.20	4.3
MAO	0.00	0.20	7.30	43.70	48.80	4.4
Other farmers	0.00	0.00	16.20	57.30	26.50	4.1
Farmer Organizations	0.50	0.00	12.60	55.30	31.60	4.2
Other service providers	0.00	0.00	18.80	47.50	33.70	4.1

a/ rating

1- very difficult; 2- difficult; 3-neither easy nor difficult; 4- easy; 5- very easy

Level of accommodation. Rated from 1 (not accommodating) to 5 (extremely accommodating), DA-ATI, MAO and PAO obtained the highest rate of 4.4 as the majority of AEWs interviewed indicated that these agencies are either “very accommodating” or “extremely accommodating”. This means that these agencies are sympathetic enough to address the needs of the AEWs (**Table 36**). Other agencies like SUCs and farmer organizations are likewise “very accommodating” to AEWs.

Table 36. Level of accommodation of service providers in meeting respondent's needs

Service provider	Not accommodating	Slightly accommodating	Moderately accommodating	Very accommodating	Extremely accommodating	Average rating a/
	percentage of respondents reporting					
DA-ATI	0.00	0.90	4.30	48.10	46.70	4.4
DENR	0.80	3.60	24.90	49.50	21.10	3.9
DOST	0.00	2.50	28.40	45.60	23.50	3.9
SUCs	0.00	1.70	15.20	54.80	28.20	4.1
Private firm	0.00	1.70	28.30	43.70	26.30	3.9
PAO	0.00	0.90	7.70	45.00	46.40	4.4
MAO	0.10	0.90	7.30	44.50	47.20	4.4
Other farmers	0.00	3.10	24.10	48.80	24.00	3.9
Farmer Organizations	0.00	1.80	14.90	56.60	26.70	4.1
Other service providers	0.00	2.30	20.40	46.80	30.50	4.1

a/ rating

1- not accommodating; 2 - slightly accommodating; 3 - moderately accommodating; 4 - very accommodating; 5 - extremely accommodating

Level of comfort. The level of comfort of AEWs in interacting with service providers is rated 1 (very uncomfortable) to 5 (very comfortable). Most AEWs find it “very comfortable” to interact with DA-ATI, MAO and PAO as reflected in rating of 4.5 (**Table 37**). AEWs also feel comfortable interacting with SUCs, DOST, farmer organizations, and other service providers. This may mean that the service providers are providing an environment of comfort and ease for better interaction with the AEWs.

Table 37. Level of comfort in interacting with the service provider

Service provider	Very uncomfortable	Uncomfortable	Neutral	Comfortable	Very comfortable	Average rating a/
	percentage of respondents reporting					
DA-ATI	0.00	0.10	2.20	43.90	53.80	4.5
DENR	0.30	0.40	26.00	54.30	19.00	3.9
DOST	0.00	0.00	20.90	52.20	26.90	4.1
SUCs	0.00	0.70	11.70	53.10	34.60	4.2
Private firm	0.00	0.00	22.60	53.10	24.30	4.0
PAO	0.20	0.00	3.60	43.90	52.30	4.5
MAO	0.10	0.40	6.30	40.60	52.60	4.5
Other farmers	0.00	0.00	13.40	58.60	28.00	4.1
Farmer Organizations	0.00	0.00	8.40	56.20	35.40	4.3
Other service providers	0.00	0.00	18.90	46.60	34.50	4.2

a/ rating

1-very uncomfortable; 2-uncomfortable; 3-neutral; 4-comfortable; 5-very comfortable

Level of satisfaction with extension services accessed. This is rated from 1 (very dissatisfied) to 5 (very satisfied). The AEWs were generally either “satisfied” or “very satisfied” with the extension services they accessed from the service providers (**Table 38**). Almost all service providers received satisfaction ratings ranging from 4.0 (DOST) to 4.5 (DA-ATI). For DA-ATI, the majority (56.4%) were “very satisfied” while 40.3% were “satisfied” with the services of the agency. Other entities like DOST and SUCs may have to improve their extension service delivery to further increase the level of satisfaction of AEWs. In particular, the respondents’ source of dissatisfaction is the lack of information or awareness about the services being provided and their inaccessibility.

Table 38. Level of satisfaction with the extension services accessed from service provider

Service provider	Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	Average rating a/
	percentage of respondents reporting					
DA-ATI	0.00	0.10	3.10	40.30	56.40	4.5
DENR	0.00	0.00	27.10	54.40	18.50	3.9
DOST	0.00	0.00	24.00	49.30	26.70	4.0
SUCs	0.00	0.70	9.80	59.20	30.40	4.2
Private firm	0.00	0.00	25.50	49.70	24.80	4.0
PAO	0.00	0.20	3.70	49.60	46.50	4.4
MAO	0.00	0.40	6.50	42.80	50.40	4.4
Other farmers	0.00	0.00	18.40	55.70	26.00	4.1
Farmer Organizations	0.00	0.00	12.90	56.90	30.20	4.2
Other service providers	0.00	0.00	16.10	53.00	31.00	4.1

a/ rating

1-very dissatisfied; 2-dissatisfied; 3-neutral; 4-satisfied; 5-very satisfied

Rating on DA-ATI extension services. These are rated by the respondents in terms of importance, quality, and relevance (**Table 39**). In terms of **importance**, the majority (76.2%) rated the DA-ATI extension services as “very important”, and “important” to 17.3%. In particular, the ATI-sponsored training introduced them to new technologies and improved production practices thereby enhancing their knowledge. Since they served as link to the farmers in information dissemination of improved or new technologies, the services of ATI through practical and hands-on training enabled AEWs to provide significant assistance to farmers that include improving their problem-solving capability. It enhances the effectiveness of farming practices and promotes interest among farmers.

Table 39. Rating of DA-ATI extension services provided to AF extension workers

Item	Percentage reporting
In terms of importance	
Very important	76.2
Important	17.3
Moderately important	2.5
Slightly important	3.1
Not important	0.8
In terms of quality	
Very good	71.7
Good	25.0
Acceptable	2.7
Poor	0.2
Very poor	0.4
In terms of relevance	
Very relevant	82.1
Fairly relevant	15.1
Somewhat relevant	2.7
Not relevant	0.2

An AEW also appreciates that ATI can bridge research results to practical application. The training is updated with modern technologies that meet their needs.

Those who rated “slightly” or “not important” stated that some training is less practical, have limited participation, less interesting and that improvements are needed in handling and logistics.

“extension workers are better equipped to support farmers leading to improved agricultural outcomes and rural developments”

“they offer advice and information to help solve the farmers agricultural problems”

“nakatulong sa pagdagdag kaalaman sa bagong teknolohiya lalo na bilang technician. Importante upang maging effective sa pagbahagi rin ng kaalaman sa iba »

« they address the needs of the agricultural sector and that research results are communicated to the farmers”

In terms of the **quality of service**, the majority of respondents (71.7%) rated it as “very good” and 25% as “good”. Respondents rated this in terms of effectiveness of the resource speakers, quality of training materials, and accommodation. First, they find the trainers experts in their field and are effective speakers who can simplify complex topics and hands-on experience.

The extension services, especially training, are helpful and useful to both AEWs and farmers as they provide useful ideas and knowledge. The focus is on learning by doing or the practical approach such as demonstrations as this applies to grassroots level. The training modules are

well reviewed and prepared, the training program is well structured, the training staff are respectful, very accommodating, very supportive and approachable, act fast on requests and provides what the AEWs need during the conduct of the training. The services provided meet their expectations and needs. The quality of training meets their standards. The quality is high, commendable, consistent and effective and improves over time. The training program is well-organized.

“ ensures that the trainings address the needs of the farmers”

“effective resource speaker, actual demonstration, with prizes”

“ the resource speaker is knowledgeable about the topic”

“...visual aids are compelling”

“ training materials, food and accommodation are of quality”

“ they are very good in all aspects of discussions and implementation”

On relevance, the majority of respondents (82.1%) reported that the services provided to them are “very relevant” while 15.1% indicated that the services are “fairly relevant. Responding to the TNA or Training Needs Assessment, the training contents are reported relevant and up to date. One respondent reported that the training provides direct application and relevance as an AEW by applying and sharing new knowledge to the farmers. It improves the respondent’s performance and confidence as an AEW.

The extension services address the challenges and real needs of the agriculture sector and are useful in everyday farming activities. The trainings also support gender inclusion by encouraging them to form groups to increase their access to improved farming technologies. The trainings are relevant to improving agricultural production and techniques by helping farmers improve their level of awareness on agriculture and fisheries. ATI extension services also enhance business ventures as both AEWs and farmers gain more ideas and lifelong skills needed on how to manage business, for instance, on livestock farming.

“The trainings received are needed by the AEWS and the farmers”

“very timely and help farmers to become confident to their field”

“dahil napapanahon yung mga tinuturo at binigay na idea or kaalaman”

“ATI provides exactly what is needed”

“relevant because there training address the real needs of the agriculture sector”

In general, the extension services provided by the DA-ATI may be viewed to be very important, of very good quality, and very relevant to the needs of AEWs.

3.2.3 Improved Knowledge, Attitude and Skills from Training/Intervention

It is never easy to provide extension services to farmers when the AEWs themselves are not technically competent and not adequately provided with training and intervention. Filling the knowledge gap and improving their attitude and skills through training will serve them well and the farming and fishing community they serve. Discussed below are the changes which AEWs admitted having gained as a result of the training they attended.

Changes in knowledge. The training received from ATI by the respondents indicated that the majority of them (89.3%) have gained substantial knowledge (**Table 40**). Less than ten percent perceived a moderate increase. In terms of retention, the majority (82.1%) consistently retain and effectively apply the knowledge gained. These imply the effectiveness of the DA-ATI training/interventions in imparting new knowledge with most respondents able to retain and apply them.

Table 40. Changes in knowledge from trainings/interventions received

Item	Percent
Knowledge gained	
I believe that I have gained substantial knowledge, facts, and concepts from the trainings	89.3
I perceive a moderate increase in knowledge, facts, and concepts from the training	9.7
I'm unsure whether my knowledge has changed	1.0
My knowledge has not significantly improved	0.0
I have not gained any knowledge from the training	0.0
Retain and apply knowledge	
I consistently retain and effectively apply the knowledge	82.1
I retain some knowledge but inconsistently apply it	16.6
I struggle to retain and apply the knowledge	0.7
I forget most of the knowledge gained	0.6

For others, the training courses are refresher courses that aim to also update them with modern technologies. It is a continuous learning and self-improvement to them, and of sharing and applying this new knowledge gained in the farm business.

A few have certain challenges in applying the knowledge gained and forgotten about it. Among the reasons are the inadequate resources of farmers, the training attended is not in line with their current job, and it is just mere knowledge with limited use or application in their job as AEWs. A few were not able to absorb and retain information they received. They find the process of absorbing and retaining information difficult. Retaining information would be better for others if they are also actively engaged in farming.

Changes in attitude and beliefs related to the training. For the majority of respondents (81.3%), their attitude, values, and beliefs have changed for the better towards the concepts and topics discussed during the training (**Table 41**). Likewise, the majority (85.7%) are highly motivated and committed to applying what they learned while almost all are willing to embrace new ideas and approaches learned. All these imply that the training provided by DA-ATI is successful in effecting change in the attitude and beliefs of the AEWs.

Table 41. Changes in attitude and beliefs related to the training

Item	Percent
Change in attitude, values and beliefs	
I believe that my attitude and beliefs have changed for the better toward the concepts and the topics discussed	81.3
I perceive moderate change in attitude and belief related to the training	12.3
I'm not sure if my attitude and beliefs have changed	2.7
My attitude and beliefs have not changed	3.6
Impact	
I am highly motivated and committed to applying in my work what I learned from the training	85.7
I am somewhat motivated and committed to applying in my work what I learned from the training	13.8
I am not motivated and committed to applying in my work what I learned from the training	0.5
Openness to change	
I am willing to embrace new ideas and approaches	99.0
I am not open much to new ideas and approaches	1.0

In particular, the intervention changed their perspective and approach to work, as they learned new knowledge and skills. They became humble. It boosted/developed their confidence and self-efficacy, and they became responsible and enthusiastic about their work. It changed them for the better.

For others, the training deepened and widened their appreciation about the training concepts and enhanced their commitment to community development as they learned the importance of community engagement and building rapport with the farmers.

The integration of new values is forceful enough to spark new enthusiasm in their line of work. It changed their attitude. They become motivated and inspired to continue learning and be an inspiration to others. It motivated them to apply new knowledge at the farm.

“dati kasi talagang wala akong pakialam tapos narealize mo as a worker, everytime we work mas maganda ang binibigay at it helps a lot on farmers”

“it has positively influenced my perspective and approach to my work as an extension worker”

“kasi dati walang alam pero ngayon marami ang napulot na learning in farming”

“before may stage freight ako, ngayon naka gain na ako ng self-confidence”

Changes in skills. The DA-ATI training appeared to be effective since majority of the respondents (88.5%) indicated that they developed practical skills, techniques, and competencies as a result of the training and that they applied these learnings in their work and daily activities (**Table 42**). They even shared these with others, most especially to farmers. A few have limited or no opportunity to apply the skills because of their busy schedule. Others think that the skills learned are not related or applicable in their line of work. It is just mere knowledge and limited application on their part.

Table 42. Changes in skills

Item	Percent
Skills acquisition	
I have developed practical skills, techniques, and competencies during training	88.5
I have somewhat developed practical skills, techniques, and competencies	10.7
I have not acquired the skill	0.8
Skills application and transfer	
I applied the skills I learned from the training in work and daily life	95.1
I have not applied the skills learned	4.9

Passing the post-test and gaining competencies. Most of the respondents (93.7%) passed the post-test on the training they attended (**Table 43**). This spells the success of the training as they were able to apply their learnings in a real-world situation. However, while they passed the post-test, only a third were given a TESDA National Competency (NC) Certification. Those who obtained certification were mostly certified at Level II (73%), and 17.3% at Level III.

Table 43. Passing the post-test and gaining competencies

Item	Percent
Pass the post-test on training attended	
Yes	93.7
No	6.3
Given a TESDA National Competency Certification	
Yes	35.7
No	64.3
Level of certification obtained	
Level I	7.7
Level II	73.0
Level III	17.3
Level IV	2.0

Preparation and implementation of an action plan. This is a major goal of the DA-ATI training. Over half of the participants (56.9%) prepared an action plan after the training and of this, 77.3% implemented the plan (**Table 44**).

The plan covered several barangays and this ranged from 21 to over 50. Resources from the LGUs included budget as reported by 21.7%, supplies and materials (21.8%), transportation/vehicle, additional personnel, farm inputs and other resources. The resources provided were generally sufficient as reported by 73.2%. For instance, supplies and materials, transportation/vehicle and budget were reported as sufficient by one-half of the respondents. Addition personnel and farm inputs were reported by 28.8% and 22%, respectively.

Implementation of the action plan is helpful to the farmers with 48.3% indicating that it is “very helpful” and 41% reporting that it is “extremely helpful”. A few (2%) reported that it is slightly helpful.

Table 44. Preparation and implementation of action plan

Item	Percent
Prepared an action plan	
Yes	56.9
No	43.1
Implemented action plan	
Yes	77.3
No	22.7
Number of barangays covered by the plan	
21 to 30	22.6
31 to 40	30.4
41 to 50	23.9
50 and above	23.2
Resources provided by the LGU	
Budget	21.7
Supplies and materials	21.8
Transportation/Vehicle	20.1
Additional personnel	12.0
Farm inputs	9.3
Others	7.9
Sufficient resources provided by LGU	
Yes	73.2
No	26.8
Sufficiency of resources by item for yes response	
Budget	49.9
Supplies and materials	54.9
Transportation/Vehicle	50.5
Additional personnel	28.8
Farm inputs	22.0
Others	12.2
Extent of help to the farmers in implementing the plan	
Not at all helpful	0.7
Slightly helpful	2.0
Somewhat helpful	8.0
Very helpful	48.3
Extremely helpful	41.0
Rating on the action plan in terms of	
Relevance	87.0
Effectiveness	91.0
Efficiency	88.5
Sustainability	86.1

In terms of relevance of the action plan for those who implemented it, 87% reported that the interventions it contains are consistent with the LGU development plans and priorities. On the effectiveness of the plan, 91% indicated that it is successful in addressing the needs of the farmers. In terms of efficiency, 88.5% noted that the interventions were carried out at the time they were needed at the least possible cost. On sustainability, 86.1% reported that the interventions introduced are still being practiced long after they have been introduced.

Those who did not implement indicated budget constraint (lack of funds), no time for it since they are busy with their work as AEWs, the LGU has other activities to prioritize and is focused on other programs, lack of staff, not in their line of work and external factors like pandemic, weather, and accidents. One respondent was recently promoted to a higher post and the implementation of the action plan is no longer in the AEW's scope of work.

Organizational or administrative issues were also reported. This included the assignment of a new coordinator, the plan is not finished yet, conflict of different projects, and they were not required to implement the plan way back in 2018.

For others, there were memory or motivation issues. They forgot if they have to implement the action plan or not and forgot the details as well.

3.2.4 Empowerment Through Employment to AF-Related Job

Only one-fifth of the respondents were promoted to a position (**Table 45**). Those who were not promoted reported lack of vacancy, seniority or length of service, and no civil service eligibility.

Table 45. Empowerment of clients and social protection

Item	Percent
Promoted to a higher position	
Yes	20.9
No	79.1
Employed in AF-related job	
Yes	29.7
No	70.3
Have other AF job competencies	
Yes	21.8
No	78.2
Provided with social protection	
SSS	48.9
GSIS	85.3
Pag-Ibig	90.4
PhilHealth	24.8
Other social protection	98.7

Majority (70.3%) were not able to obtain other AF-related employment. In terms of job competencies, only 21.8% possess other skills while the majority do not have.

All these reflect the lack of employment opportunity among the AEWs in terms of promotion to higher positions as well as job stability in the AF sector.

On social protection, about one half and 85.3% have SSS and GSIS coverage, respectively. The majority (90.4%) are enrolled in Pag-Ibig while 24.8% have PhilHealth coverage. Majority have other forms of social protection. Most of the respondents obtained social protection starting in the year 2010 (**Table 46**). Enrolment to PhilHealth coverage also increased in recent years.

Table 46. Social protection: Year obtained

Year obtained	SSS	GSIS	Pag-IBIG	PhilHealth	Other social protection
	Percentage reporting				
Before 1990s	2.1	3.4	4.0		2.7
1990 to 1999	7.0	8.5	7.3	0.9	5.7
2000 to 2009	16.6	16.3	17.1	7.0	10.5
2010 to 2019	59.9	55.1	56.8	47.3	47.3
2020 to 2024	14.4	16.7	14.9	44.8	33.9

E. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

1. SUMMARY

The study was conducted to evaluate the AFE RBME System. The System consists of a theory of change and results framework of 28 indicators designed to measure whether the DA-ATI interventions in terms of PAPs translate to higher order outcomes and impact. The evaluation specifically aimed at reviewing and enhancing the results framework; identifying issues and challenges encountered during implementation; and recommending policy options to further improve the DA-ATI programs.

The study employed concurrent mixed method approach which involved parallel collection of both quantitative and qualitative data and convergent analysis to provide equal weights on the quantitative and qualitative aspects of project performance and impact. Both primary and secondary data were used. Primary data were collected through a survey of DA-ATI beneficiaries (farmers and AEWs) using online/telephone and face-to-face CAPI based on pre-tested structured questionnaires. The sample size for the survey was determined using Slovin’s formula at 95% confidence level and 8 percent margin of error. Key informant interviews (KIIs) of representatives from the DA-ATI central and regional offices were also carried out to gather information related to the development and operation of the AFE RBME System. Secondary data were obtained from the AFE RBME data base and from available reports.

To determine the results of DA-ATI’s PAPs, the study validated the RBME results in the field by reviewing outputs based on OECD-DAC criteria of relevance, effectiveness, efficiency, sustainability, and impact. The validation was done with LGU extension workers and farmers trained by ATI, using the indicators identified in the AFE results framework.

Descriptive analysis was employed to summarize and describe the main features of the dataset such as central tendency, dispersion and distribution. Inferential analysis was used to determine whether significant differences exist between the variable means in two time periods (paired t-test for before and after) and binary logistic regression to determine the factors affecting the adoption of the technologies and practices promoted by DA-ATI. Thematic analysis was employed as a qualitative method to identify, analyze and build narratives on themes emerging from the data.

The study found limited uniformity in the conceptual understanding and operationalization of the AFE RBME across regions, especially its ToC and Results Framework. While some staff particularly those involved in the earlier workshops were familiar with the System, a number of regional staff particularly those who were newly hired lack formal orientation and

understanding of the System. The implementation across regions followed a structured yet diverse approach based on central guidelines but adapted to each region's specific needs. However, all regional centers appreciate the importance of RBME especially in evaluating the effectiveness of DA-ATI interventions, determination of technology adoption rates and the achievement of higher order outcomes and impact. It is also an important tool in determining stakeholder's perception and feedback about the various programs being implemented.

The various regions employed different approaches to RBME implementation depending on the logistical challenges and available resources. Regional centers varied widely in terms of capacity to manage the System. Some regional centers faced manpower shortages and a lack of expertise, indicating a need for more staff and training to support the growing demands of RBME. Other regional centers have addressed capacity issues by outsourcing data collection to academic institutions to cope with the limited capacity of the Center and also to avoid bias. In regions where data collection was done by the Center's M&E officers, assistance was sought from agricultural extension workers to serve as enumerators.

A review of the RBME reports from 2015-2017 and 2018-2022 showed that the values for the set of indicators on increase access declined in the latter period largely due to the pandemic restrictions, while indicators measuring improved attitudes, skills, and knowledge of clients remained stable with 90% of clients reporting improvement in knowledge and high satisfaction level with the interventions provided. Indicators on client productivity including farm diversification, value adding and increased income remained consistent in both periods. As in other M&E systems, the most important concern in the AFE RBME system is the credibility of the results generated from this platform. In general, the key informants interviewed as part of the study still believe that the system is robust and the integrity of the data collected remains solid.

The study found that the main challenges in implementation revolve around the inadequacy of manpower. The strategy of outsourcing the survey activities is being employed already by a number of regional centers, albeit this cannot be relied upon completely as financial resources to fund this are also limited. The hiring of contractual staff to complement the few regular staff somehow works, but the smooth implementation of the program is affected as it is difficult to build institutional knowledge of the System due to high turnover rate of contractual personnel. The survey revealed that more than half of the DA-ATI beneficiaries were recipients of trainings on the production of rice, corn, vegetables; backyard gardening, organic farming, and good agricultural practices. A little less than 30% were recipients of trainings on postharvest such as product cleaning sorting and grading. Entrepreneurship trainings, which covered farm business school, climate smart business school, and financial literacy were also reported by 43%, 21%, and 23%, respectively.

The study also found that the DA-ATI beneficiaries are just as satisfied with the service they received as those received from other government agencies. They reported ease in accessing the extension services. In fact, DA-ATI fares better than other NGAs and LGUs as fewer respondents reported having difficulty in accessing the services provided. As could be expected however, the private sector extension service providers (agro-chemical companies) enjoy the highest client satisfaction when pitted against government agencies, including DA-ATI. These private players are more operationally agile unlike government agencies which have to comply with government prescribed regulations in their operation.

A significant number of respondents (40%) reported to have adopted the technologies/improved practices they learned from the various trainings. Such adoption resulted to increased yield as reported by almost 35 % of beneficiaries, improved quality of plants and animals (23 %), less pests and diseases (20%) and lower input use (15%). Those who did not adopt the technologies reported they were constrained by high input prices (21%), non-availability of inputs (15%), difficulty in application (7%), and irrelevance of the technology in the particular circumstances of their farms (32%).

Empowerment and resiliency are two of the higher order outcomes being targeted by ATI through their various programs. These are important considering that agriculture-based livelihoods are inherently prone to crisis or unfortunate events. Majority of the beneficiaries claimed the ATI interventions helped them develop skills that are empowering and make them more resilient. These include skills on business management, workforce management and record keeping; communication and negotiation as well as mindset improvement. The interventions also covered market development and expansion, social media or online selling and technical skills on value adding (e.g., meat and fruit processing), farm management, product development, certifications, as well as new technical skills such as artificial insemination and organic agriculture, among others.

About 47% of the beneficiaries experienced typhoon, drought (46%), pests and diseases (28%) and flooding (26%) during the 2017 to 2022 period. Interestingly, majority of the beneficiaries expressed having greater confidence in coping with crisis situation due to the trainings provided by the DA-ATI. School on the air figured prominently as influential in improving crisis resiliency by majority (74%) of the beneficiaries. This was followed by e-extension program (58%) and trainings (57%).

Having duly certified farms (e.g., GAP) contribute to empowerment in various ways. Foremost of these are through better access to market and improved bargaining power. The DA-ATI provides trainings with topics related to certifications of farms, including Good Agricultural Practice (GAP), Organic Agriculture (OA), Good Animal Husbandry Practice (GAHP) and others. In regional training centers, ATI also provides technical assistance for farmer and walk in clients and aspiring certifiers for Participatory Guarantee System for GAP.

Before receiving ATI interventions, about 30% of beneficiaries applied for GAP, 32% applied for OA certification, and 13% for GAHP. While the DA-ATI interventions did not increase the number of farmers applying for these certifications, majority of the beneficiaries reported that the interventions helped increase their chances of approval. The success rate was 81% for GAP, 78% for OA and 86% for GAHP. According to these beneficiaries, ATI introduced the concept of certification, importance, benefits, and the application process through orientations, seminars, discussions, and provision of materials.

The study placed special emphasis on the assessment of technology adoption as this is considered by the DA-ATI to play a pivotal role in the AFE RBME theory of change. Indeed, the link between the provision of interventions and the higher order outcomes and impact would be severed if the technologies and improved practices would not be adopted by the target clients.

The study determined the level of adoption for the various types of technologies promoted by DA-ATI through trainings and other platforms. The levels of adoption were categorized into three: high, partial and non-adoption. Results show that there is an almost equal percentage of

beneficiaries reporting full and partial adoption, with minor percentages reporting non-adoption. The study found very high adoption index (0.65 to 0.80) regardless of commodity indicating the effectiveness of the DA-ATI interventions in influencing farmers to shift to technologies and practices that can improve farm performance.

The results of the binary logistic regression analysis indicate that several factors, including sex, commodity type, type of ATI intervention, and specific ATI regional centers (Ilocos Region, Western Visayas, Davao, and SOCCSKSARGEN), significantly influence technology adoption. Specifically, female farmers are 37.83% less likely to adopt the technology or practice compared to male farmers. Additionally, those who received interventions focused on non-crop commodities from ATI are 54.25% less likely to adopt the technology or practice than their counterparts who received crop-focused interventions.

Moreover, farmers who participated in both training and other interventions from ATI are 2.0888 times more likely to adopt the technology or practice than those who attended training only. Farmers trained in the ATI-Northern Mindanao show an 8.8403 times higher likelihood of adoption compared to those trained in ATI-Cordilleras. Similarly, those trained in ATI-Central Luzon are 8.6481 times more likely to adopt the technology or practice than those from ATI-Cordilleras.

Conversely, farmers trained in ATI-Davao are 1.4631 times less likely to adopt the technology or practice compared to those trained in ATI-Cordilleras, and farmers trained in ATI-SOCCSKSARGEN are 7.5685 times less likely to adopt compared to those trained in ATI-Cordilleras.

2. CONCLUSIONS AND RECOMMENDATIONS

The study concludes that the AFE RBME System has generally been relevant and effective as evidenced by the favorable feedback from its beneficiaries, the high rate of adoption of technologies/practices promoted and enhanced empowerment and resilience of its clients. The System continues to be perceived as robust and the integrity of the data collection process remains solid. However, the system is beset with operational issues which could undermine efficiency and sustainability. Among others, these include the lack of uniformity in the conceptual understanding of the System and its elements, primarily the theory of change and results framework; limited technical capacity to manage the System; and the persistent manpower shortages being experienced in most regional offices. The disparity in regional capacities to effect technology adoption as empirically validated by the binary logistic regression model, probably reflects already the regional disparity in the capacity to manage the AFE RBME System.

Capacity issues, particularly related to manpower and limited expertise, figured prominently as among the significant barriers to more effective operationalization of the AFE-RBME System. Some regional centers addressed this by outsourcing data collection to academic institutions, while others utilized agricultural extension workers as enumerators. However, reliance on outsourcing is limited by financial constraints, and the high turnover of contractual staff undermines institutional knowledge of the system.

The study recommends the following measures and specific action points:

Recommendations

1. Conduct an in-depth organizational capacity assessment (OCA) to determine capacity gaps and disparity across regional centers in the management and implementation of the AFE-RBME System. In addition to gauging organizational and technical capacity, the assessment should consider geographical coverage in terms of size and accessibility as these are important determinants of the cost of data collection.
2. Strengthen staff capacity and training. A comprehensive orientation and training program should be developed and implemented for all ATI staff especially the new ones including contractual staff. A periodic (e.g., annual or biennial) ATI wide conference involving the regional staff handling the RBME System should be held for the review of the System and sharing of lessons learned and best practices.
3. Continual improvement should be pursued by regularly examining the ToC, results framework and basic assumptions of the RBME System. While the study found these elements as still logical and feasible, constant assessment will enable updating the various elements to keep up with the challenges emerging in the course of implementation.
4. Employ more gender responsive approaches in the delivery of DA-ATI interventions. The study found that female beneficiaries are 39% less likely to apply the technologies promoted compared to male beneficiaries. Such disparity highlights the need for designing and implementing interventions more relevant to female farmers.
5. Strengthen the role of DA-ATI in the provision of input support. The study found that technology adoption is constrained by high input cost and accessibility. While DA-ATI is primarily focused on knowledge dissemination through trainings and other extension service modalities, the Institute may consider closely collaborating with other government agencies and private partners for the provision of input support and enhancing the accessibility of inputs especially for small farmers.
6. Expand and sustain interventions designed to enhance empowerment and resilience. The study found that the DA-ATI interventions have considerable positive impact on empowerment and resilience of farmers. As agriculture-based livelihoods are inherently vulnerable to various shocks, the interventions proven to improve empowerment and resilience should be expanded and sustained. These include interventions to improve market access, certification and value adding, among others.

Specific Action Points

Table 47 below provides the specific actions points.

Table 47. Recommendations and specific action points.

General Recommendations	Specific Action Points	Timeline
1. Conduct an In-depth Organizational Capacity Assessment (OCA)	<p>Engage an independent consultant or academic institution to conduct the OCA, focusing on:</p> <ul style="list-style-type: none"> • Staffing levels and technical expertise in each regional center; • Geographical challenges in terms of area size, remoteness, and accessibility, which affect data collection costs and logistics; • Resource allocation efficiency, including available budgets for monitoring and evaluation (M&E) activities; and • Stakeholder feedback, collecting input from regional staff, farmers, and extension workers to understand capacity gaps and logistical constraints. 	Complete the OCA within 6 months, and use findings to inform regional capacity-building strategies.
2. Strengthen Staff Capacity and Training	<p>Design a comprehensive training and orientation program that:</p> <ul style="list-style-type: none"> • Provides consistent and uniform training on the AFE RBME System for all new and current staff, particularly in under-resourced regions; • Includes training on M&E data collection, management, and analysis tools to build staff expertise; and • Establishes an annual or biennial RBME Conference where staff can review performance, share best practices, and participate in case studies or hands-on workshops on M&E. <p>Training modules include:</p> <ul style="list-style-type: none"> • Introduction to AFE RBME System and Theory of Change (ToC); • Quantitative and qualitative data collection techniques; and • Conducting evaluations using OECD-DAC criteria. 	Implement an orientation program within 3 months and hold the first RBME Conference within a year.
3. Regularly Review the ToC, Results Framework, and Assumptions	<p>Institute a biannual review cycle for the ToC and results framework by:</p> <ul style="list-style-type: none"> • Establishing a task force to review emerging trends in agriculture, farmer needs, and new technologies that could impact DA-ATI's interventions; • Conducting field visits and consultations with regional centers, academic institutions, and external stakeholders to collect input on needed adjustments; and • Integrating feedback mechanisms from farmers and extension workers to update assumptions and framework indicators. 	Ensure the first review is completed within the next 12 months and integrate changes based on review findings.
4. Employ More Gender-Responsive Approaches	<p>Develop interventions specifically tailored to female farmers, addressing the barriers they face in adopting new technologies by:</p>	Start pilot programs within 6 months in regions where female farmers have lower

General Recommendations	Specific Action Points	Timeline
	<ul style="list-style-type: none"> • Creating gender-targeted training programs focusing on women's specific needs, such as small-scale farming techniques, time management, and social capital building; • Providing subsidized input packages for female farmers to reduce the cost barriers that limit their technology adoption; and • Introducing women-centered pilot programs in selected regions to test and refine these interventions, with the goal of scaling successful programs. 	adoption rates and expand within a year based on pilot results.
5. Strengthen DA-ATI's Role in Input Support	<p>Collaborate with government agencies, private companies, and cooperatives to improve farmers' access to inputs by:</p> <ul style="list-style-type: none"> • Developing a formal partnership with agencies like the DA and private sector entities to establish joint programs for distributing inputs at reduced costs; • Helping in the implementation of input voucher schemes for farmers, particularly smallholders, to access seeds, fertilizers, and pesticides at subsidized rates; and • Building an input monitoring platform where farmers can report on input availability and quality, improving the system's responsiveness to shortages. 	Establish partnerships and pilot input support programs within 12 months.
6. Expand and Sustain Empowerment and Resilience Interventions	<p>Scale up interventions proven to enhance farmer empowerment and resilience by:</p> <ul style="list-style-type: none"> • Developing programs focused on market access, value addition, and certifications, such as organic or Good Agricultural Practices (GAP) certifications; • Expanding training on business management, workforce development, and technical skills, particularly those that enable farmers to diversify income streams; • Working with digital platforms and e-commerce providers to support farmers in online selling and market expansion, ensuring access to broader customer bases; and • Conducting financial literacy workshops that will help farmers build resilience through better savings, credit management, and financial planning. 	Start scaling these programs within 6 months, prioritizing regions that report lower resilience and empowerment scores.

ANNEX



The AFE Results Indicators

ANNEX 1
THE AFE RESULTS INDICATORS

Result Indicator	Description
<i>Increased access to AFE interventions</i>	
<i>1. # of clients served</i>	total number of clients provided with AFE interventions
<i>2. % of marginalized clients trained</i>	proportion of marginalized client such as out-of-school youths, rural women, indigenous people, senior citizen, and persons with disabilities trained
<i>3. % of area coverage</i>	proportion of clients' area coverage reached by AFE interventions
<i>Improved attitude, skills, and knowledge of clients</i>	
<i>4. % of clients saying that they have an increased knowledge</i>	proportion of clients that perceived an increase in knowledge based on the provided intervention
<i>5. % of clients passing the Post-test</i>	proportion of clients scoring at least 60% in the Post-test
<i>6. # of clients certified with skills competencies</i>	total number of clients gaining TESDA national competency certification (NC I, II, III, IV) on AF related subjects
<i>7. % of adopters based on action plan</i>	proportion of AEWs trained that complied to/implemented their action plan
<i>8. % of clients that adopted new AF technologies</i>	proportion of clients (small farmers) that adopted new AF technologies or practices
<i>9. % of clients satisfied with the intervention they received</i>	proportion of clients that gave at least a satisfactory rating after being provided with the intervention
<i>Improved provision of interventions</i>	
<i>10. % of clients saying that the intervention is relevant</i>	proportion of clients that gave at least a somewhat relevant rating on the intervention given in terms of the current situation and needs
<i>11. % of accomplished interventions as scheduled</i>	proportion of timely delivery of interventions based on its targeted schedule of implementation
<i>12. % absorptive capacity</i>	proportion of institutional extent by which the fund allocated for AFE intervention was spent by all AFE institutions
<i>Increased productivity of clients</i>	
<i>13. % of clients engaged in diversified farming</i>	proportion of clients using diversified farming methods/techniques
<i>14. % of clients engaged in value-adding</i>	proportion of clients that ventured into value addition of products
<i>15. % of clients with increased income</i>	proportion of clients that showcased improved AF practices resulting in an increased income
<i>Increased empowerment of clients</i>	
<i>16. % of clients turned into agripreneurs</i>	proportion of clients transformed into agripreneurs
<i>17. % of marginalized clients turned into agripreneurs</i>	proportion of marginalized clients transformed into agripreneurs

Result Indicator	Description
<i>18. % of clients employed in AF related job or promoted to a higher position</i>	proportion of clients (including scholars) that have been employed to AF-related job or have been promoted to higher positions
<i>19. # Schools for Practical Agriculture assisted</i>	total number of learning sites elevated into Schools for Practical Agriculture with the assistance of ATI
<i>20. # Farm Tourism sites assisted</i>	total number of Schools for Practical Agriculture elevated into Farm Tourism sites with the assistance of ATI
<i>Increased resiliency of clients</i>	
<i>21. % of clients with social protection</i>	proportion of clients with crop or livestock insurance, SSS, PhilHealth, among others
<i>22. % of clients saying that they are confident of coping from unfortunate events</i>	proportion of clients that perceived confidence in coping from unfortunate events/total # of clients served
<i>23. % of clients that have coped with unfortunate events by applying adaptation and mitigation measures</i>	proportion of clients that have adopted adaptation and mitigation measures and have coped with unfortunate events
<i>24. % of clients with alternative AF-related job competencies</i>	proportion of clients that are considered to be more adaptive because they have other AF-related job competencies
<i>Increased competitiveness of clients</i>	
<i>25. % of farms certified</i>	proportion of client farms certified as GAP, OA, GAHP, among others
<i>26. % of products certified by an accreditation body</i>	proportion of clients that produced products certified as organic, Halal, GMP, HACCP, among others
<i>27. % of clients producing demand-driven products</i>	proportion of clients providing produce to institutional or commercial buyers
<i>28. % of clients engaged in the overseas market</i>	proportion of clients exporting products to overseas markets

ANNEX



**RBME Reference Materials
Reviewed**

ANNEX 2

LIST OF RBME REFERENCE MATERIALS REVIEWED

1. Post Training Evaluation of Action Plan Implementation: A Monitoring Report for the Activity Entitled “From Outputs to Outcomes Leveling Up to a Results-Based Monitoring and Evaluation Practice”, 2018.
2. The Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) System Report, 2019.
3. The Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) System Report, 2020.
4. The Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) System Report, 2021.
5. Excellence and Accountability in Extension: Technical Guidance Notes in the Monitoring and Evaluation of Agriculture and Fisheries Extension Program Performance, 2017.
6. Excel sheets containing names of AFE workers and farmers per region and ITCPH from 2018-2022.
7. Agriculture and Fisheries Extension Results-Based Monitoring and Evaluation System: Survey Questionnaire for Farmer.
8. Agriculture and Fisheries Extension Results-Based Monitoring and Evaluation System: Survey Questionnaire for LGU Extension Worker.
9. ATI Annual Reports, 2010-2023.
10. ATI Programs

ANNEX



List of KII Respondents
from ATI Central and
Regional Offices

ANNEX 3
LIST OF KEY INFORMANT INTERVIEW (KII) RESPONDENTS FROM
ATI CENTRAL AND REGIONAL OFFICES

ATI Office/Region	Key Informants Interviewed		Date of Interview	Interviewer
	Name	Position/Designation		
ATI - Main Office	Bernard James Tandang	Chief of Policy Standards and Development Section	May 16	Dr. Decena and Ms. Tidon
	Cindy C. Alfonso	Project Evaluation Officer II		
	Mark Alforque	Project Evaluation Officer II		
ATI - Cordilleras	Khareen B. Tigui-ing	Development Management Officer I	May 21	Ms. Tidon
ATI - Ilocos Region	Jayvee Bryan G. Carillo, PhD	OIC, Center Director	May 27	Ms. Tidon
	Jomar Palsimon	Project Evaluation Officer I		
ATI - CALABARZON	Angelo Hernandez	Project Evaluation Officer I	May 28	Ms. Tidon
ATI - Cagayan Valley	Claris M. Alaska, DPA	OIC, Center Director, Training Superintendent I	May 29	Ms. Tidon
	Jhim Salvador	Chief, Career Development and Management Section		
	Vladimir Caliguiran	Chief, Information Services Section		
ATI - MIMAROPA	Manilyn M. Tejada, MPA, LPT	Project Evaluation Officer I	June 7	Dr. Decena
ATI - Western Visayas	Mary Ann A. Ramos, MPM	Training Center Superintendent II Center Director	June 7	Dr. Decena
	Dianne Rivera	Planning Officer/Focal person of RBME		
	Mary Jean Yupano	Designated Monitoring and Evaluation Officer		
ATI - Eastern Visayas	Hazel Grace T. Taganas	Training Superintendent II Center Director	June 10	Ms. Tidon
ATI - Central Luzon	Marciano C. Santos	Unit Head, PMEUP Planning Officer II	June 13	Dr. Decena
	Joan P. Su-Ay	Project Evaluation Officer I CFIDP Point Person/ HR Designate		

ATI Office/Region	Key Informants Interviewed		Date of Interview	Interviewer
	Name	Position/Designation		
ATI - Central Visayas	Lhea Araña	Development Management Officer I/ M & E Designate	June 13	Ms. Tidon
ATI - Davao Region	Chonna Vae Cañete	PMEU Representative	June 14	Dr. Decena
ATI - Bicol	Roberto Santos Jr.	Project Evaluation Officer Focal Person, Monitoring and Evaluation, Data Privacy Officer	June 21	Ms. Tidon
ATI - Northern Mindanao	Cheaster Magat	PMEU Technical Support Staff	June 26	Dr. Decena
ATI - International Training Center on Pig Husbandry	Jackielyn B. Garlet	OIC Chief, PMES / Admin Officer IV	June 27	Dr. Decena and Ms. Tidon
ATI - Zamboanga Peninsula	Agustin Wagas	Planning Officer	July 3	Dr. Decena
	Decelyn Cabang	Monitoring and Evaluation Officer		
ATI - SOCCSKSARGEN	Alvin Palma	PMEU Officer	July 15	Dr. Brown
ATI - CARAGA	Teovelita Rodriguez	PMEU Officer	July 15	Mr. Agbisit and Mr. Macuha

ANNEX



**AFE Results Indicators by
ATI Training Center**

ANNEX 4
AFE RESULTS INDICATORS BY TRAINING CENTER, 2018-2022

Table 1. AFE results indicators for ATI–ITCPH, ATI-CAR, ATI-Ilocos Region, and ATI-Cagayan Valley (2018-2022).

Training Center	ATI – ITCPH			ATI – CAR			ATI – Ilocos Region			ATI – Cagayan Valley		
Year of intervention	2018-2022			2018-2022			2018-2022			2018-2022		
Result Indicator	Farmers	AEWs	Total	Farmers	AEWs	Total	Farmers	AEWs	Total	Farmers	AEWs	Total
Increased access to AFE interventions												
1. # of clients served	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
2. % of marginalized clients trained	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
3. % of area coverage	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
Improved attitude, skills, and knowledge of clients												
4. % of clients saying that they have an increased knowledge	86.3	95.8	89	99.1	97.5	98.9	89.3	100.0	87.2	no data	100.0	89.9
5. % of clients passing the Post-test	no data	93.6	93.6	no data	87.5	87.5	no data	93.8	93.8	no data	100.0	100.0
6. # of clients certified with skills competencies	34.9	38.0	35.8	15.4	29.4	17.2	12.0	17.0	13.3	40.1	51.8	42.6
7. % of adopters based on action plan												
% clients with action plan	53.2	40.7	49.5	27.1	70.0	32.6	32.6	83.9	45.8	65.1	36.0	58.9
% adopters based on action plan	84.6	67.4	79.6	86.2	75.5	84.9	85.3	83.0	84.7	84.2	79.7	83.2
8. % of clients that adopted new AF technologies	44.1	90.1	57.5	27.9	91.3	36	77.2	98.5	82.7	45.0	100.0	56.8
9. % of clients satisfied with the intervention received	100.0	100.0	100.0	97.2	100.0	97.5	91.0	97.6	92.7	80.8	96.1	84.1
Improved provision of interventions												
10. % of clients saying that the intervention is relevant	100.0	67.0	90.4	95.7	95.3	95.6	85.3	100.0	89.1	70.1	74.5	71.1
11. % of accomplished interventions as scheduled	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
12. % absorptive capacity	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
Increased productivity of clients												
13. % of clients engaged in diversified farming	58.4		58.4	77.8		77.8	61.4		61.4	62.8		62.8
14. % of clients engaged in value-adding	11.6		11.6	0.0		0.0	2.5		2.5	2.5		2.5
15. % of clients with increased income	73.6		73.6	65.3		65.3	66.5		66.5	63.7		63.7
Increased empowerment of clients												
16. % of clients turned into agripreneurs	65.8		65.8	22.5		22.5	72.0		72.0	91.6		91.6
17. % of marginalized clients turned into agripreneurs	no data			no data			no data			no data		

Training Center	ATI – ITCPH			ATI – CAR			ATI – Ilocos Region			ATI – Cagayan Valley		
Year of intervention	2018-2022			2018-2022			2018-2022			2018-2022		
Result Indicator	Farmers	AEWs	Total	Farmers	AEWs	Total	Farmers	AEWs	Total	Farmers	AEWs	Total
18. % of clients employed in AF related job or promoted to a higher position		42.0	42.0		13.4	13.4		24.9	24.9		30.1	30.1
19. # of Schools for Practical Agriculture assisted	no data			no data			no data			no data		
20. # of farm tourism sites assisted	no data			no data			no data			no data		
Increased resiliency of clients												
21. % of clients with social protection	75.6	87.6	79.1	64.7	96.3	68.7	85.4	94.6	87.8	87.8	94.4	89.2
22. % of clients saying that they are confident of coping from unfortunate events	48.2		48.2	29.6		29.6	65.3		65.3	84.0		84
23. % of clients that have coped with unfortunate events by applying adaptation and mitigation measures	68.2		68.2	69.8		69.8	73.8		73.8	62.0		62
24. % of clients with alternative AF-related job competencies		31.5	31.5		5.7	5.7		24.1	24.1		13.7	13.7
Increased competitiveness of clients												
25. % of farms certified	92.4		92.4	32.9		32.9	88.3		88.3	92.8		92.8
26. % of products certified by an accreditation body	no data			no data			no data			no data		
27. % of clients producing demand-driven products	no data			no data			no data			no data		
28. % of clients engaged in the overseas market	no data			no data			no data			no data		

Table 2. AFE results indicators for ATI–Central Luzon, ATI-CALABARZON, ATI-MIMAROPA, and ATI-Bicol (2018-2022)

Training Center	ATI – Central Luzon			ATI – CALABARZON			ATI – MIMAROPA			ATI – Bicol		
Year of intervention	2018-2022			2018-2022			2018-2022			2018-2022		
Result Indicator	Farmers	AEWs	Total	Farmers	AEWs	Total	Farmers	AEWs	Total	Farmers	AEWs	Total
Increased access to AFE interventions												
1. # of clients served	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
2. % of marginalized clients trained	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
3. % of area coverage	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
Improved attitude, skills, and knowledge of clients												
4. % of clients saying that they have an increased knowledge	95.5	95.7	95.5	94.6	92.9	94.3	89.0	99.1	92	93.7	100.0	94.9
5. % of clients passing the Post-test	no data	95.7	95.7	no data	91.5	91.5	no data	99.1	99.1	no data	100.0	100
6. # of clients certified with skills competencies	71.1	38.5	64.8	47.6	39.2	46.1	25.0	26.1	25.4	19.4	45.1	24.3
7. % of adopters based on action plan												
% clients with action plan	80.3	72.4	78.8	30.4	21.4	28.8	47.3	69.8	53.9	37.8	94.7	48.5
% adopters based on action plan	95.0	95.5	95.1	94.1	61.5	88.1	82.7	78.6	81.5	100.0	91.1	98.3
8. % of clients that adopted new AF technologies	80.8	92.7	83	53.9	85.6	59.7	64.5	95.7	73.7	40.1	98.4	51.1
9. % of clients satisfied with the intervention received	94.5	100.0	95.5	88.6	83.9	87.7	93.3	95.3	93.9	98.2	97.1	98.0
Improved provision of interventions												
10. % of clients saying that the intervention is relevant	91.9	87.7	91.1	84.0	100.0	87	83.7	79.1	82.4	77.7	96.2	81.2
11. % of accomplished interventions as scheduled	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
12. % absorptive capacity	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
Increased productivity of clients												
13. % of clients engaged in diversified farming	63.0		63	55.1		55.1	77.6		77.6	96.4		96.4
14. % of clients engaged in value-adding	44.5		44.5	0.0		0.0	27.7		27.7	0.0		0.0
15. % of clients with increased income	67.5		67.5	63.7		63.7	84.5		84.5	63.7		63.7
Increased empowerment of clients												
16. % of clients turned into agripreneurs	69.1		69.1	75.6		75.6	78.9		78.9	68.7		68.7
17. % of marginalized clients turned into agripreneurs	no data		no data	no data		no data	no data		no data	no data		no data
18. % of clients employed in AF related job or promoted to a higher position		47.6	47.6		17.2	17.2		18.5	18.5		35.8	35.8
19. # of Schools for Practical Agriculture assisted	no data			no data			no data			no data		
20. # of farm tourism sites assisted1/	no data			no data			no data			no data		

Training Center	ATI – Central Luzon			ATI – CALABARZON			ATI – MIMAROPA			ATI – Bicol		
Year of intervention	2018-2022			2018-2022			2018-2022			2018-2022		
Result Indicator	Farmers	AEWs	Total	Farmers	AEWs	Total	Farmers	AEWs	Total	Farmers	AEWs	Total
Increased resiliency of clients												
21. % of clients with social protection	98.9	91.5	97.4	72.0	80.1	73.5	79.0	92.6	83.0	91.2	98.4	92.6
22. % of clients saying that they are confident of coping from unfortunate events	66.3		66.3	48.4		48.4	55.9		55.9	65.4		65.4
23. % of clients that have coped with unfortunate events by applying adaptation and mitigation measures	85.2		85.2	69.0		69.0	61.9		61.9	84.2		84.2
24. % of clients with alternative AF-related job competencies		16.7	16.7		10.2	10.2		15.1	15.1		9.1	9.1
Increased competitiveness of clients												
25. % of farms certified	95.6		95.6	62.6		62.6	87.3		87.3	97.8		97.8
26. % of products certified by an accreditation body	no data			no data			no data			no data		
27. % of clients producing demand-driven products	no data			no data			no data			no data		
28. % of clients engaged in the overseas market	no data			no data			no data			no data		

Table 3. AFE results indicators for ATI–Western Visayas, ATI-Central Visayas, ATI-Eastern Visayas, and ATI-Zamboanga Peninsula (2018-2022).

Training Center	ATI – Western Visayas			ATI – Central Visayas			ATI – Eastern Visayas			ATI – Zamboanga Peninsula		
Year of intervention	2018-2022			2018-2022			2018-2022			2018-2022		
Result Indicator	Farmers	AEWs	Total	Farmers	AEWs	Total	Farmers	AEWs	Total	Farmers	AEWs	Total
Increased access to AFE interventions												
1. # of clients served	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
2. % of marginalized clients trained	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
3. % of area coverage	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
Improved attitude, skills, and knowledge of clients												
4. % of clients saying that they have an increased knowledge	83.3	100.0	86.3	98.2	100.0	98.5	95.9	100.0	96.6	100.0	100.0	100.0
5. % of clients passing the Post-test	no data	93.9	93.9	no data	96.5	96.5	no data	96.7	96.7	no data	94.6	94.6
6. # of clients certified with skills competencies	37.2	32.1	36.3	17.7	20.1	18.1	4.8	35.2	10.2	15.0	55.2	19.4
7. % of adopters based on action plan												
% clients with action plan	28.5	61.2	34.4	19.6	54.6	25.6	9.0	27.7	12.3	71.1	63.0	70.2
% adopters based on action plan	73.9	85.8	76.1	100.0	83.5	97.2	71.8	49.5	67.9	83.3	100.0	85.1
8. % of clients that adopted new AF technologies	78.4	100.0	82.3	57.4	100.0	64.7	51.8	93.4	59.1	42.0	89.2	47.1
9. % of clients satisfied with the intervention received	81.6	96.9	84.4	100.0	100.0	100.0	87.8	97.3	89.4	97.0	100.0	97.3
Improved provision of interventions												
10. % of clients saying that the intervention is relevant	83.5	89.4	84.6	98.2	59.9	91.7	93.3	69.7	89.2	100.0	83.9	98.3
11. % of accomplished interventions as scheduled	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
12. % absorptive capacity	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
Increased productivity of clients												
13. % of clients engaged in diversified farming	92.7		92.7	84.8		84.8	78.4		78.4	64.4		64.4
14. % of clients engaged in value-adding	0.0		0.0	32.4		32.4	56.0		56.0	17.7		17.7
15. % of clients with increased income	63.7		63.7	99.7		99.7	66.3		66.3	81.7		81.7
Increased empowerment of clients												
16. % of clients turned into agripreneurs	78.2		78.2	44.6		44.6	50.7		50.7	39.0		39.0
17. % of marginalized clients turned into agripreneurs	no data		no data	no data		no data	no data		no data	no data		no data
18. % of clients employed in AF related job or promoted to a higher position		24.1	24.1		49.1	49.1		8.8	8.8		89.9	89.9
19. # of Schools for Practical Agriculture assisted	no data			no data			no data			no data		
20. # of farm tourism sites assisted	no data			no data			no data			no data		

Training Center	ATI – Western Visayas			ATI – Central Visayas			ATI – Eastern Visayas			ATI – Zamboanga Peninsula		
Year of intervention	2018-2022			2018-2022			2018-2022			2018-2022		
Result Indicator	Farmers	AEWs	Total	Farmers	AEWs	Total	Farmers	AEWs	Total	Farmers	AEWs	Total
Increased resiliency of clients												
21. % of clients with social protection	94.7	96.9	95.1	75.1	93.9	78.3	30.8	97.3	42.5	97.3	94.6	97.1
22. % of clients saying that they are confident of coping from unfortunate events	77.5		77.5	76.5		76.5	39.5		39.5	59.2		59.2
23. % of clients that have coped with unfortunate events by applying adaptation and mitigation measures	96.6		96.6	66.7		66.7	58.0		58.0	56.7		56.7
24. % of clients with alternative AF-related job competencies		29.7	29.7		55.4	55.4		6.0	6.0		5.4	5.4
Increased competitiveness of clients												
25. % of farms certified	88.3		88.3	93.4		93.4	96.8		96.8	100.0		100.0
26. % of products certified by an accreditation body	no data			no data			no data			no data		
27. % of clients producing demand-driven products	no data			no data			no data			no data		
28. % of clients engaged in the overseas market	no data			no data			no data			no data		

Table 4. AFE results indicators for ATI–Northern Mindanao, ATI-Davao, ATI-SOCCSKSARGEN, ATI-CARAGA (2018-2022)

Training Center	ATI – Northern Mindanao			ATI – Davao			ATI – SOCCSKSARGEN			ATI – CARAGA		
Year of intervention	2018-2022			2018-2022			2018-2022			2018-2022		
Result Indicator	Farmers	AEWs	Total	Farmers	AEWs	Total	Farmers	AEWs	Total	Farmers	AEWs	Total
Increased access to AFE interventions												
1. # of clients served	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
2. % of marginalized clients trained	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
3. % of area coverage	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
Improved attitude, skills, and knowledge of clients												
4. % of clients saying that they have an increased knowledge	92.1	100.0	93.6	98.8	100.0	99.0	100.0	100.0	100.0	100.0	100.0	100.0
5. % of clients passing the Post-test	no data	100.0	100.0	no data	52.8	52.8	no data	73.7	73.7	no data	100.0	100.0
6. # of clients certified with skills competencies	27.9	50.5	32.1	13.2	39.4	17.6	29.2	28.0	29.1	4.6	44.0	12.4
7. % of adopters based on action plan												
% clients with action plan	51.5	77.9	56.4	15.3	4.5	13.5	0.0	2.7	0.3	57.4	86.3	63.1
% adopters based on action plan	100.0	93.6	98.8	100.0	100.0	100.0	-	0.0	0.0	60.7	37.1	56.0
8. % of clients that adopted new AF technologies	80.6	95.0	83.3	21.7	100.0	35.0	6.1	75.0	14.3	47.0	100.0	57.5
9. % of clients satisfied with the intervention received	100.0	84.3	97.1	98.8	100.0	99.0	100.0	100.0	100.0	99.1	98.1	98.9
Improved provision of interventions												
10. % of clients saying that the intervention is relevant	92.1	100.0	93.6	100.0	100.0	100.0	100.0	-	100.0	93.9	87.2	92.6
11. % of accomplished interventions as scheduled	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
12. % absorptive capacity	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
Increased productivity of clients												
13. % of clients engaged in diversified farming	96.4		96.4	88.9		88.9	81.4		81.4	87.7		87.7
14. % of clients engaged in value-adding	15.1		15.1	2.3		2.3	9.3		9.3	6.5		6.5
15. % of clients with increased income	75.2		75.2	64.9		64.9	73.0		73.0	70.1		70.1
Increased empowerment of clients												
16. % of clients turned into agripreneurs	86.6		86.6	47.9		47.9	29.2		29.2	69.1		69.1
17. % of marginalized clients turned into agripreneurs	no data		no data	no data		no data	no data		no data	no data		no data
18. % of clients employed in AF related job or promoted to a higher position		46.3	46.3		45.4	45.4		17.9	17.9		12.8	12.8
19. # of Schools for Practical Agriculture assisted	no data			no data			no data			no data		
20. # of farm tourism sites assisted1/	no data			no data			no data			no data		
Increased resiliency of clients												
21. % of clients with social protection	79.4	100.0	83.2	55.5	90.7	61.5	55.7	100.0	61.0	77.0	100.0	81.5

Training Center	ATI – Northern Mindanao			ATI – Davao			ATI – SOCCSKSARGEN			ATI – CARAGA		
Year of intervention	2018-2022			2018-2022			2018-2022			2018-2022		
Result Indicator	Farmers	AEWs	Total	Farmers	AEWs	Total	Farmers	AEWs	Total	Farmers	AEWs	Total
22. % of clients saying that they are confident of coping from unfortunate events	93.7		93.7	40.8		40.8	26.7		26.7	39.8		39.8
23. % of clients that have coped with unfortunate events by applying adaptation and mitigation measures	37.0		37.0	73.2		73.2	95.6		95.6	65.7		65.7
24. % of clients with alternative AF-related job competencies		61.2	61.2		35.5	35.5		0.0	0.0		27.1	27.1
Increased competitiveness of clients												
25. % of farms certified	49.2		49.2	87.3		87.3	100.0		100.0	100.0		100.0
26. % of products certified by an accreditation body	no data			no data			no data			no data		
27. % of clients producing demand-driven products	no data			no data			no data			no data		
28. % of clients engaged in the overseas market	no data			no data			no data			no data		

ANNEX



Result of the Farmers
Survey by ATI Training
Center

ANNEX 5
RESULT OF THE FARMER-BENEFICIARY SURVEY BY ATI TRAINING CENTER, 2018-2022

Table 1. Socio-economic profile of farmer-beneficiary respondents in percentage reporting

Characteristics	All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13
	n=900	n=24	n=101	n=54	n=39	n=43	n=49	n=54	n=41	n=54	n=55	n=98	n=35	n=16	n=83	n=46	n=108
Age (years)																	
18-24	2.4	0.0	1.9	9.5	0.0	2.5	0.0	1.8	1.8	1.9	4.6	2.2	3.0	0.0	0.0	7.1	1.8
25-34	15.2	35.6	11.3	14.7	21.0	10.6	13.4	15.2	12.4	1.8	13.4	12.9	3.0	27.2	6.0	29.9	20.1
35-44	25.6	18.0	24.6	8.1	29.3	24.0	28.1	15.8	27.5	22.1	29.0	18.7	43.6	40.0	39.0	40.4	19.8
45-54	29.8	21.7	26.3	34.6	19.2	23.7	34.7	43.4	29.8	40.2	31.8	27.6	30.0	19.4	47.8	13.8	32.9
55-64	17.4	24.6	30.2	14.4	8.6	28.7	4.4	17.0	20.8	27.9	11.3	33.4	11.7	8.5	7.3	4.4	15.7
65 - 74	8.6	0.0	5.6	16.2	21.9	10.6	18.0	5.0	6.0	4.2	5.7	5.3	5.7	4.9	0.0	4.4	9.7
Above 75	1.0	0.0	0.0	2.5	0.0	0.0	1.4	1.8	1.6	1.8	4.1	0.0	3.0	0.0	0.0	0.0	0.0
<i>average (years)</i>	<i>46.8</i>	<i>42.7</i>	<i>48.0</i>	<i>48.5</i>	<i>48.1</i>	<i>49.0</i>	<i>48.6</i>	<i>47.3</i>	<i>48.1</i>	<i>50.6</i>	<i>45.9</i>	<i>48.5</i>	<i>46.7</i>	<i>40.5</i>	<i>44.0</i>	<i>38.8</i>	<i>46.9</i>
Gender																	
Male	48.7	45.0	37.1	40.5	49.6	59.6	52.8	56.1	63.7	30.6	49.7	52.4	53.0	47.2	43.4	55.7	41.0
Female	51.3	55.0	62.9	59.5	50.4	40.4	47.2	43.9	36.3	69.4	50.3	47.6	47.0	52.8	56.6	44.3	59.0
Civil Status																	
Single/Never been married	18.9	34.0	13.2	28.1	13.7	32.7	19.4	18.8	33.1	9.0	7.6	14.4	17.7	23.0	1.1	30.4	12.6
Married	71.2	42.7	82.6	62.3	80.2	58.4	69.2	67.7	55.4	75.8	73.4	82.5	76.3	65.5	87.1	67.9	81.9
Common Law/live-in	2.9	5.9	1.3	0.0	0.0	0.0	1.5	5.3	1.8	3.7	11.2	1.3	3.0	7.9	6.9	0.0	0.9
Widowed	5.7	17.4	2.9	5.6	6.0	5.7	7.3	4.8	9.8	11.4	6.0	1.8	3.0	3.6	3.7	1.7	3.0
Separated	1.2	0.0	0.0	4.0	0.0	3.2	2.5	3.5	0.0	0.0	1.9	0.0	0.0	0.0	1.2	0.0	1.7
Ethnicity																	
Tagalog	24.4	77.0	0.0	5.3	9.3	78.5	98.5	68.2	0.0	0.0	4.0	1.3	0.0	0.0	0.0	51.5	0.0
Bisaya/ Binisaya	26.7	12.1	0.0	4.0	0.0	0.0	1.5	5.0	1.6	0.0	63.7	39.5	94.0	65.5	85.2	11.0	88.9
Ilocano	14.3	0.0	14.8	81.3	68.2	12.6	0.0	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.8
Cebuano	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	28.9	0.0	3.0	30.8	0.0	4.4	4.3
Ilonggo	5.4	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	81.2	0.0	0.0	0.0	0.0	3.7	20.3	3.5
Bikol/ Bicol	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	98.4	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0
Waray	4.6	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.0	0.0	0.0	0.0	0.0	0.0
Kapampangan	0.7	0.0	0.0	0.0	0.0	8.8	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0
Maguindanao	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	10.5	0.0
Pangasinan	0.6	0.0	0.0	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Characteristics	All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13
	n=900	n=24	n=101	n=54	n=39	n=43	n=49	n=54	n=41	n=54	n=55	n=98	n=35	n=16	n=83	n=46	n=108
Other	12.1	5.2	85.2	1.4	22.5	0.0	0.0	15.3	0.0	16.9	3.4	0.0	3.0	3.6	8.6	0.0	2.5
Highest Educational Attainment																	
Early childhood education	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	3.0	0.0	2.4	0.0	0.0
Primary Education	7.4	4.9	4.3	5.4	9.0	1.1	11.4	7.3	0.0	8.8	14.4	13.6	6.0	0.0	16.8	1.7	8.7
Lower secondary education	10.4	13.2	4.3	18.7	6.5	5.6	3.1	13.3	3.6	9.6	10.2	27.8	17.3	3.6	15.4	12.2	5.9
Upper secondary education	19.1	17.4	34.7	6.8	23.3	10.6	17.1	1.8	15.8	34.0	27.2	4.8	29.7	0.0	23.3	23.1	34.0
Post-secondary non-tertiary	6.7	0.0	3.8	7.9	5.9	5.9	5.6	7.0	10.2	5.3	9.3	13.0	5.7	4.9	8.4	5.6	5.2
Short-cycle tertiary education	3.2	7.2	1.3	3.9	6.4	4.5	1.0	8.8	0.0	0.0	1.9	5.3	6.0	3.6	0.0	2.2	0.0
Bachelor level education or equivalent	38.7	52.1	41.9	50.4	41.8	25.0	41.6	41.7	62.2	36.6	21.1	27.9	6.0	87.9	26.4	49.1	21.7
Master level education or equivalent	13.7	5.2	9.8	6.8	7.2	47.2	17.3	20.3	6.3	5.6	16.0	7.6	23.3	0.0	7.3	3.9	24.4
Doctoral level education or equivalent	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0
No formal education	0.3	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Household Size																	
1 to 3	32.1	38.7	22.3	23.9	42.4	32.6	42.5	49.2	35.8	22.3	37.6	23.7	17.7	38.7	18.0	31.6	31.4
4 to 6	58.0	59.7	66.9	64.1	47.3	50.7	48.6	39.3	51.8	64.4	54.8	68.8	55.3	61.3	76.4	63.5	61.0
7 and above	9.9	1.6	10.8	12.0	10.3	16.7	8.9	11.5	12.4	13.3	7.6	7.5	27.0	0.0	5.7	4.9	7.6
<i>Average (number)</i>	4.4	3.9	4.7	4.5	4.1	4.4	4.0	3.7	4.3	4.7	4.4	4.5	5.5	4.2	4.7	4.4	4.4

Table 2. Area planted to crops (in hectares)

Training Center		Crops Area															
		Rice		Corn		Vegetables		Coconut		Banana		Cacao		Fruit trees		Others	
		Average	Max	Average	Max	Average	Max	Average	Max	Average	Max	Average	Max	Average	Max	Average	Max
All Centers	n=900	1.0	16.0	0.4	10.0	0.2	10.0	0.4	15.0	0.2	15.0	0.1	8.0	0.1	15.0	0.1	10.0
ATI - ITCPH	n=24	0.4	8.0	0.0	0.4	0.3	3.0	0.5	8.0	0.1	1.0	0.0	0.0	0.3	3.0	0.4	6.5
ATI - CAR	n=101	0.5	8.0	0.4	8.0	0.2	8.0	0.0	0.8	0.1	8.0	0.0	1.0	0.1	2.3	0.1	4.0
ATI – Region 1	n=54	0.8	3.5	0.3	3.0	0.1	2.3	0.0	0.0	0.0	0.1	0.0	0.0	0.1	1.9	0.1	8.0
ATI – Region 2	n=39	1.8	7.0	1.0	8.0	0.1	1.4	0.0	0.5	0.1	4.0	0.0	0.0	0.1	3.0	0.4	3.0
ATI – Region 3	n=43	2.0	16.0	0.3	10.0	0.2	3.0	0.2	5.0	0.1	8.0	0.0	1.0	0.2	3.0	0.1	1.0
ATI – Region 4A	n=49	0.6	10.0	0.4	10.0	0.6	10.0	0.5	3.0	0.4	3.0	0.3	3.0	0.4	3.0	0.3	10.0
ATI – Region 4B	n=54	1.9	12.0	0.8	7.0	0.2	4.0	0.8	15.0	0.6	15.0	0.2	5.0	0.3	5.0	0.1	6.0
ATI – Region 5	n=41	1.3	6.0	0.3	2.5	0.5	8.0	1.3	13.0	0.2	2.0	0.1	1.5	0.1	2.0	0.1	1.3
ATI – Region 6	n=54	0.8	4.0	0.3	3.0	0.3	2.0	0.3	4.0	0.1	1.0	0.0	0.3	0.1	2.0	0.1	2.0
ATI – Region 7	n=55	0.6	4.0	0.2	3.0	0.1	2.0	0.1	1.0	0.3	10.0	0.0	1.4	0.1	0.5	0.1	2.0
ATI – Region 8	n=98	1.0	10.0	0.1	2.5	0.1	3.0	0.1	5.0	0.0	1.0	0.1	2.0	0.0	2.2	0.0	0.8
ATI – Region 9	n=35	0.8	10.0	0.8	5.0	0.2	1.3	1.8	6.0	0.3	6.0	0.1	0.4	0.1	1.0	0.1	1.5
ATI – Region 10	n=16	0.7	2.0	0.1	1.0	0.1	1.0	1.0	5.0	0.3	3.0	0.2	1.5	0.0	0.3	0.2	2.5
ATI – Region 11	n=83	0.4	3.0	0.4	8.0	0.2	1.5	0.2	3.0	0.1	2.0	0.1	1.0	0.1	1.0	0.1	3.0
ATI – Region 12	n=46	1.3	3.0	0.4	5.0	0.1	0.5	0.1	1.0	0.0	0.5	0.0	0.1	0.0	0.2	0.1	1.0
ATI – Region 13	n=108	1.2	8.0	0.4	4.0	0.1	1.4	0.6	5.0	0.2	6.0	0.2	8.0	0.2	15.0	0.0	1.0

Table 3. Number of animals raised (head)

Training Center		Number of Animals Raised											
		Pigs		Chicken		Duck		Carabao		Goat		Cattle	
		Average	Max	Average	Max	Average	Max	Average	Max	Average	Max	Average	Max
All Centers	n=900	4	200	28	3,000	8	700	1	30	2	60	1	22
ATI - ITCPH	n=24	12.6	70.0	7.7	50.0	2.1	30.0	0.6	30.0	2.7	40.0	0.4	4.0
ATI - CAR	n=101	3.1	50.0	7.9	100.0	2.6	50.0	0.2	10.0	0.6	30.0	0.2	8.0
ATI - Region 1	n=54	3.0	20.0	25.8	250.0	4.2	70.0	0.1	2.0	2.3	15.0	1.2	11.0
ATI - Region 2	n=39	3.4	20.0	31.4	160.0	15.5	160.0	0.8	7.0	0.7	6.0	0.2	2.0
ATI - Region 3	n=43	5.9	200.0	89.8	3000.0	18.4	500.0	0.5	5.0	3.0	45.0	1.4	22.0
ATI - Region 4A	n=49	5.6	78.0	18.1	100.0	2.2	50.0	0.8	6.0	1.7	20.0	0.5	15.0
ATI - Region 4B	n=54	7.2	103.0	61.7	500.0	9.2	70.0	0.6	5.0	4.5	50.0	1.3	20.0
ATI - Region 5	n=41	3.2	65.0	24.3	150.0	9.7	100.0	0.4	3.0	1.0	15.0	0.2	2.0
ATI - Region 6	n=54	7.4	100.0	44.3	200.0	7.5	70.0	0.5	7.0	2.6	16.0	0.8	8.0
ATI - Region 7	n=55	1.9	10.0	15.2	60.0	0.9	20.0	0.5	3.0	1.4	15.0	0.7	5.0
ATI - Region 8	n=98	1.8	50.0	4.0	100.0	1.9	50.0	0.1	3.0	0.4	15.0	0.1	10.0
ATI - Region 9	n=35	3.7	10.0	13.7	70.0	4.1	25.0	1.2	4.0	2.4	8.0	1.5	6.0
ATI - Region 10	n=16	6.7	30.0	56.8	150.0	43.5	400.0	0.2	2.0	6.0	60.0	0.7	7.0
ATI - Region 11	n=83	1.9	13.0	18.0	700.0	1.6	100.0	0.6	5.0	0.8	9.0	0.8	16.0
ATI - Region 12	n=46	1.9	16.0	10.6	50.0	2.3	15.0	0.6	4.0	1.0	12.0	0.4	4.0
ATI - Region 13	n=108	3.2	30.0	21.1	100.0	8.2	700.0	0.6	4.0	0.7	10.0	0.1	3.0

Table 4. Farming experience and tenure of beneficiaries in percentage reporting

Characteristics	All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13
	n=900	n=24	n=101	n=54	n=39	n=43	n=49	n=54	n=41	n=54	n=55	n=98	n=35	n=16	n=83	n=46	n=108
Number of years in farming																	
0 to 10	42.7	62.1	18.2	41.8	19.2	44.3	60.5	47.8	49.7	41.0	43.7	51.6	44.3	43.6	39.3	62.0	36.0
11 to 20	30.4	24.6	31.2	18.5	49.7	27.4	17.5	19.6	38.5	29.0	32.4	31.2	14.7	35.1	53.2	30.4	27.7
21 to 30	15.5	8.1	30.1	25.1	10.7	20.0	7.1	21.3	8.3	20.8	18.2	6.6	26.0	7.9	1.2	5.4	24.2
31 to 40	9.9	5.2	20.5	11.8	18.3	8.2	13.5	4.8	3.4	9.3	5.7	8.4	12.0	8.5	6.2	2.2	11.2
More than 51	1.4	0.0	0.0	2.8	2.1	0.0	1.4	6.5	0.0	0.0	0.0	2.2	3.0	4.9	0.0	0.0	0.9
<i>Average (years)</i>	<i>16.5</i>	<i>11.2</i>	<i>23.3</i>	<i>19.5</i>	<i>21.4</i>	<i>16.4</i>	<i>14.0</i>	<i>17.4</i>	<i>13.1</i>	<i>16.3</i>	<i>15.3</i>	<i>13.9</i>	<i>18.7</i>	<i>15.4</i>	<i>13.4</i>	<i>10.8</i>	<i>17.7</i>
Member of an organization																	
Farmer Organizations	64.8	52.6	74.1	67.5	41.8	80.4	65.8	70.6	75.1	72.6	51.0	69.8	88.3	68.5	29.8	89.5	54.5
Non-farm organizations	19.4	39.1	23.0	38.2	13.0	17.6	19.4	26.4	23.6	20.7	23.8	4.4	14.7	16.4	9.6	15.4	7.2
Tenurial Status																	
Owner	60.5	71.5	79.3	41.5	59.1	57.0	74.0	70.5	61.0	46.9	55.8	51.7	41.3	64.9	84.2	71.3	40.7
Tenant	28.3	12.1	15.8	51.6	39.1	27.0	9.7	21.0	20.4	37.0	35.0	29.4	49.6	11.5	13.5	20.4	50.6
Leasehold/Rentee	3.1	0.0	0.8	2.8	0.0	5.6	1.0	1.8	6.9	10.4	3.7	9.2	3.0	0.0	1.1	0.0	1.8
Others	8.1	16.4	4.1	4.1	1.8	10.3	15.3	6.7	11.7	5.6	5.5	9.7	6.0	23.6	1.2	8.3	6.9

Table 5. Commodity focus of interventions received from ATI, other government agencies, and private organizations

Training Center		Rice	Corn	Vegetables	Banana	Coconut	Fruit Trees	Chicken	Swine	Aquaculture	Other
All Centers	n=900	58.1	22.5	28.6	5.9	7.2	8	9.8	7.3	2.0	19.0
ATI - ITCPH	n=24	29.8	12.1	26.4	10.8	6.5	16.4	18.0	49.2	0.0	21.5
ATI - CAR	n=101	30.2	10.7	53.2	2.2	1.3	2.8	6.8	12.3	2.2	8.5
ATI – Region 1	n=54	63.0	31.5	31.7	2.8	3.9	11.5	17.2	15.8	2.6	21.3
ATI – Region 2	n=39	79.0	40.0	15.1	4.4	0.0	0.0	2.1	0.0	2.1	0.0
ATI – Region 3	n=43	75.8	22.7	21.2	0.0	0.0	4.5	2.3	0.0	0.0	23.0
ATI – Region 4A	n=49	42.7	15.8	45.1	12.1	7.3	25.2	12.4	11.2	0.0	26.7
ATI – Region 4B	n=54	49.2	16.5	22.0	7.8	1.5	3.5	5.0	0.0	6.5	38.4
ATI – Region 5	n=41	78.7	21.2	28.0	4.5	12.4	3.6	5.4	1.8	0.0	6.3
ATI – Region 6	n=54	57.7	28.5	48.6	20.5	16.5	22.9	27.9	12.8	3.7	24.2
ATI – Region 7	n=55	59.5	13.4	19.9	1.8	0.0	3.7	0.0	0.0	1.9	11.0
ATI – Region 8	n=98	75.2	9.8	15.3	0.9	3.5	2.2	2.9	4.8	0.0	28.7
ATI – Region 9	n=35	38.3	50.4	23.7	11.7	35.3	8.7	17.7	5.7	3.0	29.3
ATI – Region 10	n=16	55.1	3.6	23.0	11.5	28.5	7.2	12.8	0.0	7.9	24.3
ATI – Region 11	n=83	33.8	23.2	32.3	9.7	7.2	6.0	8.4	7.2	2.3	20.1
ATI – Region 12	n=46	93.9	48.5	30.3	6.1	14.4	15.0	40.9	0.0	0.0	7.3
ATI – Region 13	n=108	54.0	25.2	22.7	1.8	6.3	4.7	3.0	4.4	3.8	26.6

Table 6. Percent of farmer beneficiaries receiving interventions from private companies and government agencies other than DA-ATI

Training Center		Receiving Intervention	
		Yes	No
All Centers	n=900	37.7	62.3
ATI - ITCPH	n=24	37.0	63.0
ATI - CAR	n=101	24.3	75.7
ATI – Region 1	n=54	47.6	52.4
ATI – Region 2	n=39	35.3	64.7
ATI – Region 3	n=43	31.6	68.4
ATI – Region 4A	n=49	31.6	68.4
ATI – Region 4B	n=54	41.4	58.6
ATI – Region 5	n=41	28.8	71.2
ATI – Region 6	n=54	41.2	58.8
ATI – Region 7	n=55	5.7	94.3
ATI – Region 8	n=98	65.3	34.7
ATI – Region 9	n=35	53.4	46.6
ATI – Region 10	n=16	78.7	21.3
ATI – Region 11	n=83	24.4	75.6
ATI – Region 12	n=46	20.9	79.1
ATI – Region 13	n=108	55.7	44.3

Table 7. Percent of farmers receiving interventions, by agency

Agency	All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13
	n=900	n=24	n=101	n=54	n=39	n=43	n=49	n=54	n=41	n=54	n=55	n=98	n=35	n=16	n=83	n=46	n=108
Other DA agencies	42.3	36.1	27.7	38.3	60.7	85.7	67.3	43.0	22.0	31.0	65.2	42.3	83.1	30.0	14.4	36.5	13.2
DOST	11.1	0.0	0.0	8.2	20.3	9.7	16.6	12.1	22.0	32.8	0.0	1.4	11.3	6.2	55.2	0.0	4.6
DTI	20.9	0.0	7.8	5.9	21.6	27.2	16.6	44.9	39.5	45.8	65.2	2.7	28.1	50.0	14.4	0.0	10.1
LGU (MAO/PAO)	79.1	30.2	70.2	75.4	74.0	70.1	87.7	83.1	76.2	67.1	100.0	96.6	94.4	90.0	100.0	23.5	82.4
SUCs	16.6	0.0	5.2	25.1	33.4	28.6	8.6	12.1	6.2	9.0	0.0	34.6	5.6	30.8	0.0	0.0	1.7
Private companies	13.7	50.2	5.2	17.0	11.8	24.0	11.8	19.9	15.8	9.6	32.6	1.4	16.9	26.2	0.0	0.0	2.2
NGOs	7.3	0.0	0.0	8.2	5.9	0.0	27.3	14.1	8.5	23.1	0.0	0.0	0.0	14.6	0.0	0.0	6.7
Cooperatives/POs	18.2	14.2	6.7	16.4	19.0	25.4	18.2	50.3	12.5	45.1	32.6	2.7	0.0	35.4	14.7	0.0	11.7
Others	10.1	15.2	17.1	17.0	11.8	28.6	9.6	21.9	0.0	13.6	67.4	0.0	0.0	10.0	0.0	0.0	0.0

Table 8. Beneficiaries receiving interventions from various agencies (percent reporting)

Agency	All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13
	n=900	n=24	n=101	n=54	n=39	n=43	n=49	n=54	n=41	n=54	n=55	n=98	n=35	n=16	n=83	n=46	n=108
DA-ATI																	
Training	43.2	8.1	3.2	13.3	21.4	26.1	15.3	14.3	1.8	0.0	3.7	30.3	38.3	23.6	3.5	7.6	5.6
School on the Air	2.7	0.0	1.6	0.0	2.5	2.0	2.9	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0
e-extension program/ e-learning	3.5	5.2	0.9	0.0	0.0	3.1	1.5	0.0	0.0	0.0	0.0	3.8	3.0	0.0	0.0	0.0	0.0
Advisory Services	3.1	0.0	0.0	1.4	0.0	2.0	4.2	0.0	0.0	0.0	0.0	2.8	0.0	0.0	1.1	2.7	0.0
IEC Materials	8.5	0.0	0.0	6.4	2.5	3.1	10.2	1.8	0.0	0.0	0.0	10.3	0.0	0.0	0.0	0.0	0.9
Machineries/ Equipment		0.0	0.7	11.7	0.0	8.6	6.0	3.2	0.0	0.0	0.0	2.6	3.0	0.0	1.1	2.7	0.0
Production Inputs		11.7	1.3	9.2	0.0	2.0	12.0	1.8	4.5	0.0	3.7	16.5	3.0	0.0	2.3	2.7	4.8
Cash Grants/ Loans		0.0	0.0	1.4	2.5	3.1	6.0	3.5	0.0	0.0	0.0	2.6	9.0	0.0	0.0	0.0	0.0
Market Linkage	3.1	0.0	0.0	3.9	0.0	2.0	2.7	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	2.7	1.7
Others	5.5	0.0	0.7	2.5	0.0	0.0	2.7	1.8	0.0	0.0	0.0	7.9	3.0	7.9	0.0	2.2	0.0
DOST																	
Training	58.0	0.0	0.0	3.9	7.2	3.1	5.3	5.0	6.3	0.0	0.0	0.9	6.0	0.0	9.8	0.0	0.0
School on the Air	10.2	0.0	0.0	0.0	2.5	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e-extension program/ e-learning	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advisory Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IEC Materials	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0
Machineries/ Equipment	4.6	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0
Production Inputs	18.3	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	4.9	8.6	0.0	2.6
Cash Grants/ Loans	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Market Linkage	5.1	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0
Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DTI																	
Training	59.7	0.0	1.9	1.4	7.6	8.6	5.3	16.8	11.4	5.6	1.9	0.9	12.0	26.6	2.2	0.0	5.6
School on the Air	3.1	0.0	0.0	0.0	2.5	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e-extension program/ e-learning	3.1	0.0	0.0	0.0	2.5	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advisory Services	2.9	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.9
IEC Materials	5.5	0.0	0.0	0.0	2.5	0.0	1.5	1.8	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0
Machineries/ Equipment	1.8	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0
Production Inputs	9.0	0.0	0.0	0.0	0.0	2.0	2.5	1.8	0.0	0.0	1.9	0.9	0.0	3.6	1.2	0.0	0.9
Cash Grants/ Loans	1.8	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0
Market Linkage	6.4	0.0	0.0	1.4	0.0	0.0	1.0	1.8	0.0	0.0	0.0	0.0	0.0	7.9	1.2	0.0	0.0
Others	6.7	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	12.8	1.3	0.0	0.0

Agency	All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13
	n=900	n=24	n=101	n=54	n=39	n=43	n=49	n=54	n=41	n=54	n=55	n=98	n=35	n=16	n=83	n=46	n=108
LGU (MAO/PAO)																	
Training	36.6	5.9	14.9	13.4	26.1	18.7	27.7	20.2	20.2	3.7	3.7	38.9	38.7	51.5	24.4	4.9	23.3
School on the Air	2.5	0.0	0.9	0.0	0.0	4.1	1.5	1.8	2.4	0.0	0.0	4.1	3.0	0.0	0.0	0.0	3.5
e-extension program/ e-learning	1.9	5.2	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	6.3	3.0	0.0	0.0	0.0	0.0
Advisory Services	5.1	0.0	0.0	3.9	0.0	10.1	15.0	0.0	0.0	0.0	0.0	6.3	0.0	0.0	0.0	0.0	3.5
IEC Materials	7.2	0.0	0.0	2.5	0.0	3.1	19.3	1.8	0.0	1.9	0.0	13.5	0.0	3.6	3.6	0.0	9.5
Machineries/ Equipment	9.1	0.0	0.9	10.4	0.0	7.6	4.2	3.5	1.8	3.7	0.0	15.9	0.0	23.0	4.8	2.7	5.6
Production Inputs	21.7	0.0	1.9	26.4	4.6	5.1	14.7	12.6	2.4	3.5	3.8	22.3	0.0	39.4	20.8	2.7	35.6
Cash Grants/ Loans	4.3	0.0	0.7	8.2	5.1	2.0	6.0	1.8	1.6	1.9	0.0	1.3	3.0	3.6	0.0	0.0	1.8
Market Linkage	4.1	0.0	0.0	1.4	0.0	3.1	13.5	0.0	0.0	0.0	0.0	0.0	0.0	4.9	12.3	2.7	0.0
Others	7.4	0.0	3.2	5.3	0.0	0.0	1.5	9.0	0.0	0.0	0.0	28.2	5.7	7.9	0.0	0.0	3.5
SUC																	
Training	52.7	0.0	0.0	1.4	11.8	9.0	2.7	5.0	1.8	0.0	0.0	22.6	3.0	7.9	0.0	0.0	0.9
School on the Air	11.0	0.0	1.3	9.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	3.0	0.0	0.0	0.0	0.0
e-extension program/ e-learning	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advisory Services	4.4	0.0	0.0	0.0	0.0	2.5	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IEC Materials	8.0	0.0	0.0	2.5	2.5	0.0	2.7	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0
Machineries/ Equipment	4.2	0.0	0.0	0.0	2.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Production Inputs	8.3	0.0	0.0	1.4	2.5	4.5	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0
Cash Grants/ Loans	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Market Linkage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Others	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.3	0.0	0.0	0.0
Private Companies																	
Training	36.8	0.0	1.3	4.2	0.0	5.5	3.7	5.0	0.0	0.0	1.9	0.0	9.0	7.9	0.0	0.0	1.2
School on the Air	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e-extension program/ e-learning	4.3	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advisory Services	8.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IEC Materials	4.7	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Machineries/ Equipment	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0
Production Inputs	26.3	6.5	0.0	5.3	2.1	0.0	0.0	1.8	0.0	0.0	1.9	0.0	0.0	12.8	0.0	0.0	0.0
Cash Grants/ Loans	2.5	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Market Linkage	3.9	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0
Others	11.1	6.5	0.0	0.0	0.0	0.0	2.7	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NGOs/POs																	
Training	54.8	0.0	0.0	0.0	0.0	0.0	8.6	5.8	2.4	0.0	0.0	0.0	0.0	11.5	0.0	0.0	2.9
School on the Air	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Agency	All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13
	n=900	n=24	n=101	n=54	n=39	n=43	n=49	n=54	n=41	n=54	n=55	n=98	n=35	n=16	n=83	n=46	n=108
e-extension program/ e-learning	5.2	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advisory Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IEC Materials	8.7	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Machineries/ Equipment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Production Inputs	14.6	0.0	0.0	0.0	0.0	0.0	2.7	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
Cash Grants/ Loans	5.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Market Linkage	3.4	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Others	7.8	0.0	0.0	1.4	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
Other Government Agencies																	
Training	40.6	0.0	0.7	0.0	4.6	5.5	5.8	15.8	0.0	1.9	1.9	1.8	0.0	15.1	3.6	0.0	0.0
School on the Air	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e-extension program/ e-learning	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advisory Services	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	1.1	0.0	0.0
IEC Materials	2.5	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Machineries/ Equipment	9.1	0.0	0.0	1.4	0.0	2.5	0.0	1.8	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
Production Inputs	15.1	0.0	0.0	6.4	0.0	0.0	2.7	3.5	1.8	0.0	0.0	0.0	0.0	4.9	0.0	0.0	0.9
Cash Grants/ Loans	18.5	5.2	0.9	1.4	2.5	0.0	0.0	1.8	1.8	0.0	0.0	0.9	0.0	7.9	0.0	0.0	3.9
Market Linkage	3.7	0.0	0.0	0.0	0.0	1.0	1.5	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Others	7.8	0.0	0.0	0.0	2.1	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	7.9	0.0	0.0	0.8
Other Companies/Agencies																	
Training	36.6	0.0	4.2	0.0	2.1	2.5	3.1	7.3	0.0	1.9	1.9	0.0	0.0	7.9	0.0	0.0	0.0
School on the Air	3.3	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e-extension program/ e-learning	2.2	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advisory Services	3.7	0.0	0.9	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IEC Materials	3.7	0.0	0.9	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Machineries/ Equipment	13/3	0.0	0.0	1.4	0.0	5.5	0.0	1.5	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Production Inputs	22.5	5.6	0.9	5.3	0.0	0.0	1.5	3.2	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0
Cash Grants/ Loans	5.8	0.0	0.9	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0
Market Linkage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Others	8.8	0.0	0.0	2.8	0.0	0.0	0.0	1.8	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 9. Level of ease in accessing services of the providers

Agency	All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13
	n=900	n=24	n=101	n=54	n=39	n=43	n=49	n=54	n=41	n=54	n=55	n=98	n=35	n=16	n=83	n=46	n=108
DA-ATI																	
Very difficult	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Difficult	4.4	0.0	61.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	33.3	0.0	0.0	0.0
Neither easy or difficult	14.9	51.4	0.0	21.3	11.9	24.2	41.6	32.7	0.0	12.6	0.0	0.0	6.8	0.0	0.0	0.0	0.0
Easy	55.9	0.0	38.3	13.6	27.3	55.3	53.6	19.6	100.0	87.4	100.0	95.1	86.5	33.3	30.5	100.0	48.1
Very easy	24.7	48.6	0.0	65.1	60.8	20.5	4.8	47.7	0.0	0.0	0.0	2.5	6.8	33.3	69.5	0.0	51.9
DOST																	
Very difficult	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
Difficult	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
Neither easy or difficult	5.0			0.0	0.0	0.0	29.0	35.1	0.0	0.0		0.0	0.0	0.0	0.0		0.0
Easy	54.7			63.7	64.6	100.0	0.0	0.0	71.6	72.5		100.0	100.0	100.0	9.4		100.0
Very easy	40.3			36.3	35.4	0.0	71.0	64.9	28.4	27.5		0.0	0.0	0.0	90.6		0.0
DTI																	
Very difficult	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Difficult	5.7		0.0	0.0	0.0	0.0	0.0	32.3	15.8	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Neither easy or difficult	5.7		50.0	0.0	0.0	0.0	29.0	0.0	0.0	0.0	50.0	0.0	20.0	0.0	0.0		0.0
Easy	63.6		50.0	49.6	33.3	76.3	51.6	9.4	54.2	90.1	50.0	100.0	80.0	100.0	30.5		54.1
Very easy	25.0		0.0	50.4	66.7	23.7	19.4	58.3	30.1	9.9	0.0	0.0	0.0	0.0	69.5		45.9
LGU (MAO/PAO)																	
Very difficult	0.3	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Difficult	3.6	0.0	11.1	6.9	0.0	0.0	5.5	17.4	8.2	0.0	0.0	1.4	0.0	0.0	0.0	0.0	3.7
Neither easy or difficult	10.3	61.4	9.6	25.9	9.7	0.0	32.6	10.2	28.8	12.6	0.0	3.7	6.0	0.0	0.0	0.0	0.0
Easy	51.8	0.0	79.4	30.3	27.4	95.4	57.0	22.0	39.2	68.2	65.2	62.8	94.0	72.7	5.2	100.0	25.0
Very easy	34.0	38.6	0.0	33.0	62.8	4.6	4.9	50.4	23.8	19.2	34.8	32.1	0.0	27.3	94.8	0.0	71.2
SUC																	
Very difficult	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0			0.0
Difficult	1.6		0.0	11.8	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0			0.0
Neither easy or difficult	15.0		100.0	32.4	17.7	0.0	0.0	0.0	0.0	0.0		3.5	0.0	32.4			0.0
Easy	65.1		0.0	23.3	21.5	100.0	100.0	0.0	100.0	100.0		96.5	100.0	67.6			100.0
Very easy	18.3		0.0	32.4	60.8	0.0	0.0	100.0	0.0	0.0		0.0	0.0	0.0			0.0
Private Companies																	
Very difficult	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
Difficult	5.9	34.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
Neither easy or difficult	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
Easy	76.3	65.1	100.0	82.5	100.0	86.6	72.7	39.5	0.0	47.0	100.0	100.0	100.0	100.0			100.0

Agency	All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13
	n=900	n=24	n=101	n=54	n=39	n=43	n=49	n=54	n=41	n=54	n=55	n=98	n=35	n=16	n=83	n=46	n=108
Very easy	17.9	0.0	0.0	17.5	0.0	13.4	27.3	60.5	100.0	53.0	0.0	0.0	0.0	0.0			0.0
NGOs/POs																	
Very difficult	0.0			0.0	0.0		0.0	0.0	0.0	0.0				0.0			0.0
Difficult	0.0			0.0	0.0		0.0	0.0	0.0	0.0				0.0			0.0
Neither easy or difficult	25.7			35.9	0.0		35.3	0.0	0.0	0.0				68.5			22.0
Easy	66.4			64.1	100.0		64.7	100.0	100.0	77.9				31.5			32.5
Very easy	8.0			0.0	0.0		0.0	0.0	0.0	22.1				0.0			45.5
Other Government Agencies																	
Very difficult	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Difficult	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Neither easy or difficult	8.6	0.0	0.0	0.0	0.0	0.0	26.5	15.7	50.0	20.1	0.0	0.0		0.0	0.0		0.0
Easy	48.1	100.0	42.0	17.9	68.9	43.5	47.1	15.6	0.0	58.7	100.0	50.0		100.0	0.0		0.0
Very easy	43.4	0.0	58.0	82.1	31.1	56.5	26.5	68.8	50.0	21.2	0.0	50.0		0.0	100.0		100.0
Other Companies/Agencies																	
Very difficult	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0			
Difficult	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0			
Neither easy or difficult	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0		33.3	0.0			0.0			
Easy	52.1	0.0	77.2	34.4	50.0	88.7	50.0	0.0		66.7	48.4			100.0			
Very easy	45.6	100.0	22.8	65.6	50.0	11.3	50.0	100.0		0.0	51.6			0.0			

Table 10. Level of satisfaction for the services provided by various agencies

Agency	All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13
	n=900	n=24	n=101	n=54	n=39	n=43	n=49	n=54	n=41	n=54	n=55	n=98	n=35	n=16	n=83	n=46	n=108
DA-ATI																	
Very dissatisfied	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dissatisfied	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neither satisfied nor dissatisfied	9.3	60.7	0.0	13.6	0.0	0.0	28.1	9.8	0.0	0.0	0.0	0.0	6.8	33.3	0.0	0.0	0.0
Satisfied	55.5	39.3	89.8	7.6	21.6	50	67.1	32.7	0.0	41.9	50.0	95.0	93.2	33.3	30.5	100.0	60.1
Very satisfied	35.2	0.0	10.2	78.7	78.4	50.0	4.8	57.5	100.0	58.1	50.0	5.0	0.0	33.3	69.5	0.0	39.9
DOST																	
Very dissatisfied	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
Dissatisfied	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
Neither satisfied nor dissatisfied	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
Satisfied	50.9			63.7	64.6	100.0	51.6	0.0	71.6	56.9		100.0	100	0.0	18.1		34.0
Very satisfied	49.1			36.3	35.4	0.0	48.4	100.0	28.4	43.1		0.0	0.0	100.0	81.9		66.0
DTI																	
Very dissatisfied	1.9		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.2	0.0		0.0
Dissatisfied	0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Neither satisfied nor dissatisfied	2.7		0.0	0.0	0.0	0.0	0.0	9.4	0.0	0.0	0.0	0.0	20.0	0.0	0.0		0.0
Satisfied	60		100.0	49.6	33.3	88.2	80.6	32.3	84.2	69.0	100.0	100.0	80.0	40.0	0.0		69.7
Very satisfied	35.5		0.0	50.4	66.7	11.8	19.4	58.3	15.8	31.0	0.0	0.0	0.0	50.8	100.0		30.3
LGU (MAO/PAO)																	
Very dissatisfied	0.5	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	5.1	0.0	0.0	0.0
Dissatisfied	1.6	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	11.1	0.0	0.0	0.0
Neither satisfied nor dissatisfied	8.5	53.1	4.0	29.0	0.0	0.0	37.5	10.2	16.4	5.8	0.0	3.7	0.0	0.0	0.0	0.0	0.0
Satisfied	44.1	46.9	72.0	26.4	35.4	59.2	46.0	27.1	48.7	46.2	65.2	61.4	100	5.1	24.9	45.0	30.8
Very satisfied	45.3	0.0	18.5	44.6	64.6	40.8	16.5	62.7	34.9	47.9	34.8	33.5	0.0	78.7	75.1	55.0	69.2
SUC																	
Very dissatisfied	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0			0.0
Dissatisfied	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0			0.0
Neither satisfied nor dissatisfied	1.6		0.0	11.8	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0			0.0
Satisfied	61.1		100.0	44.1	39.2	49.9	100.0	35.1	100.0	100.0		100.0	100.0	14.9			100.0
Very satisfied	37.2		0.0	44.1	60.8	50.1	0.0	64.9	0.0	0.0		0.0	0.0	85.1			0.0
Private Companies																	
Very dissatisfied	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
Dissatisfied	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
Neither satisfied nor dissatisfied	5.9	34.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
Satisfied	54.6	65.1	0.0	65.5	100.0	100.0	72.7	39.5	0.0	47.0	0.0	100.0	100.0	0.0			100.0
Very satisfied	39.5	0.0	100.0	34.5	0.0	0.0	27.3	60.5	100.0	53.0	100.0	0.0	0.0	100.0			0.0
NGOs/POs																	

Agency	All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13
	n=900	n=24	n=101	n=54	n=39	n=43	n=49	n=54	n=41	n=54	n=55	n=98	n=35	n=16	n=83	n=46	n=108
Very dissatisfied	0.0			0.0	0.0		0.0	0.0	0.0	0.0				0.0			0.0
Dissatisfied	0.0			0.0	0.0		0.0	0.0	0.0	0.0				0.0			0.0
Neither satisfied nor dissatisfied	25.2			0.0	0.0		33.3	0.0	100.0	0.0				68.5			0.0
Satisfied	63.7			100.0	100.0		66.7	100.0	0.0	58.6				31.5			54.5
Very satisfied	11.1			0.0	0.0		0.0	0.0	0.0	41.4				0.0			45.5
Other Government Agencies																	
Very dissatisfied	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		13.0	0.0		0.0
Dissatisfied	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Neither satisfied nor dissatisfied	8.7	0.0	0.0	0.0	0.0	0.0	26.5	24.1	50.0	10.0	0.0	0.0		0.0	0.0		0.0
Satisfied	40.6	0.0	0.0	50.2	68.9	87.3	73.5	0.0	0.0	68.8	100.0	50.0		41.2	0.0		0.0
Very satisfied	48.5	100.0	100.0	49.8	31.1	12.7	0.0	75.9	50.0	21.2	0.0	50.0		45.8	100.0		100.0
Other Companies/Agencies																	
Very dissatisfied	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0			
Dissatisfied	3.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0		0.0	0.0			0.0			
Neither satisfied nor dissatisfied	2.5	0.0	0.0	0.0	0.0	0.0	0.0	19.3		0.0	0.0			0.0			
Satisfied	47.4	100.0	46.8	17.2	50.0	88.7	50.0	0.0		100.0	48.4			0.0			
Very satisfied	47.1	0.0	53.2	82.8	50.0	11.3	0.0	80.7		0.0	51.6			100.0			

Table 11. Specific intervention received by farmers from ATI

Training Center		Training	School on the Air	e-extension Program	Advisory Services/ IEC Materials	Others
All Centers	n=900	93.0	7.5	5.0	9.0	2.8
ATI - ITCPH	n=24	90.1	5.9	18.5	0.0	5.6
ATI - CAR	n=101	96.8	1.9	0.0	5.1	0.0
ATI - Region 1	n=54	98.6	0.0	4.2	1.4	1.4
ATI - Region 2	n=39	66.1	27.2	0.0	7.6	9.3
ATI - Region 3	n=43	100.0	5.2	3.1	4.5	0.0
ATI - Region 4A	n=49	88.4	18.9	7.6	16.3	1.5
ATI - Region 4B	n=54	98.5	1.5	6.2	4.7	3.2
ATI - Region 5	n=41	91.3	19.2	3.6	3.6	0.0
ATI - Region 6	n=54	94.7	10.4	7.2	11.2	3.5
ATI - Region 7	n=55	100.0	0.0	0.0	7.4	0.0
ATI - Region 8	n=98	99.1	1.8	6.4	24.8	1.8
ATI - Region 9	n=35	100.0	0.0	3.0	3.0	0.0
ATI - Region 10	n=16	100.0	12.1	16.4	20.0	7.9
ATI - Region 11	n=83	98.9	0.0	12.9	4.6	0.0
ATI - Region 12	n=46	68.9	0.0	2.2	21.1	10.0
ATI - Region 13	n=108	99.1	8.6	0.8	9.9	3.8

Table 12. Perceived increase in knowledge of beneficiaries as a result of ATI intervention

Training Center		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
All Centers	n=900	1.5	0.6	3.8	44.9	49.2
ATI - ITCPH	n=24	5.6	0.0	8.1	25.7	60.5
ATI - CAR	n=101	0.0	0.0	0.9	84.7	14.3
ATI - Region 1	n=54	2.8	2.6	5.3	22.4	66.9
ATI - Region 2	n=39	3.3	0.0	9.5	40.3	46.9
ATI - Region 3	n=43	0.0	0.0	4.5	56.7	38.8
ATI - Region 4A	n=49	0.0	0.0	5.4	43.8	50.7
ATI - Region 4B	n=54	1.8	0.0	9.3	38.8	50.2
ATI - Region 5	n=41	1.8	4.5	0.0	26.1	67.6
ATI - Region 6	n=54	5.5	1.9	9.3	48.5	34.8
ATI - Region 7	n=55	1.8	0.0	0.0	15.7	82.5
ATI - Region 8	n=98	0.9	1.0	2.2	58.1	37.9
ATI - Region 9	n=35	0.0	0.0	0.0	94.0	6.0
ATI - Region 10	n=16	0.0	0.0	7.9	15.1	77.0
ATI - Region 11	n=83	1.2	0.0	0.0	45.0	53.8
ATI - Region 12	n=46	0.0	0.0	0.0	44.8	55.2
ATI - Region 13	n=108	0.0	0.0	0.0	55.3	44.7

Table 13. DA-ATI training resulted to NC certification as reported by beneficiaries

Training Center		Resulted to NCC		Level of Certification for Yes Response			
		Yes	No	Level I	Level II	Level III	Level IV
All Centers	n=900	26.1	73.9	32.1	51.0	11.3	5.6
ATI - ITCPH	n=24	34.9	65.1	0.0	83.9	16.1	0.0
ATI - CAR	n=101	15.4	84.6	43.7	39.6	16.7	0.0
ATI – Region 1	n=54	12.0	88.0	11.8	22.1	66.1	0.0
ATI – Region 2	n=39	40.1	59.9	47.3	27.0	25.7	0.0
ATI – Region 3	n=43	71.1	28.9	33.2	29.2	9.8	27.8
ATI – Region 4A	n=49	47.6	52.4	28.9	71.1	0.0	0.0
ATI – Region 4B	n=54	25.0	75.0	54.0	32.0	14.0	0.0
ATI – Region 5	n=41	19.4	80.6	9.2	90.8	0.0	0.0
ATI – Region 6	n=54	37.2	62.8	56.4	43.6	0.0	0.0
ATI – Region 7	n=55	17.7	82.3	47.6	52.4	0.0	0.0
ATI – Region 8	n=98	4.8	95.2	18.1	63.8	18.1	0.0
ATI – Region 9	n=35	15	85.0	0.0	100.0	0.0	0.0
ATI – Region 10	n=16	27.9	72.1	0.0	82.4	17.6	0.0
ATI – Region 11	n=83	13.2	86.8	53.4	46.6	0.0	0.0
ATI – Region 12	n=46	29.2	70.8	16.8	83.2	0.0	0.0
ATI – Region 13	n=108	4.6	95.4	63.9	18.0	18.0	0.0

Table 14. Number of farmer-beneficiaries formulating and implementing action plans and their results, and reasons for non-implementation

Item	All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13
	n=900	n=24	n=101	n=54	n=39	n=43	n=49	n=54	n=41	n=54	n=55	n=98	n=35	n=16	n=83	n=46	n=108
Formulated action plan																	
Yes	43.1	53.2	27.1	32.6	65.1	80.3	30.4	47.3	37.8	28.5	19.6	9.0	71.1	51.5	15.3	0.0	57.4
No	56.9	46.8	72.9	67.4	34.9	19.7	69.6	52.7	62.2	71.5	80.4	91.0	28.9	48.5	84.7	100.0	42.6
Implemented action plan																	
Yes	86.4	84.6	86.2	85.3	84.2	95.0	94.1	82.7	100.0	73.9	100.0	71.8	83.3	100.0	100.0	84.6	86.2
No	13.6	15.4	13.8	14.7	15.8	5.0	5.9	17.3	0.0	26.1	0.0	28.2	16.7	0.0	0.0	15.4	13.8
Result of implementation of the action plan																	
increased yield	40.0	9.9	4.9	15.9	22.1	59.4	16.2	15.8	14.0	11.2	10.2	2.5	21.0	32.8	1.3	0.0	14.7
healthy plants/animals	21.0	17.2	6.3	14.8	0.0	9.0	14.8	10.8	3.6	5.6	1.9	0.9	30.0	29.8	3.7	0.0	5.1
less pests and diseases	16.0	4.3	2.4	9.2	2.5	7.7	14.6	10.8	5.4	5.6	2.8	2.5	15.0	17.1	3.7	0.0	6.0
less use of inputs	15.0	4.3	2.4	13.0	10.2	15.8	13.3	1.5	1.8	5.3	0.0	1.8	6.0	17.1	1.3	0.0	3.4
others	8.0	13.7	0.0	1.4	2.5	6.7	0.0	10.3	0.0	0.0	1.9	0.0	0.0	12.8	0.0	0.0	6.7
Reasons for not implementing the action plan																	
costly inputs	20.0	0.0	1.3	0.0	0.0	0.0	1.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	6.3
unavailable inputs	11.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
difficult to use	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
did not understand how to use	8.0	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
not applicable/not relevant in the farm	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0	2.6
Others	47.0	5.6	0.0	3.9	2.5	0.0	0.0	5.8	0.0	0.0	0.0	1.3	3.0	0.0	0.0	0.0	5.5

Table 15. Technology or improved practice intervention by ATI received by farmers

Technology or improved practice	All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13
	n=900	n=24	n=101	n=54	n=39	n=43	n=49	n=54	n=41	n=54	n=55	n=98	n=35	n=16	n=83	n=46	n=108
Rice production technologies	72.4			74.3	100.0			75.0		64.5							
Corn production technologies	52.6			42.7	100.0			100.0		45.6							
Vegetable farming	63.6			51.6	50.0			100.0		72.3							
Diversified farming	48.5			31.6	100.0			100.0		45.6							
Backyard gardening	50.3			31.6	100.0			100.0		49.5							
Organic farming	56.9			37.6	100.0			50.0		63.4							
Pest management	57.4			36.8	100.0			100.0		60.1							
Good Agriculture Practice	54.8			49.4	100.0			100.0		45.0							
Climate smart technologies	36.7			25.0	50.0			100.0		36.8							
Mulching/Vermicomposting	42.5			25.0	50.0			100.0		48.8							
Sloping Agricultural Land Technology	30.4			6.6	100.0			50.0		32.3							
Modern livestock technology	32.6			19.9	100.0			100.0		21.5							
Animal husbandry	34.5			25.0	100.0			100.0		21.5							
Animal waste management	36.6			25.0	100.0			100.0		26.0							
Product processing	30.7			6.6	100.0			100.0		27.9							
By-product utilization	24.1			18.3	100.0			100.0		5.0							
Farm machinery operation	40.8			18.3	100.0			100.0		39.9							
Other commodity-based production technology	19.1			0.0	100.0			100.0		8.9							
Product cleaning	23.6			11.8	100.0			50.0		14.0							
Product sorting	23.8			6.6	100.0			50.0		18.4							
Product grading	28.5			19.1	100.0			50.0		18.4							
Entrepreneurship training																	
<i>Farm business school</i>	43.5			42.7	100.0			50.0		31.6							
<i>Climate smart business school</i>	21.4			11.8	100.0			50.0		9.4							
<i>Farmer business development and farm record keeping</i>	32.6			30.9	100.0			50.0		17.8							
<i>Financial literacy</i>	23.6			19.1	100.0			100.0		26.0							
<i>Kapatid Mentor ME</i>	10.2			18.3	100.0			50.0		8.9							

Table 16. Farmers reporting adopting the technology or improved practice

Item	All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13
	n=900	n=24	n=101	n=54	n=39	n=43	n=49	n=54	n=41	n=54	n=55	n=98	n=35	n=16	n=83	n=46	n=108
Adopted the technology																	
Yes	51.5	44.1	27.9	77.2	45.0	80.8	53.9	64.5	40.1	78.4	57.4	51.8	42.0	80.6	21.7	6.1	47.0
No	48.5	55.9	72.1	22.8	55.0	19.2	46.1	35.5	59.9	21.6	42.6	48.2	58.0	19.4	78.3	93.9	53.0
Results from adopting technology or practice																	
Increased yield	34.8	17.5	14.2	57.4	42.5	72.8	42.3	41.1	38.3	72.9	50.9	38.6	33.0	72.8	18.3	6.1	34.1
Healthy plants and animals	23.1	27.1	20.7	52.4	9.7	18.0	48.3	30.9	3.6	57.4	21	20.8	42.0	80.6	16.9	6.1	12.3
Less pests and diseases	20.2	15.9	14.1	45.2	9.7	13.0	47.8	24.4	5.4	52.9	21.5	31.1	30.0	64.3	9.5	3.4	10.3
Less use of inputs	15.2	5.9	11.5	48.3	12.2	20.9	30.8	20.4	1.8	46.1	3.7	11.7	9.0	45.6	12.2	1.7	12.1
Others	6.8	21.0	2.8	17.1	2.1	14.4	9.0	18.3	1.8	16.7	2.8	0.9	3.0	20.6	0.0	0.0	7.6
Reasons for not adopting																	
costly inputs	21.7	23.7	5.9	0.0	2.5	0.0	1.5	0.0	1.8	1.9	0.0	0.0	0.0	0.0	0.0	1.7	15.8
unavailable inputs	15.4	1.6	0.9	2.5	2.5	2.5	9.0	0.0	0.0	7.4	0.0	0.0	6.0	0.0	0.0	0.0	5.5
difficult to use	7.2	3.2	0.0	0.0	0.0	1.0	3.1	0.0	1.8	5.6	0.0	0.0	3.0	0.0	0.0	1.7	1.2
did not understand how to use	3.5	1.6	0.0	1.4	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.9
not applicable/not relevant in the farm	32.6	12.9	4.2	6.6	0.0	3.1	7.1	1.8	0.0	21.2	3.1	1.8	15.0	7.9	2.4	1.7	3.4
others	19.5	12.1	2.5	3.9	0.0	3.2	0.0	3.2	0.0	9.3	4.7	0.9	5.7	0.0	0.0	0.0	6.1

Table 17. Satisfaction level of beneficiaries for DA-ATI programs

Training Center		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
All Centers	n=900	0.4	0.6	4.9	51.1	43.1
ATI - ITCPH	n=24	0.0	0.0	0.0	57.5	42.5
ATI - CAR	n=101	0.0	0.0	2.8	79.4	17.7
ATI – Region 1	n=54	0.0	2.5	6.5	26.7	64.2
ATI – Region 2	n=39	0.0	0.0	19.2	47.7	33.1
ATI – Region 3	n=43	0.0	2.0	3.5	70.6	23.9
ATI – Region 4A	n=49	0.0	0.0	11.4	48.1	40.5
ATI – Region 4B	n=54	0.0	0.0	6.7	21.3	71.9
ATI – Region 5	n=41	0.0	0.0	1.8	46.3	51.9
ATI – Region 6	n=54	0.0	1.8	16.5	52.2	29.5
ATI – Region 7	n=55	0.0	0.0	0.0	17.6	82.4
ATI – Region 8	n=98	1.3	1.0	9.9	61.4	26.4
ATI – Region 9	n=35	3.0	0.0	0.0	88.0	9.0
ATI – Region 10	n=16	0.0	0.0	0.0	23.0	77.0
ATI – Region 11	n=83	0.0	1.2	0.0	50.0	48.8
ATI – Region 12	n=46	0.0	0.0	0.0	41.6	58.4
ATI – Region 13	n=108	0.9	0.0	0.0	51.0	48.1

Table 18. Relevance rating by beneficiaries of ATI programs

Training Center		Not very relevant	Not relevant	Neutral	Relevant	Very relevant
All Centers	n=900	1.2	1.0	6.5	50.2	41.2
ATI - ITCPH	n=24	0.0	0.0	0.0	56.6	43.4
ATI - CAR	n=101	0.0	0.7	3.7	80.5	15.2
ATI – Region 1	n=54	2.7	0.0	12.0	22.5	62.8
ATI – Region 2	n=39	0.0	5.6	24.3	38.2	31.9
ATI – Region 3	n=43	0.0	0.0	8.1	71.5	20.4
ATI – Region 4A	n=49	0.0	0.0	16.0	41.1	42.9
ATI – Region 4B	n=54	0.0	1.8	14.5	30.6	53.2
ATI – Region 5	n=41	9.9	1.8	10.6	28.7	49.0
ATI – Region 6	n=54	3.7	0.0	12.8	42.0	41.5
ATI – Region 7	n=55	0.0	1.8	0.0	17.6	80.6
ATI – Region 8	n=98	0.0	2.3	4.4	65.5	27.7
ATI – Region 9	n=35	0.0	0.0	0.0	91.0	9.0
ATI – Region 10	n=16	7.9	0.0	0.0	27.2	64.9
ATI – Region 11	n=83	0.0	0.0	0.0	50.0	50.0
ATI – Region 12	n=46	0.0	0.0	0.0	50.5	49.5
ATI – Region 13	n=108	1.8	0.8	3.4	49.4	44.5

Table 19. Satisfaction level of beneficiaries on the timeliness of delivery of ATI interventions

Training Center		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
All Centers	n=900	0.7	0.1	5.0	53.3	40.9
ATI - ITCPH	n=24	0.0	0.0	12.1	53.4	34.5
ATI - CAR	n=101	0.8	0.9	1.6	82.8	13.8
ATI – Region 1	n=54	2.5	0.0	11.9	21.3	64.2
ATI – Region 2	n=39	0.0	0.0	15.2	50.4	34.4
ATI – Region 3	n=43	0.0	0.0	2.5	78.3	19.2
ATI – Region 4A	n=49	0.0	0.0	13.1	36.9	50.0
ATI – Region 4B	n=54	0.0	0.0	9.3	36.6	54.2
ATI – Region 5	n=41	4.5	0.0	4.2	44.8	46.4
ATI – Region 6	n=54	1.9	0.0	14.6	56.9	26.5
ATI – Region 7	n=55	0.0	0.0	0.0	17.6	82.4
ATI – Region 8	n=98	1.3	0.0	5.4	67.7	25.5
ATI – Region 9	n=35	0.0	0.0	3.0	94.0	3.0
ATI – Region 10	n=16	0.0	0.0	0.0	30.8	69.2
ATI – Region 11	n=83	0.0	0.0	0.0	52.5	47.5
ATI – Region 12	n=46	0.0	0.0	0.0	36.5	63.5
ATI – Region 13	n=108	0.0	0.0	0.0	52.8	47.2

Table 20. Estimated price, yield, and income of farmer-beneficiaries before and after ATI intervention, by commodity (average values)

Item		All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13
		n=900	n=24	n=101	n=54	n=39	n=43	n=49	n=54	n=41	n=54	n=55	n=98	n=35	n=16	n=83	n=46	n=108
Price ¹																		
Before	rice	13.90					24.80					35.00			60.00			43.00
	corn	9.40										35.00		16.00				18.00
	vegetables	21.00					37.00					50.00						
	fruits	161.50					250.00											150.00
	pigs	17,912.00	25,000.00															
After	rice	41.80					27.30					49.00						51.00
	corn	28.20										45.00		24.33				21.00
	vegetables	55.50					66.00					60.00						
	fruits	242.20					250.00											200.00
	pigs	25,000.00	25,000.00															
Yield ²																		
Before	rice	11,343.00					3,534.38											4,250.00
	corn	62.60												4,150.00				
	vegetables	18,898.00					46,250.00					50.00						
	fruits	77.30					133.00											
	pigs																	
After	rice	49,618.00					3,404.69											2,625.00
	corn	425.00												4,250.00				
	vegetables	49,684.00					63,750.00					60.00						
	fruits	500.00					500.00											
	pigs																	
Income ³																		
Before	rice	11,150.00					89,221.88											183,000.00
	corn	58.00												62,250.00				
	vegetables	16,313.00					55,000.00					2,000.00						
	fruits	29,062.00					50,000.00											
	pigs																	
After	rice	87,926.00					94,067.19											133,750.00
	corn	440.00												105,000.00				
	vegetables	52,277.00					65,000.00					5,000.00						
	fruits	100,000.00					100,000.00											
	pigs																	

¹Price/kg or head

²Yield (estimate per cropping per hectare, or per head per season for animals)

³Income (estimate per cropping per hectare)

Table 21. DA-ATI intervention provided skills and opportunities for beneficiaries to become entrepreneurs

Training Center		Yes	No
All Centers	n=900	62.0	38.0
ATI - ITCPH	n=24	65.8	34.2
ATI - CAR	n=101	22.5	77.5
ATI – Region 1	n=54	72.0	28.0
ATI – Region 2	n=39	91.6	8.4
ATI – Region 3	n=43	69.1	30.9
ATI – Region 4A	n=49	75.6	24.4
ATI – Region 4B	n=54	78.9	21.1
ATI – Region 5	n=41	68.7	31.3
ATI – Region 6	n=54	78.2	21.8
ATI – Region 7	n=55	44.6	55.4
ATI – Region 8	n=98	50.7	49.3
ATI – Region 9	n=35	39.0	61.0
ATI – Region 10	n=16	86.6	13.4
ATI – Region 11	n=83	47.9	52.1
ATI – Region 12	n=46	29.2	70.8
ATI – Region 13	n=108	69.1	30.9

Table 22. Respondents with social protection before and after ATI intervention (percent reporting)

Training Center		SSS			PAG-Ibig			PhilHealth			Crop Insurance			Other forms of social protection		
		Before	After	ATI helped	Before	After	ATI helped	Before	After	ATI helped	Before	After	ATI helped	Before	After	ATI helped
All Centers	n=900	42.9	25.5	16.1	25.7	14.1	7.5	57.2	36.6	6.2	29.7	29.5	60.8	34.8	27.4	9.4
ATI - ITCPH	n=24	57.1	62.4	0.0	42.3	42.3	0.0	60.8	60.8	15.9	6.5	22.2	70.8	100.0	100.0	0.0
ATI - CAR	n=101	35.2	35.9	0.0	9.7	11.3	0.0	44.9	46.5	0.0	11.8	25.2	30.4	0.0	33.7	0.0
ATI - Region 1	n=54	63.6	65.0	3.5	29.7	32.5	0.0	73.3	77.3	0.0	50.9	65.2	23.7	65.2	65.2	0.0
ATI - Region 2	n=39	34.4	34.4	0.0	35.4	35.4	0.0	56.9	65.3	6.1	60.8	65.5	37.3	0.0	0.0	
ATI - Region 3	n=43	69.8	69.8	0.0	42.7	43.9	0.0	71.9	76.4	9.7	42.2	62.8	74.7	31.3	31.3	0.0
ATI - Region 4A	n=49	52.0	59.5	9.2	34.9	36.4	0.0	59.4	65.0	0.0	11.6	20.9	24.2	18.4	18.4	0.0
ATI - Region 4B	n=54	51.8	59.2	11.7	36.3	38.1	10.9	60.1	67.7	8.5	27.6	40.6	34.7	59.3	81.1	0.0
ATI - Region 5	n=41	65.5	76.1	0.0	37.8	41.4	0.0	54.3	64.1	0.0	30.0	34.2	11.6	63.8	63.8	0.0
ATI - Region 6	n=54	45.8	47.9	17.1	21.9	24.0	0.0	68.2	77.9	0.0	48.1	54.0	38.8	66.7	66.7	100.0
ATI - Region 7	n=55	18.5	22.2	40.2	11.1	11.1	0.0	58.6	64.6	4.5	29.2	39.8	32.4			
ATI - Region 8	n=98	11.9	15.9	6.5	9.2	10.6	0.0	21.6	26.8	0.0	5.3	5.3	0.0	0.0	0.0	
ATI - Region 9	n=35	26.7	26.7	0.0	23.7	26.7	0.0	91.3	91.3	0.0	36.0	42.0	57.1	0.0	0.0	
ATI - Region 10	n=16	55.1	55.1	18.0	20.0	20.0	0.0	63.6	71.5	0.0	47.9	55.8	15.1			
ATI - Region 11	n=83	34.4	37.9	46.0	19.3	21.7	62.3	45.7	45.7	3.4	16.9	19.4	40.7	0.0	0.0	
ATI - Region 12	n=46	35.8	40.3	0.0	11.1	13.8	0.0	38.1	39.7	0.0	0.0	7.1	37.9	0.0	0.0	
ATI - Region 13	n=108	35.6	38.3	0.0	25.5	27.3	0.0	63.0	63.0	2.9	44.5	48.8	3.5	100.0	100.0	

Table 23. Causes of crisis situations

Training Center		Typhoon	Flooding	Drought	Pests and diseases	Decrease in output prices	Increase in input prices	Family emergencies	Others (specify)	None
All Centers	n=900	46.8	26.3	36.3	28.8	9.0	7.3	3.7	3.2	18.0
ATI - ITCPH	n=24	24.8	13.2	33.6	36.9	5.9	16.8	1.6	13.7	18.0
ATI - CAR	n=101	63.2	2.9	13.3	14.6	3.9	6.3	1.9	3.8	24.6
ATI – Region 1	n=54	35.2	22.2	37.1	27.8	14.3	20.7	10.6	2.7	21.0
ATI – Region 2	n=39	74.7	24.2	9.7	9.7	0.0	2.5	0.0	0.0	15.6
ATI – Region 3	n=43	60.5	22.3	51.5	21.8	9.6	2.2	0.0	9.1	10.3
ATI – Region 4A	n=49	48.9	34.3	39.7	24.5	10.9	7.1	8.6	1.5	28.5
ATI – Region 4B	n=54	69.8	30.5	34.8	26.3	1.8	1.5	0.0	6.5	10.3
ATI – Region 5	n=41	58.1	6.2	51.5	45.1	0.0	0.0	0.0	0.0	7.2
ATI – Region 6	n=54	50.4	55.8	53.7	44.2	5.6	9.1	9.6	1.6	1.6
ATI – Region 7	n=55	36.2	11.6	19.3	28.1	9.8	2.8	0.0	0.0	33.3
ATI – Region 8	n=98	53.1	10.2	41.9	13.6	5.2	1.0	0.9	2.2	3.1
ATI – Region 9	n=35	30.0	23.7	27	36.0	14.7	17.7	3.0	2.7	29.0
ATI – Region 10	n=16	19.4	35.1	25.5	12.8	0.0	0.0	0.0	0.0	42.3
ATI – Region 11	n=83	2.2	38.7	41.8	57.2	25.1	3.5	1.1	1.2	22.2
ATI – Region 12	n=46	37.5	71.3	91.2	72.4	55.2	30.4	17.6	0.0	2.7
ATI – Region 13	n=108	42.1	52.2	36.1	26.8	0.0	8.3	8.4	7.0	19.6

Table 24. Improvement in coping with crisis situations

Training Center		Yes	No	Not applicable
All Centers	n=900	56.5	36.2	7.3
ATI - ITCPH	n=24	48.2	28.2	23.6
ATI - CAR	n=101	29.6	66.2	4.2
ATI – Region 1	n=54	65.3	21.5	13.2
ATI – Region 2	n=39	84.0	14.5	1.5
ATI – Region 3	n=43	66.3	16.5	17.2
ATI – Region 4A	n=49	48.4	23.4	28.2
ATI – Region 4B	n=54	55.9	42.4	1.7
ATI – Region 5	n=41	65.4	32.6	1.9
ATI – Region 6	n=54	77.5	20.8	1.6
ATI – Region 7	n=55	76.5	23.5	0.0
ATI – Region 8	n=98	39.5	58.7	1.8
ATI – Region 9	n=35	59.2	16.4	24.4
ATI – Region 10	n=16	93.7	0.0	6.3
ATI – Region 11	n=83	40.8	59.2	0.0
ATI – Region 12	n=46	26.7	70.5	2.8
ATI – Region 13	n=108	39.8	60.2	0.0

Table 25. Coping mechanisms of farmer beneficiaries in dealing with crises before and after ATI intervention (percent reporting)

Item		All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13	
		n=900	n=24	n=101	n=54	n=39	n=43	n=49	n=54	n=41	n=54	n=55	n=98	n=35	n=16	n=83	n=46	n=108	
Typhoon																			
early harvest of crops	Before	39.0	15.6	49.4	12.0	30.1	21.4	30.2	19.3	37.2	11.4	6.6	13.3	21.0	0.0	1.1	26	26.5	
avail crop insurance		19.3	7.2	7.3	15.7	16.0	14.6	10.1	11.7	10.9	11.1	19.9	2.2	21.0	0.0	1.1	0	13.2	
ask for assistance from LGUs/government agencies		15.8	3.2	7.3	3.9	7.6	15.7	1.0	18.0	21.0	20.4	7.4	0.0	9.0	3.6	2.2	2.7	16.7	
no action		26.0	5.9	5.8	10.3	32.3	8.8	11.2	27.5	11.1	18.6	7.8	38.9	0.0	15.7	0.0	11.5	11.1	
early harvest of crops	After	35.5	17.2	47.5	18.5	28.0	17.6	30.2	12.8	37.2	22.8	5.7	8.5	21.0	7.9	1.1	33.1	21.6	
avail crop insurance		26.9	5.6	13.4	19.6	24.4	33.5	13.3	20.0	10.9	24.7	22.9	4.4	21.0	0.0	2.2	8.8	22	
ask for assistance from LGUs/government agencies		19.8	4.9	9.8	1.4	10.2	22.3	2.5	24.8	21.6	39.5	15.0	1.3	9.0	3.6	2.2	2.7	21.3	
no action		17.8	4.3	8.4	6.4	28.1	4.5	9.7	23.5	10.5	3.7	0.0	38.9	0.0	7.9	0.0	0	7.7	
Flooding																			
early harvest of crops	Before	41.1	9.9	1.9	6.7	4.2	1.0	31.4	1.5	0.0	13.3	6.1	6.6	12.0	7.9	29.0	71.3	23.7	
avail crop insurance		18.0	0.0	0.0	11.6	12.9	3.1	3.1	8.2	0.0	11.1	7.4	0.0	14.7	0.0	4.8	0	12.2	
ask for assistance from LGUs/government agencies		20.8	7.2	0.0	10.5	7.6	5.5	4.1	4.7	6.2	17.0	7.4	0.0	5.7	3.6	8.2	4.9	13.2	
No action		20.1	1.6	0.9	1.4	2.1	13.7	2.9	16.0	0.0	23.9	0.0	3.6	0.0	23.6	2.4	0	16.2	
early harvest of crops	After	38.3	11.6	1.9	9.3	12.0	2.0	25.4	1.8	4.5	16.8	6.1	4.4	12.0	7.9	32.7	66.9	20.7	
avail crop insurance		26.7	3.2	1.6	11.6	15.4	9.7	3.1	8.2	0.0	33.7	7.4	4.0	9.0	7.9	8.3	2.2	26.1	
ask for assistance from LGUs/government agencies		24.0	8.9	0.0	10.5	7.6	5.5	10.1	6.5	1.6	33.4	7.4	2.6	3.0	3.6	14.3	9.3	16.5	
No action		11.0	0.0	0.0	1.4	2.1	7.0	2.9	12.3	0.0	3.7	0.0	4.5	2.7	15.7	1.2	0	11.3	
Drought																			
delayed planting	Before	33.7	5.6	3.8	12.0	2.5	23.5	22.5	8.5	6.0	31.6	12.5	33.9	21.0	0.0	17.9	85.1	15.1	
adjustment of planting calendar		16.2	7.2	4.9	13.4	2.1	10.5	15.6	5.0	3.6	10.9	3.7	4.4	18.0	0.0	14.4	13.2	13.3	
use drought tolerant varieties		7.6	1.6	0.0	1.4	0.0	7.6	22.0	0.0	2.4	5.6	1.9	0.0	6.0	4.9	0.0	11	0.9	
practice mulching		3.3	0.0	0.0	7.9	0.0	0.0	4.2	1.8	4.5	0.0	1.1	0.0	3.0	0.0	1.2	4.4	0	
use drip irrigation		11.5	5.6	2.5	5.3	5.1	4.9	9.3	6.2	7.2	6.1	6.9	8.4	0.0	0.0	14.4	7.8	4.2	
hand watering		13.2	8.6	2.7	8.1	0.0	0.0	1.5	11.2	22.5	9.1	1.9	2.2	0.0	7.9	29.9	12.7	4.4	
ask for assistance from LGUs/government agencies		6.9	12.1	0.9	2.7	0.0	0.0	1.0	6.5	5.4	14.6	6.8	1.3	0.0	4.9	1.1	6.1	1.8	
others		7.6	5.6	1.3	9.2	0.0	9.5	7.3	11.8	1.6	3.7	2.0	1.8	0.0	7.9	0.0	0	1.8	
delayed planting		After	22.2	12.9	4.0	12.0	0.0	14.1	19.3	3.5	7.8	34.8	9.5	1.3	21.0	0.0	26.0	79.0	6.2
adjustment of planting calendar	21.1		12.9	6.0	20.4	2.1	22.1	21.9	5.3	1.8	14.9	7.4	1.8	18.0	0.0	28.6	27.5	23.8	
use drought tolerant varieties	9.1		7.2	0.0	2.8	0.0	16.1	20.3	0.0	2.4	11.1	1.9	0.0	6.0	4.9	1.2	13.2	5.5	
practice mulching	4.1		7.2	0.0	6.5	0.0	8.1	0.0	3.2	4.5	0.0	1.1	2.6	3.0	0.0	0.0	4.9	0.0	
use drip irrigation	15.8		8.9	2.5	9.0	5.1	7.6	6.1	8.2	9.0	9.8	8.8	38.3	0.0	7.9	19.3	6.1	4.2	
hand watering	14.7		17.5	1.8	5.3	2.5	9.4	1.5	11.2	22.5	11.2	0.0	23.3	0.0	0.0	23.7	15.4	4.4	
ask for assistance from LGUs/government agencies	6.8		12.1	0.9	2.7	0.0	0.0	1.0	10.0	7.2	20.2	6.8	1.3	0.0	0.0	4.6	6.6	1.8	
others	6.3		0.0	2.2	10.6	0.0	11.5	6.0	10.1	1.6	1.9	2.0	0.9	0.0	12.8	0.0	0.0	1.8	
Pests and Diseases																			
spraying	Before	71.8	3.2	12.7	17.4	7.2	14.8	21.9	16.1	45.1	34.7	18.8	8.6	33.0	0.0	52.6	72.4	15.0	

Item		All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13	
		n=900	n=24	n=101	n=54	n=39	n=43	n=49	n=54	n=41	n=54	n=55	n=98	n=35	n=16	n=83	n=46	n=108	
IPM	After	5.1	4.3	0.0	1.4	0.0	4.5	4.2	0.0	0.0	0.0	3.7	0.0	3.0	0.0	2.1	0.0	0.9	
others		9.4	22.1	1.9	6.5	0.0	0.0	6.0	7.0	0.0	1.9	0.0	1.0	0.0	0.0	3.5	0.0	0.0	
no action		13.8	7.2	0.0	2.5	2.5	2.5	2.5	5.0	0.0	5.8	9.3	4.0	3.0	12.8	0.0	0.0	11.8	
spraying		71.4	4.9	13.6	17.4	9.7	18.3	17.5	16.1	45.1	35.1	28.1	8.6	33	0.0	52.6	72.4	15.6	
IPM		13.0	11.6	0.0	7.5	0.0	5.5	7.3	1.5	0.0	6.9	5.5	0.0	0.0	0.0	12.0	13.3	0.9	
others		10.8	22.1	0.9	9.3	0.0	0.0	6.0	5.3	0.0	3.7	0.0	0.0	0.0	12.8	2.4	0.0	1.2	
no action		4.8	0.0	0.0	0.0	0.0	0.0	1.0	1.8	0.0	1.9	0.0	5.0	3.0	0.0	1.1	0.0	10.0	
Decrease in output prices																			
look for other markets		Before	42.7	0.0	0.7	7.8	0.0	1.0	4.1	0.0	0.0	3.7	6.8	0.9	3.0	0.0	20.4	26.5	0.0
did not sell	27.9		5.9	0.0	0.0	0.0	6.6	4.1	0.0	0.0	0.0	1.8	4.3	5.7	0.0	1.2	19.4	0.0	
sell in the usual market	29.4		0.0	3.2	6.5	0.0	2.0	4.2	1.8	0.0	1.9	1.1	0.0	6.0	0.0	8.4	15.5	0.0	
look for other markets	After	46.0	1.6	0.7	9.2	0.0	1.0	5.6	0.0	0.0	5.6	6.7	1.9	3.0	0.0	13.0	42.0	0.0	
did not sell		24.6	4.3	0.0	0.0	0.0	6.6	2.5	1.8	0.0	0.0	0.0	4.3	5.7	0.0	0.0	24.3	0.0	
sell in the usual market		29.4	0.0	3.2	6.5	0.0	2.0	4.2	0.0	0.0	3.7	6.1	0.0	6.0	0.0	14.5	6.6	0.0	
Increases in input prices																			
look for other sources	Before	75.0	11.6	6.3	14.1	2.5	2.2	6.1	0.0	0.0	9.1	0.0	1.0	17.7	0.0	3.5	30.4	3.8	
loans		25.0	5.20	0.9	10.5	0.0	0.0	2.5	0.0	0.0	0.0	2.8	0.0	3.0	0.0	1.1	0.0	4.5	
look for other sources	After	70.8	9.9	5.4	15.7	2.5	2.2	6.1	0.0	0.0	9.1	0.0	1.0	17.7	0.0	3.5	30.4	3.9	
loans		29.2	6.90	1.9	8.9	0.0	1.1	2.5	0.0	0.0	5.6	2.8	0.0	3.0	0.0	1.1	0.0	5.4	
Family emergencies																			
use social protection (PhilHealth, etc)	Before	34.7	0.0	0.0	2.5	0.0	0.0	5.6	0.0	0.0	4.0	0.0	0.0	3.0	0.0	1.1	11.5	2.6	
loans		24.9	0.0	0.9	2.8	0.0	0.0	5.6	0.0	0.0	1.6	0.0	0.9	0.0	0.0	0.0	3.4	2.8	
request assistance from government agencies		32.0	1.6	0.9	5.1	0.0	0.0	1.5	0.0	0.0	7.7	0.0	0.0	3.0	0.0	0.0	1.7	4.7	
others		8.5	0.0	0.0	2.7	0.0	0.0	1.5	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
use social protection (PhilHealth, etc)	After	33.6	1.6	0.0	2.5	0.0	0.0	7.1	0.0	0.0	4.0	0.0	0.0	3.0	0.0	1.1	11.5	1.8	
loans		31.8	1.6	0.9	0.0	0.0	0.0	5.6	0.0	0.0	5.8	0.0	0.9	0.0	0.0	0.0	11.0	4.0	
request assistance from government agencies		27.1	1.6	0.9	5.1	0.0	0.0	1.5	0.0	0.0	7.7	0.0	0.0	3.0	0.0	0.0	1.7	3.5	
others		7.4	0.0	0.0	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Table 26. Beneficiary perception of DA ATI intervention resulting to better coping mechanism

Item	All Centers	ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13
	n=900	n=24	n=101	n=54	n=39	n=43	n=49	n=54	n=41	n=54	n=55	n=98	n=35	n=16	n=83	n=46	n=108
Typhoon																	
Strongly disagree	1.4	0.0	0.0	11.1	0.0	1.7	0.0	2.5	0.0	4.2	0.0	2.5	0.0	0.0	0.0	0.0	0.0
Disagree	4.0	0.0	1.5	0.0	0.0	19.0	2.1	2.5	0.0	3.6	0.0	9.3	0.0	0.0	47.6	0.0	8.3
Neither agree nor disagree	18.6	13.1	8.0	25.6	15.7	11.1	15.4	42.0	9.0	14.3	12.7	60.2	0.0	18.7	0.0	0.0	8.3
Disagree	49.9	41.5	86.8	26.5	52.9	60.7	53.1	24.0	49.3	55.2	28.9	22.2	90.0	81.3	0.0	58.8	42.6
Strongly disagree	26.0	45.4	3.7	36.7	31.5	7.5	29.5	29.0	41.7	22.6	58.4	5.8	10.0	0.0	52.4	41.2	40.8
Flooding																	
Strongly disagree	1.7	0.0	0.0	0.0	0.0	4.6	0.0	5.0	73.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Disagree	3.2	0.0	0.0	0.0	0.0	0.0	0.0	11.5	0.0	3.3	0.0	0.0	0.0	0.0	5.9	0.0	11.6
Neither agree nor disagree	15.1	12.3	32.7	30.1	8.6	51.7	0.0	23.7	0.0	13.4	0.0	51.5	12.7	32.7	2.8	0.0	13.7
Disagree	52.4	32.8	67.3	35.7	53.1	43.7	68.4	23.0	0.0	65.7	36.5	22.6	87.3	67.3	66.5	67.4	39.5
Strongly disagree	27.6	54.9	0.0	34.2	38.2	0.0	31.6	36.8	26.4	17.6	63.5	25.8	0.0	0.0	24.8	32.6	35.2
Drought																	
Strongly disagree	1.8	0.0	0.0	21.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0
Disagree	3.9	16.7	0.0	0.0	0.0	4.8	3.8	5	7.0	6.9	0.0	2.1	0.0	0.0	2.6	0.0	9.5
Neither agree nor disagree	15.6	14.5	16.6	21.3	0.0	30.0	15.1	50.3	7.0	20.4	19.2	8.5	11.1	30.8	2.6	0.0	12.6
Disagree	48.7	56.0	78.3	36.8	0.0	60.5	43.5	9.3	30.6	69.3	46.3	28.4	88.9	69.2	64.5	70.9	34.0
Strongly disagree	29.9	12.9	5.1	20.9	100.0	4.8	37.6	35.4	55.4	3.5	34.6	57.9	0.0	0.0	30.4	29.1	43.9
Pests and diseases																	
Strongly disagree	3.5	15.2	0.0	9.0	0.0	0.0	0.0	6.7	0.0	8.5	0.0	9.7	0.0	38.4	0.0	0.0	0.0
Disagree	1.3	0.0	0.0	0.0	0.0	0.0	4.2	6.7	0.0	4.2	0.0	0.0	0.0	0.0	1.9	0.0	3.3
Neither agree nor disagree	9.3	4.4	14.9	14.5	0.0	26.1	34.9	5.7	4.0	12.1	0.0	13.2	0.0	0.0	1.9	0.0	23.6
Disagree	48.9	66.2	85.1	23.5	52.3	62.6	34.0	26.6	34.6	62.1	14.6	61.0	91.7	61.6	49.0	58.0	44.8
Strongly disagree	36.9	14.2	0.0	53.1	47.7	11.3	27.0	54.4	61.4	13.2	85.4	16.2	8.3	0.0	47.3	42.0	28.4
Decrease in output prices																	
Strongly disagree	2.0	0.0	0.0	0.0		10.6	0.0	0.0		0.0	0.0	25.4	0.0		0.0	0.0	
Disagree	9.0	0.0	0.0	0.0		68.2	9.4	0.0		33.0	0.0	0.0	18.1		4.3	0.0	
Neither agree nor disagree	14.1	27.3	64.8	45.6		0.0	23.4	0.0		0.0	0.0	55.4	0.0		0.0	4.0	
Disagree	51.4	72.7	35.2	17.4		21.2	39.1	100		67.0	50.8	19.2	81.9		76.2	60.0	
Strongly disagree	23.6	0.0	0.0	37.0		0.0	28.1	0.0		0.0	49.2	0.0	0.0		19.5	36.0	
Increase in input prices																	
Strongly disagree	1	0.0	0.0	0.0	0.0	47.1	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0
Disagree	6.4	0.0	30.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	15.0		0.0	0.0	0.0
Neither agree nor disagree	21.3	9.6	55.0	36.8	100.0	52.9	0.0	100.0		17.7	0.0	0.0	0.0		0.0	0.0	32.1
Disagree	55.9	90.4	15.0	24.9	0.0	0.0	78.6	0.0		82.3	0.0	100.0	85.0		100.0	92.7	10.6
Strongly disagree	15.4	0.0	0.0	38.3	0.0	0.0	21.4	0.0		0.0	0.0	0.0	0.0		0.0	7.3	57.3
Family emergencies																	

Item	All Centers	ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13
	n=900	n=24	n=101	n=54	n=39	n=43	n=49	n=54	n=41	n=54	n=55	n=98	n=35	n=16	n=83	n=46	n=108
Strongly disagree	0.0	0.0	0.0	0.0			0.0			0.0		0.0	0.0		0.0	0.0	0.0
Disagree	0.0	0.0	0.0	0.0			0.0			0.0		0.0	0.0		0.0	0.0	0.0
Neither agree nor disagree	27.4	100	50.0	24.9			0.0			16.8		100.0	100.0		0.0	27.9	33.1
Disagree	45.9	0.0	50.0	0.0			64.7			83.2		0.0	0.0		100.0	72.1	35.5
Strongly disagree	26.6	0.0	0.0	75.1			35.3			0.0		0.0	0.0		0.0	0.0	31.4

Table 27. Farmer-beneficiaries applying for farm certifications before and after DA ATI Intervention (percent reporting)

Training Center		Good Agriculture Practice (GAP)			Organic Agriculture (OA)			Good Animal Husbandry Practice (GAHP)			Others		
		Before	After	ATI helped	Before	After	ATI helped	Before	After	ATI helped	Before	After	ATI helped
All Centers	n=900	29.6	33.4	73.7	32.4	31.2	59.5	13.4	14.6	71.4	24.6	20.8	67.8
ATI - ITCPH	n=24	5.62	14.11	100.0	0.0	3.24	100.0	7.24	19.74	100.0	0.0	0.0	
ATI - CAR	n=101	11.33	24.71	48.2	15.31	37.23	37.1	2.58	5.13	70.4	0.0	0.0	
ATI - Region 1	n=54	12.04	14.53	71.2	3.88	13.37	17.3	2.49	3.88	0.0	26.9	36.5	52.8
ATI - Region 2	n=39	20.03	28.83	82.7	7.17	14.33	100.0	5.08	9.71	100.0	0.0	0.0	
ATI - Region 3	n=43	31.13	50.22	73.7	49.6	63.14	57.0	13.76	22.92	60.2	25.0	25.0	100.0
ATI - Region 4A	n=49	20.91	29.44	79.6	30.0	31.52	34.3	6.61	12.6	70.0	0.0	0.0	
ATI - Region 4B	n=54	15.77	24.01	50.0	19.01	24.01	40.0	10.25	12.0	68.3	16.47	16.47	100.0
ATI - Region 5	n=41	35.82	52.27	71.6	58.1	66.75	66.3	22.15	30.12	69.3	0.0	50.0	100.0
ATI - Region 6	n=54	14.92	24.47	82.0	16.26	19.96	49.1	10.95	12.78	79.4	50.0	50.0	100.0
ATI - Region 7	n=55	9.27	12.04	100.0	20.53	24.43	62.2	0.0	0.0		51.6	51.6	0.0
ATI - Region 8	n=98	21.37	27.53	93.3	7.72	9.92	86.7	11.18	13.38	93.4	4.9	4.9	0.0
ATI - Region 9	n=35	35.34	47.35	93.3	35.34	40.99	100.0	29.68	32.68	100.0	0.0	0.0	
ATI - Region 10	n=16	27.88	39.37	0.0	22.98	26.6	18.7	15.73	15.73	0.0			
ATI - Region 11	n=83	18.99	20.25	84.2	19.07	22.78	81.5	5.92	9.54	74.4	48.28	48.28	100.0
ATI - Region 12	n=46	12.72	21.56	38.5	10.53	14.96	11.3	2.21	6.63	0.0	0.0	0.0	
ATI - Region 13	n=108	3.42	5.13	33.3	4.3	5.52	22.1	0.0	0.0		0.0	0.0	

Table 28. Percent of farmer-beneficiaries able to get farm certification

Training Center		Good Agriculture Practice (GAP)	Organic Agriculture (OA)	Good Animal Husbandry Practice (GAHP)	Others
All Centers	n=900	81.0	78.0	86.3	95.7
ATI - ITCPH	n=24	88.5	100.0	73.4	
ATI - CAR	n=101	29.6	36.4	45.2	
ATI - Region 1	n=54	63.5	60.3	64.1	100.0
ATI - Region 2	n=39	92.8	100.0	100.0	
ATI - Region 3	n=43	98.0	80.2	100.0	100.0
ATI - Region 4A	n=49	50.9	48.6	40.4	
ATI - Region 4B	n=54	100.0	73.0	85.4	100.0
ATI - Region 5	n=41	96.6	94.6	88.1	100.0
ATI - Region 6	n=54	84.7	79.6	70.8	100.0
ATI - Region 7	n=55	84.6	92.4		100.0
ATI - Region 8	n=98	95.2	100.0	100.0	100.0
ATI - Region 9	n=35	94.4	100.0	100.0	
ATI - Region 10	n=16	40.0	72.8	100.0	
ATI - Region 11	n=83	76.0	89.1	100.0	50.0
ATI - Region 12	n=46	100.0	100.0	100.0	
ATI - Region 13	n=108	100.0	100.0		

Table 29. Level of adoption of technologies/interventions/practice received from DA-ATI

Item	All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13	
	n=900	n=24	n=101	n=54	n=39	n=43	n=49	n=54	n=41	n=54	n=55	n=98	n=35	n=16	n=83	n=46	n=108	
Rice production technologies																		
Did not receive/NA	2.5	0.0	0.0	0.0	6.9	7.3	0.0	0.0	0.0	7.3	0.0	0.0	0.0	0.0	0.0		0.0	
Level of Adoption	High/Full (2)	57.1	0.0	65.3	76.5	62.6	61.3	7.9	46.1	36.4	37.9	64.2	70.3	33.3	72.7	89.1	44.4	
	Partial/Not Full (1)	38.4	100.0	34.7	23.5	23.7	28.2	92.1	45.3	63.6	54.7	35.8	27.2	66.7	27.3	10.9	55.6	
	None (0)	2.1	0.0	0.0	0.0	6.9	3.3	0.0	8.6	0.0	0.0	0.0	2.5	0.0	0.0		0.0	
Adoption index*	0.78																	
Corn production technologies																		
Did not receive/NA	3.8		0.0	0.0	8.7	0.0	0.0	0.0	0.0	16.9	0.0	0.0	0.0	0.0	0.0		0.0	
Level of Adoption	High/Full (2)	43.9		0.0	52.8	21.2	38.5	66.7	79.4	71.6	25.2	78.3	100.0	57.1	100.0	68.2	7.4	
	Partial/Not Full (1)	50.6		100.0	47.2	62.4	61.5	33.3	20.6	28.4	57.9	21.7	0.0	42.9	0.0	31.8	92.6	
	None (0)	1.7		0.0	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Adoption index*	0.72																	
Vegetable farming																		
Did not receive/NA	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	0.0	17.8	0.0	15.8	0.0	100.0	0.0	
Level of Adoption	High/Full (2)	42.6	72.7	63.3	51.0	0.0	65.0	10.4	72.3	0.0	39.5	41.7	52.4	66.7	15.8	33.0	0.0	46.5
	Partial/Not Full (1)	52.3	27.3	24.4	49.0	100.0	35.0	80.3	27.7	100.0	56.9	58.3	29.7	33.3	68.5	67.0	0.0	53.5
	None (0)	1.5	0.0	12.2	0.0	0.0	0.0	9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adoption index*	0.71																	
Diversified farming																		
Did not receive/NA	2.5			0.0	0.0		0.0	0.0		8.2		0.0	0.0	0				
Level of Adoption	High/Full (2)	41.6			100.0	0.0		0.0	50.0	48.9		100.0	0.0	47.9				
	Partial/Not Full (1)	55.9			0.0	100.0		100.0	50.0	42.9		0.0	100.0	52.1				
	None (0)																	
Adoption index*	0.71																	
Backyard gardening																		
Did not receive/NA	1.4		0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Level of Adoption	High/Full (2)	43.3		50.9	77.1	0.0	100.0	50.9	59.4	0.0	25.6	38.1	66.7	50.0	31.5	100.0	0.0	
	Partial/Not Full (1)	53.5		49.1	22.9	100.0	0.0	36.1	40.6	100.0	69.2	61.9	33.3	50.0	68.5	0.0	100.0	
	None (0)	1.8		0.0	0.0	0.0	0.0	13.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Adoption index*	0.71																	
Organic farming																		
Did not receive/NA																		
Level of Adoption	High/Full (2)	48.9	57.1	48.3	46.1	0.0	64.3	60.2	39.5	100.0	34.3	45.0	66.6	14.3	88.5	57.8	0.0	13.5
	Partial/Not Full (1)	48.7	42.9	51.7	53.9	100.0	30.4	32.9	60.5	0.0	65.7	55.0	33.4	85.7	11.5	42.2	0.0	73.0
	None (0)	2.4	0.0	0.0	0.0	0.0	5.4	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	13.5
Adoption index*	0.73																	
Pest management																		

Item	All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13	
	n=900	n=24	n=101	n=54	n=39	n=43	n=49	n=54	n=41	n=54	n=55	n=98	n=35	n=16	n=83	n=46	n=108	
Did not receive/NA																		
Level of Adoption	High/Full (2)	53.4	37.4	39.1	84.0	0.0	61.3	62.9	86.4	100	26.7	44.4	100.0	42.9	59.4	75.5	0.0	32.7
	Partial/Not Full (1)	44.2	62.6	60.9	16.0	100.0	27.4	31.4	13.6	0.0	68.8	55.6	0.0	57.1	40.6	24.5	100.0	67.3
	None (0)	2.4	0.0	0.0	0.0	0.0	11.3	5.7	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adoption index*	0.76																	
Good Agriculture Practice																		
Did not receive/NA	1.5		0.0	0.0	0.0	0.0	7.8	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Level of Adoption	High/Full (2)	48.9		30.7	54.6	0.0	71.4	46.1	100.0	0.0	48.5		100.0	50.0	31.5	67.5	0.0	
	Partial/Not Full (1)	48.6		69.3	45.4	100.0	21.4	46.1	0.0	100.0	51.5		0.0	50.0	68.5	32.5	100.0	
	None (0)	1.0		0.0	0.0	0.0	7.1	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Adoption index*	0.74																	
Climate smart technologies																		
Did not receive/NA																		
Level of Adoption	High/Full (2)	52.5	100.0	0.0	46.3	45.1	0.0	66.7	50.0		45.3		100.0	50.0	100.0	0.0		
	Partial/Not Full (1)	45.6	0.0	100.0	53.7	54.9	0.0	33.3	50.0		54.7		0.0	50.0	0.0	100.0		
	None (0)	1.9	0.0	0.0	0.0	0.0	100.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0		
Adoption index*	0.75																	
Mulching/Vermicomposting																		
Did not receive/NA																		
Level of Adoption	High/Full (2)	52.7			65.5	0.0		0.0	50.0		49.5		100.0		100.0			
	Partial/Not Full (1)	47.3			34.5	100.0		100.0	50.0		50.5		0.0		0.0			
	None (0)																	
Adoption index*	0.76																	
Sloping Agricultural Land Technology																		
Did not receive/NA																		
Level of Adoption	High/Full (2)	46.8			100.0	33.3			100.0		18.5		100.0	100.0				
	Partial/Not Full (1)	53.2			0.0	66.7			0.0		81.5		0.0	0.0				
	None (0)																	
Adoption index*	0.73																	
Modern livestock technology																		
Did not receive/NA																		
Level of Adoption	High/Full (2)	41.9	39.2	61.2	50.0	0.0	100.0	16.9	50.0		56.1	0.0	73.8	100.0			0.0	68.0
	Partial/Not Full (1)	55.3	60.8	38.8	50.0	100.0	0.0	83.1	50.0		43.9	100.0	26.2	0.0			0.0	32.0
	None (0)	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0			100	0.0
Adoption index*	0.70																	
Animal husbandry																		
Did not receive/NA																		

Item		All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13
		n=900	n=24	n=101	n=54	n=39	n=43	n=49	n=54	n=41	n=54	n=55	n=98	n=35	n=16	n=83	n=46	n=108
Level of Adoption	High/Full (2)	58.8	76.7	26.6	23.3	0.0	64.0	88.7	62.5		48.9		75.5	100.0				
	Partial/Not Full (1)	41.2	23.3	73.4	76.7	100.0	36.0	11.3	37.5		51.1		24.5	0.0				
	None (0)																	
Adoption index*		0.79																
Animal waste management																		
Did not receive/NA																		
Level of Adoption	High/Full (2)	52.7	100.0	42.0	53.0	0.0		66.2	64.9		34.7		55.9	100.0	100.0	100.0		
	Partial/Not Full (1)	47.3	0.0	58.0	47.0	100.0		33.8	35.1		65.3		44.1	0.0	0.0	0.0		
	None (0)																	
Adoption index*		0.76																
Product processing																		
Did not receive/NA																		
Level of Adoption	High/Full (2)	49.80		0.0	34.7	50.0	100.0	65.4	18.9		16.5		100.0	100.0	100.0	100.0	0.0	67.4
	Partial/Not Full (1)	50.20		100.0	65.3	50.0	0.0	34.6	81.1		83.5		0.0	0.0	0.0	0.0	100.0	32.6
	None (0)																	
Adoption index*		0.75																
By-product utilization																		
Did not receive/NA		6.0			0.0	0.0	0.0	100.0	0.0		0.0		0.0		0.0		0.0	
Level of Adoption	High/Full (2)	43.2			0.0	0.0	100.0	0.0	50.0		53.0		100.0		100.0		0.0	
	Partial/Not Full (1)	50.8			100.0	100.0	0.0	0.0	50.0		47.0		0.0		0.0		100.0	
	None (0)																	
Adoption index*		0.73																
Farm machinery operation																		
Did not receive/NA		4.2			0.0	0.0	16.9	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		
Level of Adoption	High/Full (2)	44.1			33.1	0.0	76.1	33.3	100.0	0.0	44.8	100.0		100.0	0.0	0.0		
	Partial/Not Full (1)	49.9			66.9	100.0	0.0	66.7	0.0	100.0	55.2	0.0		0.0	100.0	100.0		
	None (0)	1.7			0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		
Adoption index*		0.72																
Other commodity-based production technology (specify)																		
Did not receive/NA																		
Level of Adoption	High/Full (2)	41.5				50.0		0.0	50.0	0.0	28.8		100.0				100.0	
	Partial/Not Full (1)	58.5				50.0		100.0	50.0	100.0	71.2		0.0				0.0	
	None (0)																	
Adoption index*		0.71																
Product cleaning																		
Did not receive/NA																		
	High/Full (2)	34.4	100.0	100.0	100.0	0.0	100.0	8.3	100.0		47.0							

Item		All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13
		n=900	n=24	n=101	n=54	n=39	n=43	n=49	n=54	n=41	n=54	n=55	n=98	n=35	n=16	n=83	n=46	n=108
Level of Adoption	Partial/Not Full (1)	61	0.0	0.0	0.0	100.0	0.0	82.4	0.0		53							
	None (0)	4.6	0.0	0.0	0.0	0.0	0.0	9.3	0.0		0.0							
Adoption index*		0.65																
Product sorting																		
Did not receive/NA																		
Level of Adoption	High/Full (2)	37.1	100.0		0.0	100.0	27.7	100.0		32.0								
	Partial/Not Full (1)	62.9	0.0		100.0	0.0	72.3	0.0		68.0								
	None (0)																	
Adoption index*		0.66																
Product grading																		
Did not receive/NA																		
Level of Adoption	High/Full (2)	46.1	100.0	0.0	0.0	100.0	44.8	100.0		63.9								
	Partial/Not Full (1)	53.9	0.0	100.0	100.0	0.0	55.2	0.0		36.1								
	None (0)																	
Adoption index*		0.73																
Entrepreneurship training																		
<i>Farm business school</i>																		
Did not receive/NA																		
Level of Adoption	High/Full (2)	46.1			78.1	0.0	0.0	33.3	100.0		41.5		100.0					60.0
	Partial/Not Full (1)	50.9			21.9	100.0	0.0	66.7	0.0		58.5		0.0					40.0
	None (0)	3.0			0.0	0.0	100.0	0.0	0.0		0.0		0.0					0.0
Adoption index*		0.72																
<i>Climate smart business school</i>																		
Did not receive/NA																		
Level of Adoption	High/Full (2)	45.4			100.0	0.0			100.0		46.6							
	Partial/Not Full (1)	54.6			0.0	100.0			0.0		53.4		0.0					
	None (0)																	
Adoption index*		0.73									100.0							
Farmer business development and farm record keeping																		
Did not receive/NA																		
Level of Adoption	High/Full (2)	41.4	100.0		100.0	0.0		0.0	100.0		28.8		100.0		0.0			59.1
	Partial/Not Full (1)	53.4	0.0		0.0	100.0		50.0	0.0		71.2		0.0	100.0				40.9
	None (0)	5.2	0.0		0.0	0.0		50.0	0.0		0.0		0.0	0.0				0.0
Adoption index*		0.68																
Financial literacy																		
Did not receive/NA																		
	High/Full (2)	47.5			100.0	0.0			100.0		42.0		100.0					

Item		All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13
		n=900	n=24	n=101	n=54	n=39	n=43	n=49	n=54	n=41	n=54	n=55	n=98	n=35	n=16	n=83	n=46	n=108
Level of Adoption	Partial/Not Full (1)	52.5			0.0	100.0			0.0		58.0		0.0					
	None (0)																	
Adoption index*		0.74																
<i>Kapatid Mentor ME</i>																		
Did not receive/NA		7.7	0.0		0.0	0.0			0.0		50.4		0.0					
Level of Adoption	High/Full (2)	55.5	100.0		100.0	0.0			100.0		49.6		100.0					
	Partial/Not Full (1)	36.7	0.0		0.0	100.0			0.0		0.0		0.0					
	None (0)																	
Adoption index*		0.8																

*adoption index = (obtained adoption score/maximum obtainable score) X 100

ANNEX



Result of the AEWs Survey
by ATI Training Center

ANNEX 6 RESULT OF THE AEWs SURVEY BY ATI TRAINING CENTER, 2018-2022

Table 1. Socio-economic profile of AEW-beneficiary respondents

Characteristics	All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13
Number of Respondents	n=658	n=30	n=36	n=61	n=51	n=26	n=38	n=83	n=60	n=34	n=22	n=44	n=19	n=17	n=43	n=23	n=71
Age (years)																	
18-24	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0
25-34	32.0	35.0	27.4	43.9	34.5	35.1	26.6	47.3	20.6	26.5	13.1	23.7	31.6	29.8	35.5	20.6	34.2
35-44	32.1	43.9	33.1	25.7	22.7	20.3	21.6	26.6	41.4	35.8	40.9	21.7	31.6	54.5	53.2	50.0	30.0
45-54	18.5	14.0	15.2	21.4	18.8	24.8	27.9	9.6	16.7	23.4	26.6	23.6	25.9	0.0	11.3	23.7	14.4
55-64	14.1	7.1	20.5	6.0	11.8	15.5	24.0	12.4	15.8	14.3	19.4	29.6	10.8	5.0	0.0	5.8	20.4
65 - 74	3.0	0.0	3.8	3.0	11.4	4.3	0.0	4.1	5.5	0.0	0.0	1.4	0.0	5.7	0.0	0.0	1.0
Above 75	0.1	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>average (years)</i>	41.5	40.4	43.0	38.7	43.1	43.2	43.4	38.6	43.3	40.4	45.6	45.1	39.4	36.8	37.4	39.9	42.2
Gender																	
Male	47.0	33.6	27.9	43.9	33.2	48.6	61.5	44.5	60.3	45.1	60.3	41.2	52.2	80.1	62.8	52.7	40.9
Female	52.7	66.4	72.1	56.1	66.8	51.4	38.5	55.5	39.7	54.9	39.7	58.8	47.8	19.9	37.2	47.3	59.1
Civil Status																	
Single/Never been married	24.3	29.4	14.1	35.6	19.7	26.5	26.8	26.4	21.5	41.6	8.4	16.2	36.7	29.8	16.2	11.2	24.6
Married	71.4	64.4	78.5	61.4	71.8	71.6	69.1	70.3	75.1	55.8	85.5	83.3	63.3	70.2	74.3	88.8	68.9
Common Law/live-in	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	9.5	0.0	1.0
Widowed	2.7	0.0	7.5	3.0	8.6	1.9	0.0	1.4	3.4	2.6	6.1	0.0	0.0	0.0	0.0	0.0	2.7
Separated	1.1	6.2	0.0	0.0	0.0	0.0	4.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8
Ethnicity																	
Tagalog	33.8	92.2	0.0	43.8	11.6	61.4	100.0	75.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	88.8	0.0
Bisaya	24.3	2.1	0.0	0.0	0.0	0.0	0.0	8.7	0.0	0.0	96.5	36.2	94.6	55.5	92.7	5.4	89.6
Ilocano	15.2	1.4	19.9	49.4	74.6	19.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	1.0
Cebuano	1.3	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	3.5	0.0	0.0	21.4	0.0	0.0	1.9
Ilonggo	4.3	0.0	0.0	0.0	0.0	0.0	0.0	3.6	0.0	88.2	0.0	0.0	0.0	0.0	4.8	0.0	0.0
Bikol	6.7	4.2	0.0	1.5	0.0	0.0	0.0	1.4	96.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Waray	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.8	0.0	0.0	0.0	0.0	0.0
Kapampangan	1.4	0.0	0.0	0.0	0.0	19.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maquindanao	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	0.0
Pangasinan	0.2	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Others	8.3	0.0	80.1	0.0	13.7	0.0	0.0	4.8	3.3	11.8	0.0	0.0	5.4	23.2	0.0	0.0	7.5
Highest Educational Attainment																	

Characteristics	All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13
Number of Respondents	n=658	n=30	n=36	n=61	n=51	n=26	n=38	n=83	n=60	n=34	n=22	n=44	n=19	n=17	n=43	n=23	n=71
Primary Education	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Lower secondary education	0.9	0.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	4.4
Upper secondary education	3.7	2.8	0.0	0.0	1.6	0.0	22.9	1.4	0.0	3.1	4.9	0.0	5.1	18.2	0.0	5.8	2.8
Post-secondary non-tertiary	2.8	4.2	0.0	4.5	0.0	5.6	11.2	2.0	1.5	0.0	8.4	0.0	0.0	0.0	0.0	0.0	0.0
Short-cycle tertiary education	2.5	0.0	0.0	0.0	18.2	0.0	0.0	0.0	0.0	5.6	4.9	2.7	0.0	0.0	0.0	0.0	0.7
Bachelor level education or equivalent	55.0	66.4	66.9	80.3	39.2	53.3	35.5	71.9	91.8	71.0	45.0	58.5	10.8	25.6	4.5	88.5	26.8
Master level education or equivalent	33.6	23.0	25.5	13.7	37.4	41.2	24.6	22.1	6.8	20.4	33.3	38.8	84.2	56.2	95.5	5.8	63.6
Doctoral level education or equivalent	1.5	3.5	7.6	1.5	3.5	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Household Size																	
1 to 3	31.7	38.4	25.5	28.1	32.5	14.9	58.2	40.2	23.1	34.8	38.9	30.0	26.6	33.1	18.2	36.5	20.5
4 to 6	55.8	56.6	60.3	53.9	52.2	61.5	34.7	51.6	71.4	47.4	43.1	64.1	68.0	45.5	67.5	60.8	67.7
7 and above	12.5	4.9	14.2	18	15.2	23.5	7.1	8.2	5.6	17.9	18.0	6.0	5.4	21.4	14.3	2.7	11.7
<i>Average (number)</i>	4.4	3.9	4.4	4.6	4.5	5.3	3.7	5.2	4.5	4.5	4.4	4.1	4.5	5.2	4.8	4.0	4.6
Working Family Members																	
1	35.9	32.2	52.6	27.3	26.0	22.1	38.0	35.4	37.9	46.3	38.9	38.9	37.0	48.8	18.0	76.3	41.8
2	44.8	49.6	33.4	54.5	51.2	39.5	51.6	42.0	42.9	44.9	33.9	50.9	41.8	29.8	48.7	23.7	46.8
3	12.1	14.7	4.4	12.2	18.6	16.0	4.1	14.0	14.0	5.8	18.8	1.4	21.2	10.7	23.8	0.0	9.5
4 and above	7.2	3.5	9.6	6.0	4.2	22.4	6.3	8.6	5.2	3.1	8.4	8.8	0.0	10.7	9.5	0.0	1.9
<i>Average (number)</i>		1.9	1.7	2.0	2.2	2.4	1.8	2.0	1.9	1.7	2.0	2.0	1.8	1.8	2.2	1.2	1.7
Sources of Income																	
Government employment	94.2	85.3	96.2	98.5	89.4	100.0	88.8	94.8	96.3	91.8	100.0	100.0	89.6	83.6	100.0	79.0	98.3
Farming	28.4	7.1	13.3	43.8	42.7	30.4	12.9	31.3	13.9	65.8	12.3	6.7	20.9	33.9	33.1	44.6	47.0
Non-farm business	9.9	22.3	10.2	11.3	8.0	12.9	11.5	13.4	3.7	26.6	3.5	0.0	0.0	10.7	4.6	0.0	6.0
Monthly Income (pesos)																	
<i>Respondent</i>																	
Government	22,982	26,238	26,289	21,371	14,731	26,289	18,168	26,499	23,680	26,963	16,763	21,590	42,406	30,449	22,817	22,817	20,075
Farming	19,903	21,202	32,086	6,794	29,634	14,419	14,891	39,445	19,641	5,702	13,000	5,108	28,071	64,443	8,523	15,023	14,739
Non-farm Business	20,316	44,391	23,395	12,617	15,666	31,411	6,999	15,310	9,888	9,612	5,000	-	-	15,702	7,835	-	14,091
<i>Working family member</i>																	
Government	9,922	4,570	10,491	11,734	9,042	16,825	15,156	11,142	9,755	12,587	3,341	5,617	38,384	1,261	2,422	2,422	11,331
Farming	1,669	4,519	2,064	1,702	1,116	857	449	760	2,087	233	0	727	3246	2,912	838	6,652	4,212
Non-farm Business	3,784	402	2,962	4,079	809	10,158	0	4,714	1,370	2,795	12,426	202	2257	7,377	236	0	8,056
Years as AF Extension Worker																	
Less than 1	2.6	12.6	0.0	0.0	0.7	0.0	7.4	1.4	0.0	0.0	0.0	6.6	0.0	0.0	0.0	11.5	2.1
1 to 5	26.4	18.2	24.5	30.9	19.2	5.6	18.8	32.9	20.7	23.6	14.5	55.2	52.5	48.0	35.3	28.7	25.1

Characteristics	All Centers	ATI ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13
Number of Respondents	n=658	n=30	n=36	n=61	n=51	n=26	n=38	n=83	n=60	n=34	n=22	n=44	n=19	n=17	n=43	n=23	n=71
6 to 10	37.5	50.8	29.7	37.3	35.9	44.6	45.1	32.1	45.9	41.6	38.2	19.0	21.2	35.6	55.6	31.1	26.9
11 to 15	12.6	9.9	13.9	6.0	7.3	18.9	18.4	10.8	12.1	17.3	22.9	9.2	10.1	0.0	6.9	23.3	19.7
16 to 20	7.3	2.8	9.6	9.8	9.6	10.7	4.4	9.2	5.1	3.1	11.0	0.0	5.4	10.7	0.0	2.7	12.8
21 to 25	4.3	3.5	1.9	10.0	8.6	5.6	0.0	3.3	1.8	8.3	4.9	3.0	0.0	0.0	2.2	2.7	3.6
26 to 30	4.1	0.0	6.3	1.5	7.3	8.5	6.1	5.2	3.7	3.1	8.4	0.0	5.4	0.0	0.0	0.0	6.1
More than 30	5.2	2.1	14.0	4.5	11.4	6.1	0.0	5.2	10.7	3.1	0.0	7.1	5.4	5.7	0.0	0.0	3.8
<i>Average (years)</i>	<i>10.9</i>	<i>8.0</i>	<i>13.6</i>	<i>10.8</i>	<i>14.5</i>	<i>14.0</i>	<i>9.3</i>	<i>10.6</i>	<i>12.1</i>	<i>10.7</i>	<i>12.3</i>	<i>8.5</i>	<i>9.0</i>	<i>8.7</i>	<i>7.2</i>	<i>7.9</i>	<i>12.0</i>
Status of Appointment																	
Permanent	72.3	62.3	93.9	88.0	88.8	88.3	44.7	80.9	88.3	76.4	57.7	32.6	63.0	66.9	47.4	87.9	72.0
Contractual	14.7	19.5	0.0	1.5	9.9	9.8	42.3	12.2	6.5	15.4	17.2	17.7	16.1	23.2	33.6	9.4	14.3
On Job Contract	13.0	18.2	6.1	10.5	1.3	1.9	13.1	6.9	5.2	8.2	25.2	49.7	20.9	9.9	19.0	2.7	13.8
Membership to																	
Farmer organization	36.9	14.7	53.7	41.1	46.0	42.6	25.4	38.8	35.4	37.6	54.8	11.5	41.8	43.8	28.8	42.9	40.9
Non-farm organization	21.5	8.5	40.0	38.0	23.2	22.9	10.4	27.9	37.5	29.2	6.1	4.2	5.4	30.6	4.8	15.2	21.1

Table 2. Commodity focus per training center

Training Center		Rice	Corn	Livestock	Others
ATI All Training Centers	n=658	78.2	42.8	32.5	40.6
ATI-ITCPH	n=30	44.91	16.79	66.96	23.86
ATI – CAR	n=36	76.47	39.95	23.04	47.19
ATI – Region 1	n=61	80.62	65.36	42.90	58.47
ATI – Region 2	n=51	89.71	47.35	12.78	10.71
ATI – Region 3	n=26	86.21	33.38	19.19	42.00
ATI – Region 4-A	n=38	59.02	31.19	36.77	31.64
ATI - Region 4-B	n=83	95.55	59.34	51.73	62.08
ATI – Region 5	n=60	89.40	16.33	1.83	35.41
ATI – Region 6	n=34	85.3	20.8	29.5	55.0
ATI – Region 7	n=22	77.1	47.9	28.4	49.9
ATI – Region 8	n=44	64.4	19.3	30.3	33.0
ATI – Region 9	n=19	78.8	62.6	62.6	47.5
ATI – Region 10	n=17	61.2	73.6	5.0	81.8
ATI – Region 11	n=43	77.0	56.1	65.6	11.1
ATI – Region 12	n=23	100.0	63.2	5.8	0.0
ATI – Region 13	n=71	87.1	49.6	26.5	47.5

Table 3. Awareness about the services provided by various service providers

Service Provider	ATI All Centers	ATI-ITCPH	ATI CAR	ATI-1	ATI-2	ATI-3	ATI-4A	ATI-4B	ATI-5	ATI-6	ATI-7	ATI-8	ATI-9	ATI-10	ATI-11	ATI-12	ATI-13
	n=658	n=30	n=36	n=61	n=51	n=26	n=38	n=83	n=60	n=34	n=22	n=44	n=19	n=17	n=43	n=23	n=71
	percentage of respondents reporting																
DA-ATI																	
Not Aware	0.9	0.0	0.0	0.0	0.0	0.0	5.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.2	0.0
Slightly Aware	1.9	2.8	0.0	0.0	1.8	4.3	4.3	1.4	2.9	0.0	0.0	0.0	0.0	5.7	0.0	12.5	1.0
Moderately Aware	10.0	19.5	3.7	6.0	17.9	40.8	6.3	6.0	5.1	4.0	9.8	9.2	10.4	0.0	0.0	0.0	1.3
Very Aware	46.0	42.5	83.0	13.6	47.1	31.6	31.0	45.6	34.6	49.5	52.4	67.6	73.4	84.3	63.6	43.9	43.5
Extremely Aware	41.1	35.1	13.4	80.5	33.2	23.4	52.6	45.8	57.4	46.5	37.8	23.1	16.1	9.9	36.4	28.4	54.2
DENR																	
Not Aware	39.6	49.7	68.5	56.8	11.6	43.7	18.3	25.3	58.2	27.8	19.4	51.6	53.2	46.3	20.1	21.0	56.6
Slightly Aware	10.9	14.7	17.7	1.5	6.5	15.4	16.9	17.9	6.7	11.1	3.5	26.1	5.4	10.7	2.4	2.7	7.2
Moderately Aware	18.7	14.7	7.6	12.8	15.9	18.9	30.7	29.1	19.1	30.5	31.1	12.0	15.8	28.1	15.8	2.7	9.7
Very Aware	19.3	18.1	6.3	9.8	46.7	22.1	12.6	13.9	8.4	23.1	30.1	6.0	25.6	9.9	49.6	47.3	8.7
Extremely Aware	11.5	2.8	0.0	19.1	19.3	0.0	21.4	13.7	7.7	7.5	16.0	4.4	0.0	5.0	12.1	26.3	17.7
DOST																	
Not Aware	44.4	32.9	69.0	62.9	16.7	53.5	47.4	34.3	53.5	27.8	25.6	73.5	53.2	14.9	42.9	29.4	54.9
Slightly Aware	9.2	2.8	9.5	2.4	0.0	11.7	9.5	16.5	10.2	21.9	18.2	7.5	5.4	41.3	2.2	0.0	1.3
Moderately Aware	18.8	29.4	9.5	14.3	21.5	24.4	24.4	18.5	18.5	27.2	31.1	10.1	5.1	18.2	9.5	0.0	15.7
Very Aware	18.2	23.7	12.0	8.3	44.6	10.4	13.0	12.4	16.1	15.1	13.9	6.0	36.4	25.6	35.9	34.4	14.3
Extremely Aware	9.5	11.2	0.0	12.1	17.2	0.0	5.8	18.3	1.6	8.0	11.0	3.0	0.0	0.0	9.5	36.2	13.8
SUC																	
Not Aware	49.8	73.3	77.8	61.3	39.5	26.6	78.7	36.8	30.6	26.4	34.8	16.3	58.9	19.9	85.5	66.9	71.2
Slightly Aware	7.9	1.4	12.0	5.4	5.5	32.2	0.0	9.5	0.0	15.1	11.9	0.0	10.1	26.4	0.0	5.4	2.1
Moderately Aware	12.5	16.1	5.7	1.5	11.4	20.4	7.8	17.7	16.5	19.5	14.5	23.7	10.1	28.1	0.0	0.0	4.6
Very Aware	20.5	9.2	2.5	10.7	38.6	20.8	7.4	18.3	30.7	31.0	25.6	57.1	20.9	25.6	12.1	15.2	5.8
Extremely Aware	9.3	0.0	2.0	21.1	5.1	0.0	6.0	17.7	22.3	8.0	13.3	3.0	0.0	0.0	2.4	12.5	16.3
Private Firm																	
Not Aware	71.3	87.3	94.3	68.9	37.8	66.8	84.5	67.7	51.4	77.0	69.9	85.7	79.4	36.3	83.3	72.7	88.1
Slightly Aware	5.1	4.2	3.8	2.4	6.2	18.6	4.3	3.3	3.1	0.0	11.9	1.4	0.0	14.9	0.0	2.7	0.7
Moderately Aware	9.1	7.1	1.9	6.0	19.7	10.4	2.0	7.7	15.4	4.0	13.3	8.5	10.1	28.1	2.2	6.7	4.4
Very Aware	10.1	1.4	0.0	8.3	36.3	4.3	9.1	10.3	19.8	11.9	4.9	4.4	10.4	20.6	12.1	5.8	1.9
Extremely Aware	4.3	0.0	0.0	14.5	0.0	0.0	0.0	11.0	10.3	7.2	0.0	0.0	0.0	0.0	2.4	12.1	4.8
PAO																	

Service Provider	ATI All Centers	ATI-ITCPH	ATI CAR	ATI-1	ATI-2	ATI-3	ATI-4A	ATI-4B	ATI-5	ATI-6	ATI-7	ATI-8	ATI-9	ATI-10	ATI-11	ATI-12	ATI-13
	n=658	n=30	n=36	n=61	n=51	n=26	n=38	n=83	n=60	n=34	n=22	n=44	n=19	n=17	n=43	n=23	n=71
Not Aware	19.0	30.1	28.2	59.9	13.7	0.0	13.8	3.9	6.0	4.0	10.4	7.4	10.8	5.7	42.6	58.5	9.0
Slightly Aware	3.4	0.0	1.9	0.0	2.6	8.5	7.4	3.3	1.6	7.2	4.9	2.7	0.0	5.0	0.0	8.5	4.4
Moderately Aware	10.1	21.6	15.8	1.5	24.1	14.9	11.7	11.6	1.8	7.3	3.5	8.7	15.8	10.7	4.8	0.0	2.8
Very Aware	33.7	31.5	44.6	6.0	43.1	45.3	20.4	34.9	39.3	19.9	49.5	20.0	46.8	73.6	27.9	8.1	44.4
Extremely Aware	33.8	16.8	9.5	32.6	16.5	31.2	46.6	46.3	51.2	61.6	31.7	61.2	26.6	5.0	24.7	25.0	39.5
MAO																	
Not Aware	16.9	35.6	28.3	59.9	9.7	0.0	7.8	2.2	4.7	15.1	0.0	0.0	10.8	5.0	49.8	40.6	1.9
Slightly Aware	1.9	0.0	0.0	0.0	0.0	9.8	7.4	0.0	1.5	0.0	0.0	3.0	0.0	0.0	0.0	12.5	0.0
Moderately Aware	7.1	4.9	3.8	0.0	13.2	11.8	6.8	8.5	1.9	4.0	6.1	33.0	5.4	0.0	4.5	0.0	0.0
Very Aware	32.0	38.4	40.7	3.0	50.1	32.9	20.9	17.0	34.5	7.5	55.0	50.8	46.8	61.9	23.2	13.8	32.1
Extremely Aware	42.1	21.0	27.2	37.1	26.9	45.5	57.0	72.2	57.4	73.5	38.9	13.2	37.0	33.1	22.5	33.1	65.9
Other Farmers																	
Not Aware	64.1	70.5	76.1	67.4	30.0	68.2	54.9	72.1	69.6	74.2	55.4	67.1	78.8	41.3	81.0	34.8	80.0
Slightly Aware	3.2	0.0	5.7	0.0	1.8	9.8	1.7	2.2	2.9	0.0	4.9	4.2	0.0	9.9	0.0	19.2	0.0
Moderately Aware	8.0	8.5	7.6	3.0	12.2	16.5	17.2	5.2	6.7	4.1	8.4	6.0	5.4	23.2	0.0	0.0	1.0
Very Aware	15.1	18.2	6.8	3.0	40.5	5.6	12.1	9.2	17.5	7.2	15.3	21.4	15.8	25.6	14.3	25.0	12.7
Extremely Aware	9.7	2.8	3.8	26.6	15.6	0.0	14.1	11.3	3.3	14.5	16.0	1.3	0.0	0.0	4.6	21.0	6.3
Farmer Organizations																	
Not Aware	57.7	78.3	84.2	67.4	28.5	50.3	80.8	51.0	21.4	34.3	58.1	68.9	37.7	25.6	81.0	61.2	69.0
Slightly Aware	2.9	0.0	0.0	0.0	4.7	15.4	3.1	0.0	0.0	0.0	9.8	2.7	0.0	5.0	2.2	0.0	0.0
Moderately Aware	6.5	0.0	3.8	0.0	13.0	11.7	14.4	2.8	6.6	19.3	8.4	4.4	0.0	28.1	0.0	0.0	0.0
Very Aware	21.4	21.7	8.2	6.9	44.9	7.3	1.7	22.2	34.4	31.2	20.2	22.7	56.9	41.3	14.5	21.0	23.9
Extremely Aware	11.6	0.0	3.8	25.8	8.9	15.4	0.0	24.0	37.7	15.2	3.5	1.3	5.4	0.0	2.2	17.9	7.1
Other service providers																	
Not Aware	78.9	90.1	92.4	79.1	50.7	91.5	98.5	76.7	92.3	88.7	53.2	85.3	84.2	41.3	90.3	69.6	76.9
Slightly Aware	1.7	0.0	3.8	0.0	0.0	0.0	0.0	1.4	0.0	0.0	8.4	0.0	0.0	20.6	0.0	0.0	0.0
Moderately Aware	4.9	0.0	0.0	0.0	16.7	4.3	0.0	0.0	0.0	4.1	11.9	8.7	10.4	28.1	2.4	6.7	0.0
Very Aware	7.1	9.9	3.8	1.5	22.6	0.0	0.0	3.6	7.7	0.0	18.2	6.0	5.4	9.9	4.8	18.3	4.5
Extremely Aware	7.5	0.0	0.0	19.4	10.0	4.3	1.5	18.3	0.0	7.2	8.4	0.0	0.0	0.0	2.4	5.4	18.6

a/ rating:
 1-not aware; 2-slightly aware; 3-moderately aware; 4-very aware; 5-extremely aware

Table 4. Extension interventions and advisory services accessed from service providers

Extension Service	ATI All Centers	ATI-ITCPH	ATI-CAR	ATI-1	ATI-2	ATI-3	ATI-4A	ATI-4B	ATI-5	ATI-6	ATI-7	ATI-8	ATI-9	ATI-10	ATI-11	ATI-12	ATI-13
	n=658	n=30	n=36	n=61	n=51	n=26	n=38	n=83	n=60	n=34	n=22	n=44	n=19	n=17	n=43	n=23	n=71
	percentage of respondents reporting																
DA-ATI																	
School on the air	27.6	40.0	26.4	7.5	31.5	38.2	38.6	9.3	29.4	21.0	26.6	35.9	0.0	19.9	0.0	0.0	74.6
e-Learning - free online courses	18.7	17.5	9.6	1.5	8.6	34.2	33.1	6.7	9.1	35.9	24.9	8.1	5.1	34.8	40.0	0.0	40.7
e-Farming - Farm Business Advisory Services via the Farmers' Contact	18.8	25.1	0.0	0.0	2.9	16.1	34.1	7.7	2.9	6.1	38.2	10.0	0.0	55.5	66.4	47.7	33.4
Webinars on various agricultural technologies	22.8	20.9	19.6	10.5	10.2	25.6	34.1	20.5	6.6	21.0	32.1	2.7	21.2	61.9	65.6	5.8	35.3
Rice Crop Manager Advisory Service (RCMAS)	23.4	16.7	19.2	3.0	14.6	48.6	35.5	11.3	1.5	18.1	27.2	33.8	10.8	41.3	64.2	19.6	32.4
IEC materials	32.7	32.2	43.2	31.8	18.2	48.1	41.8	12.5	0.0	39.0	38.2	61.3	0.0	55.5	42.6	8.5	39.5
Advisory services	23.0	29.9	15.2	13.7	5.7	14.8	39.9	5.3	9.1	6.1	16.6	42.4	15.5	50.5	59.1	5.8	53.1
Training	82.0	83.2	89.9	100.0	48.6	95.7	73.5	79.9	98.5	100.0	72.8	92.3	94.6	95.0	35.8	26.3	99.0
Others	2.1	2.1	1.9	1.5	0.7	0.0	0.0	2.4	0.0	2.6	0.0	6.3	0.0	20.6	0.0	0.0	0.0
None	5.1	2.8	0.0	0.0	25.7	0.0	14.6	8.7	1.5	0.0	0.0	1.4	0.0	0.0	0.0	19.2	0.0
DENR																	
School on the air	5.1	12.4	0.0	0.0	17.3	0.0	26.6	1.1	1.5	0.0	4.9	1.4	0.0	0.0	0.0	0.0	1.0
e-Learning - free online courses	5.3	9.0	0.0	0.0	0.0	3.1	16.5	1.4	1.9	3.1	13.9	3.0	0.0	5.0	35.5	0.0	0.0
e-Farming - Farm Business Advisory Services via the Farmers' Contact	4.3	15.2	0.0	1.5	0.0	0.0	3.3	1.4	0.0	0.0	8.4	0.0	0.0	15.7	9.7	39.2	0.0
Webinars on various agricultural technologies	3.5	0.0	0.0	1.5	0.0	0.0	11.8	2.2	3.3	0.0	8.4	0.0	0.0	20.6	16.7	0.0	0.0
RCMAS	2.7	0.0	0.0	0.0	6.1	0.0	13.6	0.0	0.0	0.0	4.9	0.0	0.0	9.9	7.3	8.5	0.0
IEC materials	5.6	6.2	2.5	3.0	5.7	14.7	9.1	0.0	0.0	0.0	0.0	1.4	0.0	14.9	7.3	0.0	19.5
Advisory services	5.0	7.1	2.5	1.5	2.9	5.6	9.6	0.0	5.2	0.0	0.0	0.0	10.4	20.6	21.4	0.0	8.4
Training	15.6	31.3	7.6	6.0	13.4	29.4	26.6	12.2	20.5	9.2	14.7	3.0	15.2	20.6	20.8	17.9	6.3
Others	1.9	0.0	0.0	0.0	0.0	8.5	0.0	6.3	1.8	0.0	0.0	3.3	5.4	5.0	0.0	0.0	1.0
None	30.6	14.7	21.5	34.1	45.7	14.5	46.4	54.2	9.5	46.5	43.6	40.7	15.8	23.2	9.3	24.6	9.2
DOST																	
School on the air	4.8	15.2	0.0	0.0	15.3	0.0	24.6	1.1	1.5	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e-Learning - free online courses	4.3	6.2	0.0	0.0	0.0	3.1	16.5	1.4	0.0	0.0	13.9	0.0	0.0	11.4	21.6	0.0	0.0
e-Farming - Farm Business Advisory Services via the Farmers' Contact	2.8	2.8	0.0	0.0	0.0	0.0	17.8	2.7	0.0	0.0	3.5	0.0	0.0	14.9	2.4	5.4	0.0

Extension Service	ATI All Centers	ATI-ITCPH	ATI-CAR	ATI-1	ATI-2	ATI-3	ATI-4A	ATI-4B	ATI-5	ATI-6	ATI-7	ATI-8	ATI-9	ATI-10	ATI-11	ATI-12	ATI-13
	n=658	n=30	n=36	n=61	n=51	n=26	n=38	n=83	n=60	n=34	n=22	n=44	n=19	n=17	n=43	n=23	n=71
Webinars on various agricultural technologies	4.4	2.8	0.0	1.5	0.0	6.1	17.3	7.9	4.7	0.0	3.5	0.0	5.4	15.7	2.4	0.0	4.4
RCMAS	1.7	6.2	0.0	0.0	0.0	0.0	8.2	0.0	0.0	0.0	0.0	1.4	0.0	5.7	4.8	2.7	0.0
IEC materials	6.3	13.3	0.0	3.0	16.0	7.3	13.7	0.0	0.0	3.1	0.0	0.0	0.0	30.6	4.8	0.0	23.6
Advisory services	5.6	7.6	3.8	3.0	2.9	5.0	8.2	0.0	2.9	3.1	0.0	0.0	5.1	31.3	11.9	0.0	15.9
Training	16.1	31.9	15.8	4.5	16.1	17.8	25.0	13.5	27.7	12.3	4.9	6.0	41.4	32.1	11.9	11.2	9.8
Others	4.4	1.4	3.8	1.5	10.2	0.0	0.0	5.4	0.0	2.6	4.9	3.0	5.4	29.8	0.0	0.0	7.9
None	25.5	23.9	15.2	31.2	34.7	21.4	20.3	39.4	11.1	34.6	47.2	16.1	5.4	23.2	16.4	56.7	2.6
SUC																	
School on the air	4.1	1.4	0.0	7.5	12.8	0.0	4.4	0.0	4.8	6.1	4.9	0.0	0.0	5.0	12.1	0.0	2.3
e-Learning - free online courses	3.1	0.0	0.0	0.0	1.6	21.6	1.4	0.0	1.8	9.2	3.5	0.0	0.0	5.0	4.8	0.0	1.3
e-Farming - Farm Business Advisory Services via the Farmers' Contact	1.4	0.0	0.0	0.0	0.0	8.7	1.4	1.4	0.0	6.1	0.0	0.0	0.0	5.0	2.4	0.0	0.0
Webinars on various agricultural technologies	2	0.0	0.0	0.0	6.1	1.9	1.4	1.4	3.3	3.1	4.9	0.0	5.4	5.7	2.4	0.0	0.0
RCMAS	1.2	0.0	0.0	0.0	0.0	10.6	0.0	1.4	0.0	3.1	0.0	0.0	0.0	0.0	0.0	5.4	0.0
IEC materials	4.9	0.0	4.4	7.5	1.6	18.0	1.9	9.1	0.0	0.0	0.0	0.0	0.0	10.7	4.8	0.0	10.8
Advisory services	3.2	2.8	0.0	1.5	1.6	1.9	0.0	3.0	2.9	0.0	0.0	0.0	10.1	26.4	9.7	0.0	5.6
Training	24.9	10.6	10.2	19.6	18.4	45.8	4.4	21.8	62.8	39.3	19.4	68.9	31.0	26.4	0.0	11.2	10.2
Others	4.1	9.0	0.0	1.5	2.9	3.1	1.4	1.4	0.0	0.0	6.1	3.0	10.4	24.9	0.0	0.0	10.5
None	16.3	8.5	9.5	14.5	23.8	12.8	11.2	36.0	5.2	17.5	36.2	11.9	5.1	33.9	0.0	21.9	1.0
Private Firm																	
School on the air	0.9	4.2	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0
e-Learning - free online courses	1.5	2.8	0.0	0.0	0.0	1.9	1.6	0.0	3.3	0.0	0.0	0.0	0.0	10.7	9.7	0.0	0.0
e-Farming - Farm Business Advisory Services via the Farmers' Contact	1.4	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	4.9	0.0	0.0	14.9	4.8	0.0	0.0
Webinars on various agricultural technologies	1.5	0.0	0.0	1.5	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.0	20.6	7.3	0.0	0.0
RCMAS	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.9	9.7	2.7	0.0
IEC materials	3.0	2.8	3.8	3.9	4.5	0.0	1.9	4.3	0.0	0.0	0.0	1.4	5.1	19.9	4.8	0.0	0.0
Advisory services	3.0	1.4	3.8	0.0	4.5	0.0	0.0	3.0	9.5	0.0	0.0	1.3	5.4	25.6	4.8	0.0	0.0
Training	9.4	4.2	0.0	10.6	17.5	0.0	0.0	17.6	34.1	11.7	0.0	4.0	15.5	20.6	0.0	8.5	5.8
Others	2.4	0.0	0.0	0.0	5.7	0.0	0.0	2.7	2.9	0.0	0.0	0.0	15.5	19.9	0.0	0.0	5.1
None	13.3	5.6	1.9	14.5	30.0	23.9	11.2	10.6	6.8	6.1	30.1	10.4	0.0	23.2	4.6	18.9	0.0

Extension Service	ATI All Centers	ATI-ITCPH	ATI CAR	ATI-1	ATI-2	ATI-3	ATI-4A	ATI-4B	ATI-5	ATI-6	ATI-7	ATI-8	ATI-9	ATI-10	ATI-11	ATI-12	ATI-13
	n=658	n=30	n=36	n=61	n=51	n=26	n=38	n=83	n=60	n=34	n=22	n=44	n=19	n=17	n=43	n=23	n=71
PAO																	
School on the air	14.7	15.2	7.6	0.0	7.0	16.6	28.2	12.0	13.2	27.6	16.8	26.9	0.0	0.0	0.0	0.0	45.0
e-Learning - free online courses	6.4	6.2	3.8	0.0	0.0	17.9	21.9	5.2	4.7	12.2	7.0	5.6	0.0	5.0	2.4	0.0	6.4
e-Farming - Farm Business Advisory Services via the Farmers' Contact	10.6	9.0	3.8	0.0	0.0	23.4	23.0	10.4	1.5	9.2	11.9	25.5	10.4	40.5	7.3	11.2	1.0
Webinars on various agricultural technologies	9.4	2.8	7.6	4.5	1.6	17.9	22.7	13.5	4.4	9.2	0.0	9.3	15.5	41.3	16.2	0.0	1.0
RCMAS	13.3	15.2	9.5	1.5	8.9	35.8	120	7.9	1.5	3.1	9.8	30.7	5.1	40.5	2.4	11.2	20.7
IEC materials	20.7	25.1	16.5	11.4	7.3	50.0	16.9	11.6	0.0	12.3	0.0	56.1	10.4	63.7	2.4	0.0	41.8
Advisory services	16.6	14.7	9.5	6.0	4.5	36.9	12.3	11.1	4.7	3.1	0.0	33.6	16.1	56.2	18.2	2.7	44.8
Training	58	51.7	68.0	30.3	36.1	80.9	44.5	56.9	87.6	66.0	72.8	82.5	73.4	84.3	40.7	17.9	57.0
Others	3.3	4.9	0.0	0.0	2.9	3.1	1.4	2.7	0.0	0.0	0.0	6.3	15.5	34.8	0.0	0.0	0.0
None	13.5	13.3	1.9	8.3	34.4	8.5	34.8	32.6	1.6	8.2	4.9	5.7	5.4	5.0	7.1	15.2	0.0
MAO																	
School on the air	15.1	13.3	10.6	1.5	13.3	25.9	26.6	4.2	18.9	17.3	11.9	14.0	0.0	10.7	0.0	0.0	54.6
e-Learning - free online courses	8.9	11.9	5.7	1.5	2.9	16.0	25.2	5.4	4.9	11.8	10.4	6.0	0.0	32.1	7.3	0.0	4.7
e-Farming - Farm Business Advisory Services via the Farmers' Contact	10.6	10.5	3.8	1.5	4.5	29.1	24.6	7.2	2.9	8.6	20.2	6.9	0.0	41.3	2.4	16.5	0.0
Webinars on various agricultural technologies	10.6	6.2	5.7	6.9	2.9	34.3	18.8	10.2	0.0	8.6	7.0	6.9	16.1	41.3	18.4	0.0	0.7
RCMAS	15.6	9.0	9.5	3.0	8.9	40.7	25.4	9.7	0.0	8.7	25.2	29.0	5.4	42.0	2.4	8.5	21.4
IEC materials	20.2	14.1	25.4	4.5	8.9	59.4	18.1	15.8	0.0	20.9	3.5	38.8	5.4	69.4	2.4	8.5	35.6
Advisory services	20.3	24.3	10.0	4.5	4.5	52.4	18.3	15.0	11.1	8.7	10.4	22.0	26.3	57.0	9.3	8.5	54.6
Training	59.1	44.8	69.2	19.7	39.3	81.4	36.1	62.0	90.9	48.1	83.4	95.6	78.5	90.1	35.8	23.7	73.8
Others	3.4	0.0	0.0	1.5	5.7	5.6	0.0	3.3	0.0	8.6	0.0	6.0	10.4	24.9	0.0	0.0	1.0
None	12.2	12.0	0.0	12.1	22.7	4.3	43.9	26.3	0.0	5.7	6.1	3.0	10.8	5.0	4.6	21.9	0.0
Other Farmers																	
School on the air	2.2	0.0	6.3	0.0	11.0	0.0	1.9	0.0	0.0	0.0	3.5	6.0	0.0	0.0	0.0	0.0	1.0
e-Learning - free online courses	0.5	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	1.3	0.0	0.0	4.8	2.7	0.0
e-Farming - Farm Business Advisory Services via the Farmers' Contact	2.4	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	8.4	3.0	0.0	15.7	9.7	17.9	0.0
Webinars on various agricultural technologies	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	4.8	0.0	0.0
RCMAS	2.0	2.8	0.0	0.0	2.9	0.0	0.0	1.2	0.0	0.0	4.9	4.2	5.4	0.0	9.7	11.2	0.0

Extension Service	ATI All Centers	ATI-ITCPH	ATI CAR	ATI-1	ATI-2	ATI-3	ATI-4A	ATI-4B	ATI-5	ATI-6	ATI-7	ATI-8	ATI-9	ATI-10	ATI-11	ATI-12	ATI-13
	n=658	n=30	n=36	n=61	n=51	n=26	n=38	n=83	n=60	n=34	n=22	n=44	n=19	n=17	n=43	n=23	n=71
IEC materials	0.9	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0	0.0	5.5	0.0	5.0	2.4	0.0	0.0
Advisory services	3.0	0.0	0.0	0.0	1.6	5.6	3.6	3.3	1.5	0.0	0.0	4.2	0.0	30.6	7.3	0.0	0.0
Training	11.8	6.4	3.8	8.4	19.2	15.9	6.1	6.4	20.8	11.2	20.2	11.7	10.8	25.6	4.5	11.2	9.5
Others	2.0	6.2	0.0	0.0	2.9	4.3	0.0	0.0	0.0	0.0	0.0	3.3	5.4	14.9	0.0	0.0	0.0
None	18.2	16.9	15.8	22.8	28.6	11.7	32.3	18.2	9.6	8.7	24.3	14.9	10.4	23.2	0.0	36.2	9.5
Farmer Organizations																	
School on the air	2.3	2.8	2.5	0.0	5.4	0.0	9.6	0.0	1.5	0.0	3.5	1.4	0.0	0.0	0.0	0.0	4.4
e-Learning - free online courses	2.9	4.2	0.0	0.0	2.9	5.6	9.6	0.0	2.9	0.0	3.5	1.3	0.0	10.7	7.3	0.0	0.0
e-Farming - Farm Business Advisory Services via the Farmers' Contact	3.3	2.8	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	8.4	6.0	5.1	26.4	11.9	8.5	0.0
Webinars on various agricultural technologies	2.2	4.2	0.0	0.0	2.9	0.0	8.2	0.0	0.0	0.0	0.0	0.0	0.0	16.4	9.7	0.0	0.0
RCMAS	3.9	2.8	6.3	0.0	2.9	4.3	9.6	0.0	0.0	0.0	4.9	5.7	0.0	26.4	4.8	5.4	0.0
IEC materials	3.7	4.2	10.0	0.0	7.3	5.6	4.1	2.4	0.0	0.0	0.0	2.7	5.4	25.6	0.0	0.0	0.0
Advisory services	5.6	13.3	0.0	0.0	4.5	4.3	9.8	7.0	3.4	0.0	0.0	0.0	15.5	36.3	12.1	0.0	0.0
Training	18.3	7.1	7.6	3.9	33.6	24.6	4.1	14.4	34.4	14.7	38.4	8.7	42.1	41.3	2.2	23.7	19.5
Others	2.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	3.1	0.0	6.3	10.4	19.9	0.0	0.0	4.4
None	16.0	2.8	5.7	24.3	21.1	19.6	4.1	31.7	41.3	33.0	3.5	6.0	0.0	28.1	0.0	9.4	3.9
Other Service Providers																	
School on the air	0.4	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	1.0
e-Learning - free online courses	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	4.8	0.0	0.0
e-Farming - Farm Business Advisory Services via the Farmers' Contact		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0	14.9	0.0	0.0	0.0
Webinars on various agricultural technologies	0.3	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0
RCMAS	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	2.7	7.6
IEC materials	2.5	0.0	0.0	5.3	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	25.6	2.4	2.7	8.6
Advisory services	2.4	0.0	0.0	1.5	0.0	0.0	0.0	1.4	1.5	0.0	3.5	0.0	0.0	30.6	2.4	2.7	5.6
Training	8.4	7.1	0.0	8.3	18.6	4.3	0.0	10.1	4.8	0.0	16.8	7.3	10.4	20.6	0.0	14.2	10.5
Others	2.2	0.0	3.8	3.9	0.0	0.0	0.0	2.0	1.5	3.1	0.0	3.0	10.4	14.9	0.0	0.0	2.3
None	8.7	2.8	3.8	8.2	2.6	4.3	1.4	12.3	0.0	5.6	30.1	4.4	5.4	18.2	4.8	16.2	1.0

Table 5. Other services accessed from service providers

Extension Service	ATI All Centers	ATI-ITCPH	ATI-CAR	ATI-1	ATI-2	ATI-3	ATI-4A	ATI-4B	ATI-5	ATI-6	ATI-7	ATI-8	ATI-9	ATI-10	ATI-11	ATI-12	ATI-13
	n=658	n=30	n=36	n=61	n=51	n=26	n=38	n=83	n=60	n=34	n=22	n=44	n=19	n=17	n=43	n=23	n=71
	percentage of respondents reporting																
DA-ATI																	
Livelihood projects	25.9	39.8	8.7	12.9	18.5	36.7	37.1	17.5	39.4	9.2	27.2	13.2	5.4	57.0	54.5	28.4	19.6
Cash grant	15.0	22.3	6.3	9.2	24.6	14.8	17.2	10.4	18.0	12.3	4.9	11.9	0.0	52.0	28.8	0.0	5.1
Farm inputs	38.8	32.7	8.2	15.9	53.4	40.1	32.8	16.9	42.9	17.8	35.6	71.6	47.1	66.9	87.9	22.7	54.5
Farm animals	24.7	45.5	6.3	6.9	9.6	30.3	32.8	10.1	18.0	3.1	18.8	50.7	26.6	57.0	70.5	21.0	21.1
Machinery/ equipment	21.0	23.2	3.8	9.2	15.0	16.6	31.5	10.3	18.3	24.5	25.8	26.8	10.8	61.9	54.5	14.2	16.7
Market linkage	10.9	8.5	3.8	5.4	8.9	11.1	22.1	5.5	4.7	2.6	18.8	1.3	5.4	36.3	36.8	14.2	8.6
Did not access any	41.2	42.7	89.4	61.2	31.2	30.0	55.4	63.4	37.0	37.9	47.6	6.0	37.0	33.1	0.0	29.7	25.4
DENR																	
Livelihood projects	7.8	9.0	0.0	0.0	14.4	0.0	24.6	1.4	7.0	3.1	9.8	0.0	0.0	15.7	30.9	23.7	2.8
Cash grant	2.1	9.0	0.0	0.0	1.3	0.0	8.2	0.0	0.0	0.0	0.0	0.0	0.0	5.7	9.7	0.0	1.0
Farm inputs	10.3	1.4	0.0	6.0	23.5	7.3	18.1	3.4	7.0	5.6	13.3	0.0	15.2	10.7	11.7	16.9	29.5
Farm animals	6.4	12.4	0.0	1.5	1.6	0.0	8.7	1.2	0.0	0.0	13.9	0.0	0.0	5.7	64.2	20.0	0.0
Machinery/ equipment	4.5	16.7	0.0	0.0	0.0	0.0	24.6	1.4	1.8	11.8	0.0	0.0	0.0	5.7	7.3	5.8	0.0
Market linkage	1.0	0.0	0.0	0.0	0.0	0.0	7.1	0.0	0.0	0.0	0.0	0.0	0.0	10.7	0.0	2.7	0.0
Did not access any	38.8	27.4	31.5	37.1	46.6	44.7	49.7	68.7	25.9	41.0	48.5	48.4	31.6	38.1	4.5	32.7	10.1
DOST																	
Livelihood projects	7.7	14.7	2.5	1.5	8.9	4.3	22.0	5.9	13.5	0.0	0.0	1.4	10.4	30.6	12.1	2.7	1.0
Cash grant	5.1	11.2	3.8	1.5	3.5	0.0	19.5	7.5	3.1	6.1	0.0	0.0	5.4	10.7	4.8	0.0	3.6
Farm inputs	5.3	2.8	0.0	0.0	15.4	0.0	18.1	1.4	0.0	0.0	3.5	0.0	0.0	31.3	7.3	8.5	4.4
Farm animals	3.9	15.2	0.0	0.0	1.6	0.0	17.3	0.0	1.9	0.0	0.0	0.0	0.0	21.4	7.3	2.7	0.0
Machinery/ equipment	8.9	23.7	8.2	1.5	0.0	1.9	20.6	8.2	6.6	0.0	4.9	6.0	5.4	47.0	4.8	8.5	8.0
Market linkage	3.1	11.2	0.0	0.0	0.0	5.6	7.1	2.7	3.7	0.0	0.0	3.0	0.0	10.7	0.0	8.5	0.0
Did not access any	35.1	29.4	22.8	34.1	43.9	30.6	23.6	46.0	22.8	49.7	66.1	16.1	25.9	23.2	42.6	59.4	29.1
SUC																	
Livelihood projects	4.9	5.6	4.4	0.0	5.9	4.3	4.4	8.4	15.1	3.1	3.5	0.0	0.0	5.7	14.5	0.0	2.3
Cash grant	1.4	2.1	0.0	0.0	2.9	0.0	3.0	0.9	3.3	0.0	4.9	0.0	5.4	0.0	0.0	0.0	0.0
Farm inputs	5.2	2.1	2.0	0.0	8.6	11.8	1.4	1.4	12.8	6.2	0.0	4.7	5.1	5.0	12.1	8.5	9.5
Farm animals	2.1	2.8	0.0	0.0	0.0	0.0	1.4	0.0	3.5	3.1	0.0	8.0	0.0	5.0	9.7	0.0	3.3
Machinery/ equipment	1.5	0.0	0.0	0.0	0.0	0.0	1.4	0.9	4.9	3.1	0.0	0.0	0.0	9.9	4.8	2.7	3.3
Market linkage	1.4	2.8	0.0	0.0	0.0	5.6	3.0	1.4	1.8	0.0	0.0	0.0	0.0	0.0	0.0	11.2	1.0

Extension Service	ATI All Centers	ATI-ITCPH	ATI CAR	ATI-1	ATI-2	ATI-3	ATI-4A	ATI-4B	ATI-5	ATI-6	ATI-7	ATI-8	ATI-9	ATI-10	ATI-11	ATI-12	ATI-13
	n=658	n=30	n=36	n=61	n=51	n=26	n=38	n=83	n=60	n=34	n=22	n=44	n=19	n=17	n=43	n=23	n=71
Did not access any	36.8	18.9	15.8	35.7	33.0	51.8	15.9	51.2	38.6	44.5	61.8	72.4	30.7	64.4	0.0	21.9	15.7
Private Firm																	
Livelihood projects	3.0	0.0	0.0	0.0	8.9	1.9	0.0	6.2	7.1	6.1	0.0	1.3	0.0	5.0	7.3	0.0	1.9
Cash grant	1.7	0.0	0.0	3.0	0.0	0.0	0.0	4.2	8.8	3.1	0.0	0.0	5.4	0.0	2.4	0.0	1.0
Farm inputs	8.2	1.4	5.7	4.5	17.5	17.3	0.0	12.1	21.9	3.1	4.9	2.7	5.4	14.9	2.4	8.5	4.6
Farm animals	1.1	0.0	0.0	0.0	0.0	0.0	0.0	1.6	6.7	0.0	0.0	2.7	0.0	0.0	7.3	0.0	0.0
Machinery/ equipment	1.2	0.0	0.0	0.0	0.0	0.0	0.0	4.6	2.9	3.1	0.0	0.0	0.0	0.0	9.7	0.0	0.0
Market linkage	2.3	2.8	0.0	0.0	2.9	0.0	0.0	2.7	4.7	0.0	4.9	3.0	0.0	10.7	0.0	8.5	1.0
Did not access any	15.2	7.1	0.0	23.7	32.8	14.1	14.8	9.4	11.8	5.6	25.2	8.7	10.1	43.0	7.1	18.9	5.4
PAO																	
Livelihood projects	20.9	20.9	12.5	1.5	14.7	30.7	28.2	18.1	56.7	23.6	3.5	39.6	26.3	15.7	18.8	11.2	21.2
Cash grant	11.1	15.4	5.7	1.5	13.8	17.6	12.3	9.4	10.5	24.0	4.9	4.0	15.8	25.6	7.3	0.0	15.7
Farm inputs	37.4	22.4	15.9	13.4	30.0	64.5	26.8	27.7	44.4	23.1	46.2	49.2	52.5	73.6	33.6	11.2	79.2
Farm animals	21	16.7	8.7	3.0	5.1	49.8	24.9	7.8	20.6	14.9	8.4	50.5	32.0	30.6	16.0	2.7	54.2
Machinery/ equipment	23.9	25.7	16.4	6.0	4.5	52.9	28.2	13.1	31.7	45.0	20.2	46.8	16.1	55.5	0.0	0.0	28.6
Market linkage	9.6	10.6	3.8	3.0	5.7	33.5	6.2	8.8	13.3	0.0	4.9	1.3	5.4	38.8	2.2	11.2	11.0
Did not access any	25.5	17.5	53.4	26.8	30.9	8.5	51.1	58.2	21.1	14.8	26.6	8.7	26.6	5.7	9.5	21.9	1.9
MAO																	
Livelihood projects	27.4	23.2	13.8	4.5	18.4	18.4	23.3	26.8	73.7	20.9	30.7	23.7	31.6	52.0	9.3	17.9	22.4
Cash grant	14.2	12.6	5.7	6.0	18.7	18.7	11.2	11.4	28.2	19.8	13.9	5.7	5.4	47.0	2.4	0.0	11.0
Farm inputs	45.7	34.2	15.8	19.6	38.2	38.2	25.2	42.3	77.2	35.4	50.7	50.2	62.6	95.0	38.4	16.9	92.7
Farm animals	28.7	26.5	6.3	6.0	9.9	9.9	26.0	18.3	43.2	14.4	13.3	54.4	52.5	56.2	13.6	8.5	74.9
Machinery/ equipment	23.2	37.0	5.7	3.0	2.9	2.9	24.1	21.1	43.6	17.9	18.8	22.7	21.5	71.9	4.8	2.7	35.1
Market linkage	13.4	23.0	7.6	4.5	0.0	0.0	14.8	12.4	16.9	5.6	4.9	4.7	0.0	65.2	2.2	16.9	11.9
Did not access any	21.3	11.3	53.4	17.6	27.0	27.0	51.3	43.5	5.1	12.4	30.5	18.2	16.1	0.0	7.1	27.3	0.0
Other Farmers																	
Livelihood projects	5.7	6.2	0.0	0.0	8.9	5.6	4.1	1.2	10.1	0.0	11.9	10.2	5.4	10.7	7.3	12.1	5.4
Cash grant	3.2	6.2	0.0	0.0	4.5	5.6	1.9	0.0	3.3	0.0	0.0	10.2	5.4	5.0	12.1	0.0	0.0
Farm inputs	8.2	9.0	0.0	3.0	20.5	5.6	6.1	2.2	7.8	0.0	13.3	14.7	5.4	10.7	11.9	11.2	8.8
Farm animals	4.3	11.9	0.0	0.0	0.0	5.6	9.0	0.0	3.3	0.0	4.9	13.2	5.4	10.7	9.5	0.0	0.0
Machinery/ equipment	2.9	6.2	1.9	0.0	0.0	0.0	6.1	1.2	6.2	0.0	3.5	4.0	5.4	5.0	12.1	2.7	0.7
Market linkage	1.8	0.0	1.9	0.0	1.6	5.6	0.0	2.5	6.0	0.0	0.0	1.3	0.0	5.0	0.0	8.5	0.0
Did not access any	21.7	17.7	20.1	29.7	27.8	20.7	34.0	22.0	9.5	19.9	24.3	18.2	15.8	43.0	0.0	29.4	9.5
Farmer Organizations																	

Extension Service	ATI All Centers	ATI-ITCPH	ATI CAR	ATI-1	ATI-2	ATI-3	ATI-4A	ATI-4B	ATI-5	ATI-6	ATI-7	ATI-8	ATI-9	ATI-10	ATI-11	ATI-12	ATI-13
	n=658	n=30	n=36	n=61	n=51	n=26	n=38	n=83	n=60	n=34	n=22	n=44	n=19	n=17	n=43	n=23	n=71
Livelihood projects	7.7	5.6	2.5	0.0	19.1	5.6	9.6	4.0	15.5	0.0	11.9	6.0	5.4	16.4	14.5	12.5	0.7
Cash grant	4.7	2.8	0.0	3.0	18.8	5.6	1.4	3.8	9.9	0.0	0.0	4.0	5.4	5.7	4.6	5.8	0.0
Farm inputs	11.1	2.8	2.5	4.5	12.9	17.2	14.2	8.5	18.7	9.2	16.8	7.5	41.8	10.7	11.9	22.7	8.0
Farm animals	4.2	2.8	0.0	3.0	2.9	11.1	9.6	0.0	0.0	0.0	4.9	6.0	20.9	5.7	14.3	0.0	0.0
Machinery/ equipment	8.9	4.2	6.3	3.9	2.9	11.6	5.5	8.6	20.7	20.8	13.3	7.5	5.4	25.6	7.3	0.0	7.3
Market linkage	3.1	0.0	0.0	0.0	2.9	0.0	4.1	2.7	5.2	0.0	4.9	6.0	0.0	5.7	0.0	23.7	5.9
Did not access any	18.8	14.7	9.5	21.3	31.0	19.6	4.1	30.8	37.1	26.8	7.0	10.1	20.6	38.1	0.0	9.4	9.8
Other Service Providers																	
Livelihood projects	2.6	0.0	0.0	1.5	7.3	0.0	0.0	4.3	3.4	0.0	3.5	5.8	5.4	5.7	4.8	0.0	0.0
Cash grant	2.3	0.0	0.0	9.2	5.7	0.0	0.0	1.1	0.0	0.0	0.0	1.4	5.4	10.7	0.0	2.7	0.0
Farm inputs	6.1	0.0	0.0	5.3	16.7	0.0	0.0	5.2	1.5	0.0	13.3	0.0	5.4	20.6	4.8	5.8	18.0
Farm animals	1.7	0.0	0.0	1.5	2.9	0.0	0.0	1.6	1.9	0.0	0.0	0.0	0.0	10.7	4.8	0.0	5.5
Machinery/ equipment	3.0	0.0	0.0	0.0	0.0	4.3	0.0	2.3	1.5	5.6	0.0	0.0	5.4	25.6	0.0	5.8	12.0
Market linkage	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	5.0	0.0	14.2	0.7
Did not access any	9.7	9.9	7.6	8.3	16.6	4.3	1.4	12.9	1.5	3.1	30.1	4.4	10.4	28.1	4.8	16.2	1.3

Table 6. Level of easiness or difficulty in accessing the service providers

Service Provider	ATI All Centers	ATI-ITCPH	ATI CAR	ATI-1	ATI-2	ATI-3	ATI-4A	ATI-4B	ATI-5	ATI-6	ATI-7	ATI-8	ATI-9	ATI-10	ATI-11	ATI-12	ATI-13
	n=658	n=30	n=36	n=61	n=51	n=26	n=38	n=83	n=60	n=34	n=22	n=44	n=19	n=17	n=43	n=23	n=71
	percentage of respondents reporting																
DA-ATI																	
Very Difficult	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Difficult	1.3	1.5	0.0	1.5	0.0	0.0	10.6	0.0	1.8	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0
Neither Easy or Difficult	7.2	14.4	3.8	3.0	0.9	5.1	12.6	16.0	16.2	6.1	4.9	4.2	0.0	15.7	0.0	0.0	1.9
Easy	50.8	46.6	82.3	21.5	57.7	71.6	23.9	42.6	32.8	43.6	63.4	76.9	47.1	73.6	54.5	60.7	46.7
Very Easy	40.8	37.5	13.9	74.1	41.4	23.3	52.8	41.4	49.1	50.3	31.7	18.9	52.9	5.0	45.5	39.3	51.4
DENR																	
Very Difficult	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Difficult	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.7	0.0	0.0	0.0	0.0	0.0
Neither Easy or Difficult	29.3	38.9	0.0	14.2	0.0	13.6	66	58.4	48.9	58.4	8.6	0.0	0.0	48.8	3.1	5.0	67.3
Easy	56.1	43.6	100	28.5	87.8	76.1	29.8	28.8	25.1	26.6	79.3	42.7	100	51.2	78.7	85.1	23.6
Very Easy	14.3	17.5	0.0	57.3	12.2	10.4	4.2	12.7	26.0	15.1	12.1	38.6	0.0	0.0	18.2	9.9	9.1
DOST																	
Very Difficult	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Difficult	1.5	0.0	11.6	0.0	0.0	0.0	0.0	8.2	0.0	10.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neither Easy or Difficult	26.4	32.7	32.3	0.0	7.0	7.4	55.9	28.9	32.5	38.3	27.3	13.9	0.0	26.5	5.9	0.0	47.9
Easy	55.7	63.1	56.1	75.6	68.3	68.3	33	22.3	39.4	37.9	72.7	57.4	100	73.5	94.1	100.0	24.5
Very Easy	16.4	4.2	0.0	24.4	24.7	24.3	11.1	40.6	28.1	13.0	0.0	28.7	0.0	0.0	0.0	0.0	27.5
SUC																	
Very Difficult	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Difficult	0.6	0.0	26.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neither Easy or Difficult	16.9	7.8	30.0	6.2	14.3	18.3	0.0	35.6	13.8	15.8	19.8	4.6	0.0	67.7	0.0	0.0	12.6
Easy	57.5	92.2	30.0	24.9	66.6	66.2	69.4	35.3	53.5	38.8	28.0	91.3	100	32.3	83.3	100.0	54.2
Very Easy	25.1	0.0	14.0	68.9	19.0	15.5	30.6	29.1	32.7	45.4	52.2	4.1	0.0	0.0	16.7	0.0	33.2
Private Firm																	
Very Difficult	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Difficult	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	31.3	0.0	61.0	0.0	0.0	0.0	0.0	0.0
Neither Easy or Difficult	26.9	20.0	0.0	27.1	33.3	22.1	54.5	24.4	9.8	17.2	36.9	0.0	49.2	63.2	0.0	0.0	45.1
Easy	44.3	80.0	100.0	17.5	57.3	26.8	0.0	40.0	40.1	34.4	63.1	39.0	50.8	36.8	100.0	100.0	38.6
Very Easy	25.4	0.0	0.0	55.4	9.4	51.1	45.5	35.6	47.1	17.2	0.0	0.0	0.0	0.0	0.0	0.0	16.3
PAO																	

Service Provider	ATI All Centers	ATI-ITCPH	ATI-CAR	ATI-1	ATI-2	ATI-3	ATI-4A	ATI-4B	ATI-5	ATI-6	ATI-7	ATI-8	ATI-9	ATI-10	ATI-11	ATI-12	ATI-13
	n=658	n=30	n=36	n=61	n=51	n=26	n=38	n=83	n=60	n=34	n=22	n=44	n=19	n=17	n=43	n=23	n=71
Very Difficult	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Difficult	0.5	0.0	0.0	0.0	0.0	0.0	0.0	2.1	1.6	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neither Easy or Difficult	7.9	28.1	8.2	0.0	15.7	6.8	6.3	8.0	3.6	12.9	0.0	1.7	6.2	21.9	0.0	0.0	3.6
Easy	47.2	48.2	78.2	13.5	56.3	44.5	49.1	44.8	49.3	31.3	45.4	49.0	31.3	72.8	42.1	100.0	37.2
Very Easy	44.2	23.7	13.6	86.5	28.1	48.7	44.7	45.1	44.0	51.4	54.6	49.3	62.6	5.3	57.9	0.0	59.2
MAO																	
Very Difficult	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Difficult	0.2	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neither Easy or Difficult	7.3	13.9	5.3	0.0	4.5	9.2	14.8	9.9	3.1	9.3	0.0	19.1	0.0	11.3	5.3	0.0	1.0
Easy	43.7	50.0	67.3	4.9	58.2	46.4	39.8	21.7	29.7	22.8	57.3	61.6	39.5	59.1	35.9	70.3	39.0
Very Easy	48.8	36.2	27.4	95.1	37.3	44.3	45.4	66.6	67.2	67.9	42.7	19.3	60.5	29.6	58.7	29.7	60.0
Other Farmers																	
Very Difficult	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Difficult	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neither Easy or Difficult	16.2	0.0	37.5	15.3	7.5	0.0	38.6	0.0	12.8	0.0	17.2	34.4	0.0	69.9	12.8	18.8	0.0
Easy	57.3	45.8	43.4	0.0	58.2	83.5	18.2	63.1	63.7	23.4	82.8	58.5	50.0	30.1	75.5	73.6	100.0
Very Easy	26.5	54.2	19.0	84.7	34.3	16.5	43.1	36.9	23.5	76.6	0.0	7.0	50.0	0.0	11.7	7.5	0.0
Farmer Organization																	
Very Difficult	0.5	0.0	0.0	9.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Difficult	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neither Easy or Difficult	12.6	0.0	62.2	0.0	6.6	13.9	50.1	14.9	7.4	17.1	0.0	14.8	8.1	44.2	12.8	0.0	0.0
Easy	55.3	77.6	0.0	55.1	66.9	57.0	0.0	8.1	39.1	46.8	81.9	70.1	58.4	55.8	75.5	67.9	76.2
Very Easy	31.6	22.4	37.8	35.0	26.5	29.0	49.9	76.9	53.5	36.1	18.1	15.1	33.5	0.0	11.7	32.1	23.8
Other Service Providers																	
Very Difficult	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Difficult	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neither Easy or Difficult	18.8	39.9	0.0	86.0	10.7	0.0	-	22.1	18.8	36.2	17.2	26.4	0.0	61.3	0.0	0.0	0.0
Easy	47.5	60.1	100.0	8.6	62.6	0.0	-	21.2	81.2	0.0	82.8	73.6	100	38.7	100.0	100.0	33.3
Very Easy	33.7	0.0	0.0	82.8	26.8	100.0	-	56.8	0.0	63.8	0.0	0.0	0.0	0.0	0.0	0.0	66.7

Table 7. Level of accommodation of service providers in meeting respondent's needs

Service Provider	ATI All Centers	ATI-ITCPH	ATI CAR	ATI-1	ATI-2	ATI-3	ATI-4A	ATI-4B	ATI-5	ATI-6	ATI-7	ATI-8	ATI-9	ATI-10	ATI-11	ATI-12	ATI-13	
	n=658	n=30	n=36	n=61	n=51	n=26	n=38	n=83	n=60	n=34	n=22	n=44	n=19	n=17	n=43	n=23	n=71	
	percentage of respondents reporting																	
DA-ATI																		
Not Accommodating	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Slightly Accommodating	0.9	0.0	0.0	1.5	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	10.7	0.0	8.1	0.0	
Moderately Accommodating	4.3	2.9	2.9	2.4	8.6	7.0	12.3	7.6	4.4	6.2	0.0	4.2	0.0	5.0	0.0	0.0	1.0	
Very Accommodating	48.1	46.8	46.8	22.9	53.9	76.3	24.4	33.6	41.0	26.7	64.8	73.9	62.6	51.2	45.0	44.5	38.2	
Extremely Accommodating	46.7	50.3	50.3	73.2	37.5	16.7	63.3	57.8	54.7	67.1	35.2	21.8	37.4	33.1	55.0	47.4	60.8	
DENR																		
Not Accommodating	0.8	0.0	0.0	0.0	0.0	0.0	0.0	12.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Slightly Accommodating	3.6	0.0	0.0	0.0	0.0	0.0	4.9	9.6	4.3	14.6	8.6	18.7	0.0	16.3	0.0	0.0	2.3	
Moderately Accommodating	24.9	0.0	37.8	28.5	0.0	33.0	27.3	34.9	44.0	29.2	24.2	42.7	17.4	51.2	3.1	0.0	62.8	
Very Accommodating	49.5	82.5	62.2	14.2	87.8	46.2	43.7	30.2	20.0	14.6	46.5	0.0	82.6	32.5	69.9	59.0	25.9	
Extremely Accommodating	21.1	17.5	0.0	57.3	12.2	20.7	24.2	12.7	31.6	41.6	20.7	38.6	0.0	0.0	27.0	41.0	9.1	
DOST																		
Not Accommodating	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Slightly Accommodating	2.5	0.0	21.4	0.0	0.0	0.0	0.0	4.8	4.6	0.0	11.3	13.9	0.0	0.0	0.0	0.0	0.0	
Moderately Accommodating	28.4	11.1	43.9	25.2	10.6	41.2	30.2	37.1	39.5	36.5	32.0	0.0	0.0	57.4	0.0	0.0	47.9	
Very Accommodating	45.6	67.0	34.7	25.2	59.4	41.8	42.1	22.3	23.2	50.5	34.0	57.4	87.0	34.5	88.1	100.0	24.5	
Extremely Accommodating	23.5	21.9	0.0	49.6	30.1	16.9	27.7	35.8	32.7	13.0	22.7	28.7	13.0	8.0	11.9	0.0	27.5	
SUC																		
Not Accommodating	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Slightly Accommodating	1.7	0.0	30.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0	9.3	0.0	0.0	0.0	0.0	0.0	0.0	
Moderately Accommodating	15.2	0.0	39.1	12.4	27.6	24.3	21.4	26.5	8.0	7.8	0.0	4.6	14.0	55.4	0.0	0.0	2.5	
Very Accommodating	54.8	58.1	30.9	18.7	44.2	65.6	15.3	39.8	50.7	54.6	22.4	95.4	86.0	44.6	83.3	100.0	63.5	
Extremely Accommodating	28.2	41.9	0.0	68.9	28.2	7.0	63.3	33.7	41.3	37.7	68.3	0.0	0.0	0.0	16.7	0.0	34.0	
Private Firm																		
Not Accommodating	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Slightly Accommodating	1.7	0.0	0.0	0.0	0.0	22.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Moderately Accommodating	28.3	39.9	66.3	17.8	5.2	17.1	54.5	23.5	10.7	17.2	73.8	61.0	49.2	85.9	0.0	0.0	45.1	
Very Accommodating	43.7	60.1	33.7	50.1	66.7	60.8	0.0	31.3	45.2	17.2	26.2	39.0	50.8	14.1	80.0	100.0	22.3	
Extremely Accommodating	26.3	0.0	0.0	32.1	28.1	0.0	45.5	45.3	44.1	65.6	0.0	0.0	0.0	0.0	20.0	0.0	32.6	
PAO																		

Service Provider	ATI All Centers	ATI-ITCPH	ATI CAR	ATI-1	ATI-2	ATI-3	ATI-4A	ATI-4B	ATI-5	ATI-6	ATI-7	ATI-8	ATI-9	ATI-10	ATI-11	ATI-12	ATI-13
	n=658	n=30	n=36	n=61	n=51	n=26	n=38	n=83	n=60	n=34	n=22	n=44	n=19	n=17	n=43	n=23	n=71
Not Accommodating	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Slightly Accommodating	0.9	0.0	0.0	0.0	0.0	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Moderately Accommodating	7.7	11.9	11.7	4.5	0.0	5.4	19.0	11.5	6.8	12.7	5.8	5.5	12.5	16.6	0.0	0.0	1.5
Very Accommodating	45.0	37.7	82.9	13.5	75.1	50.3	28.9	38.8	47.0	17.9	45.4	41.8	24.9	72.8	37.7	56.3	38.1
Extremely Accommodating	46.4	50.4	5.4	82.0	24.9	35.5	52.0	49.7	46.2	69.4	48.8	52.7	62.6	10.5	62.3	43.7	60.4
MAO																	
Not Accommodating	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Slightly Accommodating	0.9	0.0	3.4	0.0	0.0	5.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Moderately Accommodating	7.3	12.9	0.0	4.9	5.0	8.8	8.1	8.1	5.0	4.7	5.2	24.0	0.0	6.0	0.0	15.3	0.0
Very Accommodating	44.5	47.4	74.5	24.3	61.1	53.4	22.9	24.4	34.6	22.6	52.1	58.0	39.5	58.4	51.0	14.4	39.0
Extremely Accommodating	47.2	39.7	22.1	70.9	33.9	32.0	69.0	64.2	60.5	72.7	42.7	18.0	60.5	35.6	49.0	70.3	61.0
Other Farmers																	
Not Accommodating	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Slightly Accommodating	3.1	0.0	0.0	0.0	0.0	16.5	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	18.8	0.0
Moderately Accommodating	24.1	40.4	19.0	15.3	0.0	21.6	53.8	13.9	33.1	0.0	41.4	43.0	0.0	69.9	0.0	18.8	6.9
Very Accommodating	48.8	59.6	61.9	0.0	60.2	40.3	18.2	46.1	55.5	50.5	58.6	49.0	100.0	30.1	62.8	22.6	93.1
Extremely Accommodating	24.0	0.0	19.0	84.7	39.8	21.6	27.9	40.0	11.4	49.5	0.0	0.0	0.0	0.0	37.2	39.7	0.0
Farmer Organization																	
Not Accommodating	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Slightly Accommodating	1.8	0.0	24.5	0.0	0.0	13.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Moderately Accommodating	14.9	0.0	37.8	19.8	6.6	21.7	11.4	3.6	10.3	17.1	0.0	36.0	8.1	61.9	12.8	0.0	2.4
Very Accommodating	56.6	77.6	0.0	45.2	76.8	64.4	67.7	34.8	36.2	37.5	91.0	59.5	58.9	29.2	62.8	19.6	70.6
Extremely Accommodating	26.7	22.4	37.8	35.0	16.6	0.0	20.9	61.5	53.5	45.5	9.0	4.5	33.0	8.8	24.5	80.4	27.0
Other Service Providers																	
Not Accommodating	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Slightly Accommodating	2.3	39.9	0.0	0.0	0.0	0.0	-	0.0	18.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Moderately Accommodating	20.4	0.0	0.0	0.0	30.9	0.0	-	18.5	0.0	36.2	41.4	14.1	0.0	61.3	0.0	0.0	0.0
Very Accommodating	46.8	60.1	100.0	34.4	42.3	0.0	-	39.3	81.2	0.0	58.6	85.9	100.0	38.7	100.0	100.0	29.1
Extremely Accommodating	30.5	0.0	0.0	65.6	26.8	100.0	-	42.2	0.0	63.8	0.0	0.0	0.0	0.0	0.0	0.0	70.9

Table 8. Level of comfort in interacting with the service provider

Service Provider	ATI All Centers	ATI-ITCPH	ATI CAR	ATI-1	ATI-2	ATI-3	ATI-4A	ATI-4B	ATI-5	ATI-6	ATI-7	ATI-8	ATI-9	ATI-10	ATI-11	ATI-12	ATI-13
	n=658	n=30	n=36	n=61	n=51	n=26	n=38	n=83	n=60	n=34	n=22	n=44	n=19	n=17	n=43	n=23	n=71
	percentage of respondents reporting																
DA-ATI																	
Very Uncomfortable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uncomfortable	0.1	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neutral	2.2	0.0	0.0	0.0	0.0	1.9	10.9	3.7	2.9	3.1	0.0	2.7	0.0	5.7	2.4	0.0	1.9
Comfortable	43.9	48.2	48.2	15.8	55.7	53.3	25.8	21.5	36.1	31.9	50.3	75.1	57.6	61.2	37.6	84.4	41.6
Very Comfortable	53.8	50.3	50.3	84.2	44.3	44.8	63.3	74.8	61	65.0	49.7	22.2	42.4	33.1	60.0	15.6	56.4
DENR																	
Very Uncomfortable	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uncomfortable	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neutral	26.0	25.4	24.5	28.5	0.0	12.1	30.4	55.2	44.0	29.2	20.7	18.7	17.4	83.7	6.0	0.0	48.5
Comfortable	54.3	66.7	75.5	14.2	79.4	52.2	51.3	23.8	14.6	56.2	70.7	42.7	65.3	16.3	73.5	100.0	38.5
Very Comfortable	19.0	7.9	0.0	57.3	20.6	35.7	18.3	21.0	37.0	0.0	8.6	38.6	17.4	0.0	20.6	0.0	13.0
DOST																	
Very Uncomfortable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uncomfortable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neutral	20.9	2.8	22.4	0.0	0.0	29.5	9.9	20.8	42.8	23.9	38.7	0.0	0.0	57.4	5.5	0.0	39.6
Comfortable	52.2	68.7	77.6	25.2	62.8	46.2	54.0	40.8	19.1	76.1	61.3	71.3	87.0	26.5	58.9	58.5	42.7
Very Comfortable	26.9	28.6	0.0	74.8	37.2	24.3	36.0	38.4	38.1	0.0	0.0	28.7	13.0	16.1	35.6	41.5	17.8
SUC																	
Very Uncomfortable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uncomfortable	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.3	0.0	0.0	0.0	0.0	0.0	0.0
Neutral	11.7	0.0	42.8	12.4	9.2	8.5	21.4	0.8	8.0	15.5	0.0	4.6	14.0	78.5	0.0	0.0	0.0
Comfortable	53.1	50.4	43.2	22.3	62.6	53.2	48.0	49.2	51.3	39.1	22.4	91.3	86.0	21.5	66.7	75.8	61.0
Very Comfortable	34.6	49.6	14.0	65.3	28.2	38.4	30.6	42.8	40.8	45.4	68.3	4.1	0.0	0.0	33.3	24.2	39.0
Private Firm																	
Very Uncomfortable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uncomfortable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neutral	22.6	20.0	0.0	27.1	9.4	28.9	54.5	14.8	9.8	17.2	36.9	61.0	24.6	73.6	0.0	0.0	8.1
Comfortable	53.1	80.0	100.0	40.8	71.9	71.1	0.0	49.1	40.1	17.2	63.1	39.0	75.4	26.4	80.0	100.0	67.4
Very Comfortable	24.3	0.0	0.0	32.1	18.7	0.0	45.5	36.1	50.1	65.6	0.0	0.0	0.0	0.0	20.0	0.0	24.4
PAO																	

Service Provider	ATI All Centers	ATI-ITCPH	ATI CAR	ATI-1	ATI-2	ATI-3	ATI-4A	ATI-4B	ATI-5	ATI-6	ATI-7	ATI-8	ATI-9	ATI-10	ATI-11	ATI-12	ATI-13
	n=658	n=30	n=36	n=61	n=51	n=26	n=38	n=83	n=60	n=34	n=22	n=44	n=19	n=17	n=43	n=23	n=71
Very Uncomfortable	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uncomfortable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neutral	3.6	3.6	0.0	0.0	0.0	0.0	10.4	6.0	5.1	4.4	0.0	1.7	6.0	22.7	0.0	0.0	1.5
Comfortable	43.9	48.2	78.0	4.5	68.5	44.1	33.0	40.1	47.5	12.9	51.2	45.8	24.9	61.5	32.9	42.3	37.0
Very Comfortable	52.3	48.2	22.0	95.5	31.5	55.9	56.6	53.9	47.3	78.9	48.8	52.5	69.1	15.8	67.1	57.7	61.5
MAO																	
Very Uncomfortable	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uncomfortable	0.4	0.0	3.4	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neutral	6.3	3.5	0.0	0.0	0.0	9.2	14.8	9.9	3.5	9.3	0.0	22.5	0.0	11.3	5.3	0.0	0.0
Comfortable	40.6	40.8	58.6	9.7	58.5	47.9	20.6	22.8	34.9	13.3	47.7	60.8	39.1	48.7	40.8	44.1	38.2
Very Comfortable	52.6	55.6	38.0	85.4	41.5	42.9	64.6	65.8	61.6	77.4	52.3	16.7	60.9	40.1	53.8	55.9	61.8
Other Farmers																	
Very Uncomfortable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uncomfortable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neutral	13.4	0.0	0.0	0.0	0.0	0.0	53.8	0.0	20	0.0	17.2	26.4	0.0	69.9	0.0	18.8	9.2
Comfortable	58.6	86.2	43.4	15.3	58.2	61.9	18.2	60.0	68.7	23.4	65.7	73.6	100.0	30.1	88.3	57.5	90.8
Very Comfortable	28.0	13.8	56.6	84.7	41.8	38.1	27.9	40.0	11.4	76.6	17.2	0.0	0.0	0.0	11.7	23.6	0.0
Farmer Organization																	
Very Uncomfortable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uncomfortable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neutral	8.4	0.0	0.0	0.0	0.0	0.0	11.4	3.6	3.6	17.1	0.0	14.8	8.1	72.1	0.0	0.0	0.0
Comfortable	56.2	77.6	24.5	45.2	80.1	15.3	38.7	49.3	42.9	46.8	91.0	80.7	58.9	19.0	88.3	48.3	73.0
Very Comfortable	35.4	22.4	75.5	54.8	19.9	84.7	49.9	47.0	53.5	36.1	9.0	4.5	33.0	8.8	11.7	51.7	27.0
Other Service Providers																	
Very Uncomfortable	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uncomfortable	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neutral	18.9	39.9	0.0	0.0	9.6	0.0	-	11.9	18.8	36.2	17.2	14.1	0.0	87.7	0.0	0.0	0.0
Comfortable	46.6	60.1	100.0	17.2	58.2	0.0	-	54.7	81.2	0.0	82.8	85.9	100.0	12.3	100.0	81.0	21.0
Very Comfortable	34.5	0.0	0.0	82.8	32.2	100.0	-	33.4	0.0	63.8	0.0	0.0	0.0	0.0	0.0	19.0	79.0

Table 9. Level of satisfaction with the extension services accessed from service provider

Service Provider	ATI All Centers	ATI-ITCPH	ATI CAR	ATI-1	ATI-2	ATI-3	ATI-4A	ATI-4B	ATI-5	ATI-6	ATI-7	ATI-8	ATI-9	ATI-10	ATI-11	ATI-12	ATI-13
	n=658	n=30	n=36	n=61	n=51	n=26	n=38	n=83	n=60	n=34	n=22	n=44	n=19	n=17	n=43	n=23	n=71
	percentage of respondents reporting																
DA-ATI																	
Very Dissatisfied	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dissatisfied	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neutral	3.1	0.0	0.0	2.4	3.9	0.0	16.1	3.2	2.9	3.1	0.0	2.7	0.0	15.7	0.0	0.0	1.9
Satisfied	40.3	27.5	78.3	12.2	50.9	50.7	12.3	33.5	34.8	17.6	47.4	70.7	52.2	46.3	52.1	76.3	39.0
Very Satisfied	56.4	72.5	21.7	85.5	45.2	49.3	71.6	61.8	62.3	79.3	52.6	26.6	47.8	38.1	47.9	23.7	59.1
DENR																	
Very Dissatisfied	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dissatisfied	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neutral	27.1	17.5	0.0	14.2	8.3	12.1	30.4	63.5	48.4	43.8	20.7	18.7	17.4	83.7	0.0	0.0	61.2
Satisfied	54.4	74.6	100.0	28.5	71.1	46.4	51.3	23.8	24.3	56.2	67.2	42.7	65.3	16.3	78.7	95.0	29.7
Very Satisfied	18.5	7.9	0.0	57.3	20.6	41.5	18.3	12.7	27.3	0.0	12.1	38.6	17.4	0.0	21.3	5.0	9.1
DOST																	
Very Dissatisfied	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dissatisfied	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neutral	24.0	11.1	22.4	0.0	7.0	29.5	0.0	20.8	38.7	49.1	27.3	13.9	0.0	67.9	0.0	0.0	50.6
Satisfied	49.3	49.3	77.6	0.0	61.3	46.2	88.9	37.9	28.6	25.2	61.3	57.4	87.0	16.1	88.1	58.5	31.2
Very Satisfied	26.7	39.6	0.0	100.0	31.7	24.3	11.1	41.3	32.7	25.6	11.3	28.7	13.0	16.1	11.9	41.5	18.2
SUC																	
Very Dissatisfied	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dissatisfied	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.3	0.0	0.0	0.0	0.0	0.0	0.0
Neutral	9.8	0.0	13.2	6.2	0.0	0.0	21.4	4.9	10.8	15.5	0.0	4.6	14.0	89.2	0.0	24.2	3.4
Satisfied	59.2	50.4	72.8	34.5	81.0	77.8	48.0	55.5	50.4	46.8	22.4	91.3	86.0	0.0	66.7	75.8	63.5
Very Satisfied	30.4	49.6	14.0	59.3	19.0	22.2	30.6	39.7	38.8	37.7	68.3	4.1	0.0	10.8	33.3	0.0	33.2
Private Firm																	
Very Dissatisfied	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dissatisfied	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neutral	25.5	0.0	0.0	18.1	14.6	39.2	0.0	14.8	13.1	48.5	36.9	61.0	49.2	85.9	0.0	0.0	8.1
Satisfied	49.7	100.0	100.0	49.9	66.7	60.8	54.5	45.7	30.0	17.2	63.1	39.0	50.8	14.1	80.0	100.0	61.4
Very Satisfied	24.8	0.0	0.0	32.1	18.7	0.0	45.5	39.5	56.9	34.4	0.0	0.0	0.0	0.0	20.0	0.0	30.5
PAO																	

Service Provider	ATI All Centers	ATI-ITCPH	ATI CAR	ATI-1	ATI-2	ATI-3	ATI-4A	ATI-4B	ATI-5	ATI-6	ATI-7	ATI-8	ATI-9	ATI-10	ATI-11	ATI-12	ATI-13
	n=658	n=30	n=36	n=61	n=51	n=26	n=38	n=83	n=60	n=34	n=22	n=44	n=19	n=17	n=43	n=23	n=71
Very Dissatisfied	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dissatisfied	0.2	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neutral	3.7	7.1	0.0	0.0	0.0	0.0	0.0	7.8	6.7	4.4	5.8	1.7	0.0	17.4	0.0	0.0	1.5
Satisfied	49.6	45.8	97.1	22.4	70.5	50.9	39.3	51.7	47.7	35.2	55.3	0.4	43.0	52.7	37.7	57.7	41.9
Very Satisfied	46.5	47.0	2.9	77.6	29.5	49.1	60.7	38.5	45.5	60.0	38.9	55.9	57.0	29.8	62.3	42.3	56.7
MAO																	
Very Dissatisfied	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dissatisfied	0.4	0.0	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0
Neutral	6.5	3.5	0.0	0.0	0.0	5.8	10.4	10.4	5.0	14.0	5.2	21.0	0.0	12.0	5.3	0.0	0.0
Satisfied	42.8	37.3	72.6	4.9	67.0	44.1	34.3	26.0	31.9	22.8	52.1	60.8	39.5	47.9	40.8	62.1	38.2
Very Satisfied	50.4	59.2	27.4	90.3	33.0	50.1	55.3	63.5	63.1	63.3	42.7	16.7	60.5	40.1	53.8	37.9	61.8
Other Farmers																	
Very Dissatisfied	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dissatisfied	0.0	0.0	0.0	0.0	0.0	78.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neutral	18.4	0.0	0.0	15.3	0.0	0.0	53.8	23.0	21.4	0.0	17.2	26.4	0.0	83.9	0.0	18.8	0.0
Satisfied	55.7	86.2	43.4	39.4	67.7	0.0	18.2	35.2	61.5	23.4	65.7	66.6	100.0	16.1	75.5	50.0	100.0
Very Satisfied	26.0	13.8	56.6	45.3	32.3	21.6	27.9	41.8	17.1	76.6	17.2	7.0	0.0	0.0	24.5	31.2	0.0
Farmer Organization																	
Very Dissatisfied	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dissatisfied	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neutral	12.9	0.0	0.0	9.9	12.5	13.9	11.4	3.6	3.6	26.4	0.0	14.8	8.1	73.5	12.8	0.0	0.0
Satisfied	56.9	62.7	62.2	55.1	70.9	53.8	38.7	39.2	42.9	37.5	78.2	80.7	58.9	17.7	75.5	81.6	69.8
Very Satisfied	30.2	37.3	37.8	35.0	16.6	32.3	49.9	57.1	53.5	36.1	21.8	4.5	33.0	8.8	11.7	18.4	30.2
Other Service Providers																	
Very Dissatisfied	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dissatisfied	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neutral	16.1	39.9	0.0	0.0	9.6	0.0	-	6.6	0.0	36.2	17.2	14.1	0.0	73.6	0.0	0.0	0.0
Satisfied	53.0	0.0	100.0	39.3	58.2	0.0	-	76.7	100.0	0.0	82.8	85.9	100.0	26.4	100.0	100.0	29.1
Very Satisfied	31.0	60.1	0.0	60.7	32.2	100.0	-	16.7	0.0	63.8	0.0	0.0	0.0	0.0	0.0	0.0	70.9

Table 10. Rating of DA-ATI extension services provided to AF extension workers in terms of importance, by training center

Training Center		Very important	Important	Moderately important	Slightly important	Not important
		percentage of respondents reporting				
ATI All Training Centers	n=658	76.2	17.3	2.5	3.1	0.8
ATI-ITCPH	n=30	88.0	4.9	1.4	2.8	2.8
ATI – CAR	n=36	83.6	16.4	0.0	0.0	0.0
ATI – Region 1	n=61	93.2	6.8	0.0	0.0	0.0
ATI – Region 2	n=51	65.5	21.3	7.0	6.1	0.0
ATI – Region 3	n=26	53.4	42.4	0.0	4.3	0.0
ATI – Region 4-A	n=38	89.7	4.6	5.7	0.0	0.0
ATI - Region 4-B	n=83	82.9	10.9	0.0	2.4	3.8
ATI – Region 5	n=60	75.9	19.3	3.3	1.5	0.0
ATI – Region 6	n=34	76.5	12.3	11.2	0.0	0.0
ATI – Region 7	n=22	79.8	16.8	0.0	3.5	0.0
ATI – Region 8	n=44	42.3	42.5	2.7	12.5	0.0
ATI – Region 9	n=19	78.8	21.2	0.0	0.0	0.0
ATI – Region 10	n=17	94.3	5.7	0.0	0.0	0.0
ATI – Region 11	n=43	69.3	23.6	2.2	2.4	2.4
ATI – Region 12	n=23	25.4	33.5	15.2	20.2	5.8
ATI – Region 13	n=71	88.3	10.9	0.0	0.7	0.0

Table 11. Rating of DA-ATI extension services provided to AF extension workers in terms of quality, by training center

Training Center		Very good	Good	Acceptable	Poor	Very poor
		percentage of respondents reporting				
ATI All Training Centers	n=658	71.7	25.0	2.7	0.2	0.4
ATI-ITCPH	n=30	90.8	7.8	1.4	0.0	0.0
ATI – CAR	n=36	89.2	10.8	0.0	0.0	0.0
ATI – Region 1	n=61	84.9	13.6	1.5	0.0	0.0
ATI – Region 2	n=51	65.9	28.0	6.1	0.0	0.0
ATI – Region 3	n=26	57.0	34.5	8.5	0.0	0.0
ATI – Region 4-A	n=38	91.3	7.1	1.6	0.0	0.0
ATI - Region 4-B	n=83	76.7	18.1	2.7	1.1	1.4
ATI – Region 5	n=60	76.2	22.4	1.5	0.0	0.0
ATI – Region 6	n=34	73.3	21.1	0.0	0.0	5.6
ATI – Region 7	n=22	65.2	34.8	0.0	0.0	0.0
ATI – Region 8	n=44	36.5	57.6	4.4	1.4	0.0
ATI – Region 9	n=19	89.6	10.4	0.0	0.0	0.0
ATI – Region 10	n=17	89.3	10.7	0.0	0.0	0.0
ATI – Region 11	n=43	50.7	46.8	2.4	0.0	0.0
ATI – Region 12	n=23	13.8	71.9	14.2	0.0	0.0
ATI – Region 13	n=71	68.6	31.4	0.0	0.0	0.0

Table 12. Rating of DA-ATI extension services provided to AF extension workers in terms of relevance, by training center

Training Center		Very relevant	Fairly relevant	Somewhat relevant	Not relevant
		percentage of respondents reporting			
ATI All Training Centers	n=658	82.1	15.1	2.7	0.2
ATI-ITCPH	n=30	90.8	4.2	4.9	0.0
ATI – CAR	n=36	94.2	5.8	0.0	0.0
ATI – Region 1	n=61	92.5	7.5	0.0	0.0
ATI – Region 2	n=51	71.0	26.1	2.9	0.0
ATI – Region 3	n=26	63.9	31.8	4.3	0.0
ATI – Region 4-A	n=38	97.0	3.0	0.0	0.0
ATI - Region 4-B	n=83	92.4	3.8	2.4	1.4
ATI – Region 5	n=60	92.7	7.3	0.0	0.0
ATI – Region 6	n=34	96.9	3.1	0.0	0.0
ATI – Region 7	n=22	73.4	21.7	4.9	0.0
ATI – Region 8	n=44	42.3	56.2	1.4	0.0
ATI – Region 9	n=19	94.9	5.1	0.0	0.0
ATI – Region 10	n=17	100.0	0.0	0.0	0.0
ATI – Region 11	n=43	74.2	16.7	9.1	0.0
ATI – Region 12	n=23	56.1	26.3	14.8	2.7
ATI – Region 13	n=71	80.2	15.8	4.0	0.0

Table 13. Degree of knowledge gained from trainings/interventions received by training center

Training Center		I believe that I have gained substantial knowledge, facts, and concepts from the trainings	I perceive a moderate increase in knowledge, facts, and concepts from the training	I'm unsure whether my knowledge has changed	My knowledge has not significantly improved	I have not gained any knowledge from the training
		percentage of respondents reporting				
ATI All Training Centers	n=658	89.3	9.7	1.0	0.0	0.0
ATI-ITCPH	n=30	92.9	7.1	0.0	0.0	0.0
ATI – CAR	n=36	81.8	18.2	0.0	0.0	0.0
ATI – Region 1	n=61	91.0	9.0	0.0	0.0	0.0
ATI – Region 2	n=51	97.1	2.9	0.0	0.0	0.0
ATI – Region 3	n=26	79.9	20.1	0.0	0.0	0.0
ATI – Region 4-A	n=38	79.7	7.4	12.8	0.0	0.0
ATI - Region 4-B	n=83	96.0	3.1	0.9	0.0	0.0
ATI – Region 5	n=60	94.7	5.3	0.0	0.0	0.0
ATI – Region 6	n=34	96.9	3.1	0.0	0.0	0.0
ATI – Region 7	n=22	60.9	39.1	0.0	0.0	0.0
ATI – Region 8	n=44	93.4	6.6	0.0	0.0	0.0
ATI – Region 9	n=19	100.0	0.0	0.0	0.0	0.0
ATI – Region 10	n=17	90.1	9.9	0.0	0.0	0.0
ATI – Region 11	n=43	95.2	4.8	0.0	0.0	0.0
ATI – Region 12	n=23	79.8	20.2	0.0	0.0	0.0
ATI – Region 13	n=71	96.7	3.3	0.0	0.0	0.0

Table 14. Degree of knowledge retention and application from trainings/interventions received, by training center

Training Center		I consistently retain and effectively apply the knowledge	I retain some knowledge but inconsistently apply it	I struggle to retain and apply the knowledge	I forget most of the knowledge gained
		percentage of respondents reporting			
ATI All Training Centers	n=658	82.1	16.6	0.7	0.6
ATI-ITCPH	n=30	74.7	21.1	0.0	4.2
ATI – CAR	n=36	76.1	21.5	2.5	0.0
ATI – Region 1	n=61	85.7	14.3	0.0	0.0
ATI – Region 2	n=51	93.1	6.9	0.0	0.0
ATI – Region 3	n=26	59.9	35.8	4.3	0.0
ATI – Region 4-A	n=38	74.6	18.3	3.0	4.1
ATI - Region 4-B	n=83	79.7	19.4	0.9	0.0
ATI – Region 5	n=60	94.9	5.1	0.0	0.0
ATI – Region 6	n=34	94.2	5.8	0.0	0.0
ATI – Region 7	n=22	74.4	25.6	0.0	0.0
ATI – Region 8	n=44	96.7	3.3	0.0	0.0
ATI – Region 9	n=19	100.0	0.0	0.0	0.0
ATI – Region 10	n=17	85.1	14.9	0.0	0.0
ATI – Region 11	n=43	71.2	28.8	0.0	0.0
ATI – Region 12	n=23	62.9	37.1	0.0	0.0
ATI – Region 13	n=71	89.7	10.3	0.0	0.0

Table 15. Changes in attitude and beliefs related to the training, by training center

Training Center		I believe that my attitude and beliefs have changed for the better toward the concepts and the topics discussed	I perceive moderate change in attitude and belief related to the training	I'm not sure if my attitude and beliefs have changed	My attitude and beliefs have not changed
		percentage of respondents reporting			
ATI All Training Centers	n=658	81.3	12.3	2.7	3.6
ATI-ITCPH	n=30	78.9	3.5	11.2	6.4
ATI – CAR	n=36	83.7	10.0	3.8	2.5
ATI – Region 1	n=61	90.1	9.9	0.0	0.0
ATI – Region 2	n=51	95.5	4.5	0.0	0.0
ATI – Region 3	n=26	62.7	29.1	8.2	0.0
ATI – Region 4-A	n=38	66.8	18.8	7.1	7.4
ATI - Region 4-B	n=83	90.9	6.7	2.4	0.0
ATI – Region 5	n=60	90.0	5.3	0.0	4.7
ATI – Region 6	n=34	78.6	21.4	0.0	0.0
ATI – Region 7	n=22	58.3	27.8	0.0	13.9
ATI – Region 8	n=44	96.7	3.3	0.0	0.0
ATI – Region 9	n=19	100.0	0.0	0.0	0.0
ATI – Region 10	n=17	90.1	9.9	0.0	0.0
ATI – Region 11	n=43	59.6	9.7	4.5	26.2
ATI – Region 12	n=23	53.1	34.4	5.8	6.7
ATI – Region 13	n=71	85.6	14.4	0.0	0.0

Table 16. Impact in attitude and beliefs related to the training, by training center

Training Center		I am highly motivated and committed to applying in my work what I learned from the training	I am somewhat motivated and committed to applying in my work what I learned from the training	I am not motivated and committed to applying in my work what I learned from the training
		percentage of respondents reporting		
ATI All Training Centers	n=658	85.7	13.8	0.5
ATI-ITCPH	n=30	82.4	17.6	0.0
ATI – CAR	n=36	79.9	17.6	2.5
ATI – Region 1	n=61	90.1	9.9	0.0
ATI – Region 2	n=51	94.3	5.7	0.0
ATI – Region 3	n=26	64.7	32.0	3.3
ATI – Region 4-A	n=38	77.6	22.4	0.0
ATI - Region 4-B	n=83	88.2	11.8	0.0
ATI – Region 5	n=60	98.4	1.6	0.0
ATI – Region 6	n=34	84.7	15.3	0.0
ATI – Region 7	n=22	68.5	31.5	0.0
ATI – Region 8	n=44	96.7	3.3	0.0
ATI – Region 9	n=19	94.9	5.1	0.0
ATI – Region 10	n=17	95.0	5.0	0.0
ATI – Region 11	n=43	92.7	7.3	0.0
ATI – Region 12	n=23	49.4	44.9	5.8
ATI – Region 13	n=71	97.3	2.7	0.0

Table 17. Openness to change related to the training, by training center

Training Center		I am willing to embrace new ideas and approaches	I am not open much to new ideas and approaches
		percentage of respondents reporting	
ATI All Training Centers	n=658	99.0	1.0
ATI-ITCPH	n=30	100.0	0.0
ATI – CAR	n=36	100.0	0.0
ATI – Region 1	n=61	100.0	0.0
ATI – Region 2	n=51	100.0	0.0
ATI – Region 3	n=26	100.0	0.0
ATI – Region 4-A	n=38	100.0	0.0
ATI - Region 4-B	n=83	100.0	0.0
ATI – Region 5	n=60	100.0	0.0
ATI – Region 6	n=34	100.0	0.0
ATI – Region 7	n=22	100.0	0.0
ATI – Region 8	n=44	100.0	0.0
ATI – Region 9	n=19	94.9	5.1
ATI – Region 10	n=17	94.3	5.7
ATI – Region 11	n=43	100.0	0.0
ATI – Region 12	n=23	73.3	26.7
ATI – Region 13	n=71	100.0	0.0

Table 18. Skills acquisition

Training Center		I have developed practical skills, techniques, and competencies during training	I have somewhat developed practical skills, techniques, and competencies	I have not acquired the skill
		percentage of respondents reporting		
ATI All Training Centers	n=658	88.5	10.7	0.8
ATI-ITCPH	n=30	97.2	2.8	0.0
ATI – CAR	n=36	79.9	15.2	4.9
ATI – Region 1	n=61	91.6	8.4	0.0
ATI – Region 2	n=51	93.6	6.4	0.0
ATI – Region 3	n=26	69.1	30.9	0.0
ATI – Region 4-A	n=38	91.3	8.7	0.0
ATI - Region 4-B	n=83	96.0	4.0	0.0
ATI – Region 5	n=60	93.1	6.9	0.0
ATI – Region 6	n=34	93.9	6.1	0.0
ATI – Region 7	n=22	86.7	13.3	0.0
ATI – Region 8	n=44	96.7	3.3	0.0
ATI – Region 9	n=19	84.2	10.4	5.4
ATI – Region 10	n=17	80.1	19.9	0.0
ATI – Region 11	n=43	81.0	19.0	0.0
ATI – Region 12	n=23	37.9	43.9	18.3
ATI – Region 13	n=71	95.3	4.7	0.0

Table 19. Skills application and transfer

Training Center		I applied the skills I learned from the training in work and daily life	I have not applied the skills learned
		percentage of respondents reporting	
ATI All Training Centers	n=658	95.1	4.9
ATI-ITCPH	n=30	90.1	9.9
ATI – CAR	n=36	91.3	8.7
ATI – Region 1	n=61	98.5	1.5
ATI – Region 2	n=51	100.0	0.0
ATI – Region 3	n=26	92.7	7.3
ATI – Region 4-A	n=38	85.6	14.4
ATI - Region 4-B	n=83	95.7	4.3
ATI – Region 5	n=60	98.4	1.6
ATI – Region 6	n=34	100.0	0.0
ATI – Region 7	n=22	100.0	0.0
ATI – Region 8	n=44	93.4	6.6
ATI – Region 9	n=19	89.2	10.8
ATI – Region 10	n=17	95.0	5.0
ATI – Region 11	n=43	100.0	0.0
ATI – Region 12	n=23	75.0	25.0
ATI – Region 13	n=71	100.0	0.0

Table 20. Passing the post-test

Training Center		Yes	No
		percentage of respondents reporting	
ATI All Training Centers	n=658	93.7	6.3
ATI-ITCPH	n=30	93.6	6.4
ATI – CAR	n=36	87.5	12.5
ATI – Region 1	n=61	93.8	6.2
ATI – Region 2	n=51	100.0	0.0
ATI – Region 3	n=26	95.7	4.3
ATI – Region 4-A	n=38	91.5	8.5
ATI - Region 4-B	n=83	99.1	0.9
ATI – Region 5	n=60	100.0	0.0
ATI – Region 6	n=34	93.9	6.1
ATI – Region 7	n=22	96.5	3.5
ATI – Region 8	n=44	96.7	3.3
ATI – Region 9	n=19	94.6	5.4
ATI – Region 10	n=17	100.0	0.0
ATI – Region 11	n=43	52.8	47.2
ATI – Region 12	n=23	73.7	26.3
ATI – Region 13	n=71	100.0	0.0

Table 21. TESDA National Competency Certification

Training Center		Yes	No
		percentage of respondents reporting	
ATI All Training Centers	n=658	35.7	64.3
ATI-ITCPH	n=30	38.0	62.0
ATI – CAR	n=36	29.4	70.6
ATI – Region 1	n=61	17.0	83.0
ATI – Region 2	n=51	51.8	48.2
ATI – Region 3	n=26	38.5	61.5
ATI – Region 4-A	n=38	39.2	60.8
ATI - Region 4-B	n=83	26.1	73.9
ATI – Region 5	n=60	45.1	54.9
ATI – Region 6	n=34	32.1	67.9
ATI – Region 7	n=22	20.1	79.9
ATI – Region 8	n=44	35.2	64.8
ATI – Region 9	n=19	55.2	44.8
ATI – Region 10	n=17	50.5	49.5
ATI – Region 11	n=43	39.4	60.6
ATI – Region 12	n=23	28.0	72.0
ATI – Region 13	n=71	44.0	56.0

Table 22. Level of certification obtained

Training Center		Level I	Level II	Level III	Level IV
		percentage of respondents reporting			
ATI All Training Centers	n=658	7.7	73.0	17.3	2.0
ATI-ITCPH	n=30	0.0	94.0	6.0	0.0
ATI – CAR	n=36	0.0	90.4	9.6	0.0
ATI – Region 1	n=61	19.0	62.1	18.8	0.0
ATI – Region 2	n=51	4.4	80.5	15.1	0.0
ATI – Region 3	n=26	15.1	53.2	11.5	20.1
ATI – Region 4-A	n=38	5.4	94.6	0.0	0.0
ATI - Region 4-B	n=83	27.2	72.8	0.0	0.0
ATI – Region 5	n=60	4.2	62.0	29.6	4.2
ATI – Region 6	n=34	30.3	40.8	28.9	0.0
ATI – Region 7	n=22	0.0	100.0	0.0	0.0
ATI – Region 8	n=44	0.0	87.8	12.2	0.0
ATI – Region 9	n=19	0.0	100.0	0.0	0.0
ATI – Region 10	n=17	0.0	69.0	31.0	0.0
ATI – Region 11	n=43	11.6	88.4	0.0	0.0
ATI – Region 12	n=23	32.8	67.2	0.0	0.0
ATI – Region 13	n=71	1.6	33.8	64.6	0.0

Table 23. Prepared an action plan

Training Center		Yes	No
		percentage of respondents reporting	
ATI All Training Centers	n=658	56.9	43.1
ATI-ITCPH	n=30	40.7	59.3
ATI – CAR	n=36	70.0	30.0
ATI – Region 1	n=61	83.9	16.1
ATI – Region 2	n=51	36.0	64.0
ATI – Region 3	n=26	72.4	27.6
ATI – Region 4-A	n=38	21.4	78.6
ATI - Region 4-B	n=83	69.8	30.2
ATI – Region 5	n=60	94.7	5.3
ATI – Region 6	n=34	61.2	38.8
ATI – Region 7	n=22	54.6	45.4
ATI – Region 8	n=44	27.7	72.3
ATI – Region 9	n=19	63.0	37.0
ATI – Region 10	n=17	77.9	22.1
ATI – Region 11	n=43	4.5	95.5
ATI – Region 12	n=23	2.7	97.3
ATI – Region 13	n=71	86.3	13.7

Table 24. Implemented action plan

Training Center		Yes	No
		percentage of respondents reporting	
ATI All Training Centers	n=658	77.3	22.7
ATI-ITCPH	n=30	67.4	32.6
ATI – CAR	n=36	75.5	24.5
ATI – Region 1	n=61	83.0	17.0
ATI – Region 2	n=51	79.7	20.3
ATI – Region 3	n=26	95.5	4.5
ATI – Region 4-A	n=38	61.5	38.5
ATI - Region 4-B	n=83	78.6	21.4
ATI – Region 5	n=60	91.1	8.9
ATI – Region 6	n=34	85.8	14.2
ATI – Region 7	n=22	83.5	16.5
ATI – Region 8	n=44	49.5	50.5
ATI – Region 9	n=19	100.0	0.0
ATI – Region 10	n=17	93.6	6.4
ATI – Region 11	n=43	100.0	0.0
ATI – Region 12	n=23	0.0	100.0
ATI – Region 13	n=71	37.1	62.9

Table 25. Number of barangays covered by action plan

Training Center		21 to 30	31 to 40	41 to 50	50 and above
		percentage of respondents reporting			
ATI All Training Centers	n=658	22.6	30.4	23.9	23.2
ATI-ITCPH	n=30	17.5	30.8	33.5	18.2
ATI – CAR	n=36	17.2	37.0	17.7	28.0
ATI – Region 1	n=61	32.0	27.2	31.8	9.0
ATI – Region 2	n=51	29.7	21.7	15.2	33.5
ATI – Region 3	n=26	15.9	29.7	23.5	30.9
ATI – Region 4-A	n=38	26.6	15.3	24.3	33.9
ATI - Region 4-B	n=83	39.1	24.9	17.2	18.7
ATI – Region 5	n=60	12.9	36.2	26.0	24.9
ATI – Region 6	n=34	23.8	35.8	26.1	14.3
ATI – Region 7	n=22	3.5	27.6	37.6	31.3
ATI – Region 8	n=44	18.2	25.7	15.7	40.4
ATI – Region 9	n=19	26.3	31.6	25.9	16.1
ATI – Region 10	n=17	29.8	54.5	5.0	10.7
ATI – Region 11	n=43	14.3	49.3	36.4	0.0
ATI – Region 12	n=23	15.2	52.7	17.9	14.2
ATI – Region 13	n=71	21.9	29.6	22.0	26.4

Table 26. Resources provided by LGU

Training Center		Budget	Supplies and materials	Transportation/Vehicle	Additional personnel	Farm inputs	Others
ATI All Training Centers	n=658	21.7	21.8	20.1	12.0	9.3	7.9
ATI-ITCPH	n=30	16.8	12.0	0.0	0.0	0.0	0.0
ATI – CAR	n=36	11.4	17.3	38.9	7.8	0.0	25.5
ATI – Region 1	n=61	31.1	47.8	53.8	28.1	19.8	10.5
ATI – Region 2	n=51	15.0	16.4	8.6	2.9	8.6	5.6
ATI – Region 3	n=26	47.7	35.7	36.4	30.9	31.2	8.5
ATI – Region 4-A	n=38	4.1	9.0	3.0	0.0	1.9	0.0
ATI - Region 4-B	n=83	16.4	21.8	13.3	6.6	3.5	17.0
ATI – Region 5	n=60	68.3	27.7	20.4	20.7	13.9	6.6
ATI – Region 6	n=34	35.1	43.8	32.6	14.5	17.5	5.6
ATI – Region 7	n=22	7.0	18.0	15.3	17.2	4.9	22.1
ATI – Region 8	n=44	5.4	8.1	11.0	4.2	4.0	0.0
ATI – Region 9	n=19	5.4	5.4	42.4	42.1	10.4	5.4
ATI – Region 10	n=17	39.8	53.0	38.1	24.9	19.9	9.9
ATI – Region 11	n=43	2.2	4.5	0.0	0.0	4.5	0.0
ATI – Region 12	n=23	0.0	0.0	0.0	0.0	0.0	0.0
ATI – Region 13	n=71	20.9	7.4	12.0	6.9	4.8	2.9

Table 27. Sufficiency of resources

Training Center		Yes	No
		percentage of respondents reporting	
ATI All Training Centers	n=658	73.2	26.8
ATI-ITCPH	n=30	33.5	66.5
ATI – CAR	n=36	55.9	44.1
ATI – Region 1	n=61	85.9	14.1
ATI – Region 2	n=51	78.5	21.5
ATI – Region 3	n=26	77.0	23.0
ATI – Region 4-A	n=38	53.9	46.1
ATI - Region 4-B	n=83	65.1	34.9
ATI – Region 5	n=60	78.8	21.2
ATI – Region 6	n=34	45.4	54.6
ATI – Region 7	n=22	77.2	22.8
ATI – Region 8	n=44	60.5	39.5
ATI – Region 9	n=19	83.4	16.6
ATI – Region 10	n=17	100.0	0.0
ATI – Region 11	n=43	100.0	0.0
ATI – Region 12	n=23	-	-
ATI – Region 13	n=71	73.9	26.1

Table 28. Extent of help to the farmers in implementing the plan

Training Center		Not at all helpful	Slightly helpful	Somewhat helpful	Very helpful	Extremely helpful
		percentage of respondents reporting				
ATI All Training Centers	n=658	0.7	2.0	8.0	48.3	41.0
ATI-ITCPH	n=30	0.0	0.0	45.9	36.0	18.0
ATI – CAR	n=36	0.0	7.2	0.0	88.9	3.9
ATI – Region 1	n=61	0.0	0.0	4.3	22.7	73.0
ATI – Region 2	n=51	0.0	8.3	20.9	53.6	17.2
ATI – Region 3	n=26	0.0	0.0	8.8	85.0	6.1
ATI – Region 4-A	n=38	0.0	0.0	0.0	68.7	31.3
ATI - Region 4-B	n=83	0.0	2.5	4.6	18.9	74.0
ATI – Region 5	n=60	0.0	0.0	8.9	28.3	62.9
ATI – Region 6	n=34	10.6	10.8	6.0	49.2	23.4
ATI – Region 7	n=22	0.0	0.0	0.0	37.1	62.9
ATI – Region 8	n=44	0.0	0.0	9.2	80.3	10.5
ATI – Region 9	n=19	0.0	0.0	8.0	74.9	17.1
ATI – Region 10	n=17	0.0	0.0	0.0	100.0	0.0
ATI – Region 11	n=43	0.0	0.0	0.0	50.0	50.0
ATI – Region 12	n=23	-	-	-	-	-
ATI – Region 13	n=71	3.0	2.2	6.1	34.4	54.3

Table 29. Rating on the action plan in terms of

Training Center		Relevance	Effectiveness	Efficiency	Sustainability
		percentage of respondents reporting			
ATI All Training Centers	n=658	87.0	91.0	88.5	86.1
ATI-ITCPH	n=30	67.0	92.2	72.1	69.6
ATI – CAR	n=36	95.3	91.7	95.3	91.7
ATI – Region 1	n=61	100.0	100.0	97.8	100.0
ATI – Region 2	n=51	74.5	87.0	82.8	74.5
ATI – Region 3	n=26	87.7	100.0	100.0	100.0
ATI – Region 4-A	n=38	100.0	100.0	68.7	68.7
ATI - Region 4-B	n=83	79.1	78.7	79.1	76.2
ATI – Region 5	n=60	96.2	92.8	87.3	85.4
ATI – Region 6	n=34	89.4	77.8	83.6	83.6
ATI – Region 7	n=22	59.9	80.2	92.8	80.2
ATI – Region 8	n=44	69.7	81.6	72.4	60.5
ATI – Region 9	n=19	83.9	83.9	75.9	75.9
ATI – Region 10	n=17	100.0	100.0	93.2	93.2
ATI – Region 11	n=43	100.0	100.0	100.0	100.0
ATI – Region 12	n=23	-	-	-	-
ATI – Region 13	n=71	87.2	89.4	86.4	84.2

Table 30. Promoted to a higher position

Training Center		Yes	No
		percentage of respondents reporting	
ATI All Training Centers	n=658	20.9	79.1
ATI-ITCPH	n=30	9.2	90.8
ATI – CAR	n=36	13.3	86.7
ATI – Region 1	n=61	22.0	78.0
ATI – Region 2	n=51	38.8	61.2
ATI – Region 3	n=26	37.3	62.7
ATI – Region 4-A	n=38	1.9	98.1
ATI - Region 4-B	n=83	27.1	72.9
ATI – Region 5	n=60	15.7	84.3
ATI – Region 6	n=34	35.4	64.6
ATI – Region 7	n=22	22.7	77.3
ATI – Region 8	n=44	7.4	92.6
ATI – Region 9	n=19	37.0	63.0
ATI – Region 10	n=17	21.4	78.6
ATI – Region 11	n=43	26.0	74.0
ATI – Region 12	n=23	0.0	100.0
ATI – Region 13	n=71	13.9	86.1

Table 31. Employed in AF-related job¹

Training Center		Yes	No
		percentage of respondents reporting	
ATI All Training Centers	n=658	29.7	70.3
ATI-ITCPH	n=30	42.0	58.0
ATI – CAR	n=36	13.4	86.6
ATI – Region 1	n=61	24.9	75.1
ATI – Region 2	n=51	30.1	69.9
ATI – Region 3	n=26	47.6	52.4
ATI – Region 4-A	n=38	17.2	82.8
ATI - Region 4-B	n=83	18.5	81.5
ATI – Region 5	n=60	35.8	64.2
ATI – Region 6	n=34	24.1	75.9
ATI – Region 7	n=22	49.1	50.9
ATI – Region 8	n=44	8.8	91.2
ATI – Region 9	n=19	89.9	10.1
ATI – Region 10	n=17	46.3	53.7
ATI – Region 11	n=43	45.4	54.6
ATI – Region 12	n=23	17.9	82.1
ATI – Region 13	n=71	12.8	87.2

Table 32. Have other AF job competencies¹

Training Center		Yes	No
		percentage of respondents reporting	
ATI All Training Centers	n=658	21.8	78.2
ATI-ITCPH	n=30	31.5	68.5
ATI – CAR	n=36	5.7	94.3
ATI – Region 1	n=61	24.1	75.9
ATI – Region 2	n=51	13.7	86.3
ATI – Region 3	n=26	16.7	83.3
ATI – Region 4-A	n=38	10.2	89.8
ATI - Region 4-B	n=83	15.1	84.9
ATI – Region 5	n=60	9.1	90.9
ATI – Region 6	n=34	29.7	70.3
ATI – Region 7	n=22	55.4	44.6
ATI – Region 8	n=44	6.0	94.0
ATI – Region 9	n=19	5.4	94.6
ATI – Region 10	n=17	61.2	38.8
ATI – Region 11	n=43	35.5	64.5
ATI – Region 12	n=23	0.0	100.0
ATI – Region 13	n=71	27.1	72.9

Table 33. Provided with social protection

Training Center		SSS	GSIS	Pag-IBIG	PhilHealth	Other social protection
		percentage of respondents reporting				
ATI All Training Centers	n=658	48.9	85.3	90.4	24.8	98.7
ATI-ITCPH	n=30	72.7	81.9	81.9	17.5	100.0
ATI – CAR	n=36	71.8	94.4	96.3	17.6	100.0
ATI – Region 1	n=61	45.5	93.1	91.6	10.4	96.5
ATI – Region 2	n=51	52.1	90.1	90.8	55.2	94.8
ATI – Region 3	n=26	25.5	87.2	91.5	41.5	100.0
ATI – Region 4-A	n=38	65.6	71.4	71.4	12.6	100.0
ATI - Region 4-B	n=83	15.8	80.4	87.2	21.6	100.0
ATI – Region 5	n=60	37.5	92.8	91.7	35.2	100.0
ATI – Region 6	n=34	44.9	79.9	86.1	45.9	100.0
ATI – Region 7	n=22	61.1	59.1	93.9	16.8	100.0
ATI – Region 8	n=44	8.2	87.7	97.3	16.5	100.0
ATI – Region 9	n=19	67.7	83.9	83.9	10.8	100.0
ATI – Region 10	n=17	69.4	85.1	100.0	33.1	100.0
ATI – Region 11	n=43	90.7	88.5	90.7	4.6	100.0
ATI – Region 12	n=23	91.5	94.2	100.0	2.7	-
ATI – Region 13	n=71	41.1	97.0	100.0	31.2	100.0

Table 34. Social protection: Year obtained

Social Protection	All Centers	ITCPH	ATI CAR	ATI 1	ATI 2	ATI 3	ATI 4A	ATI 4B	ATI 5	ATI 6	ATI 7	ATI 8	ATI 9	ATI 10	ATI 11	ATI 12	ATI 13
	n=658	n=30	n=36	n=61	n=51	n=26	n=38	n=83	n=60	n=34	n=22	n=44	n=19	n=17	n=43	n=23	n=71
SSS																	
Before 1990s	2.1	0.0	0.0	8.2	0.0	0.0	0.0	4.7	0.0	0.0	6.2	3.1	0.0	0.0	0.0	0.0	3.1
1990 to 1999	7.0	6.7	28.8	4.1	10.7	0.0	4.1	10.0	2.8	0.0	0.0	0.0	0.0	0.0	4.7	0.0	24.1
2000 to 2009	16.6	34.8	15.2	4.1	7.7	40.4	0.0	23.2	19.6	18.1	8.7	21.7	0.0	14.3	9.0	25.2	15.0
2010 to 2019	59.9	58.5	51.5	79.4	65.5	48.5	83.2	54.2	53.3	62.3	46.7	57.1	85.5	28.6	81.7	71.0	45.9
2020 to 2024	14.4	0.0	4.6	4.1	16.1	11.2	12.8	8.0	24.3	19.6	38.4	18.1	14.5	57.1	4.7	3.7	11.9
GSIS																	
Before 1990s	3.4	6.6	2.2	4.5	0.0	7.3	0.0	4.0	0.0	0.0	4.6	4.5	0.0	0.0	5.5	0.0	8.1
1990 to 1999	8.5	13.9	13.2	8.0	9.2	5.6	3.5	10.8	6.5	8.9	6.4	9.9	0.0	0.0	5.8	2.9	15.8
2000 to 2009	16.3	29.5	16.6	11.5	12.9	18.8	19.4	8.9	14.7	15.8	35.4	7.7	0.0	21.7	13.5	16.1	14.9
2010 to 2019	55.1	27.1	50.1	56.5	61.9	51.7	70.6	62.1	68.2	59.0	32.7	60.0	78.2	32.2	66.5	78.1	49.0
2020 to 2024	16.7	22.9	18.0	19.5	16.0	16.5	6.4	14.1	10.6	16.3	20.9	18.0	21.8	46.1	8.7	2.9	12.2
Pag-IBIG																	
Before 1990s	4.0	13.0	2.1	4.2	0.0	6.1	0.0	2.4	2.0	0.0	4.0	7.7	0.0	0.0	5.4	0.0	8.1
1990 to 1999	7.3	6.2	12.8	7.5	11.9	4.6	3.5	7.0	5.5	9.6	5.7	6.2	0.0	0.0	5.6	2.9	15.8
2000 to 2009	17.1	29.2	14.8	20.6	9.1	17.6	13.2	14.4	15.4	23.3	29.5	7.4	0.0	22.9	13.1	16.1	18.2
2010 to 2019	56.8	33.8	53.9	50.9	68.4	58.1	77.0	60.8	59.9	53.4	48.1	61.3	86.4	34.0	64.6	75.3	46.5
2020 to 2024	14.9	17.7	16.3	16.7	10.5	13.6	6.3	15.4	17.2	13.8	12.7	17.4	13.6	43.1	11.2	5.7	11.4
PhilHealth																	
Before 1990s																	
1990 to 1999	0.9	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0
2000 to 2009	7.0	12.5	0.0	19.0	0.0	10.3	0.0	0.0	0.0	20.8	0.0	4.1	0.0	-	32.9	0.0	5.3
2010 to 2019	47.3	18.8	33.2	9.2	63.6	64.6	58.2	47.1	52.7	56.3	61.1	51.7	50.0	-	50.7	50.0	50.7
2020 to 2024	44.8	56.2	66.8	71.8	36.4	25.1	41.8	52.9	47.3	22.9	38.9	44.2	50.0	-	16.4	50.0	44.0
Other social protection																	
Before 1990s	2.7	0.0	0.0	9.4	0.0	0.0	0.0	0.0	9.4	0.0	0.0	12.6	0.0	0.0	4.3	0.0	0.0
1990 to 1999	5.7	0.0	9.1	9.4	0.0	0.0	46.2	11.2	0.0	42.8	0.0	0.0	0.0	0.0	4.6	0.0	4.1
2000 to 2009	10.5	14.8	9.1	15.1	0.0	0.0	53.8	4.0	9.4	13.7	16.4	5.3	0.0	20.6	4.6	0.0	13.7
2010 to 2019	47.3	34.5	36.6	23.6	91.2	37.5	0.0	56.0	81.1	29.7	23.3	56.7	80.0	39.7	63.7	50.0	44.7
2020 to 2024	33.9	50.7	45.1	42.5	8.8	62.5	0.0	28.8	0.0	13.7	60.3	25.4	20.0	39.7	22.8	50.0	37.6

ANNEX



**Project Deliverable 2 –
Final Inception Report**



ASIAN SOCIAL PROJECT SERVICES, INC.

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March 13, 2024

ENGR. REMELYN R. RECOTER, MNSA, CESO III

Director IV
Agricultural Training Institute
ATI Bldg., Elliptical Road, Diliman, Quezon City

Subject: Submission of the Final Inception Report for the Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) Study

Dear **Director Recoter**:

Greetings from the Asian Social Project Services, Inc. (ASPSI)!

As part of Deliverable 2, ASPSI is pleased to submit the attached Final Inception Report for the above captioned project. This Report contains the objective of the AFE RBME study, review of related literature, evaluation design and methodology including the detailed sampling procedure, revised survey questionnaires and key informant interview (KII) guide questions to be used in the data collection, and the detailed workplan of the study. It also includes the documentation of the Inception Meeting conducted on February 28, 2024.

To complete our submission for Deliverable 2, the remaining task is the pre-testing of the survey questionnaires. This will be undertaken upon receipt of survey clearance from the Philippine Statistics Authority (PSA).

We hope that this Inception Report merits your kind consideration and approval.

Thank you very much.

Very truly yours,

ERNESTO O. BROWN, PhD
Project Team Leader

Noted by:

JOVY C. ROCAMORA
President, ASPSI

2024

Inception Report

Agriculture and Fisheries
Extension (AFE) Results-
Based Monitoring and
Evaluation (RBME) Study

Submitted by
ASIAN SOCIAL PROJECT SERVICES, INC.

Submitted to
AGRICULTURAL TRAINING INSTITUTE

Agriculture and Fisheries Extension (AFE)
Results-Based Monitoring and Evaluation (RBME) Study

AGRICULTURAL TRAINING INSTITUTE
(ATI)

Deliverable 2
FINAL INCEPTION REPORT

ASIAN SOCIAL PROJECT SERVICES, INC.
(ASPSI)

March 13, 2024

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Annex 4. Survey Questionnaire for LGU Extension Workers

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ACRONYMS

AFE	Agriculture and Fisheries Extension
ASPSI	Asian Social Project Services, Inc.
ATI	Agricultural Training Institute
CAPI	Computer Assisted Personal Interview
CSPro	Census and Survey Processing System
DAC	Development Assistance Committee
DAP	Development Academy of the Philippines
DIME	Digital Imaging for Monitoring and Evaluation
DOST	Department of Science and Technology
DSWD	Department of Social Welfare and Development
FAO	Food and Agriculture Organization
IP	Impact Pathway
KII	Key Informant Interview
KMME	Kapatid Mentor ME
LGU	Local Government Unit
M&E	Monitoring and Evaluation
NAT	National Achievement Test
NEDA	National Economic and Development Authority
NEPF	National Evaluation Policy Framework
NGOs	Non-government Organizations
OECD	Organization for Economic Cooperation and Development
P3	Pondo sa Pagbabago at Pag-asenso
PAPs	Programs, Activities and Projects
PDP	Philippine Development Plan
PPP	Private-Public Partnership
RBM	Results-based management
RBME	Results-Based Monitoring and Evaluation
SDGs	Sustainable Development Goal
ToC	Theory of Change
TOR	Terms of Reference
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
VS	Very Satisfactory

A. BACKGROUND AND RATIONALE

The Agricultural Training Institute (ATI) is the training arm of the Department of Agriculture mandated to lead in the formulation of national agriculture and fisheries extension (AFE) program; prepare an integrated plan for publicly- funded training programs in agriculture and fisheries; formulate and issue guidelines in planning, implementing, monitoring and evaluating AFE programs; and assist the local government units extension system by improving their effectiveness and efficiency through capability building and complementary extension activities such as technical assistance, training of local government unit (LGU) personnel, improvement of physical facilities, extension cum research and information support services.

To properly and systematically account for the results of the Institute's policies, programs, projects and activities, ATI uses its AFE Results-Based Monitoring and Evaluation (RBME) System. The system strengthens the transparency and accountability aspects of ATI's operation by providing a mechanism to ascertain whether resources used are well spent and have attained their intended results. The system also helped promote learning in the organization as it demonstrates the why's and how's of the success of the interventions, thereby informing policy and program planning.

The RBME framework is employed in many development programs. It is an approach to monitor performance and evaluate long term results. Anchored on a theory of change (ToC), one of the important steps for an effective RBME system is monitoring for results and using this information to improve the monitoring and evaluation (M&E) system within the agency, and thereby improving its services.

The AFE RBME system involves tracing how ATI interventions and activities lead to immediate, intermediate and long-term outcomes, and how these contribute to the attainment of societal goals of food security, poverty reduction and increased social equity (**Table 1**). A total of 28 indicators were identified to provide evidence to the attainment of these outputs and outcomes (**Annex 1**). Annual data collection, processing and analysis were done in the ATI Training Centers.

With the RBME system fully operationalized at ATI, it would be useful to determine the results of the ATI programs, activities and projects (PAPs) as gauged against the set of indicators/parameters prescribed in its RBME system. Such evaluation would not only provide evidence-based demonstration of the relevance and overall significance of ATI's PAPs, but may generate important insights on how to further improve ATI's RBME system.

It is in this context that the ATI contracted the Asian Social Project Services, Inc. (ASPSI), a private consultancy and training management organization based in Laguna, Philippines, to implement the **Consulting Services for the Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) Study**.

This Final Inception Report contains the objective of the AFE RBME study, review of related literature, evaluation design and methodology including the detailed sampling procedure, revised survey questionnaires and key informant interview (KII) guide question to be used in the data collection, and the detailed workplan of the study. It also includes the documentation of the Inception Meeting conducted on February 28, 2024.

Table 1. The AFE Theory of Change Model

INPUT	ACTIVITIES	OUTPUT	IMMEDIATE	INTERMEDIATE	LONG TERM	SOCIETAL GOALS
Manpower	Provide knowledge products and services	Knowledge products and services provided	Increased access to interventions	Increased productivity of clients	Increased competitiveness of clients	Food security
Money						
Machineries	Provide capability building activities	Capability building activities provided	Improved attitude, skills, and knowledge of clients	Increased empowerment of clients		Poverty reduction
Methods						
Time	Establish partnerships	Partnerships established	Improved provision of interventions	Increased resiliency of clients		Increased social equity
	Develop AFE innovations	AFE innovations developed				
	Provide climate change initiatives	Climate change initiatives provided				
	Provide enabling environment	Enabling environment provided				

B. OBJECTIVE OF THE STUDY

In general, the study aims to determine the results of the ATI programs, projects and activities based on the existing parameters from the AFE RBME ToC model. Specifically, it aims to:

1. Review and enhance the AFE results framework, including the guidelines and tools;
2. Identify issues and challenges encountered during the implementation; and
3. Recommend policy options to further improve the ATI programs.

C. SCOPE OF WORK

The evaluation will employ the Organization for Economic Cooperation and Development (OECD) – Development Assistance Committee (DAC) project evaluation criteria of relevance, effectiveness, efficiency, sustainability, and impact. To undertake this, primary data will be gathered through survey of agricultural extension workers and farmers and key informant interviews with the ATI training center representatives. Review and analysis of secondary data such as the accomplishment reports and other relevant documents will also be done. Collected qualitative and quantitative data will be analyzed using appropriate statistical tools.

D. REVIEW OF LITERATURE

Results-based monitoring and evaluation (RBME) is a framework that helps development practitioners and stakeholders to measure and assess the performance and impact of their policies, programs, and projects. It is based on the principles of results-based management (RBM), which aims to improve decision-making, accountability, and learning by focusing on the outcomes and impacts of interventions rather than the inputs, activities, and outputs.

The National Economic and Development Authority (NEDA) has developed a comprehensive guide for government agencies on how to design, conduct and use evaluation to improve public sector performance and accountability. It introduces the National Evaluation Policy Framework (NEPF) which aims to institutionalize a culture of evaluation in the government (NEDA and DBM, July 2010). Along this is a chapter from the Philippine Development Plan (PDP) 2023–2028 titled “Plan Implementation, Monitoring, and Evaluation”, which outlines the strategies, mechanisms, and tools for implementing, monitoring, and evaluating the PDP 2023–2028, the medium-term development plan of the country. It also discusses the role of various stakeholders, including the private sector and civil society, in ensuring the achievement of the PDP goals and objectives. It also explains how the RBME can help to enhance the relevance, effectiveness, efficiency, impact, and sustainability of interventions (PDP 2023-28, Chapter 16).

Moreover, a project by the Development Academy of the Philippines (DAP) called Project DIME, which stands for Digital Imaging for Monitoring and Evaluation (M&E) utilizes existing technologies such as satellite imagery, drones, and geotagging for M&E of government projects and also engages citizens and civic organizations through participatory monitoring (DAP Project DIME, 2021). The Department of Social Welfare and Development (DSWD) implemented its national monitoring and evaluation systems, social protection and the Sustainable Development Goals (SDGs) and highlights the experiences, challenges and the way forward for DSWD in setting up its monitoring and evaluation system. The initial years were met with resistance and even indifference as officials were yet to be convinced and human capacities and processes were not yet developed to implement such reforms. Results-based thinking had to be integrated not just into M&E, but more so into the DSWD management processes from planning to budgeting and performance management, to be able to sustain the reform. International development partners played an important role but political will from officials and staff was most critical. In the advent of the SDGs, new challenges arise not just for the DSWD M&E system but for the whole of national government (Alday and Sebastian, 2017).

A report by the World Bank (2019) titled “PHILIPPINES: Assessing the Effectiveness of MSME and Entrepreneurship Support” evaluated the Micro, Small, and Medium Enterprise (MSME) programs implemented by the Department of Trade and Industry (DTI) and the Department of Science and Technology (DOST) using a RBME framework. It also provides recommendations for improving the design, implementation, and coordination of MSME support policies and programs. Also, a report by United Nations Development Programme (UNDP) (2021) titled “Evaluability Assessment of the MSME Development Plan and Priority Programs under the MSME Development Plan with a Process Evaluation of Government Support” presented the findings of an evaluation of three MSME programs: Kapatid Mentor ME (KMME), Pondo sa Pagbabago at Pag-asenso (P3), and Negosyo Center. It uses a RBME framework based on the ToC, evaluability assessment, and impact pathway (IP) analysis.

A study by Gumz and Parth (2007) compared the project monitoring practices in three industry sectors: government, non-government organizations (NGOs), and construction. They proposed a nine-step process for monitoring projects using an RBME framework, and discussed the benefits and challenges of applying it. A study by Kusek and Rist (2004) presented a comprehensive handbook for development practitioners on how to design and build an RBME system. They outlined a ten-step model that covers the readiness assessment, the design, the management, and the sustainability of such systems.

Another study by Food and Agriculture Organization (FAO) (2019) provided an overview of the concepts and methods of planning, monitoring, and evaluation for learning and performance

improvement in agricultural development. It explained how RBME can help to enhance the relevance, effectiveness, efficiency, impact, and sustainability of interventions. A research study by Okello (2021) examined the nexus between M&E data management and project performance with a focus on infrastructural projects. They analyzed relevant models, theories, and empirical literature on M&E data management and project performance, and suggested some best practices for improving data quality and utilization.

The validation study titled *Monitoring and Evaluation Framework to Track and Assess the Results of Interventions Aimed at Changing Attitudes and Social Norms Towards Children with Disabilities in Europe and Central Asia* (2019) aims to track and assess the results of interventions aimed at changing discriminatory attitudes and social norms towards children with disabilities. It is part of a package of materials developed by Drexel University and the United Nations Children's Fund (UNICEF) Europe and Central Asia Regional Office. It provides guidance on how to measure changes in attitudes and social norms using quantitative and qualitative methods. On the other hand, the *Philippines: National Climate Change Action Plan RBME System* aims to monitor and evaluate the progress and impacts of the climate change adaptation and mitigation interventions in the country. It also discusses the institutional arrangements, data sources, and challenges for implementing the system.

The project titled *Monitoring and Evaluation Tool of the Department of Education in the Case of Iligan City Division Philippines* describes and analyzes the M&E tool used by the Department of Education in Iligan City, which is based on the results-based performance management system (Salvador and Canencia, 2015). It also evaluates the effectiveness, efficiency, and usefulness of the tool for planning, budgeting, and decision-making. The study used the descriptive – evaluative method and analyzed both descriptive and inferential statistics. General findings revealed that monitoring and evaluation tool was not piloted in the field at the same time performance indicators were not known by the teachers. It is also noted that teacher's overall very satisfactory (VS) rating does not correspond to National Achievement Test (NAT) rating for the last (4) four years. Subsequently, a localized Monitoring and Evaluation tool was created with proper information dissemination and piloting so that teachers are aware of what to do during the class observation. Moreover, monitoring and evaluation must come up with skills indicators that would measure the skills transfer to ensure performance development of students that can compete globally.

Projects of the Private-Public Partnerships (PPP) require the use of RBME to monitor and evaluate the projects. Among these projects are:

- The Catanduanes Solid Waste Management Project 1, which aims to establish an integrated solid waste management system in the province of Catanduanes. The project involves the construction and operation of a sanitary landfill, a materials recovery facility, and a waste-to-energy plant. The project uses RBME to monitor and evaluate the environmental, social, and economic impacts of the project, as well as its compliance with the performance standards and contractual obligations.
- The General Santos City Sanitary Landfill Project 1, which seeks to improve the solid waste management system in the city of General Santos. The project involves the development and operation of a sanitary landfill, a composting facility, and a leachate treatment plant. The project uses RBME to track and assess the progress and results of the project, as well as its contribution to the city's development goals and environmental sustainability.

- The New Surigao Airport Project 1, which aims to upgrade and modernize the existing airport in Surigao City. The project involves the construction and operation of a new passenger terminal building, a new runway, a new apron, and other ancillary facilities. The project uses RBME to measure and report on the performance and outcomes of the project, as well as its alignment with the national and regional transportation plans.

E. APPROACH AND METHODOLOGY

1. Conceptual Framework

Viewed against the RBME framework employed in most development programs including those of the national government agencies and international agencies (**Figure 1**), this AFE RBME study may be situated along the evaluation stage, specifically the stage of managing and using evaluation results. In the case of AFE RBME study, evaluation can yield a number of valuable insights on the robustness of the design logic, the appropriateness of the strategies and the extent by which stakeholders subscribe to such strategies, among others. The insights and specific lessons from the evaluation can then be used for specific adjustments along the RBME cycle for a true results-based monitoring and evaluation of the plans/programs.

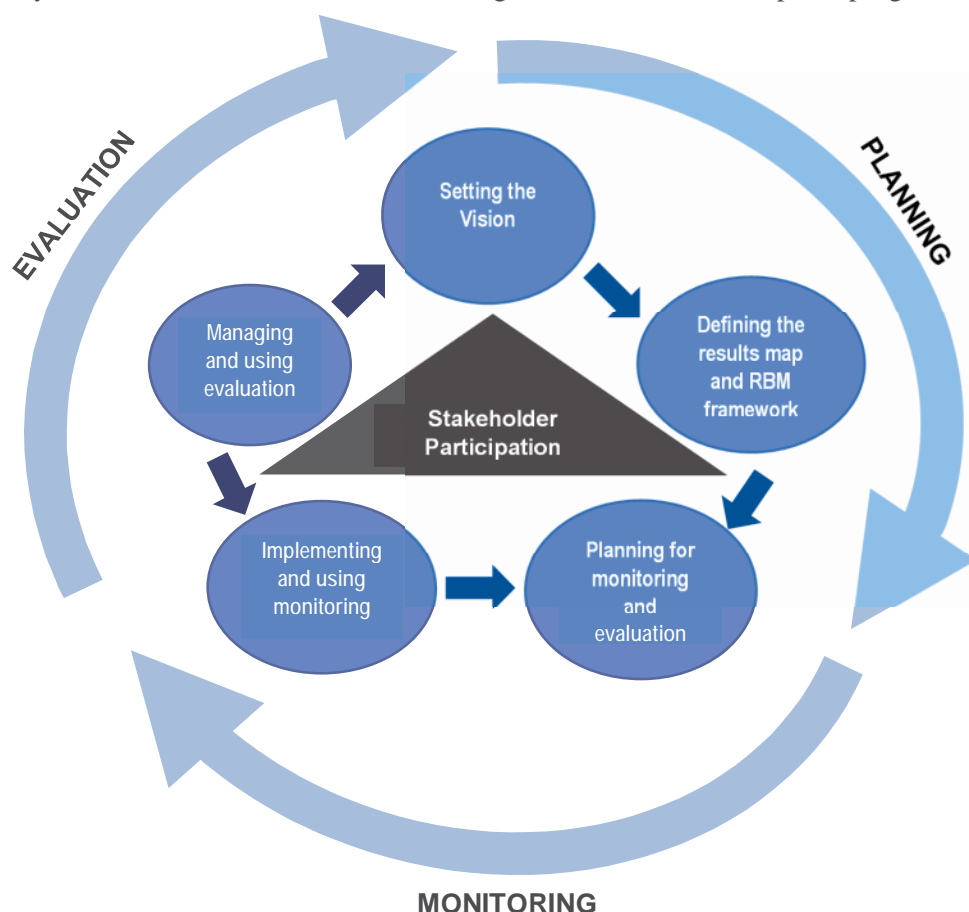


Figure 1. Results-based Monitoring and Evaluation Framework

The evaluation study will be cast along the ToC and IP framework (**Figure 2**). This is ideal considering that the AFE programs and projects are built around a set of results frameworks believed to be necessary for the achievement of the plan's long-term goals. The results framework (or IP) is a logical order of and assumptions about the activities and events relating to the inputs to be used, the process to be employed, the outputs to be produced, the outcomes to be generated and the impact to be made. The causal relationship between one activity or event with another depends largely on the overall context and specific circumstances within which the process of change is to take place.

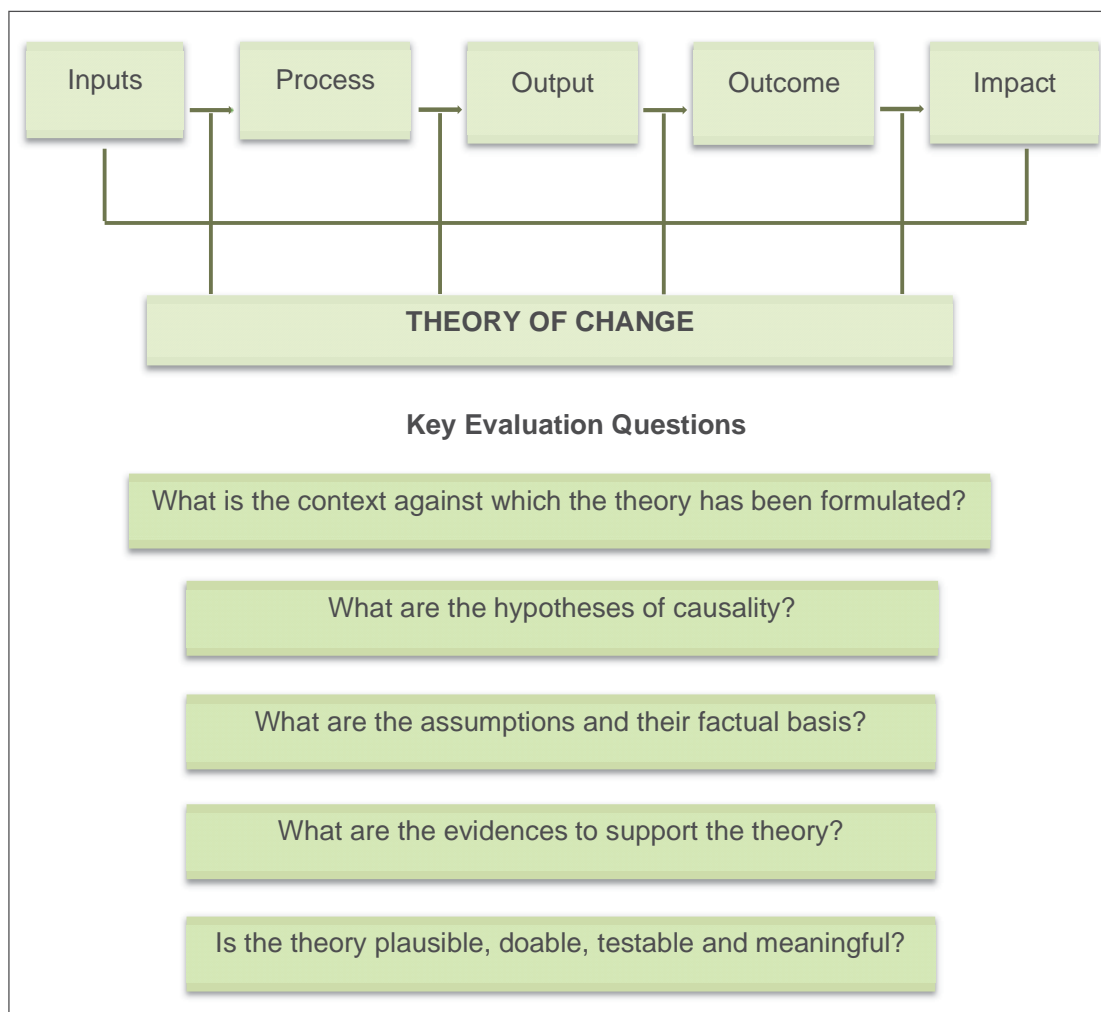


Figure 2. Theory of Change and Evaluation Key Questions

A ToC defines all the building blocks required in a given context and circumstances that may bring about the achievement of a desired change. As a planning and evaluation framework for social change, it requires participants to be clear on long-term goals, identify measurable indicators of success, and formulate actions to achieve goals. It differs from logic models as it requires stakeholders to articulate underlying assumptions which can be tested and measured, and shows a causal pathway (i.e. IP) from here to there by specifying what is needed for goals to be achieved.

In the AFE RBME study, the examination of the ToC will entail answering at least five key questions relating to: (1) the context of the plan; (2) the hypotheses of change; (3) explicit and implicit assumptions; (4) evidences to support the theory; and (5) whether the theory is plausible, doable, testable and meaningful.

A ToC should be plausible, doable, testable and meaningful for planned interventions to succeed. Plausibility relates to the logic of the model and whether or not the various stakeholders believe the model is correct. A doable theory is one where human, political and economic resources are seen as sufficient to implement the strategies of the theory. Testability necessitates that stakeholders believe there are credible ways to discover whether the results are as predicted. Finally, the change being pursued should be important and the magnitude significant enough for the theory to be meaningful.

Achieving a good understanding of the answers to the general key questions enumerated above will enable the pursuit of more in-depth and specific evaluability assessment following the evaluability criteria spelled out in the NEPF guidelines: (1) clarity of interventions; (2) availability of data; (3) stakeholder interest and intended use; and (4) availability of resources for the evaluation. These criteria can be further prioritized and refined through a consultative process to derive insights and conclusions on the major evaluability criteria specified in the TOR: (1) relevance; (2) effectiveness; (3) efficiency; (4) sustainability; and (5) impact.

Steps in the Conduct of AFE RBME Evaluation

The following steps will be employed in the AFE RBME evaluation study:

1. *Review of program documentation*—This will reveal much about program goals, organization, resourcing, etc. Insofar as documentation is inadequate and does not provide much information this also highlights what may be a cause for concern.
2. *Analysis of the information system*—Defined in the program or related to the program and determination of information needs.
3. *Interview of the main stakeholders*—This will complement the documentary analysis and more particularly clarifies stakeholders' intentions and expectations. This stage will require stakeholder mapping and analysis to ensure that the study will not miss out on the key stakeholders of the program.
4. *Analysis of the program*—This will be done following the ToC and IP framework described earlier. The ToC and IP framework of the AFE programs and projects will be established and assessed in relation to: (1) the context against which the ToC and IP have been formulated; (2) the hypotheses of causality; (3) the explicit and implicit assumptions; (4) the evidences supporting the ToC; and (5) plausibility, doability, testability and meaningfulness of the ToC and IP.

The assessment is expected to provide good understanding of the answers to the general key questions following the NEPF evaluability criteria as follows:

- a. *Clarity of the intervention* – does the subject of evaluation have a clear logical framework or ToC? Are the objectives, outcomes, and outputs clearly defined? Are the indicators clearly stated?

- b. *Availability of data* – is sufficient data collected against the indicators? Is there baseline data? What methodology can be used given the available data? The in-depth evaluability assessment is expected to delve into this evaluability criterion in detail, assessing the robustness of administrative data collection and M&E systems and how these link to broader national and agency-level planning and budgeting processes.
- c. *Stakeholder interest and intended use* – how can decision-makers use the evaluation to improve program design, implementation, and resource allocation? Are there socio-political factors that could hinder the conduct of the evaluation?
- d. *Availability of resources for the evaluation* – are there enough financial, human, and knowledge resources to conduct the evaluation? How much is required?

The above questions can further be prioritized and refined through a consultative process to derive insights and conclusions on the major evaluation criteria specified in the TOR as follows:

Relevance

- Are the results frameworks of the AFE programs/projects clearly outlined, with well-articulated results and well-defined indicators?
- To what extent have the AFE plans, its objectives, and component programs have been relevant to the sector's stakeholders? Are there mechanisms which enable the government to regularly assess the relevance of its programs to different stakeholders.

Effectiveness

- How can RBME system be set up to enable the measurement of the contribution of AFE programs and projects to the productivity, job generation, and other relevant socio-economic outcomes? Can this contribution be assessed using available data? What other data generation means can be utilized?
- Are the indicators and targets set in the AFE programs and projects reflective of the intentions of the plans' objectives and strategies? Are data collection systems in place to measure achievement?
- In the perspective of stakeholders, to what extent have the AFE program and projects helped the agricultural extension workers and farmers with their needs at key stages in their life cycle?

Efficiency

- Have government interventions been implemented efficiently? What are the efficiency constraints that remain unaddressed?
- What are the existing coordination and implementation mechanisms in implementing the AFE programs and projects? Are the implementation and coordination mechanisms conducive for achieving expected results?

- Are the programs and projects implemented cohesively at both national and local levels? Are the processes and structures in place capable of delivering and measuring the intended results: from inputs, to outputs, and to outcomes?
- Was there an appropriate level of financing to implement the AFE programs and projects?

Sustainability

- Are the government interventions for agricultural extension workers and farmers sustainable? Can government M&E enable the assessment of the sustainability of benefits to agricultural extension workers and farmers?
- How can ATI, which leads in the formulation of national AFE program, strengthen its M&E system in a way that enables it to measure outcomes and impact of interventions rigorously?
- How can the various implementing agencies of ATI development interventions strengthen their M&E systems and pursue evaluations to support the overall M&E system of the AFE programs and projects?

2. Methodology

2.1. Determination of results of ATI programs, projects and activities (PPAs) based on existing parameters from the AFE RBME ToC Model

To determine the results of the ATI programs, projects and activities, the study will validate RBME results in the field by reviewing outputs based on parameters of relevance, effectiveness, efficiency, sustainability, and impact. The validation will be done with LGU extension workers and farmers trained by ATI, using the indicators enumerated in the AFE results indicators table (**Annex 1**). Changes along these indicators will be measured by looking at values across time (2018-2022) or comparing baseline values with annual values. These indicators include the following (**Table 2**):

Table 2. AFE results indicators to be examined

Group	Indicators
Farmers	<ul style="list-style-type: none"> • Change in attitudes, skills, and knowledge by looking at the perceived change in knowledge based on the provided intervention, post test scores, TESDA National Competency Certifications on agriculture and fisheries related subjects, adopters of new technologies and practices, and farmer's rating on the interventions; • Change in productivity of clients by looking at proportion of clients using diversified farming techniques, those venturing into value addition of products, and those showing improved practices resulting in increased income. • Empowerment of clients by examining proportion of clients who became agripreneurs, including the marginalized clients; • Resiliency by determining proportion of clients with personal, crop and livestock insurance, and increased confidence in coping from unfortunate events, adopted adaptation and mitigation measures, and adaptability

Group	Indicators
	<ul style="list-style-type: none"> Change in competitiveness through certifications in GAP, OA, GAHP, Halal, GMP, HACCP and others; supplying institutional and commercial buyers and exports.
Extension workers	<ul style="list-style-type: none"> Changes in attitude, skills, and knowledge by measuring increase in knowledge based on provided intervention, post-test scores, TESDA National Competency Certifications on agriculture and fisheries related subjects, implementation of the trainee's action plans, and satisfaction rating Empowerment of clients through employment to AF-related jobs or promotions; Resiliency of clients through alternative AF-related job competencies.
Other clients	<ul style="list-style-type: none"> Changes in services and systems and procedures by examining how interventions were implemented, based on ratings on interventions in terms of relevance, timeliness and absorptive capacity of partner and implementing institutions. Empowerment of clients through increased number of learning sites elevated into schools for practical agriculture and number of schools and farm tourism sites.

In validating the results of ATI programs, projects and activities (PPA) at the clientele level, the following dimensions will also be examined:

- ✓ Relevance to determine whether the interventions are consistent with national or local development plans and priorities, and needs of the clients.
- ✓ Effectiveness to ascertain if the interventions addressed the needs of the clients; also look at accomplishments in terms of targets vs outputs year on year and total.
- ✓ Efficiency to see if the interventions were carried out at the time they are needed, and at the least possible cost.
- ✓ Sustainability to evaluate if interventions introduced are still being practiced long after these have been introduced.
- ✓ Impact to see if the interventions resulted to changes in income and welfare of the clients.

2.2. Sampling

The respondents of the study are the agricultural extension workers of the LGUs and the farmers who were trained by the ATI from 2018 – 2022. To determine the sample size, Slovin's formula was applied with a 5% margin of error as per the TOR:

$$n = \frac{N}{1+Ne^2}$$

where:

n = sample size

N = population size

e = margin of error at 5%

The computed sample size per type of respondent per year is shown in **Table 3**. A total of 2,594 respondents will be included in the survey – 1,571 are farmers and 1,023 are extension workers.

Table 3. Computed sample size based on Slovin’s formula with 5% margin of error

Year	Population of Farmers Trained	Population of Ag Ext Workers Trained	Total Population Size	Sample Size for Farmers	Sample Size for Ag Ext Workers	Total Sample Size
2018	2,445	872	3,317	344	275	619
2019	933	235	1,168	280	149	429
2020	956	252	1,208	283	155	438
2021	1,093	294	1,387	293	170	463
2022	4,969	863	5,832	371	274	645
Grand Total	10,396	2,516	12,912	1,571	1,023	2,594

As required by the TOR of this assignment, the respondent samples will be proportionately distributed across the 16 ATI training centers of the country (**Table 4**). In determining the target sample-respondents per training center per year, the specific PPA per training center to be the subject of client evaluation will be identified. This will ensure that analysis per indicator per training center per year pertains to a homogenous or similar interventions, and not a mixture of PPAs with different levels of inputs.

Table 4. ATI training centers and corresponding computed sample size

ATI Training Centers		Address	Sample Size for Farmers	Sample Size for AF Extension Workers
1	ATI – International Training Center on Pig Husbandry	Marawoy, Lipa City	73	81
2	ATI - Cordilleras	Benguet State University Compound, Km. 5, Balili, La Trinidad, Benguet 2601	131	52
3	ATI - Ilocos Region	Provincial Nursery Compound, Tebag East, Sta. Barbara, Pangasinan	114	107
4	ATI - Cagayan Valley	San Mateo Center: Malasin, San Mateo, Isabela	129	95
		Cabagan Center: Isabela State University Compound, Garita, Cabagan, Isabela		
5	ATI – Central Luzon	Bataan Center: Government Complex, San Ramon, Dinalupihan, Bataan	117	74
		Nueva Ecija Center: Singalat, Palayan City, Nueva Ecija		
6	ATI - CALABARZON	8575 Camerino Street, Brgy. Lapidario, Trece Martires City, Cavite	117	71
7	ATI – MIMAROPA	Barcenaga, Naujan, Oriental Mindoro	87	97
8	ATI – Bicol	ATI-RTC 5, Diversion Road, San Agustin, Pili, Camarines Sur	102	64
9	ATI – Western Visayas	ATI Building, ASU Compound, Banga, Aklan	74	44
10	ATI - Central Visayas	ATI-RTC 7 Training Complex, Cabawan District, Tagbilaran City 6300 Bohol	120	66
11	ATI – Eastern Visayas	ATI-RTC 8, Visayas State University Campus, Visca, Baybay City, Leyte	120	68

ATI Training Centers		Address	Sample Size for Farmers	Sample Size for AF Extension Workers
12	ATI – Zamboanga Peninsula	Pres. Corazon Aquino, Regional Center, Brgy. Balintawak, Pagadian City	60	20
13	ATI – Northern Mindanao	ATI Building, El Salvador City, Misamis Oriental 9017 Philippines	65	40
14	ATI – Davao Region	Brgy. Datu Abdul Dadia, Panabo City, Davao del Norte 8105	81	44
15	ATI - SOCCSKSARGEN	AH26, Brgy. San Felipe, Tantangan, South Cotabato	70	26
16	ATI - CARAGA	Brgy. Los Angeles, Butuan City	111	74
TOTAL			1,571	1,023

2.3 Review and enhancement of the AFE Results Framework including the guidelines and tools, and identification of issues and challenges

The review and enhancement will start with the review of the ToC indicated in Table 1. The ToC will be reviewed based on the context against which it has been formulated (such as government priorities and programs at the time of ToC formulation), examine the hypothesis of causality, assumptions and their factual basis, evidences supporting the theory, and determining whether the theory is plausible, testable and meaningful. Focus group discussions and/or key informant interviews with stakeholders will be done to generate information to support the review. Revision of the ToC and its IPs will be the main output.

Following the review of the ToC, the Results Framework will also be reviewed and revised. The review of the results framework will cover examination of appropriate indicators with respect to their relevance, timeliness, and suitability to capture desired results. Actual M&E practices and guidelines, data collection and management practices and systems, analysis and reporting systems and other operational guidelines will be examined for consistency and implementability. Interviews with the ATI personnel will be done.

The RBME and indicator review will also consider the following dimensions:

Relevance	<ul style="list-style-type: none"> • Are the indicators consistent with the priorities of the government? • To what extent does the RBME address the ATI Organizational Outputs, mandates, etc.?
Effectiveness	<ul style="list-style-type: none"> • Is the current set up at ATI able to collect data? • Are the reports from the RBME able to answer the questions of management on the PPAs of ATI? • Are the indicators and targets set in the AFE programs and projects reflective of the intentions of the plans' objectives and strategies?
Efficiency	<ul style="list-style-type: none"> • Is the RBME current set up able to collect, store and process data at the least cost possible and able to provide information on time?
Sustainability	<ul style="list-style-type: none"> • Are financial, human, technical and other support services resources in place to ensure that the RBME system will run smoothly? • Is regular review of the system being conducted? • Is upgrading of the system part of the plan of ATI?
Impact	<ul style="list-style-type: none"> • Are the indicators able to provide information on impact?

F. WORK PLAN FOR PERFORMING THE PROJECT

This section presents the proposed ASPSI Consultant Team organization and coordination mechanism as well as the activities to be undertaken to effectively and efficiently achieve objectives of this assignment. Likewise, this section provides description of technical assistance and administrative activities, schedule/ milestones, responsible parties and expected outputs and deliverables. The Consultant Team will render consultancy services with a total of 66.32 person-month inputs spread over nine (9) months.

1. Proposed Consultant Team Organization

ASPSI believes that the effectiveness and success of the consultancy services lie in an optimum complement of experts to cover all areas of concern and a strong organization competent in managing multi-disciplinary experts in the field while promoting goodwill and collaboration with client as well as with the participating units of ATI. With this in mind, the proposed organization of ASPSI and their relationship with the ATI is shown in **Figure 3**.

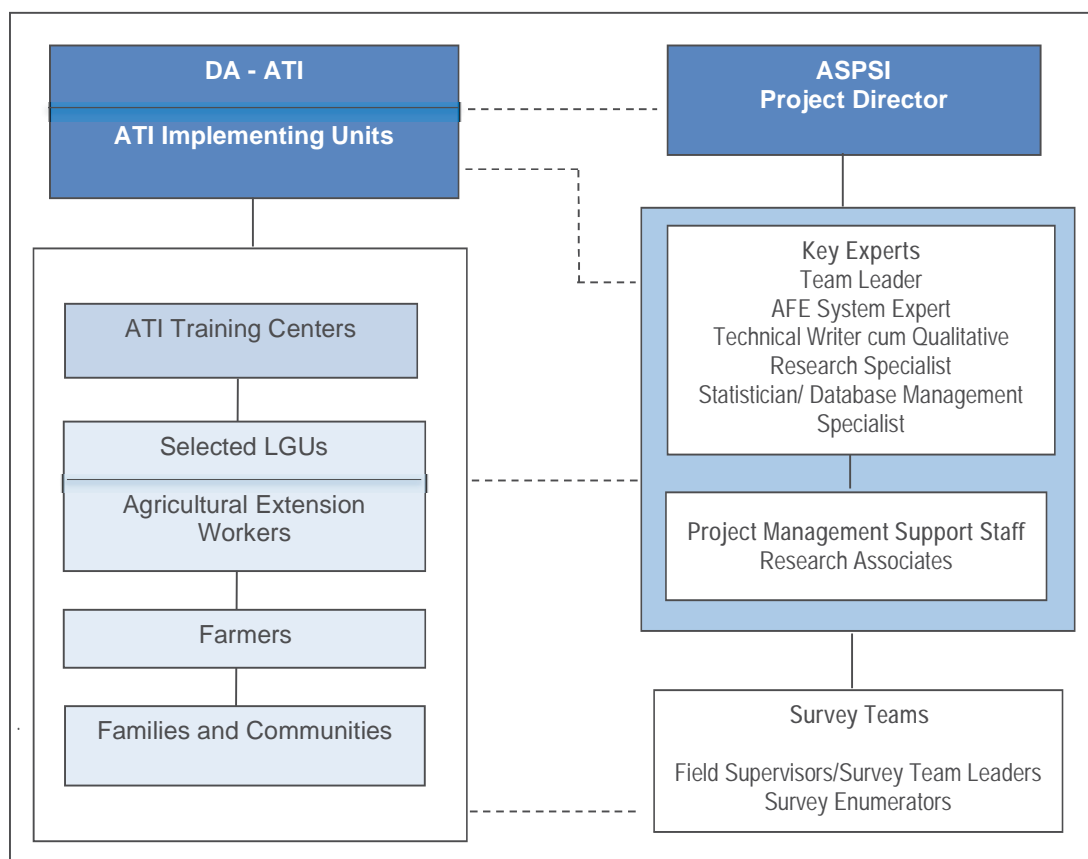


Figure 3
Proposed Consultant Team Organization and Interagency Coordination

Given the scope of work and expected outputs within the desired timeframe, ASPSI proposes a team of four (4) key experts composed of the Team Leader, Agriculture and Fisheries Extension System Expert, Technical Writer cum Qualitative Research Specialist, and Statistician cum Database Management Specialist. They will be engaged to undertake the development and finalization of the evaluation design and methodology, including survey questionnaires and other research instruments; data collection, processing, and analysis, and report preparation and presentation.

Moreover, to assist the key experts in data collection and processing and in the preparation of reports, ASPSI will provide Research Associates and survey teams composed of Field Supervisors/Survey Team Leaders and Survey Enumerators. A Project Director who will ensure that all contractual commitments of ASPSI are fulfilled will backstop the Consultant Team.

2. Key Activities and Work Schedule

Figure 4 provides the flow chart of key activities for the design and implementation of the ATI AFE RBME study.

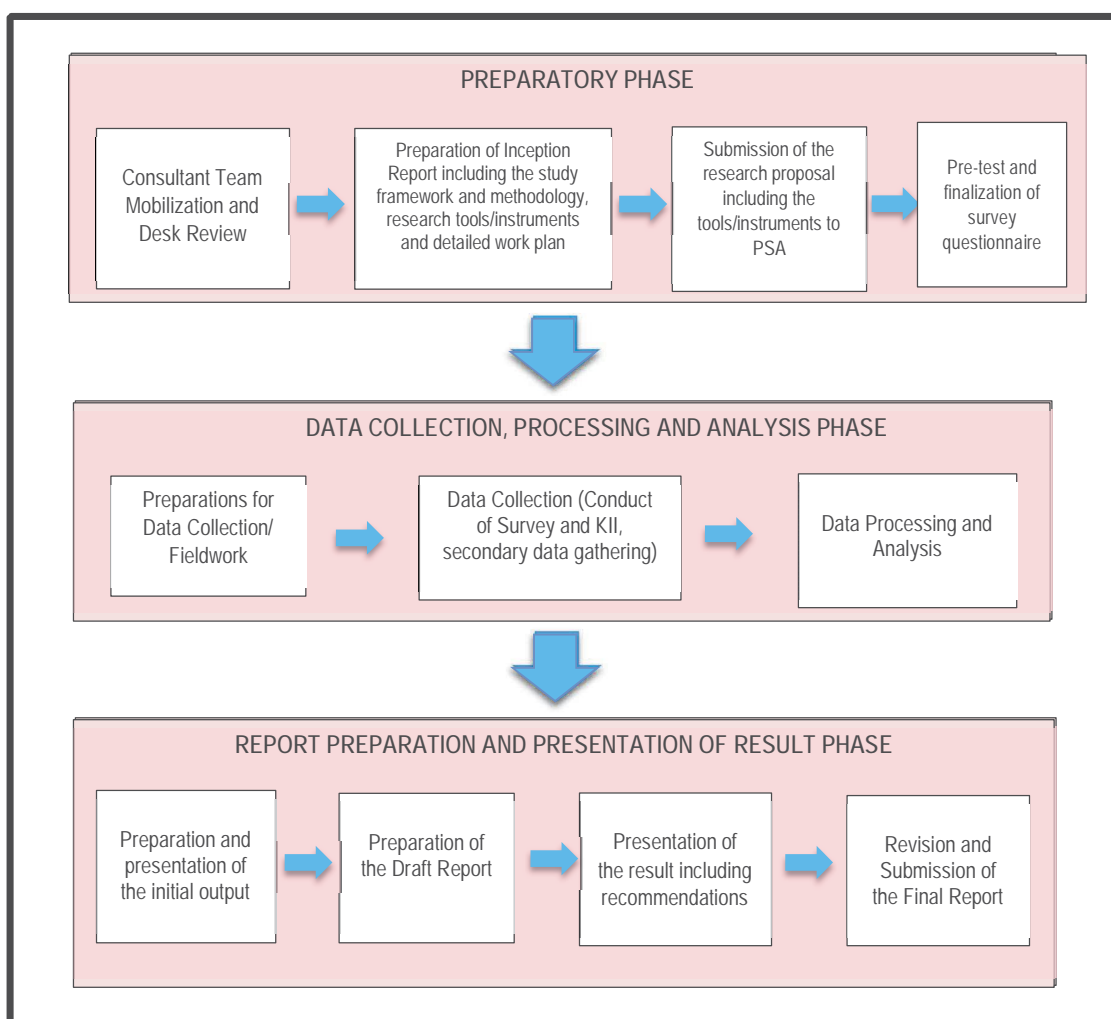


Figure 4. Flow Chart of the Research Tasks

2.1 Consultant Team Mobilization and Preparation of Inception Report

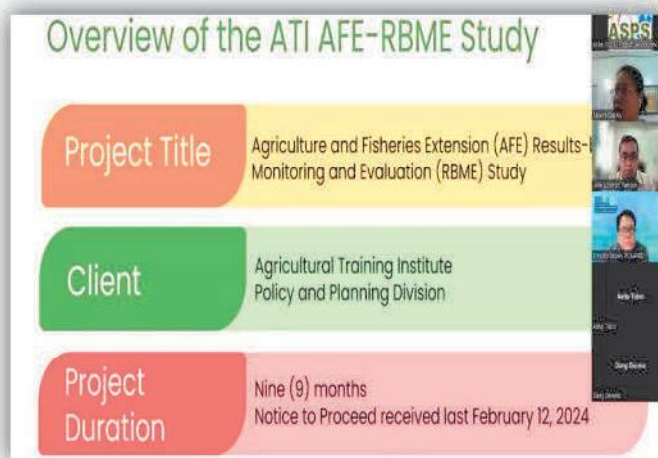
2.1.1 Consultant Team Mobilization

Upon receipt of Notice to Proceed from the ATI, an initial meeting with the members of the Consultant Team was scheduled. The first meeting of the Consultant Team was conducted online via zoom last February 16, 2024. It was participated by the following consultants and ASPSI staff:

- Dr. Ernesto O. Brown, Team Leader;
- Dr. Fezoil Luz C. Decena, AFE System Expert;
- Anita G. Tidon, Technical Writer cum Qualitative Evaluation Specialist;
- John Lorenzo A. Yambot, Statistician/DMS;
- Noemi R. Quillooy, ASPSI Project Coordinator; and
- Christine Yvette E. Dele Viña, ASPSI Project Coordinator

During this meeting, the following were discussed: overview of the AFE RBME study; scope of work and detailed work plan; task assignments of the consultants; preparation of the draft inception report; relevant reports and documents to be requested from ATI; and schedule of the inception meeting with ATI.

After the Consultant Team's meeting, coordination with ATI was done to schedule the inception meeting on February 28, 2024, to present the draft inception report.



2.1.2 Gathering and Desk Review of Secondary Data

ASPSI has coordinated with ATI on February 16 and February 20, 2024 and requested the following ATI RBME reference materials and reports:

- list of the trained AF extension workers and farmers by year by region;
- ATI RBME system including tools, guidelines, procedures, RBME manuals;
- ATI annual reports; and
- Other relevant information

Upon ASPSI's signing of the data sharing agreement provided by ATI on February 20, ATI provided the link for RBME reference materials. As of this writing, the following data/reports/reference materials have been shared through the link provided:

- Post Training Evaluation of Action Plan Implementation: A Monitoring Report for the Activity Entitled “From Outputs to Outcomes Leveling Up to a Results-Based Monitoring and Evaluation Practice”, 2018.
- The Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) System Report, 2019.
- The Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) System Report, 2020.
- The Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) System Report, 2021.
- Excellence and Accountability in Extension: Technical Guidance Notes in the Monitoring and Evaluation of Agriculture and Fisheries Extension Program Performance, 2017.
- Excel sheets containing names of AFE workers and farmers per region and ITCPH from 2018-2022.
- Agriculture and Fisheries Extension Results-Based Monitoring and Evaluation System: Survey Questionnaire for Farmer.
- Agriculture and Fisheries Extension Results-Based Monitoring and Evaluation System: Survey Questionnaire for LGU Extension Worker.
- ATI Annual Reports, 2010-2023.
- ATI Programs.

These reference materials and reports were shared to the members of the Consultant Team for their review and analysis. The result of the review and analysis of secondary data was used in the finalization of the RBME study design and methodology as well as in the development of research tools and instruments.

2.1.3 Preparation of the Draft Inception Report including the study framework and methodology, research tools/instruments and detailed work plan

Following the above activities, a Draft Inception Report, which included the study framework and methodology, research tools/instruments and detailed work plan was prepared. Consultation meetings/coordination among members of the Consultant Team were undertaken, to facilitate the preparation of inception report including the study framework and methodology, research tools/instruments and detailed work plan.

The Draft Inception Report was submitted to ATI via email last February 26, 2024.

2.1.4 Inception Meeting with ATI and Presentation of the Inception Report

After the preparation and submission of the Draft Inception Report, a meeting with ATI was arranged to present the draft report. The online inception meeting and presentation of the draft inception report was conducted on February 28, at 2:00PM. Four (4) ATI representatives and six (6) ASPSI staff and consultants attended the meeting.

During this meeting, ATI representatives shared their comments and suggestions to further improve the inception report including the survey questionnaires. The detailed documentation of the inception meeting is attached as **Annex 2**.

2.1.5 Finalization of the Inception Report including the study framework and methodology, research tools/instruments and detailed work plan

Following the inception meeting and presentation of the draft inception report with ATI, the inception report was finalized integrating the comments and suggestions raised during the presentation. This Report also considered the suggestions received from ATI on March 7, 2024 via email to ensure the generation of more valid and detailed information from the respondents through incorporating additional probing questions for each query, especially those related to the adoption of technology and practices.

As mentioned earlier, this Final Inception Report contains the objective of the AFE RBME study, review of related literature, evaluation design and methodology, detailed sampling procedure, revised survey questionnaires, KII guide questions, detailed workplan of the study, and the inception meeting documentation.

2.1.6 Submission of the Survey Protocol to PSA-SSRCS

Considering that this ATI - AFE RBME study includes statistical survey, it has to go through the process of evaluating the design and instruments to be used in the survey and apply for survey clearance from the Philippine Statistics Authority (PSA) – Statistical Survey Review and Clearance System (SSRCS). As such, the ASPSI Team will facilitate the preparation and submission of required PSA-SSRCS forms such as the following:

- ✓ SSRCS Form 1 – Statistical Survey Notification Form (to be signed by the ATI authorized signatory as the requesting agency)
- ✓ Survey Questionnaires
- ✓ SSRCS Form 4 – Statistical Survey Monitoring Form
- ✓ Enumerator’s Manual
- ✓ List of tables to be generated

It is expected that the PSA will approve the survey protocol and will issue the survey clearance within Month 3.

2.1.7 Pre-testing and Finalization of the Survey Questionnaires

As part of the Draft Inception Report, the Consultant Team has prepared the draft survey questionnaires for farmers and LGU extension workers. These survey questionnaires were revised incorporating the comments and suggestions raised by ATI. The revised survey questionnaires for farmers and LGU extension workers are attached as **Annexes 3 and 4**.

Pre-test of these survey questionnaires will be done to test the clarity and length of the interview. To facilitate the conduct of pre-test, the following specific activities will be done:

- Preparatory activities, which include coordination with pre-test respondents, arrangement of venue/food, preparation of supplies and materials needed for the activity, coordination with ATI.
- Actual conduct of the pre-test of survey questionnaires;
- Documentation of the activities conducted for pre-test; and
- Finalization of the survey questionnaires.

2.2 Data Collection, Processing, and Analysis Phase

2.2.1 Preparations for Data Collection/Field Work

Data Entry Program and Pilot-testing of the CAPI Application. A data collection and processing software package Census and Survey Processing System (CSPro) will be used to create the Computer Assisted Personal Interview (CAPI) application in the tablets or smartphones. The pre-tested/approved paper-based questionnaire will be used as a basis for the creation of the preliminary data dictionary and data entry program. Range check rules and skipping patterns will be incorporated in the program as they apply. The conversational flow of the interview process will also be considered in the design of the program. The data entry application will be designed to send completed interview records to a web server, as well as receive program modifications from the web server. A codebook for survey variables will also be developed.

A pilot-testing of the CAPI application will then be conducted. After which, the feedbacks to be received from the pilot-testing will be collated and referred to the programmer to make the necessary adjustments prior to the conduct of the field interviews.

The pilot testing of tablet-based survey instruments will be conducted as part of the survey teams' training. To facilitate the conduct of pilot testing of the tablet-based data collection instruments, the following specific activities will be done:

- Preparatory activities, which include coordination with the survey teams, coordination with pilot test respondents, preparation of supplies and materials needed for the activity, and coordination with ATI;
- Actual conduct of the pilot test of tablet-based survey questionnaires;
- Documentation of the activities conducted for pilot testing; and
- Refinement and finalization of the tablet-based survey questionnaires.

Recruitment and Training Data Collection Teams

In addition to the key experts to be engaged for this assignment, survey teams composed of field supervisors/survey team leaders and survey enumerators will be hired and mobilized to conduct the survey of agricultural extension workers and farmers. Also, KII teams will be mobilized composed of facilitators and documenters. An online training of the survey teams will be facilitated by the Consultant Team, to be led by the Team Leader and the Statistician/Data Management Specialist, prior to actual data gathering for them to be sure that they are prepared with both technical skills and contextual knowledge. There will be role playing to familiarize the researchers with the survey questionnaires. Survey teams will be required to write field diary on a daily basis. This will be useful in drawing the experiences learned in the data collection and to document issues and concerns while conducting the study.

For the KIIs, the key experts will serve as the facilitators while support staff/RAs will act as the documenters.

Social Preparation and Logistical Arrangements

Prior to data gathering in the field, a coordination mechanism will be established at the study areas to ensure as well as to facilitate the conduct of the research activities. Permission to

conduct the survey and KIIs will be secured from the concerned authority prior to the actual conduct of the activities. A formal communication letter will be sent to concerned ATI training centers and LGUs before the conduct of the data collection activities.

Following the approved sampling plan and the work plan, the members of the survey teams will coordinate with the target survey respondents and key informants from the selected ATI training centers. They will exert all effort to contact each targeted respondent. Moreover, all administrative and logistical requirements needed for data collection will be prepared at this time.

2.2.2 Data Collection and Quality Control

The survey of agricultural extension workers and farmers will be done through CAPI using android tablets or smartphones. This will allow the survey teams to collect and transmit data from the field to a cloud-based server, with the possibility of geo-referencing. This method will also allow real-time monitoring of data quality, eliminates the need to print survey forms, reduces enumerator error and eliminates the need for data entry.

A total of 16 survey teams composed of 16 field supervisors/survey team leaders and 48 survey enumerators will be deployed to administer the CAPI survey for agricultural extension workers and farmers. The survey interview with the agricultural extension workers will be done remotely using available online platforms like Zoom, MS Teams, or Google Meet or through phone interview. Depending on the capacity of the target respondents, the survey interview with the farmers will be done onsite, online, or through phone interview.

At the end of each enumeration day when the survey teams are in a place with wireless fidelity (WI-FI) or internet facilities, the data will be uploaded and transmitted to the server (Dropbox) where the data processing team will download and commence processing. For backup purposes, the data will be stored in another digital storage instrument.

For the conduct of KIIs, three KII teams composed of three facilitators and 3 documenters will be deployed. The KIIs are proposed to be conducted remotely using available online platforms like Zoom, MS Teams, or Google Meet.

During data collection, the ASPSI shall undertake the following:

- Provide the survey team members with the necessary supplies and materials (enumerator's manual, field protocols, identification cards, etc.);
- Ensure safety and security in the field of the survey team members.;
- Manage and monitor the survey team members' data collection activities;
- Ensure implementation of data collection plan and quality control plan;
- Document the respondent's refusal to answer any questions during the interview;
- Ensure that all enumerators perform consistency checks that questionnaires are fully complete before they leave the respondent's location; and
- Ensure the security of the data collected.

Moreover, the ASPSI Consultant Team shall undertake internal quality control procedures and engage in regular supervision activities to ensure all accomplished survey questionnaires are complete, consistent, and accurate. Also, field supervisors/survey team leaders will be tasked to check all completed survey questionnaires at the end of each workday. Questionnaires with missing or inconsistent responses must be completed as soon as possible.

2.2.3 Data Processing and Analysis

For CAPI survey, the data processing activities will include the following:

- a. **Transfer of Data.** Survey enumerators will be instructed to sync or upload data to the server on a daily basis before 10 PM to help monitor the progress of the survey every morning.
- b. **Data Extraction.** Interim data shall be extracted within the first full week of data collection to have an initial review of the data, to check for completeness, the accuracy of quality control checks programmed in the survey, and other issues affecting the quality of data collection. Data will also be extracted on a weekly basis for checking the number of completed interviews and for quality control. Observed outlier, if there is any, will be subjected to further verification. After survey completion, the complete dataset will be extracted for final validation and cleaning before processing.
- c. **Data Processing.** Once data have been cleaned and validated, data will be prepared for table processing. The data processing will include tabulations of all variables, consisting of descriptive statistics for continuous variables and frequency and percent tabulations for categorical variables including missing and special values like don't know, not applicable, or no response. Survey data will be properly label to ensure future usability for analysis.

On the other hand, qualitative data collected thru KIIs will be recorded electronically with permission from the key informants. Specifically, KII data will be captured with the use of zoom recording. Documenters assigned will be tasked to transcribe the documentation of the interviews conducted to the extent possible. There will also be photo and video documentation and the pictures and videos generated shall be stored in digital format for submission as needed and as permitted by the concerned key informants. Qualitative data will be analyzed and the themes drawn from responses will be used to enrich the analysis of survey data. Results in concise qualitative description can be the evaluation study data. They can also form the bases for crafting recommendations on what measures have to be put in place and how this can be communicated effectively and efficiently through policy communication planning.

Appropriate data analysis shall be done to address the AFE RBME study. Analysis should lead to generation of data to answer the evaluation questions. All claims, inferences, generalizations, and conclusions reported will be backed up with the most appropriate quantitative or qualitative data as captured in the KIIs and survey. Triangulation will be done. The analysis and interpretation of facts and data from this study, to become more meaningful, relevant and useful to various stakeholders, will be viewed from varied and broader perspective. To facilitate data comparison and analysis, tables, charts and graphs of key indicators and other tools for comparison will be prepared and this will be included in the AFE RBME study report.

2.2.4 Preparation and Submission of the Progress Report

The ASPSI Consultant Team, to be led by the Team Leader, will prepare the Progress Report for submission to ATI. This report will include the progress of the evaluation study, the issues and problems encountered during data collection and the solution/s made to address the problems.

A total of three (3) monthly progress reports will be prepared and submitted to provide update and progress of the evaluation, specifically the data collection, processing, and analysis stage:

- **Progress Report 1** will include discussion on the conduct and result of pre-testing of the survey questionnaires, training of survey teams, pilot testing of CAPI survey, coordination with survey respondents and key informants; and start of data collection;
- **Progress Report 2** will include discussion on the completion of both quantitative and qualitative data collection; and
- **Progress Report 3** will include discussion on data processing and analysis and preliminary result.

2.3 Report Preparation and Presentation of the Result Phase

2.3.1 Preparation and Presentation of the Preliminary Output

Immediately after data processing and analysis, the Consultant Team, to be led by the Team Leader, will prepare the preliminary output. Following this, a presentation of the initial output to the ATI Technical Review Committee will be arranged. The participants are expected to provide comments and suggestions on the initial findings presented.

2.3.2 Preparation and Presentation of the Draft AFE RBME Study Report

Considering the result of the presentation of the initial output, a Draft AFE RBME Study Report will be prepared. To facilitate this task, the following specific activities will be undertaken:

- Meeting and workshop among members of the Consultant Team
- Writing of the draft report
- Consolidation of the draft report
- Packaging of the draft report
- Submission of the draft report

After the preparation and submission of the Draft AFE RBME Study Report, a meeting with ATI to present the evaluation result and findings of the study will be arranged. This activity will involve preparatory activities, which include the following: coordination with ATI, invitation for major stakeholders to participate in the presentation, logistical arrangements, and technical preparations including preparation of powerpoint presentation of the study.

2.3.3 Finalization and Submission of the Final AFE RBME Study Report

The Consultant Team, to be led by the Team Leader, will finalize the report integrating the comments and recommendations raised during the presentation. To facilitate this task, the following specific activities will be undertaken:

- Meeting among members of the Consultant Team
- Writing of the final report
- Consolidation of the report
- Packaging of the report
- Submission of the Final AFE RBME Study Report and approval by ATI

The detailed work plan for the conduct of AFE RBME study is presented in **Table 5**.

G. PROJECT DELIVERABLES

At the end of nine (9) months, the ASPSI Consultant Team is expected to complete and submit the required deliverables listed in **Table 6**.

Table 5. Detailed work plan

No.	Activity/Work	Months from the start of the project																							
		Month 1 Feb 12 - 16 23 29 6 13 20 26 5 12 19 26 3 10 17 24 31	Month 2 Mar 4 - 11 18 25 1 8 15 22 29 5 12 19 26 2 9 16 23 30	Month 3 Mar 18 - 25 1 8 15 22 29 5 12 19 26 2 9 16 23 30 6 13 20 27 4 11 18 25	Month 4 May 6 - 13 20 27 3 10 17 24 31 6 13 20 27 3 10 17 24 31 7 14 21 28	Month 5 Jul 8 - 12 19 26 2 9 16 23 30 6 13 20 27 4 11 18 25	Month 6 Aug 5 - 12 19 26 2 9 16 23 30 6 13 20 27 4 11 18 25	Month 7 Aug 19 - 26 2 9 16 23 30 6 13 20 27 4 11 18 25	Month 8 Sep 9 - 16 23 30 6 13 20 27 4 11 18 25	Month 9 Oct 14 - 21 28 4 11 18 25	Month 10 Nov 1 - 8 15														
A. PREPARATORY PHASE																									
	<i>Deliverable 1. Perfected Contract</i>																								
	<i>Deliverable 2. Inception meeting; inception report including study framework/methodology; tools/instruments; plan of work; and pre-testing</i>																								
	<i>Deliverable 2.1 Draft Inception Report including study framework, methodology, research tools and instruments, work plan</i>																								
	<i>Deliverable 2.2 Inception meeting and presentation of the Inception Report including study framework, methodology, research tools and instruments, work plan</i>																								
	<i>Deliverable 2.3 Final Inception Report including study framework, methodology, research tools and instruments, work plan</i>																								
	<i>Deliverable 2.4 Pre-testing of the survey questionnaires and finalization</i>																								
1	Signing of contract and ASPFSI team mobilization																								
1.1	Signing of contract and receipt of Notice to Proceed																								
1.2	Organization and briefing of the ASPFSI consultant team																								
2	Gathering and review of program reports and relevant documents from ATI																								
3	Preparation of the Inception Report including study framework and methodology, research tools/instruments and detailed work plan																								
3.1	Planning meeting/workshop with members of the ASPFSI consultant team																								
3.2	Preparation and submission of the Inception Report including study framework and methodology, research tools/instruments and detailed work plan																								
3.3	Presentation of the Inception Report including study framework & methodology, research instruments and detailed work plan; ATI reviews it and provides feedback																								
3.4	Finalization of the Inception Report including study framework and methodology, research tools/instruments and detailed work plan, and submission to ATI																								
4	Submission of the study protocol including survey tools/instruments to PSA-SSRCS																								
5	Approval of the study protocol including survey tools/instruments by PSA-SSRCS																								
6	Pre-test and finalization of survey questionnaires																								

Table 6. Project deliverables and target submission schedule

No.	Reports/Deliverables	Date (2024)
1	Deliverable 1. Perfected Contract	February 21
	Deliverable 2. Inception meeting; inception report including study framework/ methodology; tools/instruments; plan of work; and pre-testing	
	2.1 Draft Inception Report including study framework, methodology, research tools and instruments, work plan	February 27
	2.2 Inception meeting and presentation of the Inception Report including study framework, methodology, research tools and instruments, work plan	February 28
2	2.3 Final Inception Report including study framework, methodology, research tools and instruments, work plan	March 15
	Submission of survey protocol including the survey instruments to PSA	March 27 - April 26
	2.4 Pre-testing of the survey questionnaires and finalization	May 10
	Deliverable 3. Progress Report and presentation of the initial output to the ATI Technical Review Committee	
3	3.1 Progress Report 1 (report on pre-testing of survey questionnaires, training of survey teams, pilot testing of CAPI survey, coordination with survey respondents and key informants; start of data collection)	July 12
	3.2 Progress Report 2 (report on the completion of data collection)	August 16
	3.3 Progress Report 3 (report on data processing and analysis and preliminary result)	September 20
	3.4 Presentation of the initial output to the ATI Technical Review Committee	October 11
4	Deliverable 4. Final report (electronic copy and 5 printed copies); presentation material of the results and recommendations; all materials used and outputs of the study (electronic copies)	
	4.1 Draft Report	October 25
	4.2 Presentation of the Draft Report	October 28
	4.3 Final Report including presentation material of the results and recommendations; all materials used and outputs of the study	November 12

H. REFERENCES

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ANNEX 1 THE AFE RESULTS INDICATORS

Result Indicator	Description
Increased access to AFE interventions	
1. # of clients served	total number of clients provided with AFE interventions
2. % of marginalized clients trained	proportion of marginalized client such as out-of-school youths, rural women, indigenous people, senior citizen, and persons with disabilities trained
3. % of area coverage	proportion of clients' area coverage reached by AFE interventions
Improved attitude, skills, and knowledge of clients	
4. % of clients saying that they have an increased knowledge	proportion of clients that perceived an increase in knowledge based on the provided intervention
5. % of clients passing the Post-test	proportion of clients scoring at least 60% in the Post-test
6. # of clients certified with skills competencies	total number of clients gaining TESDA national competency certification (NC I, II, III, IV) on AF related subjects
7. % of adopters based on action plan	proportion of AEWs trained that complied to/implemented their action plan
8. % of clients that adopted new AF technologies	proportion of clients (small farmers) that adopted new AF technologies or practices
9. % of clients satisfied with the intervention they received	proportion of clients that gave at least a satisfactory rating after being provided with the intervention
Improved provision of interventions	
10. % of clients saying that the intervention is relevant	proportion of clients that gave at least a somewhat relevant rating on the intervention given in terms of the current situation and needs
11. % of accomplished interventions as scheduled	proportion of timely delivery of interventions based on its targeted schedule of implementation
12. % absorptive capacity	proportion of institutional extent by which the fund allocated for AFE intervention was spent by all AFE institutions
Increased productivity of clients	
13. % of clients engaged in diversified farming	proportion of clients using diversified farming methods/techniques
14. % of clients engaged in value-adding	proportion of clients that ventured into value addition of products
15. % of clients with increased income	proportion of clients that showcased improved AF practices resulting in an increased income
Increased empowerment of clients	
16. % of clients turned into agripreneurs	proportion of clients transformed into agripreneurs
17. % of marginalized clients turned into agripreneurs	proportion of marginalized clients transformed into agripreneurs
18. % of clients employed in AF related job or promoted to a higher position	proportion of clients (including scholars) that have been employed to AF-related job or have been promoted to higher positions
19. # Schools for Practical Agriculture assisted	total number of learning sites elevated into Schools for Practical Agriculture with the assistance of ATI

Result Indicator	Description
20. # Farm Tourism sites assisted	total number of Schools for Practical Agriculture elevated into Farm Tourism sites with the assistance of ATI
Increased resiliency of clients	
21. % of clients with social protection	proportion of clients with crop or livestock insurance, SSS, PhilHealth, among others
22. % of clients saying that they are confident of coping from unfortunate events	proportion of clients that perceived confidence in coping from unfortunate events/total # of clients served
23. % of clients that have coped with unfortunate events by applying adaptation and mitigation measures	proportion of clients that have adopted adaptation and mitigation measures and have coped with unfortunate events
24. % of clients with alternative AF-related job competencies	proportion of clients that are considered to be more adaptive because they have other AF-related job competencies
Increased competitiveness of clients	
25. % of farms certified	proportion of client farms certified as GAP, OA, GAHP, among others
26. % of products certified by an accreditation body	proportion of clients that produced products certified as organic, Halal, GMP, HACCP, among others
27. % of clients producing demand-driven products	proportion of clients providing produce to institutional or commercial buyers
28. % of clients engaged in the overseas market	proportion of clients exporting products to overseas markets

ANNEX 2 INCEPTION MEETING DOCUMENTATION

Inception Meeting Documentation
Agriculture and Fisheries Extension (AFE)
Results-Based Monitoring and Evaluation (RBME) Study
February 28, 2024 | 2PM to 3PM | Zoom

Attendance:

From ATI

1. Cindy C. Alfonso (CCA), Project Evaluation Officer II
2. Gay Ritchel G.Q. Dianala (GRGQD), Planning Officer III
3. Bernard James R. Tandang (BJRT), Project Development Officer III
4. Chandra Rachel C. Panol (CRCP), Planning Officer I

From ASPSI

1. Ernesto O. Brown (EOB), Team Leader
2. Fezoil Luz C. Decena (FLCD), Agriculture and Fisheries Extension System Expert
3. John Lorenzo A. Yambot (JLAY), Statistician/ Data Management Specialist
4. Anita G. Tidon, Technical Writer cum Qualitative Evaluation Specialist
5. Noemi R. Quillo, ASPSI VP/Project Coordinator
6. Christine Yvette E. Dela Viña, Business Development Associate

Highlights of the Inception Meeting

The Inception Meeting was conducted via zoom on February 28, 2024. Four (4) ATI representatives and six (6) ASPSI staff and consultants attended the meeting (Annex A).

The meeting started with a quick introduction of all attendees. Following this, Dr. Brown, the Project Team Leader, presented the draft Inception Report (IR) submitted to the Agricultural Training Institute (ATI) on February 26, 2024. The powerpoint presentation discussed during the meeting is attached as Annex B.



After the presentation of the draft IR, clarifications from ATI and other concerns from ASPSI were raised and discussed.

Table below summarizes the issues and concerns raised.

Concerns/Clarifications Raised	Response
Ms. Dianala of ATI asked if the “access to intervention” will be included in the study methodology, since it is indicated in the results statement of the Theory of Change (ToC) of the AFE RBME system.	Dr. Brown and Dr. Decena clarified that the “access to intervention” will be part of the study because it is crucial to the ToC of AFE RBME. It was not highlighted in the draft inception report but it is included in the draft survey questionnaire.
Ms. Alfonso of ATI requested for more details about the computer assisted personal interview (CAPI) as proposed by ASPSI.	Mr. Yambot explained that the advantage of using CAPI is that it facilitates faster and more efficient way of data encoding, validation, processing, and results generation.
Ms. Alfonso asked if the tablets will be provided to the enumerators.	Ms. Quilloy clarified that while CAPI was not originally proposed, ASPSI will either lend available tablets to enumerators or hire enumerators with tablets or smartphones ready to be used for the CAPI survey.
Ms. Alfonso also inquired if the CAPI survey will not lead to respondents independently filling out survey questionnaires.	Mr. Yambot clarified that the survey will be facilitated by the enumerator and will directly encode the respondent’s answers to the tablet, and not the respondent.
Ms. Alfonso asked if the team can include the probing questions on the adoption of technology or practice of ATI.	The team will include probing questions as requested by ATI to validate the technology or practice adoption of the farmers. Questions related to this will be included in the survey questionnaire after part of Section V. Change of Productivity as a Result of Intervention.
Ms. Dianala asked if there will be interviews for the implementers of the ATI RBME System and if there are survey instruments for this.	Dr. Brown explained that the questionnaire will be finalized after the pretesting. He also clarified that the implementers will be part of the key informant interviews (KII). Also, the survey instrument/tool for this is only guide questions to lead the facilitators in the discussion with the key informant.
Mr. Tandang requested the Consultant Team to give suggestions/recommendations on possible mechanisms or methodologies to be followed to improve data organization, data validation, data management, and effective dissemination of reports, and how RBME data can be used to improve ATI’s programs and services.	The team will look into this concern of ATI and will look into more appropriate indicators to come up with recommendations on how to further enhance the utilization of the RBME system.
ASPSI Consultant Team has requested the following reports/data from ATI: <ul style="list-style-type: none"> • List of AEWs and farmers for Regions 6 and 12 • ATI RBME information system with consolidated indicators for RBME that 	ATI PPD will share with ASPSI the data needed including the specific write ups about the ATI main programs through the google drive. Ms. Alfonso mentioned that she already shared the list of AEWs and farmers from Regions 6 and 8.

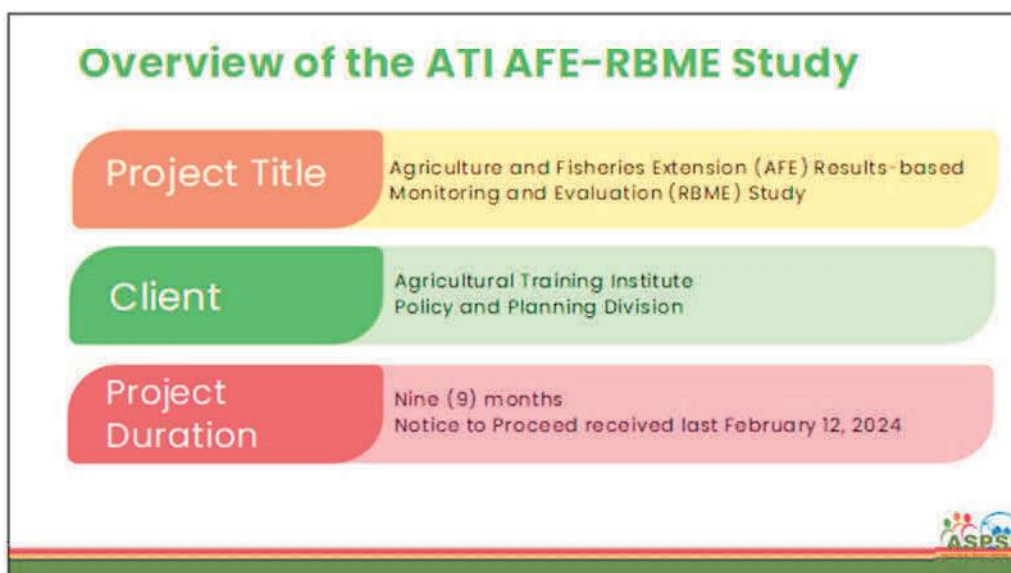
Concerns/Clarifications Raised	Response
<p>can process data from local/regional offices to ATI central office)</p> <ul style="list-style-type: none"> • Write up on the ATI programs • Incomplete data in the list of AEWs and farmers 	<p>ATI has no specific RBME system yet; they still use the traditional system.</p> <p>ATI suggested to use the general programs listed in the farmer’s survey questionnaire (C.3). Also suggested to include “others, please specify” to the item for other programs that will be mentioned.</p> <p>Blank year in the Excel sheets of AEWs and farmers means no survey conducted or no data received/submitted to ATI central office.</p>

Towards the end of the meeting, ATI mentioned that aside from their initial comments, the IR as well as the questionnaires will also be reviewed by PPD supervisors and ATI directorates. Their comments and/or suggestions will also be included in the official communication of ATI. ASPSI team will wait for their comments.

ANNEX A. ATTENDANCE SHEET

ATTENDANCE SHEET ATI AFE RBME Study: Inception Meeting February 28, 2024; Zoom; 2PM					
NAME		DESIGNATION/POSITION	ADDRESS	CONTACT INFORMATION	SEX
1	Cindy C. Alfonso	Project Evaluation Officer II	ATI Bldg., Elliptical Road, Diliman, Quezon City	929-8541 loc 265/267	Female
2	Gay Ritchel G. Q. Dianala	Planning Officer III	ATI Bldg., Elliptical Road, Diliman, Quezon City	929-8541 loc 265/268	Female
3	Bernard James R. Tandang	Project Development Officer III	ATI Bldg., Elliptical Road, Diliman, Quezon City	929-8541 loc 265/268	Male
4	Chandra Rachel C. Panol	Planning Officer I	ATI Bldg., Elliptical Road, Diliman, Quezon City	929-8541 loc 265/268	Female
5	Ernesto O. Brown	Team Leader	Los Baños, Laguna	049 5363448	Male
6	Fezoil Luz C. Decena	Agriculture and Fisheries Extension System Expert	Los Baños, Laguna	049 5363448	Female
7	John Lorenzo A. Yambot	Statistician/ Data Management Specialist	Los Baños, Laguna	049 5363448	Male
8	Anita G. Tidon	Technical Writer	Los Baños, Laguna	049 5363448	Female
9	Noemi R. Quilloy	ASPSI VP/Project Coordinator	Los Baños, Laguna	049 5363448	Female
10	Christine Yvette E. Dela Viña	Business Development Associate	Los Baños, Laguna	049 5363448	Female

ANNEX B. POWERPOINT PRESENTATION DISCUSSED DURING THE INCEPTION MEETING



General Objective of the Study

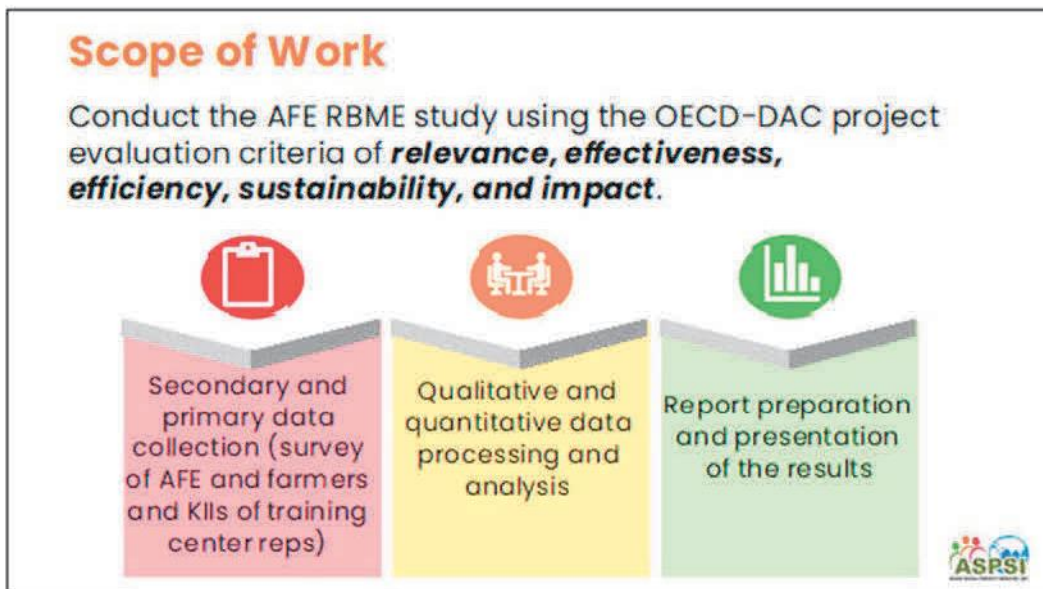


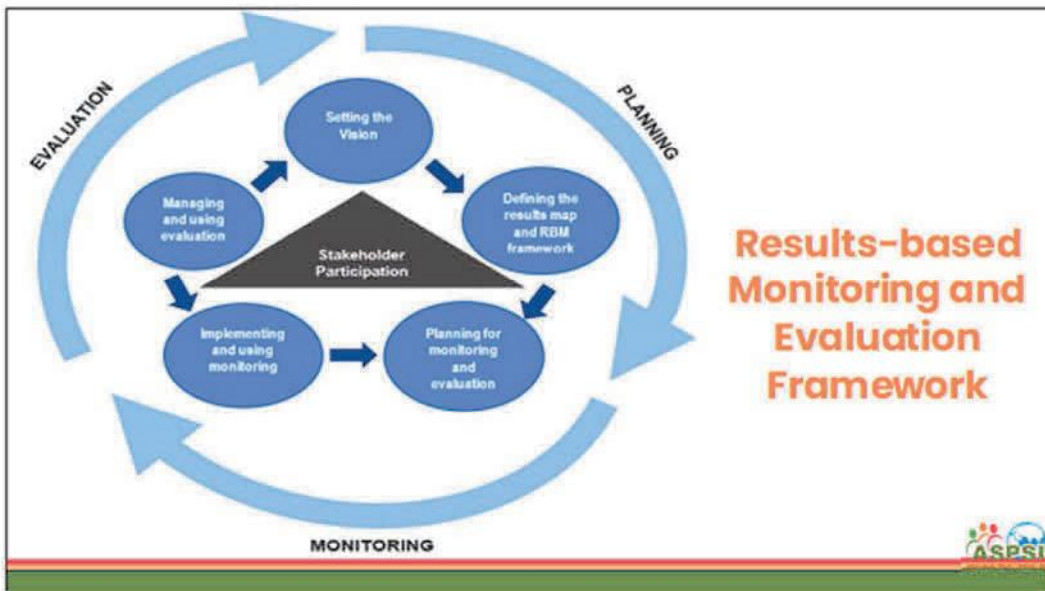
Determine the results of the ATI programs, projects and activities based on the existing parameters from the AFE RBME ToC model.

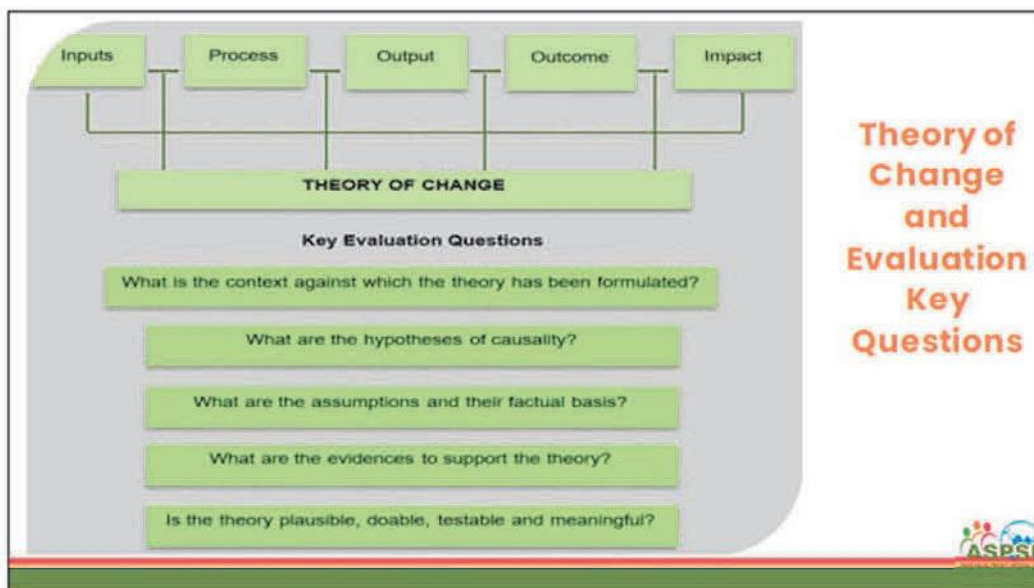
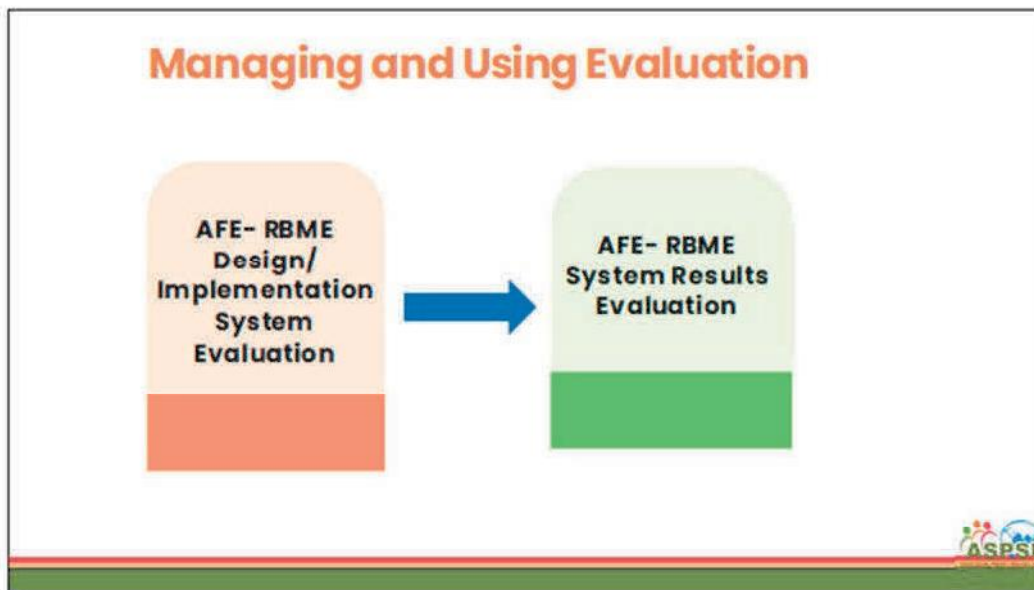


AFE Theory of Change Model

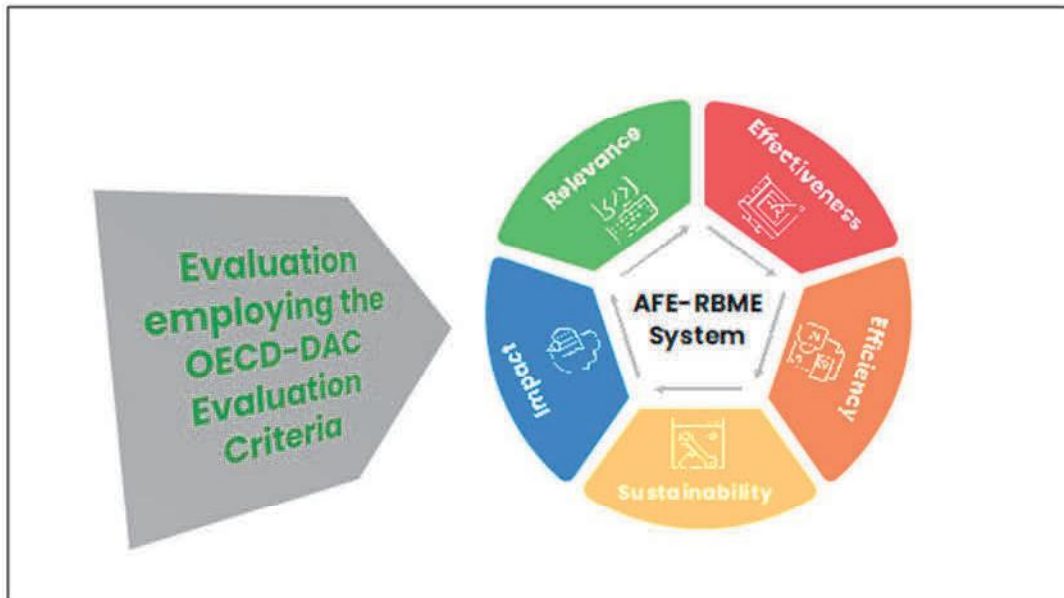
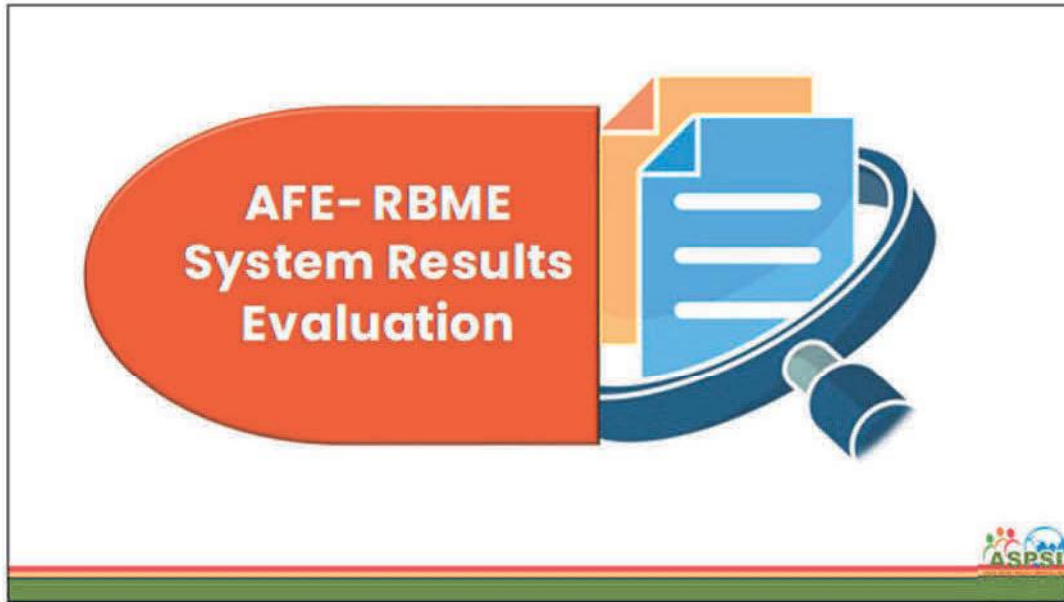
INPUT	ACTIVITIES	OUTPUT	IMMEDIATE	INTERMEDIATE	LONG TERM	SOCIETAL GOALS
Manpower	Provide knowledge products and services	Knowledge products and services provided	Increased access to interventions	Increased productivity of clients	Increased competitiveness of clients	Food security
Money	Provide capability building activities	Capability building activities provided				
Machineries	Establish partnerships	Partnerships established	Improved attitude, skills, and knowledge of clients	Increased empowerment of clients		Increased social equity
Methods	Develop AFE innovations	AFE innovations developed				
Time	Provide climate change initiatives	Climate change initiatives provided	Improved provision of interventions	Increased resiliency of clients		
	Provide enabling environment	Enabling environment provided				











AFE-RBME System Evaluation

Relevance	<ul style="list-style-type: none"> • Are the indicators consistent with the priorities of the government? • To what extent does the RBME address the ATI Organizational outputs, mandates, etc.?
Effectiveness	<ul style="list-style-type: none"> • Is the current set up at ATI able to collect data? • Are the reports from the RBME able to answer the questions of management on the PPAs of ATP? • Are the indicators and targets set in the AFE programs and projects reflective of the intentions of the plans' objectives and strategies?
Efficiency	<ul style="list-style-type: none"> • Is the RBME current set up able to collect, store and process data at the least cost possible and able to provide information on time?
Sustainability	<ul style="list-style-type: none"> • Are financial, human, technical and other support services resources in place to ensure that the RBME system will run smoothly? • Is regular review of the system being conducted? • Is upgrading of the system part of the plan of ATI?
Impact	<ul style="list-style-type: none"> • Are the indicators able to provide information on impact?



Methodology

AFE results indicators to be examined

Group	Indicators
Farmers	<ul style="list-style-type: none"> • Change in attitudes, skills, and knowledge on agriculture and fisheries related subjects, new technologies and practices • Change in productivity of clients • Empowerment of clients • Resiliency • Change in competitiveness



Methodology

AFE results indicators to be examined

Group	Indicators
Extension workers	<ul style="list-style-type: none"> • Changes in attitude, skills, and knowledge on agriculture and fisheries related subjects, implementation of the trainee's action plans, and satisfaction rating • Empowerment of clients • Resiliency of clients
Other clients	<ul style="list-style-type: none"> • Changes in services and systems and procedures • Empowerment of clients



Sampling



Computed sample size based on Slovin's formula with 5% margin of error

Year	Population of Farmers Trained	Population of Ag Ext Workers Trained	Total Population Size	Sample Size for Farmers	Sample Size for Ag Ext Workers	Total Sample Size
2018	2,067	760	2,827	336	263	599
2019	955	240	1,195	282	150	432
2020	883	246	1,129	276	153	429
2021	1,093	299	1,392	293	172	465
2022	5,013	780	5,793	371	265	636
Grand Total	10,011	2,325	12,336	1,558	1,003	2,561





Methods of Data Collection

- ✓ CAPI survey of agricultural extension workers
 - Online / phone interview
- ✓ CAPI survey of farmers
 - Online / phone interview
 - Onsite interview
- ✓ Key informant interviews
 - Online / phone interview



Work Schedule/ Work Plan



Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) Study
 Agricultural Training Institute (ATI)
FINAL INCEPTION REPORT – ANNEX 2

No.	Activity/Work	Months from the start of the project																
		Month 1				Month 2				Month 3				Month 4				
		Feb 12-16	Feb 19-23	Feb 26-1	Mar 4-8	Mar 11-15	Mar 18-22	Mar 25-29	Apr 1-5	Apr 8-12	Apr 15-19	Apr 22-26	Apr 29-3	May 6-10	May 13-17	May 20-24	May 27-31	Jun 3-7
A. PREPARATORY PHASE																		
	<i>Deliverable 1. Perfected Contract</i>																	
	<i>Deliverable 2. Inception meeting; inception report including study framework/ methodology; tools/instruments; plan of work; and pre-testing</i>																	
	<i>Deliverable 2.1 Draft Inception Report including study framework, methodology, research tools and instruments, work plan</i>																	
	<i>Deliverable 2.2 Inception meeting and presentation of the Inception Report including study framework, methodology, research tools and instruments, work plan</i>																	
	<i>Deliverable 2.3 Final Inception Report including study framework, methodology, research tools and instruments, work plan</i>																	
	<i>Deliverable 2.4 Pre-testing of the survey questionnaires and finalization</i>																	
1	Signing of contract and ASPSI team mobilization																	
1.1	Signing of contract and receipt of Notice to Proceed																	
1.2	Organization and briefing of the ASPSI consultant team																	
2	Gathering and review of program reports and relevant documents from ATI																	
3	Preparation of the Inception Report including study framework and methodology, research tools/instruments and detailed work plan																	
3.1	Planning meeting/workshop with members of the ASPSI consultant team																	
3.2	Preparation and submission of the Inception Report including study framework and methodology, research tools/instruments and detailed work plan																	
3.3	Presentation of the Inception Report including study framework and methodology, research tools/instruments and detailed work plan; ATI reviews it and provides feedback																	
3.4	Finalization of the Inception Report including study framework and methodology, research tools/instruments and detailed work plan, and submission to ATI																	
4	Submission of the research proposal including the tools/instruments to PSA																	
5	Approval of the research proposal including the tools/instruments by PSA																	
6	Pre-test and finalization of survey questionnaires																	

No.	Activity/Work	Months from the start of the project																							
		Month 3				Month 4				Month 5				Month 6				Month 7				Month 8			
		Apr 15-19	Apr 22-26	Apr 29-3	May 6-10	May 13-17	May 20-24	May 27-31	Jun 3-7	Jun 10-14	Jun 17-21	Jun 24-28	Jul 1-5	Jul 8-12	Jul 15-19	Jul 22-26	Jul 29-2	Aug 5-9	Aug 12-16	Aug 19-23	Aug 26-30	Sep 2-6	Sep 9-13	Sep 16-20	Sep 23-27
B. DATA COLLECTION, PROCESSING AND ANALYSIS PHASE																									
	<i>Deliverable 3a. Progress reports</i>																								
	<i>Progress Report 1 (report on pre-testing of survey questionnaires, training of survey teams, pilot testing of CAPI survey, coordination with survey respondents and key informants; start of data collection)</i>																								
	<i>Progress Report 2 (report on the completion of data collection)</i>																								
	<i>Progress Report 3 (report on data processing and analysis and preliminary result)</i>																								
1	Pre-Data Collection Activities																								
1.1	Data programming and other preparations for CAPI survey																								
1.2	Recruitment and training of survey teams; pilot testing of CAPI survey																								
1.3	Coordination with ATI for the list of key informants and target survey respondents																								
1.4	Coordination with target key informants and survey respondents																								
1.5	Preparation of survey kits for the survey teams																								
1.6	Logistical arrangements for the survey																								
2	Actual Data Collection																								
2.1	Deployment of KII and survey teams																								
2.2	Conduct of online KIIs and onsite/online/phone survey interviews																								
2.3	Undertake internal quality control procedures and regular supervision activities																								
2.4	Secondary data gathering and review of related literature																								
3	Data Processing and Analysis																								
3.1	Transcription and processing of KII data																								
3.2	Survey data editing, cleaning and data validation																								
3.3	Preparation of tables, charts and figures																								
3.4	Data analysis and interpretation of results																								
4	Preparation and Submission of Progress Reports																								


No.	Activity/Work	Months from the start of the project											
		Month 7			Month 8				Month 9				
		Aug 18 13	Aug 26 20	Sep 02 27	Sep 09 04	Sep 16 11	Sep 23 18	Oct 01 26	Oct 08 03	Oct 15 10	Oct 22 17	Nov 05 30	Nov 12 07
C. REPORT PREPARATION AND PRESENTATION OF THE RESULT PHASE													
	<i>Deliverable 3b. Presentation of the initial output to the ATI Technical Review Committee</i>												
	<i>Deliverable 4. Final report (electronic copy and 5 printed copies); presentation material of the results and recommendations; all materials used and outputs of the study (electronic copies)</i>												
1	Preparation of the initial output of the AFE RBME study												
2	Presentation of the initial output to the ATI Technical Review Committee												
3	Preparation of Draft Report												
4	Submission of the Draft Report												
5	Presentation of the findings of the study and recommendations												
6	Finalization of the report integrating the comments and suggestions raised during the presentation												
7	Submission of the Final Report												

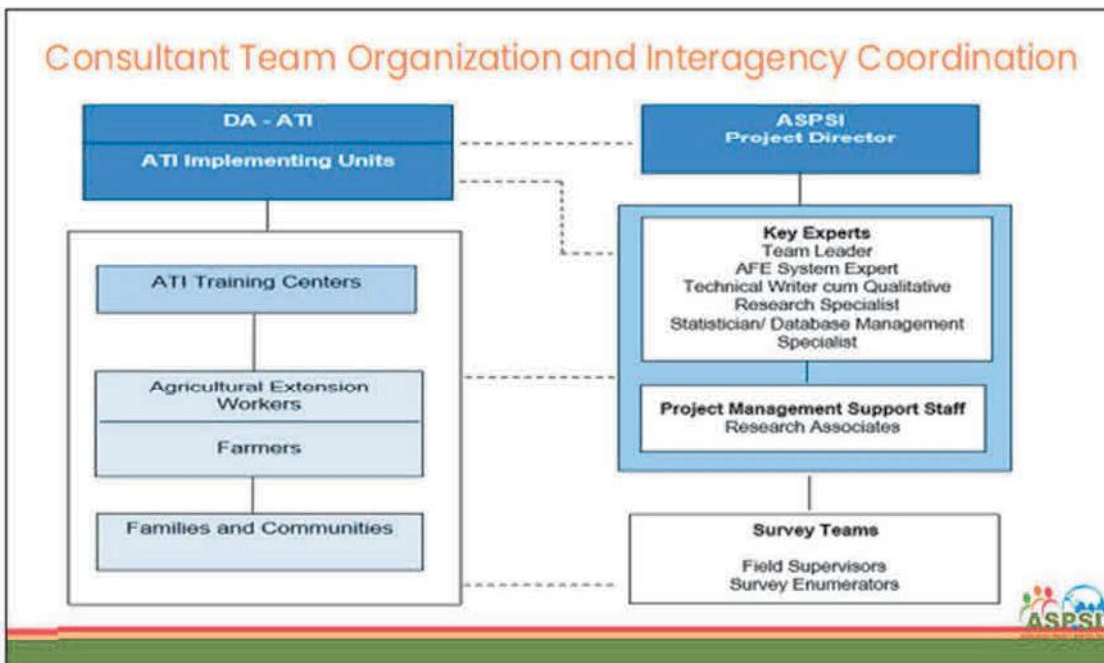
Deliverables

No.	Reports/Deliverables	Date (2024)
1	Deliverable 1. Perfected Contract	February 21
2	Deliverable 2. Inception meeting; inception report including study framework/ methodology, tools/instruments; plan of work; and pre-testing	
	2.1 Draft Inception Report including study framework, methodology, research tools and instruments, work plan	February 27
	2.2 Inception meeting and presentation of the Inception Report including study framework, methodology, research tools and instruments, work plan	February 28
	2.3 Final Inception Report including study framework, methodology, research tools and instruments, work plan	March 15
	Submission of research proposal including tools and instruments to PSA	March 20 - April 26
	2.4 Pre-testing of the survey questionnaires and finalization	May 10

Deliverables

No.	Reports/Deliverables	Date (2024)
	Deliverable 3. Progress Report and presentation of the initial output to the ATI Technical Review Committee	
3	3.1 Progress Report 1 (report on pre-testing of survey questionnaires, training of survey teams, pilot testing of CAPI survey, coordination with survey respondents, key informants; start of data collection)	July 12
	3.2 Progress Report 2 (report on the completion of data collection)	August 16
	3.3 Progress Report 3 (report on data processing and analysis and preliminary result)	September 20
	3.4 Presentation of the initial output to the ATI Technical Review Committee	October 11
	Deliverable 4. Final report (electronic copy and 5 printed copies); presentation material of the results and recommendations; all materials used and outputs of the study (electronic copies)	
4	4.1 Draft Report	October 25
	4.2 Presentation of the Draft Report	October 28
	4.3 Final Report including presentation material of the results and recommendations; all materials used and outputs of the study	November 12





ANNEX 3 SURVEY QUESTIONNAIRE FOR FARMERS

<p style="text-align: center;">Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) Study SURVEY QUESTIONNAIRE FOR FARMERS</p>

INFORMED CONSENT FORM

The Agricultural Training Institute (ATI), the training arm of the Department of Agriculture (DA) mandated to lead in the formulation of national agriculture and fisheries extension (AFE) program, contracted ASPSI, a private consultancy firm based in Laguna, Philippines, to implement the Consulting Services for the Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) Study. In general, the study aims to determine the results of the ATI programs, projects and activities based on the existing parameters from the AFE RBME Theory of Change model. Specifically, it aims to: review and enhance the AFE results framework, including the guidelines and tools; identify issues and challenges encountered during the implementation; and recommend policy options to further improve the ATI programs.

To achieve the above-mentioned objectives of the study, a survey of ATI trained farmers is being conducted. As one of the randomly selected survey respondents, we would like to invite you to take part in the survey and help us in accomplishing the questionnaire. The data/information to be collected from you include the following: socio-economic profile, farm profile, access to agriculture and fisheries interventions, and change in productivity as a result of the interventions.

Your participation in this survey is voluntary. You may refuse to take part in the research and may end the interview anytime without penalty. You are also free to decline to answer any particular question you do not wish to answer for any reason. The researcher/evaluator has no involvement in the project and your choice to respond or not will not affect you and your relationship with ATI in any way.

There is no right or wrong answer. Our only request is your sincere and honest response to every question asked. Your responses to the survey will be recorded and we will also be taking pictures for documentation purposes. Rest assured that your identity and answers will be kept confidential and secured in compliance with the Data Privacy Act of 2012 (RA 10173). All the information that we will be collecting will be used solely for the purpose of the study.

Should you have any questions or concerns about this study or this document, please feel free to ask any questions you may have at this time or contact ASPSI.

Name: Noemi R. Quilloy
Address: 3rd Floor, MG Building 10001 Mt. Halcon St., Los Baños Subd.,
Batong Malake, Los Baños, Laguna 4030, Philippines
E-mail: aspsiglobal@gmail.com
Phone: 63-49-536-3448

If you agree in participating to this survey, please affix your signature in the space provided. Thank you very much.

I, _____, voluntarily agree to participate in this survey and allow my data to be collected as stated above. I affirm that I am at least 18 years of age and that I am competent in my own name insofar as this consent is concerned.

Signature over printed name

Date

Questionnaire No: _____

Enumerator/Interviewer: _____ Date of Interview: _____

Time Started: _____ Time Ended: _____

Region: _____ Province: _____

I. SOCIO-ECONOMIC AND FARM PROFILE

1. Name of Respondent:	_____																			
	Last Name	First Name																		
2. Address:	Barangay:	Municipality:																		
3. Contact Number:																				
4. Age as of last birthday:	_____ years old																			
5. Gender:	<input type="checkbox"/> Male	<input type="checkbox"/> Others: _____																		
	<input type="checkbox"/> Female	<input type="checkbox"/> Preferred not to be specified																		
6. Civil Status:	<input type="checkbox"/> Single	<input type="checkbox"/> Married <input type="checkbox"/> Common law/Live In																		
	<input type="checkbox"/> Widowed	<input type="checkbox"/> Separated <input type="checkbox"/> Divorced																		
	<input type="checkbox"/> Annulled	<input type="checkbox"/> Unknown																		
7. Ethnicity:																				
8. Highest educational attainment:	<input type="checkbox"/> Early Childhood Education <input type="checkbox"/> Primary Education <input type="checkbox"/> Lower Secondary Education <input type="checkbox"/> Upper Secondary Education <input type="checkbox"/> Post-secondary Non-tertiary Education <input type="checkbox"/> Short-cycle Tertiary Education <input type="checkbox"/> Bachelor Level Education or Equivalent <input type="checkbox"/> Master Level Education or Equivalent <input type="checkbox"/> Doctoral Level Education or Equivalent <input type="checkbox"/> No Formal Education																			
9. Household size:																				
10. How long have you been engaged in farming?	_____ years																			
11. Membership to organization:	<input type="checkbox"/> Yes	<input type="checkbox"/> No																		
12. Name of organization:																				
13. If owner of farm, area planted to crops (ha)	<table border="1"> <thead> <tr> <th>Crops</th> <th>Area in hectares</th> </tr> </thead> <tbody> <tr><td>Rice</td><td></td></tr> <tr><td>Corn</td><td></td></tr> <tr><td>Vegetables</td><td></td></tr> <tr><td>Coconut</td><td></td></tr> <tr><td>Banana</td><td></td></tr> <tr><td>Cacao</td><td></td></tr> <tr><td>Fruit trees</td><td></td></tr> <tr><td>Others, specify</td><td></td></tr> </tbody> </table>		Crops	Area in hectares	Rice		Corn		Vegetables		Coconut		Banana		Cacao		Fruit trees		Others, specify	
Crops	Area in hectares																			
Rice																				
Corn																				
Vegetables																				
Coconut																				
Banana																				
Cacao																				
Fruit trees																				
Others, specify																				
14. If raising animals	<table border="1"> <thead> <tr> <th>Animals</th> <th>Number of Head</th> </tr> </thead> <tbody> <tr><td>Pigs</td><td></td></tr> <tr><td>Chicken</td><td></td></tr> <tr><td>Duck</td><td></td></tr> <tr><td>Carabao</td><td></td></tr> <tr><td>Goats</td><td></td></tr> <tr><td>Cattle</td><td></td></tr> <tr><td>Others, specify</td><td></td></tr> </tbody> </table>		Animals	Number of Head	Pigs		Chicken		Duck		Carabao		Goats		Cattle		Others, specify			
Animals	Number of Head																			
Pigs																				
Chicken																				
Duck																				
Carabao																				
Goats																				
Cattle																				
Others, specify																				
15. Tenurial status	<input type="checkbox"/> Owner	<input type="checkbox"/> Tenant																		
	<input type="checkbox"/> Leasehold/Rentee	<input type="checkbox"/> Others (specify)																		

II. ACCESS TO AGRICULTURE AND FISHERIES INTERVENTION

1. Commodities

rice corn vegetables
 banana coconut fruit trees
 chicken swine aquaculture (fish)
 others (specify) _____

2. Do you receive interventions from private companies/government agencies other than ATI?
 Yes No

3. If yes, what are these agencies?

other DA agencies (PCA, BPI, etc) _____
 DENR
 DTI
 LGUs (MAO/PAO)
 SUC (specify) _____
 private companies (specify) _____
 NGO (specify) _____
 Cooperatives/peoples organizations (specify) _____

4. What forms of interventions were received?

Interventions	Agencies					
	DA – ATI	LGUs	Other government agencies	SUCs	Private Companies	NGOs/Coops /POs
Training						
School on the Air						
Advisory services						
IEC Materials						
Machineries/equipment						
Production inputs						
Cash grants/loans						
Market linkage						
Others (specify) _____						

5. Ease in accessing the providers

Agency	Very difficult (1)	Difficult (2)	Neither easy or difficult (3)	Easy (4)	Very easy (5)	Reasons for difficult/very difficult response (e.g. proximity)
DA-ATI						
LGUs (PAO/MAO)						
Other government agencies (specify) _____						
SUCs (specify) _____						
Private firms (specify) _____						
NGOs/POs/Coops (specify) _____						

6. Level of satisfaction for the services provided

Agency	Very dissatisfied (1)	Dissatisfied (2)	Neutral (3)	Satisfied (4)	Very Satisfied (5)	Reasons for dissatisfaction
DA-ATI						
LGUs (PAO/MAO)						
Other government agencies (specify)_____						
SUCs (specify)_____						
Private firms (specify)____						
NGOs/POs/Coops (specify)_____						

III. IMPROVED ATTITUDES, SKILLS AND KNOWLEDGE

1. Please provide details on the interventions received from DA-ATI.

1.1 Type of intervention received from DA-ATI.

Type of intervention	Date/Year attended or provided
Training (provide topic if possible) _____	
School on the Air	
Advisory services	
IEC materials	
Others (specify)_____	

1.2 Did the intervention received from DA-ATI result to increase in knowledge?

Type of intervention	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
Training					
School on the Air					
Advisory services					
IEC materials					
Others (specify)_____					

1.3 Did the training provided by DA-ATI result to NCC certification? Yes No

If yes, what is the level of certification?

Level I Level II Level III Level IV

1.4 Did the intervention received from DA-ATI include technology/practice component?

Yes No

If yes, please specify?

Type of intervention	Technology/Practice Component
Training	
School on the Air	
Advisory services	
IEC materials	
Others (specify) _____	

1.5 Did you adopt the technology/practice component of the intervention received from DA-ATI?
 Yes No

1.6 If yes, what was the result of your adoption of technology/practice component of the intervention received from DA-ATI?
 _____ increased yield
 _____ healthy plants/animals
 _____ less pests and diseases
 _____ less use of inputs
 _____ others (specify) _____

1.7 If no, why not?
 _____ costly inputs
 _____ inputs not available
 _____ difficult to use
 _____ did not understand how to use
 _____ not applicable/ relevant in the farm
 _____ others (specify) _____

2. Level of adoption of technologies/interventions/practice received from DA-ATI. (Please check the level of adoption of the technology/intervention/practice received from DA-ATI only.)

Technology/Intervention/Practice	Did not receive/ NA	Level of adoption			Remarks (provide details if possible)
		High/ Full	Partial/ Not full	None	
Vegetable farming					
Diversified farming					
Backyard gardening					
Organic Agriculture					
Pest management					
Good agricultural practice					
Climate smart technologies					
Mulching/Vermicomposting					
Sloping agricultural land technology (SALT)					
Modern livestock technology					
Animal waste management					
Product processing					
Other commodity-based production technologies (specify) _____					
Entrepreneurship trainings					
- <i>Farmer business schools</i>					
- <i>Climate smart business school</i>					
- <i>Farmer business development and farm record keeping</i>					
- <i>Kapatid Mentor ME</i>					
Others (specify) _____					

IV. RELEVANCE AND TIMELINESS OF INTERVENTIONS PROVIDED BY DA-ATI

1. What is your satisfaction level on the interventions provided by DA-ATI?

Type of intervention	Not satisfied (1)	Neutral (2)	Satisfied (3)	Very satisfied (4)
Training (provide topic if possible)				
School on the Air				
Advisory services				
IEC materials				
Others (specify) _____				

2. Were the interventions provided by DA-ATI relevant to your current situation or needs?

Type of intervention	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
Training					
School on the Air					
Advisory services					
IEC materials					
Others (specify) _____					

3. What is your satisfaction level in terms of timeliness of delivery of the interventions?

Type of intervention	Not satisfied (1)	Neutral (2)	Satisfied (3)	Very satisfied (4)
Training				
School on the Air				
Advisory services				
IEC materials				
Others (specify) _____				

V. CHANGE IN PRODUCTIVITY AS A RESULT OF DA-ATI INTERVENTION

Source of change in productivity	Before intervention	After intervention	Remarks if any
Diversified farming methods			
<i>Use of tractors</i>			
<i>Use of animals</i>			
<i>Use of more inputs (fertilizers/pesticide)</i>			
<i>Use of organic inputs</i>			
<i>Multiple cropping</i>			
<i>Others, specify</i>			
Value addition of products			
Primary processing			
<i>Washing</i>			
<i>Cleaning</i>			

Source of change in productivity	Before intervention	After intervention	Remarks if any
<i>Grading</i>			
<i>Use of proper containers</i>			
<i>Use of cooling equipment</i>			
Secondary processing			
<i>Product transformation (cooked)</i>			
<i>Bottling</i>			
<i>Others, specify</i>			
Price of commodity (estimate per kg, or answer increase or decrease if cannot estimate)			
<i>Commodity 1</i>			
<i>Commodity 2</i>			
<i>Commodity n</i>			
Yield (estimate per cropping per hectare or commodity, or answer increase or decrease if cannot estimate)			
<i>Commodity 1</i>			
<i>Commodity 2</i>			
<i>Commodity n</i>			
Quality of harvest (improved/did not improve)			
<i>Commodity 1</i>			
<i>Commodity 2</i>			
<i>Commodity n</i>			
Income (estimate per cropping per hectare or commodity, or answer increase or decrease if cannot estimate)			
<i>Commodity 1</i>			
<i>Commodity 2</i>			
<i>Commodity n</i>			

VI. EMPOWERMENT AND RESILIENCY

1. Did the DA-ATI intervention provided you the skills and opportunity to become entrepreneurs?
 Yes No

If yes, please describe. _____

2. Do you have social protection?

Social Protection	Before Intervention		After Intervention		Did the ATI training help in your availing the social protection? How?
	Yes	No	Yes	No	
SSS					
Crop Insurance					
Others, specify_____					

3. Did the DA-ATI interventions provided you with confidence to deal with unfortunate events or crisis? Yes No

4. How do you cope with these unfortunate events/crises?

Crisis	Coping Mechanism		Did the ATI intervention result in better coping mechanism?
	Before ATI Intervention	After ATI intervention	
Typhoon			
<i>early harvest of crops</i>			
<i>avail crop insurance</i>			
<i>ask for assistance from LGUs/government agencies</i>			
<i>no action</i>			
Flooding			
<i>early harvest of crops</i>			
<i>use of flood tolerant varieties</i>			
<i>avail crop insurance</i>			
<i>ask for assistance from LGUs/government agencies</i>			
Drought			
<i>delayed planting</i>			
<i>adjustment of planting calendar</i>			
<i>use drought tolerant varieties</i>			
<i>practice mulching</i>			
<i>use drip irrigation</i>			
<i>Hand watering</i>			
<i>ask for assistance from LGUs/government agencies</i>			
<i>Others, specify</i>			
Pests and Diseases			
<i>spraying</i>			
<i>IPM</i>			
<i>no action</i>			
Decrease in output prices			
<i>look for other markets</i>			
<i>did not sell</i>			
<i>sell in the usual market</i>			
Increases in input prices			
<i>look for other sources</i>			
<i>loans</i>			
Family emergencies			
<i>use social protection (PhilHealth, etc)</i>			
<i>loans</i>			
<i>request assistance from government agencies</i>			

VII. FARM CERTIFICATIONS

Certification	Before intervention		After intervention		Did the ATI intervention helped in your getting the certification? How?
	Yes	No	Yes	No	
Good Agriculture Practice (GAP)					
Organic Agriculture (OA)					
Good Animal Husbandry Practice (GAHP)					
Others, specify_____					

ANNEX 4 SURVEY QUESTIONNAIRE FOR LGU EXTENSION WORKERS

<p style="text-align: center;">Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) Study SURVEY QUESTIONNAIRE FOR LGU EXTENSION WORKERS</p>

INFORMED CONSENT FORM

The Agricultural Training Institute (ATI), the training arm of the Department of Agriculture (DA) mandated to lead in the formulation of national agriculture and fisheries extension (AFE) program, contracted ASPSI, a private consultancy firm based in Laguna, Philippines, to implement the Consulting Services for the Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) Study. In general, the study aims to determine the results of the ATI programs, projects and activities based on the existing parameters from the AFE RBME Theory of Change model. Specifically, it aims to: review and enhance the AFE results framework, including the guidelines and tools; identify issues and challenges encountered during the implementation; and recommend policy options to further improve the ATI programs.

To achieve the above-mentioned objectives of the study, a survey of ATI trained AFE Extension Workers is being conducted. As one of the randomly selected survey respondents, we would like to invite you to take part in the survey and help us in accomplishing the questionnaire. The data/information to be collected from you include the following: socio-demographic profile, access to agriculture and fisheries interventions, and change in knowledge, attitudes, skills as a result of the training/interventions.

Your participation in this survey is voluntary. You may refuse to take part in the research and may end the interview anytime without penalty. You are also free to decline to answer any particular question you do not wish to answer for any reason. The researcher/evaluator has no involvement in the project and your choice to respond or not will not affect you and your relationship with the LGU and ATI in any way.

There is no right or wrong answer. Our only request is your sincere and honest response to every question asked. Your responses to the survey will be recorded and we will also be taking pictures for documentation purposes. Rest assured that your identity and answers will be kept confidential and secured in compliance with the Data Privacy Act of 2012 (RA 10173). All the information that we will be collecting will be used solely for the purpose of the study.

Should you have any questions or concerns about this study or this document, please feel free to ask any questions you may have at this time or contact ASPSI.

Name: Noemi R. Quilloy
Address: 3rd Floor, MG Building 10001 Mt. Halcon St., Los Baños Subd.,
Batong Malake, Los Baños, Laguna 4030, Philippines
E-mail: aspsiglobal@gmail.com
Phone: 63-49-536-3448

If you agree in participating to this survey, please affix your signature in the space provided. Thank you very much.

I, _____, voluntarily agree to participate in this survey and allow my data to be collected as stated above. I affirm that I am at least 18 years of age and that I am competent in my own name insofar as this consent is concerned.

Signature over printed name

Date

Questionnaire No: _____

Enumerator/Interviewer: _____ Date of Interview: _____

Time Started: _____ Time Ended: _____

Region: _____ Province: _____ City/Municipality: _____

I. SOCIO-DEMOGRAPHIC PROFILE

1. Name of Respondent:	_____			
	Last Name	First Name		
2. Home Address:	Barangay:	City/Municipality:	Province:	
3. Office Name & Address	_____			
4. Contact Number:	_____			
5. Age as of last birthday:	_____ years old			
6. Gender:	<input type="checkbox"/> Male	<input type="checkbox"/> Others: _____		
	<input type="checkbox"/> Female	<input type="checkbox"/> Preferred not to be specified		
7. Civil Status:	<input type="checkbox"/> Single	<input type="checkbox"/> Married	<input type="checkbox"/> Common law/Live In	
	<input type="checkbox"/> Widowed	<input type="checkbox"/> Separated	<input type="checkbox"/> Divorced	
	<input type="checkbox"/> Annulled	<input type="checkbox"/> Unknown		
8. Highest educational attainment:	<input type="checkbox"/> Early Childhood Education			
	<input type="checkbox"/> Primary Education			
	<input type="checkbox"/> Lower Secondary Education			
	<input type="checkbox"/> Upper Secondary Education			
	<input type="checkbox"/> Post-secondary Non-tertiary Education / Vocational Education			
	Vocational course: _____			
	<input type="checkbox"/> Short-cycle Tertiary Education			
	Course: _____			
<input type="checkbox"/> Bachelor Level Education or Equivalent				
College course: _____				
<input type="checkbox"/> Master Level Education or Equivalent				
Masteral course: _____				
<input type="checkbox"/> Doctoral Level Education or Equivalent				
PhD course: _____				
<input type="checkbox"/> No Formal Education				
9. Household Size:	_____			
10. Number of working family members	_____			
11. Sources of income of respondent	<input type="checkbox"/> government employment		<input type="checkbox"/> farming	
	<input type="checkbox"/> non-farm business, specify _____			
12. Monthly household income by source		Gov't	Farming	Non-farm business
	Respondent			
	Other members			
13. Number of years as LGU extension worker:	_____			
14. Current status of appointment as extension worker:	<input type="checkbox"/> Permanent		<input type="checkbox"/> Contractual	
	<input type="checkbox"/> On job contract			
15. Member of an organization	Farmer organization: <input type="checkbox"/> Yes <input type="checkbox"/> No			
	If yes, name and position in the organization: _____			
	Non-Farm organization: <input type="checkbox"/> Yes <input type="checkbox"/> No			
If yes, name and position in the organization: _____				

II. ACCESS TO AGRICULTURE AND FISHERIES INTERVENTION

1. Commodity specialization in your municipality

- ___rice
 ___corn
 ___livestock, specify _____
 ___others, specify _____

2. How well informed are you about the services provided by the following service providers?

Service Providers	Not aware (1)	Slightly aware (2)	Moderately aware (3)	Very aware (4)	Extremely aware (5)
DA-ATI					
DENR					
DOST					
SUCs (specify)					
Private firm (specify)					
PAO					
MAO					
Other farmers					
Farmer organization (specify)					

3. Extension intervention and advisory services accessed (multiple response)

Service Providers	School on the air	E-Extension	IEC materials	Advisory services	Training
DA-ATI					
DENR					
DOST					
SUCs (specify)					
Private firm (specify)					
PAO					
MAO					
Other farmers					
Farmer organization (specify)					

4. Other services accessed (please check)/ multiple response application

Service Providers	Livelihood projects	Cash grant	Farm inputs	Farm animals	Machinery/equipment	Market linkage
DA-ATI						
DENR						
DOST						
SUCs (specify)						
Private firm (specify)						
PAO						
MAO						
Other farmers						
Farmer organization (specify)						

5. How easy is it for you to access the service providers

Service Providers	Very difficult (1)	Difficult (2)	Neither easy or difficult (3)	Easy (4)	Very easy (5)	Reasons for difficult/very difficult response (e.g. proximity)
DA-ATI						
DENR						
DOST						
SUCs (specify)						
Private firm (specify)						
PAO						
MAO						
Other farmers						
Farmer organization (specify)						

6. How accommodating are the service providers in meeting your needs (e.g. language)

Service Providers	Not accommodating (1)	Slightly accommodating (2)	Moderately accommodating (3)	Very accommodating (4)	Extremely accommodating (5)
DA-ATI					
DENR					
DOST					
SUCs (specify)					
Private firm (specify)					
PAO					
MAO					
Other farmers					
Farmer organization (specify)					

7. How comfortable are you in interacting with service providers?

Service Providers	Very uncomfortable (1)	Uncomfortable (2)	Neutral (3)	Comfortable (4)	Very comfortable (5)
DA-ATI					
DENR					
DOST					
SUCs (specify)					
Private firm (specify)					
PAO					
MAO					
Other farmers					
Farmer organization (specify)					

8. Level of satisfaction with the extension services accessed from different sources.

Service Providers	Very dissatisfied (1)	Dissatisfied (2)	Neutral (3)	Satisfied (4)	Very Satisfied (5)	Reason for dissatisfaction
DA-ATI						
DENR						
DOST						
SUCs (specify)						
Private firm (specify)						
PAO						
MAO						
Other farmers						
Farmer organization (specify)						

9. Rating of extension services provided DA-ATI to LGU extension workers in terms of the following:

9.1 Importance

- Very important
- Important
- Moderately important
- Slightly important
- Not important

Explain your response _____

9.2 Quality

- Very good
- Good
- Acceptable
- Poor
- Very poor

Explain your response _____

9.3 Relevance

- Excellent
- Somewhat relevant
- Poor

Explain your response _____

III. IMPROVED KNOWLEDGE, ATTITUDE AND SKILLS FROM TRAININGS/ INTERVENTIONS RECEIVED

1. Changes in knowledge

1.1 Degree to which you have gained knowledge, facts, and concepts from the extension interventions conducted through ATI.

- I believe that I have gained substantial knowledge, facts, and concepts from the trainings
- I perceive a moderate increase in knowledge, facts, and concepts from the training.
- I'm unsure whether my knowledge has changed.
- My knowledge has not significantly improved. Why? _____
- I have not gained any knowledge from the training. Why? _____

1.2 If you have gained any knowledge or there is moderate increase in your knowledge, how well do you retain and apply the knowledge over time as an extension worker?

- I forget most of the knowledge gained.
- I struggle to retain and apply the knowledge.
- I retain some knowledge but inconsistently apply it.
- I consistently retain and effectively apply the knowledge.

2. Changes in attitude and beliefs related to the training

2.1 Degree to which you have changed your attitude, values, and beliefs as a result of the trainings

- I believe that my attitude and beliefs have changed for the better toward the concepts and the topics discussed.
- I perceive moderate change in attitude and belief related to the training.
- I'm not sure if my attitude and beliefs have changed.
- My attitude and beliefs have not changed.

Explain your response _____

2.2 Impact of training on participants' motivation, enthusiasm, and commitment to applying what were learned

- I am highly motivated and committed to applying in my work what I learned from the training.
- I am somewhat motivated and committed to applying in my work what I learned from the training
- I am not motivated and committed to applying in my work what I learned from the training.

Explain your response _____

2.3 Openness to change: Willingness to embrace new ideas and approaches

- I am willing to embrace new ideas and approaches.
- I am not open much to new ideas and approaches.

Explain your response _____

3. Changes in Skills

3.1 Skills acquisition

- I have developed practical skills, techniques, and competencies during training
- I have somewhat developed practical skills, techniques, and competencies.
- I have not acquired the skill

Explain your response _____

3.2 Skills application and transfer: the extent to which participants can effectively use these skills in work or daily life

- I applied the skills I learned from the training in work and daily life.
- I have not applied the skills learned. Why? _____

4. Passing the Post-Test and Gaining Competencies

4.1 Passed the post-test on trainings attended? [] Yes [] No

4.2 TESDA National competency certification gained on AF related subjects (please check)

- [] NC I [] NC II [] NC III [] NC IV

5. Prepared and Implemented an Action Plan

- 5.1 Did you prepare and submit an Action Plan after the training? Yes No
- 5.2 Were you able to implement the Action Plan? Yes No
If no, why? _____
If yes, how did you implement it? _____
- 5.3 How many barangays are covered in the plan? _____
- 5.4 Are resources provided by LGU sufficient to implement the plan? Yes No
Name other sources of assistance _____
- 5.5 To what extent have the implementation of your plan helped the farmers?

- 5.6 On relevance, are the interventions provided consistent with the LGU development plans and priorities? Yes No
Please explain. _____
- 5.7 On effectiveness, are the interventions contained in the plan addressed the needs of the farmers? Yes No
Please explain. _____
- 5.8 On efficiency, are the interventions carried out at the time they were needed, at the least possible cost? Yes No
Please explain. _____
- 5.9 On sustainability, are the interventions introduced still being practiced long after they have been introduced? Yes No
What are these interventions? Please explain. _____
- 5.10 What problems do you encounter in implementing the plan? _____

IV. EMPOWERMENT OF CLIENTS THROUGH EMPLOYMENT TO AF-RELATED JOB COMPETENCIES

1. After the training, were you promoted to a higher position in your office?
 No, why? _____
 If yes, what position? _____
2. Have you been employed in AF-related job?
 No If yes, what specific AF-related job? _____

V. RESILIENCY OF CLIENTS THROUGH ALTERNATIVE AF-RELATED JOB COMPETENCIES

1. In your job as extension worker, are you provided with social protection like insurance (GSIS or SSS) and PhilHealth among others?
 Yes If no, why? _____
2. Do you have other AF job competencies?
 No Yes, specify _____

ANNEX 5 GUIDE QUESTIONS FOR THE KEY INFORMANT INTERVIEW

**Agriculture and Fisheries Extension (AFE)
Results-Based Monitoring and Evaluation (RBME) Study
KII Guide Questions**

INFORMED CONSENT FORM

The Agricultural Training Institute (ATI), the training arm of the Department of Agriculture (DA) mandated to lead in the formulation of national agriculture and fisheries extension (AFE) program, contracted ASPSI, a private consultancy firm based in Laguna, Philippines, to implement the Consulting Services for the Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) Study. In general, the study aims to determine the results of the ATI programs, projects and activities based on the existing parameters from the AFE RBME Theory of Change model. Specifically, it aims to: review and enhance the AFE results framework, including the guidelines and tools; identify issues and challenges encountered during the implementation; and recommend policy options to further improve the ATI programs.

To achieve the above-mentioned objectives of the study, key informant interview (KII) with representatives from the ATI training centers is being conducted. As one of the selected key informants, we would like to invite you to take part in the conduct of KII. The data/information to be collected from you will include your knowledge, opinions, ideas, recommendations on the following: development and management of the AFE RBME system, implementation of the AFE RBME study, result of the data collection, and reporting and utilization of the AFE RBME results.

Your participation in this KII is voluntary. You may refuse to take part in the study and may end the interview anytime without penalty. You are also free to decline to answer any particular question you do not wish to answer for any reason. The researcher/evaluator has no involvement in the project and your choice to respond or not will not affect you and your relationship with the ATI in any way.

There is no right or wrong answer. Our only request is your sincere and honest response to every question asked. Your responses to the interview will be recorded and we will also be taking pictures for documentation purposes. Rest assured that your identity and answers will be kept confidential and secured in compliance with the Data Privacy Act of 2012 (RA 10173). All the information that we will be collecting will be used solely for the purpose of the study.

Should you have any questions or concerns about this study or this document, please feel free to ask any questions you may have at this time or contact ASPSI.

Name: Noemi R. Quilloy
Address: 3rd Floor, MG Building 10001 Mt. Halcon St., Los Baños Subd.,
Batong Malake, Los Baños, Laguna 4030, Philippines
E-mail: aspsiglobal@gmail.com
Phone: 63-49-536-3448

If you agree in participating to this interview, please affix your signature in the space provided. Thank you very much.

I, _____, voluntarily agree to participate in the KII and allow my data to be collected as stated above. I affirm that I am at least 18 years of age and that I am competent in my own name insofar as this consent is concerned.

Signature over printed name

Date

Interviewer: _____
 Name of Key Informant: _____
 Office: _____

Date of Interview: _____
 Time Started: _____ Time Ended: _____
 ATI Training Center/Region: _____

KEY INFORMANT INTERVIEW GUIDE QUESTIONS

On development and management of the ATI AFE RBME System	1. Please describe the AFE RBME theory of change (ToC). What was the basis for its formulation? What were the assumptions made? Has the ToC been amended in response to current political/economic situation?
	2. In your opinion, what is the purpose of the system? Is this purpose being served or met?
	3. How is targeting for each indicator done? Do you update the indicators? How do you determine if targets are attained?
	4. Are human, political, and social resources sufficient to implement the ATI interventions/PPAs? What do you think are the key competency of an agricultural extension worker/professional?
	5. Are financial resources sufficient to implement the ATI interventions/PPAs? What is the appropriate level of financing to implement the ATI interventions/PPAs?
	6. Are there efficiency constraints? Is the existing coordination and implementation mechanism efficient for achieving the expected results?
On implementation of the ATI AFE RBME Study	1. How was the data collection process for the AFE RBME system? How is data generated for each indicator? What is the regularity of generating the data?
	2. What reports did you review in order to get the needed information for the system?
	3. What issues and concerns were experienced during data collection?
	4. Does the training center have the capacity to properly carry out the activities embedded in the RBME system?
	5. What other challenges did you experience in implementing the system?
	6. What are the lessons learned from implementation of the system?
	7. Do you think the values generated by the system is credible and justifies the performance of ATI?
	8. Do you validate the results generated from the system?
On result of the data collection for the RBME system	1. How did the clients rate their satisfaction with the interventions they received? Did they feel it was relevant to their own needs?
	2. What did clients suggest to improve the provision of ATI's extension interventions?
	3. Was the increase in knowledge and skills evident in the clients? Did the clients feel confident in discussing what they learned from ATI intervention?
	4. How did the clients describe their adoption of AF technologies? Was there any evidence shown about how clients adopted the AF technologies they learned?
	5. How did clients generally describe their farming activities? What is their resource in engaging in farming?

	6. Did the clients believe that their farming activities are sufficient in providing for their household? If not, why?
	7. Were there any evidence or observation that shows clients having an increase in income?
	8. How did the clients describe their adoption of climate change adaptation and mitigation techniques and practices? What social protections were provided by ATI? Are these sufficient for the targeted clients to bounce back?
	9. What issues and constraints did the clients shared that hindered farm and product certification? What assistance are being provided by ATI?
On reporting and utilization of the RBME results	1. How is reporting for the RBME system by the regional centers being done? How do you disseminate the results of the RBME study? Please describe.
	2. Do you have a database to capture, curate, analyze and manage the data? Please describe.
	3. Do you use the results of the RBME system in targeting, planning, and budgeting for ATI?
Recommendations to improve the RBME system	1. How can the implementing agencies of ATI interventions strengthen their M&E system? In what aspects can the system be further improved?

ANNEX

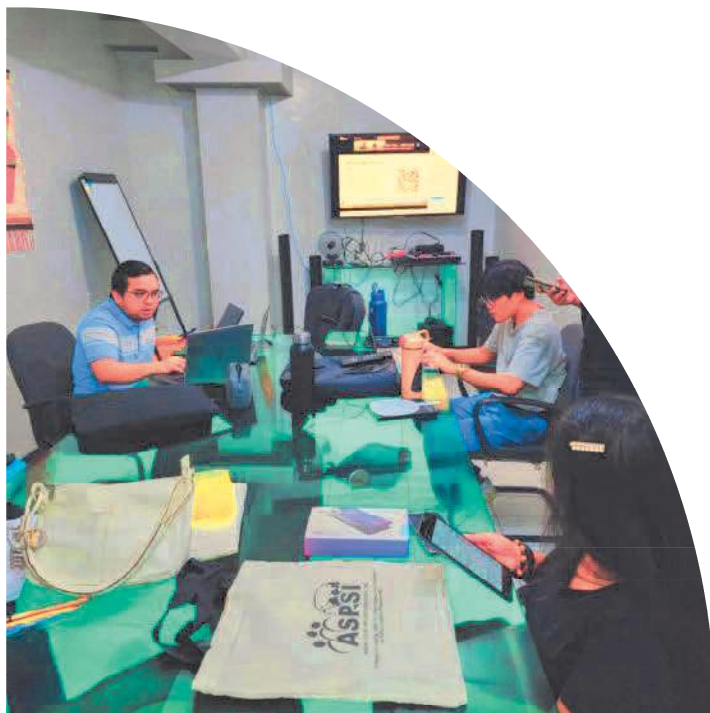


Project Deliverable 3 –
Progress Reports No. 1, 2,
and 3



PROGRESS REPORT NO. 1

AGRICULTURE AND FISHERIES
EXTENSION (AFE) RESULTS-
BASED MONITORING AND
EVALUATION (RBME) STUDY



2024

Submitted by:
Asian Social Project Services, Inc.

Submitted to:
Agricultural Training Institute



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July 8, 2024

ENGR. REMELYN R. RECOTER, MNSA, CESO III

Director IV

Agricultural Training Institute

ATI Bldg., Elliptical Road, Diliman, Quezon City

Subject: Submission of Deliverable 3: Progress Report No. 1 for Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) Study

Dear **Director Recoter**:

Greetings from the Asian Social Project Services, Inc. (ASPSI)!

As part of Deliverable 3, ASPSI is pleased to submit the attached Progress Report No. 1 for the above captioned project. This report contains discussions on the conduct of training of survey teams including pilot testing of the computer-assisted personal interview/computer-assisted telephone interview (CAPI/CATI) application; highlights of the issues and concerns raised during the training and pilot testing; and the revisions made on the tablet-based survey questionnaires, as a result of the training and pilot testing. Moreover, this report contains the progress of data collection activities conducted so far.

We hope that this Progress Report No. 1 merits your kind consideration and approval.

Thank you very much.

Very truly yours,

ERNESTO O. BROWN, PhD

Project Team Leader

Noted by:

JUVY C. ROCAMORA

President, ASPSI

**Agriculture and Fisheries Extension (AFE)
Results-Based Monitoring and Evaluation (RBME) Study**

**AGRICULTURAL TRAINING INSTITUTE
(ATI)**

**Deliverable 3: Progress Report 1
REPORT ON THE TRAINING OF SURVEY TEAMS, PILOT TESTING
OF CAPI SURVEY AND THE PROGRESS OF DATA COLLECTION**

**ASIAN SOCIAL PROJECT SERVICES, INC.
(ASPSI)**

July 8, 2024

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A. INTRODUCTION

The Agricultural Training Institute (ATI), the training arm of the Department of Agriculture (DA) mandated to lead in the formulation of national agriculture and fisheries extension (AFE) program, contracted the Asian Social Project Services, Inc. (ASPSI), a private consultancy firm based in Los Baños, Laguna, Philippines, to lead the implementation of the Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) Study. In general, the study aims to determine the results of the ATI programs, projects and activities based on the existing parameters from the AFE RBME Theory of Change model. Specifically, it aims to: review and enhance the AFE results framework, including the guidelines and tools; identify issues and challenges encountered during the implementation; and recommend policy options to further improve the ATI programs. To achieve these objectives, a survey of ATI trained Agriculture and Fisheries Extension Workers (AEWs) and farmers will be conducted across regions covered by the ATI training centers.

Before the actual conduct of survey, the ASPSI Project Team conducted the training of survey teams, which included the pilot testing of Computer Assisted Personal Interview (CAPI)/Computer Assisted Telephone Interview (CATI) application. Feedbacks from the training and pilot-testing were collated and referred to the data management specialist to make the necessary adjustments and finalization of the tablet-based survey questionnaires.

As part of Deliverable 3 for the AFE RBME Study, this Progress Report No. 1 contains the objectives of the training on CAPI/CATI survey, the training preparatory activities conducted, the actual conduct of training and pilot testing of the CAPI/CATI survey, highlights of the issues and concerns raised, feedback and observations made by the participants; the revisions made on the tablet-based survey questionnaires as a result of the training and pilot testing, and photo documentation of the training and pilot testing conducted.

Moreover, this report contains the progress of data collection conducted so far. The data collection activities included the following: key informant interview (KII), survey of farmers, and survey of AEWs.

B. OBJECTIVES OF THE TRAINING

The training was conducted for the survey teams, composed of the survey team leaders (STLs) and survey enumerators (SEs), to achieve the following:

- Understand the background of the project and the objectives of conducting the AFE RBME study;
- Familiarize with all questions under the different parts of the survey questionnaires;
- Learn how to install and use the digital/electronic survey tool using the Census and Survey Processing System (CSPRO) application;
- Familiarize with the tablet-based survey questionnaires;
- Learn to administer the tablet-based survey questionnaires using appropriate techniques and protocols;
- Practice skipping and routing of questions; and
- Understand the duties and responsibilities of STLs and SEs.

C. PREPARATORY ACTIVITIES CONDUCTED

1. Securing of Survey Clearance from PSA-SSRCS

Considering that this ATI - AFE RBME study included statistical survey, it has applied for survey clearance from the Philippine Statistics Authority (PSA) – Statistical Survey Review and Clearance System (SSRCS). The ASPSI Project Team facilitated the preparation and submission of the following required PSA-SSRCS forms and study protocol:

- ✓ SSRCS Form 1 – Statistical Survey Notification Form, including list of tables to be generated;
- ✓ SSRCS Form 4 – Statistical Survey Monitoring Form;
- ✓ SSRCS Form 6 – Service Feedback Form;
- ✓ Survey Enumerator’s Manual;
- ✓ Survey Questionnaire for Farmers;
- ✓ Survey Questionnaire for AEWs;
- ✓ Compilation of policy uses of survey results; and
- ✓ ATI AFE RBME Study Report (2021).

The survey clearance numbers and the expiration dates of the survey questionnaires were provided thru PSA letter dated April 25, 2024 with reference number 24SS02-080 (**Table 1** and **Annex A**).

Table 1. PSA-SSRCS clearance numbers

Survey Questionnaire	PSA Approval No.	Expiration Date
Survey Questionnaire for Farmers	ATI 2417-01	30 April 2025
Survey Questionnaire for AF Extension Workers	ATI-2417-02	30 April 2025

2. Survey Data Entry Programming

A data collection and processing software package Census and Survey Processing System (CSPro) was used to create the CAPI application in the tablets. The PSA and ATI approved paper-based survey questionnaires were used as basis for the creation of preliminary data dictionary and data entry program. Range check rules and skipping patterns were incorporated in the program as applicable. The conversational flow of the interview process was considered in the design of the program. The data entry application was designed to send completed interview records (cases) to a web server (dropbox), as well as receive program modifications from the web server.

3. Bench-Testing of CAPI/CATI Application

Before and after the training and pilot testing, bench-testing or in-office testing of CAPI/CATI application was conducted by the project coordinator and research associates (RAs) assigned in the AFE RBME study. After which, the feedbacks from the bench-testing were forwarded to the data management specialist for integration in the final application.

4. Coordination with the Survey Teams

As part of the preparatory activities for the training, coordination with the STLs and SEs was carried out. All STLs were contacted to confirm their participation in the training for the survey team members.

5. Provision of Tablets

Prior to the training on CAPI/CATI survey including the pilot testing of CAPI/CATI application, tablets were provided to the survey teams. A total of 49 tablets were lent to all survey enumerators through their respective STL. As discussed during the training, the STLs will turn-over all tablets to ASPSI after completion of the survey.

6. Provision of Survey Kits

Each member of the survey team was given survey kits/bag containing the following: ID, survey enumerator's manual, survey questionnaires, list of respondents to be interviewed, survey monitoring forms (STL diary, SE diary, list of interviewed respondents, travel report), and other survey materials. In total, 68 survey kits/bags were prepared and distributed to all STLs and SEs.

D. ACTUAL CONDUCT OF THE TRAINING

Training of the survey teams was composed of two parts:

- Part I – Training on the survey questionnaires' content; and
- Part II – CAPI/CATI training including pilot testing.

1. Training Part I

Part I of the online training, which focused on the contents of the two (2) survey questionnaires, was conducted on June 1, 2024 via Zoom application. A total of 59 individuals (15 STLs and 44 SEs) from 15 regions participated in the training (**Annex A**). As indicated in the training program flow (**Table 2**), the training started with preliminary activities and a brief introduction about the AFE RBME study. This was important for the STLs and SEs to achieve complete understanding and appreciation of the various questions in the survey questionnaires and how these should be asked to the respondents.

Table 2. Training program of activities (Part I)

Time	Activities	Person-In-Charge/Facilitator
TRAINING PART I - JUNE 1, 2024		
8:30-9:00	Preliminaries <ul style="list-style-type: none"> • Online registration of participants • Introduction of training team and participants • House rules Overview of the AFE RBME Study	Daniel Abraam A. Agbisit and Joshua Japheth G. Macuha, Research Associates Daniel Abraam A. Agbisit
9:00-10:30	Discussions on the content of survey questionnaire for farmers	Dr. Fezoil Luz C. Decena, AF Extension System Expert
10:30-12:00	Discussions on the content of survey questionnaire for AF extension workers	Ms. Anita G. Tidon, Technical Writer and Qualitative Evaluation Specialist
12:00-1:30	Lunch break	
1:30-3:00	Administrative meeting with the Survey Team Leaders	Noemi R. Quilloy, Project Coordinator

Following the overview of the study provided by Mr. Agbisit, Dr. Decena, discussed one by one the questions to be asked to farmer respondents. The final version of the survey questionnaire for farmers used during the discussion is attached as **Annex B**. The STLs and SEs were given time to ask questions and clarifications. Below are the issues and concerns raised and the response of the ASPSI Project Team (**Table 3**).

Table 3. Questions and concerns raised on the survey questionnaire for farmers

Questions/Concerns Raised by the STLs and SEs	ASPSI Project Team Response
How to fill out the questionnaire number?	The CAPI survey questionnaire will have a unique questionnaire number. This was discussed during Part II of the training.
On question # 1.14 - Size of farm area planted to crops.	Since intercropping is possible, enumerators should note that the farmers might say that they are planting one (1) hectare of one commodity and one (1) hectare of another commodity. But it may be possible that they are actually planting in one (1) hectare land for both commodities. This has to be reflected in the tablet-based survey questionnaire.
On question # 3.10 - Level of adoption of technologies/ interventions/practice received from DA-ATI. What are the examples of modern livestock technology?	A list of examples of modern agriculture and livestock technologies and animal husbandry was provided to avoid confusion. Examples provided include: artificial insemination, tunnel vent, rapid detection kits for diseases, embryo transfer, moisture and temperature sensors, hydroponics, and use of greenhouse.
On question # 4.2 - Were the interventions provided by DA-ATI relevant to your current situation or needs?	Possible answers were changed to: very irrelevant (1); irrelevant (2); neither relevant or irrelevant (3); relevant (4); and very relevant (5)
How long will it take to interview each survey respondent?	Based on the result of pre-test of survey respondents, interview with farmer will take 60 to 75 minutes; while an interview with AEW will take around 45 to 60 minutes.
Does the questionnaire have a translation from English to Tagalog and other local dialects?	Translation of survey questionnaires in different languages/ dialects would not be feasible, considering that the survey will be conducted using CAPI/CATI application. Since the survey is not self-administered, the enumerators are expected to translate the

Questions/Concerns Raised by the STLs and SEs	ASPSI Project Team Response
	questions in simple terms/words or in local dialects that can be easily understood by the respondents.
Would the respondents list be provided?	<p>A list of randomly selected survey respondents will be provided to the STLs and SEs.</p> <p>Note: From the master list of randomly selected survey respondents, a list of survey respondents by region/province/ municipality was generated. Depending on the assigned region, STLs and SEs were provided with the lists of survey respondents including their contact details. However, some of the sampled respondents have no contact details.</p>
Did the selected survey respondents agree to participate in the interview?	<p>The STLs will be tasked to contact the sampled survey respondents to ask their permission to participate in the survey. If they agree, the STL will schedule the interview.</p> <p>In the event that the sampled respondent cannot be contacted, they will be replaced following the replacement criteria, which include: respondent who cannot be reached or contacted after three callback attempts (on different days); deceased respondent; and sampled respondent but did not attend ATI training or intervention.</p>
Are we going to print the survey questionnaires and use that to conduct the interview?	<p>No. The survey will be conducted using CAPI/CATI application in tablets. Each enumerator will be provided with tablet to be used in survey interview.</p> <p>Note: As reference of the survey teams, STLs and SEs were provided with hard copies of the two survey questionnaires.</p>
Will the respondents receive a token?	Yes. A token in the form of a cellphone load or G-cash amounting to Php100 will be provided to each survey respondent who completed the interview.
How many days will the survey be done? How many survey respondents need to be interviewed?	<p>These questions were answered during the afternoon session/administrative briefing with the STLs.</p> <p>The duration of the survey will depend on the target number of respondents per region. It was estimated that the survey will take three (3) to four (4) weeks.</p> <p>Considering the estimated length of interview, each enumerator is expected to interview at least five (5) respondents per day.</p>
What survey tool will be utilized in the study? Kobo collect or Survey CPO?	Census and Survey Processing System (CSPro) will be used in the CAPI/CATI survey.
How the consent form will be given to the respondents since most of them will be interviewed online or through phone?	As discussed, and agreed upon during Part II of the training, the tablet-based survey questionnaires include voluntary acceptance of the respondent as part of the informed consent. This needs to be selected/checked to proceed with the interview. This will serve as the proof of voluntary participation of the respondent in the interview.

After a quick break, Ms. Tidon, discussed the survey questionnaire for AEW respondents (**Annex C**). Below are the issues and concerns raised and the response of the ASPSI Project Team (**Table 4**).

Table 4. Questions and concerns raised on the survey questionnaire for AEWs.

Questions/Concerns Raised by the STLs and SEs	ASPSI Project Team Response
Who will conduct the survey for AEWs, the STLs or the enumerators?	The survey enumerators will conduct the survey for AEWs. They will be guided and monitored by their STLs.
On question #3.8, what if the respondents do not remember whether they passed the post-test or not.	The respondents should know it since the survey will only cover 2018 to 2022 ATI trained AEWs.
Are we going to consider as qualified respondents those AEWs who have already resigned/retired/not connected with their offices that sent them to ATI training being evaluated.	<p>The ATI management recommended that these AEWs still be included as qualified respondents. As relayed by ATI, “the training’s benefit to AEWs’ skills, knowledge, and professional development remains valid regardless of their current employment status. Their insights will provide valuable information on how the training has influenced their careers and professional competencies. We acknowledge concerns about the relevance of feedback from those no longer in the same professional context and will ensure that their responses are appropriately contextualized in the analysis.”</p> <p>The same has been relayed to the STLs and SEs for their guidance.</p>
If the respondent is not available for 3 consecutive visits, should they be replaced?	<p>The criteria for replacement are: respondent who cannot be reached or contacted after three callback attempts (on different days); deceased respondent; and sampled respondent but did not attend ATI training or intervention.</p> <p>For face-to-face interview, the STLs and SEs were advised to contact first the respondents to schedule and confirm the interview date and time before going to the area.</p>

The afternoon session was devoted to administrative meeting with the STLs. During this meeting, the following roles and responsibilities of the STLs and survey protocol were explained.

1. Mobilize three (3) or four (4) survey enumerators who will be assigned to conduct the online/phone or face-to-face CAPI/CATI survey in the assigned provinces and municipalities.
2. Participate in the training on the use of survey instruments, which would include familiarity with the content of the questionnaires, effective styles of interviewing, timeline, replacement of sample respondent, and other administrative concerns;
3. Ensure that the survey enumerators are properly guided on the following during the actual data collection: (a) proper use and maintenance of tablets including updating of CAPI/CATI instrument, (b) selection and replacement of respondents, (c) completion of required number of interviews per day per enumerator, (d) completeness and accuracy of data gathered before submission/synching of survey data collected, (e) provision of token to survey respondents, and (f) proper accomplishment and submission of survey related monitoring forms;
4. Ensure that the survey enumerators are provided with necessary survey kits/materials;
5. Conduct validation/verification of the list of respondents and replacements and provide the list of verified respondents and replacements to enumerators based on the master list that will be provided by ASPSI. Prior to actual data collection by the team, the STL should

- make sure that the survey enumerators are properly advised on the list of respondents (including contact details) to be interviewed per day;
6. Coordinate with ASPSI Research Associate (RA) the organization and coordination of data gathering activities of the survey enumerators and provide daily updates of the survey activities using the monitoring forms to be provided by ASPSI;
 7. Ensure that the required number of respondents are properly interviewed (5 respondents/day/ enumerator);
 8. Collate and ensure completeness of survey monitoring forms such as the enumerators' list of interviewed respondents and diary, enumerators' agreements, signed informed consent forms (for face-to-face interview of selected farmers) as well as the STL's diary and consolidated list of interviewed respondents which shall all be submitted to ASPSI upon completion of the survey;
 9. Properly disburse payments to survey enumerators and collate the necessary supporting documents for liquidation. Only those with proper supporting documents shall be considered as expenses; and
 10. Liquidate the cash advances provided by ASPSI using the required forms with proper supporting documents.

2. Training Part II

Training Part II, which was spearheaded by Mr. John Lorenzo Yambot (Statistician/Data Management Specialist), was conducted on June 20, 2024. It was a blended training activity where the STLs and enumerators assigned in Region IV-A (CALABARZON) attended face-to-face together with the ASPSI Project Team. While the rest of the STLs and SEs attended online via Zoom application. A total of 63 individuals (15 STLs and 48 SEs) from 15 regions participated in the training (**Annex A**).

As presented in **Table 5**, the training started with preliminary activities followed by the CAPI survey training proper.

Table 5. Training program of activities (Part II)

Time	Topics to be covered	Person-in-Charge/Facilitator
TRAINING PART II: CAPI SURVEY - JUNE 20, 2024		
8:30-9:00	Preliminaries <ul style="list-style-type: none"> • Registration • Introduction of training team and participants • House rules Overview of the AFE RBME Study	Daniel Abraam A. Agbisit and Joshua Japheth G. Macuha Daniel Abraam A. Agbisit
9:00-12:00	CAPI Survey Training <ul style="list-style-type: none"> • Installation of the CSEntry CSPro Data Entry Program in Tablets • Uploading of the data entry applications • Accessing of the tablet-based survey questionnaires 	Mr. John Lorenzo Yambot, Statistician and Data Management Specialist
12:00-1:00	Lunch break	
1:00-2:00	Pilot Survey Interview of Farmer Respondent	Selected Enumerator
2:00-2:30	Feedbacking session	Mr. John Lorenzo Yambot
2:30-3:00	Pilot Survey Interview of AEW Respondent	Selected Enumerator
3:00-3:30	Feedbacking session	Mr. John Lorenzo Yambot
3:30-4:00	Administrative Briefing	Noemi R. Quilloy

After the preliminaries, Mr. Agbisit provided a brief overview of the AFE RBME study for the information of those who were not present during Part I of the training. Following this, Mr. Yambot guided the participants on the step-by-step process of installing the CSEntry data entry application in the tablet and the uploading of the two survey questionnaires. Upon successful installation of the application and uploading of the survey questionnaires, the participants were instructed to access and familiarize themselves with the interview of the CAPI/CATI application with the guidance of Mr. Yambot.

After lunch break, a pilot survey interview of a farmer respondent was conducted by a selected enumerator from CALABARZON. The computer-assisted telephone interview was setup in a manner that all online participants were able to observe the entire process. The phone interview with the farmer, however, was not completed and lasted only for an hour since the respondent had to terminate the interview to attend to his next appointment. To complete the process, Mr. Yambot ran through the remaining questions and provided an indicative response.

Early termination or interruption of the survey interview with respondents may happen in the actual data collection. In this case, the STLs and SEs were instructed to schedule the next interview date with the respondent to complete the survey.

Following the interview, feedbacking session was facilitated by Mr. Yambot. Feedbacks and comments raised during pilot-testing with the farmer respondent were collated and served as the basis for adjustments and data reprogramming prior to the conduct of survey interviews. Below are the observations and comments raised and the actions taken/response of the ASPSI Project Team.

Table 6. Observations and comments raised during pilot interview with farmer respondent.

Observations/Comments Raised	Action Taken/ Response
How to get respondent's signature for informed consent form?	<p>The tablet-based survey questionnaires include voluntary acceptance of the respondent as part of the informed consent. This needs to be selected/checked to proceed with the interview. This can be a proof of voluntary participation of the respondent in the interview.</p> <p>Upon consultation with Ms. Cindy Alfonso regarding this form of consent, Ms. Alfonso, through her chat message dated June 21, 2024, confirmed the acceptance of such proof of informed consent. In addition, the survey teams were instructed to submit hard copies of the signed informed consent forms from those farmers who will be interviewed face-to-face.</p>
<p>On Question #2.5 - Level of easiness or difficulty in accessing interventions.</p> <p>While the answer was easy, follow up question was "what was the reason for difficulty?"</p>	Applied skipping pattern such that the follow up question on the reason will only appear if the answer of respondent is difficult or very difficult.
<p>On Question #3.6 and #3.10 – Technologies and practices and level of adoption of technologies and practices.</p> <p>The farmer respondent got irritated when he was asked repetitive questions, though</p>	Reprogrammed the questions and applied skipping pattern such that those not selected in Question #3.6 will not be further asked in the succeeding questions about level of adoption of technologies and practices.

Observations/Comments Raised	Action Taken/ Response
referring to different technologies and practices. Some questions asked were not relevant to the reference training being assessed.	
On Question #5.2 - Change in value addition of products before and after the interventions. For reference of the survey enumerators, it was suggested to include the definition of value addition in the questions. It was also suggested to include examples of primary, secondary, and third processing methods.	Statement "Value addition means the improvement or increase in the value of product as a result of interventions" was included. Also, the following examples were added: <ul style="list-style-type: none"> • Primary processing (washing, cleaning, drying, use of proper containers, use of cooling equipment) • Secondary processing (fermentation) • Third processing (product transformation (cooked), bottling)

The pilot interview of AEW respondent followed. Similar with the first, the computer-assisted phone interview conducted by another enumerator from CALABARZON, was setup in such a way that all participants were able to observe the entire process. The phone interview with the AEW respondent lasted for about 45 minutes.

Following the interview, feedbacking session was again facilitated by Mr. Yambot. Feedbacks and comments raised during pilot interview of AEW respondent were considered in survey data reprogramming. Below are the observations and comments raised and the actions taken/response of the ASPSI Project Team (**Table 7**).

Table 7. Observations and comments raised during pilot interview with AEW respondent.

Observations/Comments Raised	Action Taken/ Response
On Question #2.2 – How well informed are you about the services provided by the following service providers? Some of the services providers (DA-ATI, DENR, DOST, MAO, PAO) included in the questionnaire have no question about the awareness level on the services they provide.	Reprogrammed the question to include the question on the level of awareness to the interventions provided by DA-ATI, DENR, DOST, MAO, PAO.
On Question #2.3 - Extension intervention and advisory services accessed (multiple response). When "training" was selected (under DA-ATI as service provider), no further question on the title and year of the training followed. If no intervention and advisory services accessed by the respondent, there was no option for "none". Possible answer "none" needs to be included in the choices so that it will not prompt to questions on the level of difficulty, level of comfort, and level of satisfaction.	Reprogrammed the question and applied skipping pattern. When "training" is selected, the next question will be the title and year of the training accessed from DA-ATI. Possible answer "none" was included in the choices of extension intervention and advisory services accessed. Skipping pattern will apply if "none" is selected.
On Question #3.12 – Were you able to implement the action plan. While the answer selected was "no", it still proceeded with the questions about implementation of the plan.	Reprogrammed the question and applied skipping pattern. After answering "no", the respondent will be asked to explain why and to answer question #3.13. After this, the interview will skip to Part IV.

After the CAPI survey training and pilot testing, administrative briefing followed. During this briefing the survey teams were reminded on the following:

- STLs will verify the list of respondents based on the master list provided by ASPSI.
- STLs will make sure that the enumerators are provided with the verified list of respondents (including contact details) to be interviewed per day.
- STLs should ensure that the required number of respondents are interviewed (5 respondents/day/ enumerator).
- STLs will disburse payments to the enumerators. Only those with proper supporting documents shall be considered as expenses.
- STLs will liquidate the cash advances provided by ASPSI.
- STLs and SEs are required to fill up and submit survey monitoring forms.
- After completion of the survey, SEs should turn-over the tablets to their STLs (with chargers and battery packs); then STLs will turn-over them to ASPSI.
- The start of the survey will be on June 24.
- First cash advance (CA) will be provided to STLs on June 21.
- The second and last CA will be provided to STLs after submission of the 1st CA liquidation including the supporting documents.

E. PROGRESS OF THE DATA COLLECTION ACTIVITIES

As specified in the approved inception report, the AFE RBME study will involve the survey of ATI trained farmers and AF extension workers. On the other hand, the KIIs will cover key informants from ATI main office and its regional training centers.

1. Key Informant Interview

The interview of key informants from ATI main office and training centers started on May 16, 2024. As of July 3, 2024, a total of 24 key informants representing ATI main office and 14 regional training centers were interviewed online using Zoom application. The KIIs were facilitated by Dr. Fezoil Luz Decena and Ms. Anita Tidon. The remaining two (2) KIIs with ATI- SOCCSKSARGEN and ATI-CARAGA were scheduled on July 9 and 15, 2024, respectively. These KIIs will be facilitated by Dr. Ernesto Brown and Dr. Decena.

The details of the KIIs completed are provided in the table below (**Table 8**).

Table 8. Details of the key informant interviews conducted as of July 3.

ATI Office/Region	Key Informants Interviewed		Date of Interview	Interviewer
	Name	Position/Designation		
ATI - Main Office	Bernard James Tandang	Chief of Policy Standards and Development Section	May 16	Dr. Decena and Ms. Tidon
	Cindy C. Alfonso	Project Evaluation Officer II		
	Mark Alforque	Project Evaluation Officer II		
ATI - Cordilleras	Khareen B. Tigui-ing	Development Management Officer I	May 21	Ms. Tidon
ATI - Ilocos Region	Jayvee Bryan G. Carillo, PhD	OIC, Center Director	May 27	Ms. Tidon
	Jomar Palsimon	Project Evaluation Officer I		
ATI - CALABARZON	Angelo Hernandez	Project Evaluation Officer I	May 28	Ms. Tidon
ATI - Cagayan Valley	Claris M. Alaska, DPA	OIC, Center Director, Training Superintendent I	May 29	Ms. Tidon
	Jhim Salvador	Chief, Career Development and Management Section		
	Vladimir Caliguiran	Chief, Information Services Section		
ATI - MIMAROPA	Manilyn M. Tejada, MPA, LPT	Project Evaluation Officer I	June 7	Dr. Decena
ATI - Western Visayas	Mary Ann A. Ramos, MPM	Training Center Superintendent II Center Director	June 7	Dr. Decena
	Dianne Rivera	Planning Officer/Focal person of RBME		
	Mary Jean Yupano	Designated Monitoring and Evaluation Officer		
ATI - Eastern Visayas	Hazel Grace T. Taganas	Training Superintendent II Center Director	June 10	Ms. Tidon
ATI - Central Luzon	Marciano C. Santos	Unit Head, PMEU Planning Officer II	June 13	Dr. Decena
	Joan P. Su-Ay	Project Evaluation Officer I CFIDP Point Person/ HR Designate		
ATI - Central Visayas	Lhea Araña	Development Management Officer I/ M & E Designate	June 13	Ms. Tidon
ATI - Davao Region	Chonna Vae Cañete	PMEU Representative	June 14	Dr. Decena
ATI - Bicol	Roberto Santos Jr.	Project Evaluation Officer Focal Person, Monitoring and Evaluation, Data Privacy Officer	June 21	Ms. Tidon
ATI - Northern Mindanao	Cheaster Magat	PMEU Technical Support Staff	June 26	Dr. Decena
ATI - International Training Center on Pig Husbandry	Jackielyn B. Garlet	OIC Chief, PMES / Admin Officer IV	June 27	Dr. Decena and Ms. Tidon
ATI - Zamboanga Peninsula	Agustin Wagas	Planning Officer	July 3	Dr. Decena
	Decelyn Cabang	Monitoring and Evaluation Officer		
ATI - SOCCSKSARGEN	Shirley L. Bledia (to be confirmed)	OIC, Center Director	July 15	Dr. Brown
ATI - CARAGA	Jessie V. Bledia, PhD (to be confirmed)	OIC, Center Director	July 9	Dr. Decena

With the permission of key informants, the interviews were recorded and the recordings were transcribed. The KII documentations will be consolidated for qualitative data analysis.

2. Survey of Farmers and AF Extension Workers

Coordination with the randomly selected farmer and AEW respondents commenced on June 24. They were contacted to schedule the date and time of interview to be facilitated by the SEs. As of July 2, 2024, 167 AEWs and 234 farmers have been interviewed, or a total of 401 survey respondents (15%) (**Table 9**).

Table 9. Number of interviewed survey respondents by region as of July 2, 2024.

ATI Centers/Region	No. of Target Respondents			No. of Completed Interview as of July 2			Percentage (%)
	AEW	Farmer	Total	AEW	Farmer	Total	
ATI Cordilleras	54	133	187	0	11	11	5.88
ATI - Ilocos Region	110	118	228	18	10	28	12.28
ATI - Cagayan Valley	101	128	229	22	18	40	17.46
ATI – Central Luzon	79	123	202	7	19	26	12.87
ATI - CALABARZON	106	147	253	12	12	24	9.48
ATI – MIMAROPA	100	89	189	29	18	47	24.87
ATI – Bicol	69	109	178	13	10	23	12.92
ATI – Western Visayas	51	78	129	6	20	26	20.15
ATI - Central Visayas	68	122	190	3	9	12	6.31
ATI – Eastern Visayas	70	125	195	10	19	29	14.87
ATI – Zamboanga Peninsula	20	62	82	6	13	19	23.17
ATI – Northern Mindanao	44	69	113	7	2	9	7.96
ATI – Davao Region	44	82	126	3	39	42	33.33
ATI - SOCCSKSARGEN	28	72	100	0	10	10	10.00
ATI - CARAGA	77	112	189	31	24	55	29.10
NCR (ITCPH)	1	4	5				
TOTAL	1,022	1,573	2,595	167	234	401	15.45

Note: This list includes survey respondents from ITPCH, which are located from different regions.

3. Problems Encountered During Survey and Actions Taken

Meeting with the STLs was conducted on July 3, 2024 to present the progress of the survey in each region; discuss the problems and challenges encountered and actions taken; and present the next steps / targets for the survey. Common problems and challenges encountered during the conduct of the survey interview include the following: some survey respondents cannot be contacted because they have no contact details or have incorrect contact numbers. Some respondents did not answer the call/drop the call while others had refused to be interviewed. Moreover, 2018-2019 survey respondents had difficulty remembering the training they attended.

To address these problems, the survey teams contacted the ATI training centers to ask assistance in getting the updated contact details of the selected survey respondents while some have contacted the MAO, PAO, and the LGUs. **Table 10** presents the detailed problems and challenges encountered and actions taken by region.

Table 10. Problems and challenges encountered and actions taken

Region	Problems/Challenges	Action/s Taken
ATI - Cordilleras	Survey respondents cannot be contacted; no contact details; have incorrect contact numbers; some respondents did not answer the call; some thought they were being scammed	STL went to ATI CAR to ask for updated contact details of the respondents, especially those without cell phone numbers and email addresses. Assisted the enumerators in contacting the respondents via emails, text messages.
ATI - Ilocos Region	Survey respondents cannot be contacted; no contact details; have incorrect contact numbers; only two enumerators conducted the survey	Continued contacting the survey respondents
ATI - Cagayan Valley	Survey respondents cannot be contacted; no contact details; some who answered dropped the call	Contacted ATI-Cagayan Valley to request assistance
ATI – Central Luzon	Almost half of the survey respondents cannot be contacted; no contact details; have incorrect contact numbers, some refused to be interviewed; old respondent cannot remember the training attended; sick respondent; respondent based in other country	The STL/SE assigned was advised to contact the respondent abroad through his/her relative (mother) who answered the call; sick respondent to be replaced Contacted ATI – Central Luzon to assist in obtaining updated contact details of the respondents
ATI - CALABARZON	109 respondents cannot be contacted; some were not answering calls, two respondents refused to be interviewed; some dropped the call; some were hesitant to respond to calls, incorrect name of respondents, deceased respondent	Search through internet/social media to find possible contact information; tried contacting again, sent follow-up emails; contacted ATI-CALABARZON, but the center has same contact details. Deceased respondent to be replaced.
ATI – MIMAROPA	Survey respondents cannot be contacted; no contact details; have incorrect contact numbers, no signal in the area; only two enumerators conducted the interview, the other one was sick	Contacted ATI-MIMAROPA, but the center has same contact details and no updated contact information. Some respondents were contacted thru chat/FB.
ATI – Bicol	Problem in data synching, some were not answering calls, enumerator was not feeling well; three interviews were incomplete	Coordinated with the ASPSI research associate to address the technical issues in data synching; rescheduled incomplete interviews; ATI-Bicol contacted but the center has same contact details.
ATI – Western Visayas	28 respondents not answering the call/ dropped the call, 36 unattended, 33 no contact numbers others with incorrect numbers	Sent email to ATI- Western Visayas to ask assistance in obtaining contact numbers of survey respondents; visited ATI to get updated contact details; continued contacting respondents; sought assistance from PAO/MAO to get updated contact details, emailed the survey respondents, sought assistance from the LGU, contacted respondents thru messenger.
ATI - Central Visayas	Survey respondents cannot be contacted; no contact details; have incorrect contact numbers;	Contacted ATI-Central Visayas, linked with MAO and PAO to get contact

Region	Problems/Challenges	Action/s Taken
	some were not answering the calls; there were some contact numbers that were no longer available	details; STLs/SEs reached out to the barangay captains to help in getting the contact details of respondents
ATI – Eastern Visayas	Survey respondents cannot be contacted; no contact details; have incorrect contact numbers; some were not answering the calls In the face-to-face survey interviews, the issues encountered included: while respondents are from the same municipality, they are far from the barangay proper and far from each other, “ <i>dulo to dulo</i> ”, respondent not at home during the time of visit; some respondents have already moved to different houses/locations, and some cannot be located from the address given.	Contacted ATI-Eastern Visayas, contacted MAO and PAO to get contact details
ATI – Zamboanga Peninsula	Survey respondents cannot be contacted; no contact details; have incorrect contact numbers; some were not answering the calls, others refused to be interviewed	Contacted ATI-Zamboanga, contacted MAO and PAO to get contact details
ATI – Northern Mindanao	Enumerators started July 1, 31 respondents cannot be reached, incorrect number, some were not answering the calls, no contact information, 2018-2019 respondents have outdated contact numbers	Continued contacting the survey respondents
ATI – Davao Region	AEW respondents cannot be reached, face-to-face survey in Panabo conducted but not completed, some were not answering the calls, enumerator had technical problem with the tablet	Requested contact numbers of remaining respondents from Panabo; continued contacting respondents; contacted ATI but no source of updated contact details; requested replacement; smartphone of STL to be used in the survey
ATI - SOCCSKSARGEN	One interview rescheduled; some respondents were not responding, no contact details; three respondents refused to be interviewed and ended the call; some thought they were scammer	List of survey respondents who cannot be contacted/no contact details was given to Sir Alvin of ATI Region 12 to contact the POs that have contacts with the training participants. Respondents who refused to be interviewed to be replaced.
ATI - CARAGA	Two AEWs cannot be interviewed (busy and the other one to give birth), cannot be contacted, no contact information, 2018 respondent cannot remember the training attended, a respondent was included in the list of respondents but did not finish the training course	Continued contacting the survey respondents, coordinated with the ATI in the region for assistance. A respondent who did not complete the training to be replaced.

ANNEX



Attendance Sheet

Annex A. Training Part I and Part II – Attendance Sheet

Region	Name	Designation	Part I (June 1)	Part II (June 20)
CAR	1. Ferlina Bay-OD	Survey team leader	✓	✓
	2. Sharlene A. Segundo	Survey enumerator	✓	✓
	3. Agustina A. Lagenio	Survey enumerator	✓	✓
	4. Ferlyn Carlos Fernandez	Survey enumerator		✓
Region I - Ilocos	5. Leizl Dismaya	Survey team leader	✓	✓
	6. Julius F. Daclan	Survey enumerator	✓	✓
	7. Russel Andrew G. Villena	Survey enumerator	✓	✓
	8. Marcos Dismaya Jr.	Survey enumerator	✓	✓
	9. Elishava Jean T. Viterbo	Survey enumerator	✓	
Region II - Cagayan Valley	10. Wilhelmina Guzman	Survey team leader	✓	✓
	11. Alched A. Villagracia	Survey enumerator	✓	✓
	12. Renato C. Dela Cruz Jr.	Survey enumerator	✓	
	13. Heidi Gayle Layugan	Survey enumerator	✓	✓
	14. Catherine Joy S. Bangayan	Survey enumerator	✓	✓
	15. Jonalyn Soliva Mateo	Survey enumerator		✓
Region III - Central Luzon	16. Lourdes Bautista	Survey team leader	✓	✓
	17. Estrella Z. Malabanan	Survey enumerator		✓
	18. Deborah M. De Vera	Survey enumerator		✓
	19. Sheila M. Gutierrez	Survey enumerator		✓
	20. Modesta Maboloc	Survey enumerator		✓
Region IV-A CALABARZON	21. Vanessa Avenido	Survey team leader	✓	✓
	22. Patricia Ann Orolfo	Survey enumerator	✓	✓
	23. Aries Dave Y. Aguillon	Survey enumerator	✓	✓
	24. Lorna A. Mabilangan	Survey enumerator	✓	✓
	25. Susan P. Segundo-Consigo	Survey enumerator	✓	✓
Region IV-B MIMAROPA	26. Maricel Lorenzo	Survey team leader	✓	✓
	27. Aileen Fontanilla Besaga	Survey enumerator	✓	✓
	28. Mica Aaleyah Quines	Survey enumerator	✓	✓
	29. Else C. Santanez	Survey enumerator	✓	✓
Region V - Bicol	30. Myra Liza Afundar	Survey team leader	✓	✓
	31. Michelle Mendevil	Survey enumerator	✓	✓
	32. Judy Ann Gigantone	Survey enumerator	✓	
	33. Miky Cordovilla	Survey enumerator	✓	✓
	34. Rey Buena Altavano	Survey enumerator		✓
Region VI - Western Visayas	35. Felomina Arroyo	Survey team leader	✓	✓
	36. Roxane B. Octaviano	Survey team leader	✓	✓
	37. Julius O. Velasco	Survey enumerator	✓	✓
	38. Teresita Lina Colmo	Survey enumerator	✓	✓
Region VII - Central Visayas	39. Allan Quitariano	Survey team leader	✓	✓
	40. Edgar S. Villa	Survey enumerator	✓	✓
	41. Jazel S. Tac-an	Survey enumerator	✓	✓
	42. Sharon Escabarte	Survey enumerator	✓	✓
Region VIII - Eastern Visayas	43. Maricel Laruscain	Survey team leader	✓	✓
	44. Cleofe Gadil	Survey enumerator	✓	✓
	45. Joemar Bingco	Survey enumerator	✓	✓
	46. Nilda Montubig	Survey enumerator	✓	✓

Region	Name	Designation	Part I (June 1)	Part II (June 20)
Region IX - Zamboanga	47. Cherina Karil	Survey team leader	✓	✓
	48. Alwalid Yusop	Survey enumerator	✓	✓
	49. Al-muzhabi Karil	Survey enumerator	✓	✓
	50. Jucer Sazon Jr	Survey enumerator	✓	✓
Region X - Northern Mindanao	51. Ricsel Mendrez	Survey team leader	✓	✓
	52. Arch Kapa	Survey enumerator	✓	✓
	53. Christine Fernandez	Survey enumerator	✓	✓
	54. Clyde Pegaro	Survey enumerator	✓	✓
Region XI - Davao	55. Loreto Pantua, Jr.	Survey team leader	✓	✓
	56. Albert Reston	Survey enumerator	✓	✓
	57. Harvey Ebol	Survey enumerator	✓	✓
	58. Dave Gumapac	Survey enumerator	✓	✓
Region XII - SOCCSKSARGEN	59. Norhata Pandaliday	Survey team leader	✓	✓
	60. Fatima Abdulkarim	Survey enumerator	✓	✓
	61. Bainot Johnny	Survey enumerator	✓	✓
	62. Julkaris Mastura	Survey enumerator	✓	✓
Region XIII - CARAGA	63. Anfracita Lasay Epa	Survey team leader	✓	✓
	64. Jovanie Fuego	Survey enumerator	✓	✓
	65. Liza Macalit	Survey enumerator	✓	✓
	66. Mariel Pogosa	Survey enumerator	✓	✓
TOTAL PARTICIPANTS			59	63

ANNEX



Final Survey Questionnaire
for Farmers



**Agriculture and Fisheries Extension (AFE)
Results-Based Monitoring and Evaluation (RBME) Study
FINAL SURVEY QUESTIONNAIRE FOR FARMERS**

INFORMED CONSENT FORM

The Agricultural Training Institute (ATI), the training arm of the Department of Agriculture (DA) mandated to lead in the formulation of national agriculture and fisheries extension (AFE) program, contracted ASPSI, a private consultancy firm based in Laguna, Philippines, to implement the Consulting Services for the Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) Study. In general, the study aims to determine the results of the ATI programs, projects and activities based on the existing parameters from the AFE RBME Theory of Change model. Specifically, it aims to: review and enhance the AFE results framework, including the guidelines and tools; identify issues and challenges encountered during the implementation; and recommend policy options to further improve the ATI programs.

To achieve the above-mentioned objectives of the study, a survey of ATI trained farmers is being conducted. As one of the randomly selected survey respondents, we would like to invite you to take part in the survey and help us in accomplishing the questionnaire. The data/information to be collected from you include the following: socio-economic profile, farm profile, access to agriculture and fisheries interventions, and change in productivity as a result of the interventions.

Your participation in this survey is voluntary. You may refuse to take part in the research and may end the interview anytime without penalty. You are also free to decline to answer any particular question you do not wish to answer for any reason. The researcher/evaluator has no involvement in the project and your choice to respond or not will not affect you and your relationship with ATI in any way.

There is no right or wrong answer. Our only request is your sincere and honest response to every question asked. Your responses to the survey will be recorded and we will also be taking pictures for documentation purposes. Rest assured that your identity and answers will be kept confidential and secured in compliance with the Data Privacy Act of 2012 (RA 10173). All the information that we will be collecting will be used solely for the purpose of the study.

Should you have any questions or concerns about this study or this document, please feel free to ask any questions you may have at this time or contact ASPSI.

Name: Noemi R. Quillooy / Daniel Abraam A. Agbisit
Address: 2nd Floor, MG Building 10001 Mt. Halcon St., Los Baños Subd.,
Batong Malake, Los Baños, Laguna 4030, Philippines
E-mail: aspsi.atirbmestudy@gmail.com / aspsiglobal@gmail.com
Phone: 63-49-536-3448 / 0917-819-6884

If you agree in participating to this survey, please affix your signature in the space provided. Thank you very much.

I, _____, voluntarily agree to participate in this survey and allow my data to be collected as stated above. I affirm that I am at least 18 years of age and that I am competent in my own name insofar as this consent is concerned.

Signature over Printed Name

Date



PSA Approval No.: ATI 2417-01

Expires on 30 April 2025

Questionnaire No: _____

Name of Enumerator/Interviewer: _____
Last Name First Name M. I

Date of Interview _____
mm/dd/yyyy

Region: _____

Time Started: _____
hh:mm

Province: _____

Time Ended: _____
hh:mm

Year and Title of Intervention/Training (based on sampling): _____
 ATI Training Center: _____

I. SOCIO-ECONOMIC AND FARM PROFILE

For this section, personal information such as name, address, sex, age, education, marital status, membership to organization, including farm profile of the respondent will be asked.

1.1 Name of Respondent	_____		
	Last Name	First Name	Middle Initial
1.2 Home Address	_____		
	Floor No.	House/Building Number	Block Name/ Lot No.
	Street Name	Subdivision/Village	Barangay Municipality/City
1.3 Contact Number:	1.4 Age as of last birthday: _____ years old		
1.5 Sex	[] Male [] Female		
1.6 Marital Status	[] Single/Never Married [] Married [] Common law/Live In [] Widowed [] Separated [] Divorced [] Annulled [] Unknown/Not reported		
1.7 Ethnicity	_____		
1.8 Highest educational attainment	[] Early Childhood Education (Preschool, Kindergarten) [] Primary Education (Elementary School) [] Lower Secondary Education (Middle School, Junior High School) [] Upper Secondary Education (High School, Senior High School) [] Post-secondary Non-tertiary Education (Vocational Training) [] Short-cycle Tertiary Education (Associate Degree) [] Bachelor Level Education or Equivalent (Undergraduate Education) [] Master Level Education or Equivalent (Graduate Education, Master's Degree) [] Doctoral Level Education or Equivalent (Doctorate, PhD (Doctor of Philosophy) Education) [] No Formal Education		
1.9 Household size _____	1.10 How long have you been engaged in farming? _____ years		
1.11 Member of an organization	Farmer organization: [] Yes [] No Non-Farm organization: [] Yes [] No		

1.12 Name of and position in the organization	If yes, provide the name/s and position/s in the organization/s. If the answer is no, proceed to 1.13.																			
	Name of Organization	Position																		
1.13 Tenurial status of farm	<input type="checkbox"/> Owner <input type="checkbox"/> Tenant <input type="checkbox"/> Leasehold/Rentee <input type="checkbox"/> Others (specify): _____																			
1.14 Size of farm area planted to crops	<table border="1" style="width: 100%;"> <thead> <tr> <th style="width: 60%;">Crops</th> <th style="width: 40%;">Area in hectares</th> </tr> </thead> <tbody> <tr><td>Rice</td><td> </td></tr> <tr><td>Corn</td><td> </td></tr> <tr><td>Vegetables</td><td> </td></tr> <tr><td>Coconut</td><td> </td></tr> <tr><td>Banana</td><td> </td></tr> <tr><td>Cacao</td><td> </td></tr> <tr><td>Fruit trees</td><td> </td></tr> <tr><td>Others, specify</td><td> </td></tr> </tbody> </table>		Crops	Area in hectares	Rice		Corn		Vegetables		Coconut		Banana		Cacao		Fruit trees		Others, specify	
Crops	Area in hectares																			
Rice																				
Corn																				
Vegetables																				
Coconut																				
Banana																				
Cacao																				
Fruit trees																				
Others, specify																				
1.15 Animals raised	<p>If raising animals, provide the kind and quantity of animals raised (Reference time is the year with ATI intervention on page 1). If not raising animals, proceed to Part II.</p> <table border="1" style="width: 100%;"> <thead> <tr> <th style="width: 60%;">Animals</th> <th style="width: 40%;">Number of Head</th> </tr> </thead> <tbody> <tr><td>Pigs</td><td> </td></tr> <tr><td>Chicken</td><td> </td></tr> <tr><td>Duck</td><td> </td></tr> <tr><td>Carabao</td><td> </td></tr> <tr><td>Goats</td><td> </td></tr> <tr><td>Cattle</td><td> </td></tr> <tr><td>Others, specify</td><td> </td></tr> </tbody> </table>		Animals	Number of Head	Pigs		Chicken		Duck		Carabao		Goats		Cattle		Others, specify			
Animals	Number of Head																			
Pigs																				
Chicken																				
Duck																				
Carabao																				
Goats																				
Cattle																				
Others, specify																				

II. ACCESS TO AGRICULTURE AND FISHERIES INTERVENTIONS

For this section, different agriculture and fisheries interventions received or accessed from ATI and other public and private organizations will be asked including the respondent's level of satisfaction on the interventions received/accessed.

2.1 What is the commodity focus of interventions received from ATI, other government agencies, and private organizations?

Rice Corn Vegetables Organic Agriculture
 Banana Coconut Fruit Tress
 Chicken Swine Aquaculture (fish)
 Others (specify): _____

2.2 Do you receive interventions from private companies/government agencies other than ATI?

Yes No (If no, skip to item 2.4)

2.3 If Yes, what is/are the name/s of the private companies and/or government agencies that offered interventions other than ATI?

Other DA agencies (Philippine Coconut Authority (PCA), Bureau of Plant Industry (BPI), etc): _____
 Department of Environment and Natural Resources (DENR)
 Department of Trade and Industry (DTI)



- ___ Local Government Units (LGUs) (Municipal Agriculture Office (MAO)/ Provincial Agriculture Office (PAO)
- ___ State Universities and Colleges (SUCs) (specify): _____
- ___ Private companies (specify): _____
- ___ Non-government organizations (NGOs) (specify): _____
- ___ Cooperatives/ people's organizations (POs) (specify): _____
- ___ Others, (specify): _____

2.4 What forms of interventions were received from different agencies? *Note to enumerator: No prompting*

Interventions	Agencies							
	DA-ATI	LGUs	Other Government Agencies			SUCs	Private Companies	NGO/Coop/PO
			DOST	DTI	Others (Specify)			
Training								
School on the Air								
e-extension program/e-learning								
Advisory Services								
IEC Materials								
Machineries/ Equipment								
Production Inputs								
Cash Grants/ Loans								
Market Linkage								
Others (seminar, etc) (Specify): _____								

2.5 Level of easiness or difficulty of accessing interventions from different providers.

Agency	Very Difficult (1)	Difficult (2)	Neither easy or difficult (3)	Easy (4)	Very Easy (5)	Reasons for difficult/very difficult response (e.g. proximity)
DA-ATI						
LGUs (PAO/MAO)						
Other government agencies (specify): _____						
SUC (specify) _____						
Private Firms (Specify): _____						
NGOs/POs/COOPs (specify): _____						
Others, specify						



2.6 Level of satisfaction for the services provided.

Agency	Very Dissatisfied (1)	Dissatisfied (2)	Neutral (3)	Satisfied (4)	Very Satisfied (5)	Reasons for dissatisfaction
DA-ATI						
LGUs (PAO/MAO)						
Other government agencies (specify): _____						
SUC (specify) _____						
Private Firms (Specify): _____						
NGOs/POs/COOPs (specify): _____						
Others, specify						

III. IMPROVED ATTITUDES, SKILLS AND KNOWLEDGE

*For this section, the respondents will be asked about the details of interventions and technologies received from DA-ATI, knowledge gained, the level of adoption of technologies and practices, and the result of adoption. **The reference of intervention is the year and title of intervention/training on Page 1.***

a. Details of the intervention received

3.1 Type of intervention received from DA-ATI.

- Training (provide topic if possible): _____
- School on the Air
- e-extension program* (e-Learning, e-farming, Webinar, RCMAS) (specify) _____
- Advisory services IEC Materials
- Others (seminar, etc), specify): _____

*e-Extension Program for Agriculture and Fisheries includes: 1) e-Learning - free online courses; 2) e-Farming - Farm Business Advisory Services via the Farmers' Contact Center Technology; 3) Webinars on various agricultural technologies; and 4) Rice Crop Manager Advisory Service (RCMAS), an optimized digital agriculture application for improved crop and data management.

3.2 Did the intervention received from DA-ATI result to increase in knowledge?

Type of Intervention	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Training					
School on the Air					
E-extension program					
Advisory Services					
IEC Materials					
Others, (specify): _____					

3.3 Did the training provided by DA-ATI result to National Competency (NC) Certification?

Yes (if yes, specify the title of training) _____ No (If no, skip to item 3.5)



3.4 If Yes, what is the level of certification?

Level I Level II Level III Level IV

3.5 Did the intervention received from DA-ATI include technology and practice component?

Yes No (If Yes, proceed to 3.6. If No, skip to Part IV)

3.6 Please check/specify what are these technologies and practices?

<input type="checkbox"/>	Rice production technologies
<input type="checkbox"/>	Corn production technologies
<input type="checkbox"/>	Vegetable farming
<input type="checkbox"/>	Diversified farming
<input type="checkbox"/>	Backyard gardening
<input type="checkbox"/>	Organic Agriculture
<input type="checkbox"/>	Pest management
<input type="checkbox"/>	Good Agriculture practice
<input type="checkbox"/>	Climate smart technologies
<input type="checkbox"/>	Mulching/Vermicomposting
<input type="checkbox"/>	Sloping agricultural land technology (SALT)
<input type="checkbox"/>	Modern livestock technology
<input type="checkbox"/>	Animal husbandry
<input type="checkbox"/>	Animal waste management
<input type="checkbox"/>	Product processing
<input type="checkbox"/>	By-product utilization
<input type="checkbox"/>	Farm machinery operation
<input type="checkbox"/>	Other commodity-based production technologies (specify): _____
<input type="checkbox"/>	Product cleaning
<input type="checkbox"/>	Product sorting
<input type="checkbox"/>	Product grading
<input type="checkbox"/>	Entrepreneurship trainings
<input type="checkbox"/>	- Farmer business schools
<input type="checkbox"/>	- Climate smart business school
<input type="checkbox"/>	- Farmer business development and farm record keeping
<input type="checkbox"/>	- Financial literacy
<input type="checkbox"/>	- Kapatid Mentor ME
<input type="checkbox"/>	Others (specify): _____

3.7 Did you adopt the technology/practice component of the intervention received from DA-ATI?

Yes (If Yes, proceed to 3.8) No (If No, skip to 3.9)

3.8 If Yes, what was the result of your adoption of technology/practice component of the intervention received from DA-ATI.

- _____ Increased yield
- _____ healthy plants and animals
- _____ less pests and diseases
- _____ less use of inputs
- _____ Others, (specify): _____

Then, proceed to 3.10.

3.9 If No, why not?

- _____ Costly inputs
- _____ Inputs not available
- _____ Difficult to use
- _____ Did not understand how to use
- _____ Not applicable/ relevant in the farm
- _____ Others, (specify): _____

Then, proceed to Part IV.

3.10 Level of adoption of technologies/interventions/practice received from DA-ATI (Please check the level of adoption of the technology/interventions/practice received from DA-ATI only)

Technology/Intervention/Practice	Level of adoption				Remarks (provide details if possible)
	Did not receive / NA	High / Full	Partial / Not Full	None	
Rice production technologies					
Corn production technologies					
Vegetable farming					
Diversified farming					
Backyard gardening					
Organic Agriculture					
Pest management					
Good Agriculture practice					
Climate smart technologies					
Mulching/Vermicomposting					
Sloping agricultural land technology (SALT)					
Modern livestock technology					
Animal husbandry					
Animal waste management					
Product processing					
By-product utilization					
Farm machinery operation					
Other commodity-based production technologies (specify): _____					
Product cleaning					
Product sorting					
Product grading					
Entrepreneurship trainings					
- Farmer business schools					
- Climate smart business school					
- Farmer business development and farm record keeping					
- Financial literacy					
- Kapatid Mentor ME					
Others (specify): _____					

b. Adoption of technologies based on action plan (Refer to the reference year and title of intervention/training on page 1)

3.11 Did you formulate an action plan for the intervention received from ATI?

- [] Yes [] No (if No, skip to Part IV)

3.12 If Yes, what was the action plan? Please describe.

3.13 Did you implement this action plan?

- [] Yes [] No (If no, skip to item 3.15)

3.14 If Yes, what was the result?

- _____ Increased yield
- _____ healthy plants and animals
- _____ less pests and diseases
- _____ less use of inputs
- _____ Others, (specify): _____

3.15 If No, why not?

- _____ Costly inputs
- _____ Inputs not available
- _____ Difficult to use
- _____ Did not understand how to use
- _____ Not applicable/ relevant in the farm
- _____ Others, (specify): _____

IV. RELEVANCE AND TIMELINESS OF INTERVENTIONS PROVIDED BY DA-ATI?

*For this section, the respondents will be asked about his/her level of satisfaction on the interventions provided by DA-ATI in terms of relevance to his/her needs and timeliness of the delivery of interventions. **The reference of intervention is the year and title of intervention/training on Page 1.***

4.1 What is your satisfaction level on the interventions provided by DA-ATI?

Type of Intervention	Very Dissatisfied (1)	Dissatisfied (2)	Neutral (3)	Satisfied (4)	Very Satisfied (5)
Training (provide topic if possible): _____					
School on the Air					
e-extension program					
Advisory Service					
IEC Materials					
Others (seminar, etc.), specify: _____					

4.2 Were the interventions provided by DA-ATI relevant to your current situation or needs?

Type of Intervention	Very irrelevant (1)	Irrelevant (2)	Neither relevant or irrelevant (3)	Relevant (4)	Very relevant (5)
Training (provide topic if possible): _____					
School on the Air					
e-extension program					
Advisory Service					
IEC Materials					
Others (seminar, etc.), specify: _____					

4.3 What is your satisfaction level in terms of timeliness of delivery of the interventions?

Type of Intervention	Very Dissatisfied (1)	Dissatisfied (2)	Neutral (3)	Satisfied (4)	Very Satisfied (5)
Training (provide topic if possible): _____					
School on the Air					
e-extension program					
Advisory Service					
IEC Materials					
Others (seminar, etc.), specify: _____					

V. CHANGE IN PRODUCTIVITY AS A RESULT OF A DA-ATI INTERVENTION

For this section, the respondent will be asked about the change in productivity before and after the DA-ATI interventions in terms of farming methods, value addition of products, price of commodity, yield, quality of harvest, and income. **The reference of intervention is the year and title of intervention/training on Page 1.**

5.1 Change in diversified farming methods before and after the interventions. Put a check (✓) mark if applied. Write NA if not applicable.

Source of change in productivity (Diversified Farming Methods)	Before Intervention	After Intervention	Remarks. If any
Use of tractors			
Use of animals			
Use of more inputs (fertilizers/pesticide)			
Use of organic inputs			
Multiple cropping			
Other, (specify): _____			

5.2 Change in value addition of products before and after the interventions. Value addition means the improvement or increase in the value of product as a result of interventions. Put a check (✓) mark if applied. Write NA if not applicable.

Commodity	Source of change in productivity (Value Addition of Products)	Before Intervention	After Intervention	Remarks. If any
Commodity 1	Primary processing (washing, cleaning, drying, use of proper containers, use of cooling equipment, others), specify: _____			
	Secondary processing (fermentation, others), specify: _____			
	Third processing (product transformation (cooked), bottling, others) specify: _____			
Commodity 2	Primary processing (washing, cleaning, drying, use of proper containers, use of cooling equipment, others), specify: _____			
	Secondary processing (fermentation, others), specify: _____			
	Third processing (product transformation (cooked), bottling, others) specify: _____			

5.3 Change in price of commodity. What is the price of commodity (estimate per kg) before and after the intervention? If the respondent cannot provide estimate, ask him/her if the price of the commodity has increased or decreased. Write NA if not applicable.

Source of change in productivity (Price of Commodity)	Before Intervention	After Intervention	Remarks. If any
Commodity 1			
Commodity 2			
Commodity 3			
Commodity n			

5.4 Change in yield of commodity. What is the yield of commodity (estimate per cropping per hectare) before and after the interventions. If the respondent cannot provide estimate, ask him/her if the yield of the commodity has increased or decreased. Write NA if not applicable.

Source of change in productivity (Yield per Commodity)	Before Intervention	After Intervention	Remarks. If any
Commodity 1			
Commodity 2			
Commodity 3			
Commodity n			

5.5 Change in quality of harvest of commodity. What is the quality of harvest of commodity before and after the intervention? Write whether it improved or it did not improve. Write NA if not applicable.

Source of change in productivity (Quality of Harvest)	Before Intervention	After Intervention	Remarks. If any
Commodity 1			
Commodity 2			
Commodity 3			
Commodity n			

5.6 Change in income from the commodity. What is the income from commodity (estimate per cropping per hectare or per commodity) before and after the interventions? If the respondent cannot provide estimate, ask him/her if the income from the commodity has increased or decreased. Write NA if not applicable.

Source of change in productivity (Income)	Before Intervention	After Intervention	Remarks. If any
Commodity 1			
Commodity 2			
Commodity 3			
Commodity n			

VI. EMPOWERMENT AND RESILIENCY

*For this section, the respondent will be asked about his/her social protection program obtained before and after the DA-ATI interventions, the unfortunate events or crises encountered and the respondent's coping mechanisms. **The reference of intervention is the year and title of intervention/training on Page 1.***

6.1 Did the DA-ATI intervention provide you the skills and opportunity to become entrepreneurs?
 Yes No

If Yes, what are those skills and opportunities? Please describe.

6.2 Are you currently covered by any form of social protection, such as insurance, social security, or welfare programs? If yes, please indicate the year obtained.

Social Protection	Before Intervention			After Intervention		
	Yes	Year Obtained	No	Yes	Year Obtained	No
SSS						
Pag-Ibig						
PhilHealth						
Crop Insurance						
Other, (specify): _____						

6.3 If yes, did the DA-ATI training help in your availing the social protection programs? How?

Social Protection	Did the ATI training help in your availing the social protection?		If yes, how?
	Yes	No	
SSS			
Pag-Ibig			
PhilHealth			
Crop Insurance			
Other, (specify): _____			

6.4 What were the unfortunate events or crises you encountered within two (2) years after receiving ATI intervention (training)? *Note to enumerator: No Prompting*

- _____ Typhoon
- _____ Flooding
- _____ Drought
- _____ Pests and Diseases
- _____ Decrease in output prices
- _____ Increase in input prices
- _____ Family Emergencies
- _____ Others, (specify): _____
- _____ None /Not Applicable

6.5 Did the DA-ATI interventions provide you with confidence to deal with these unfortunate events or crises?

[] Yes [] No [] Not applicable

If yes, please describe how?

Type of Intervention	Yes	No	Describe how?
Training			
School on the Air			
e-extension program			
Advisory Service			
IEC Materials			
Others (seminar, etc.), specify: _____			

6.6 How do you cope with these unfortunate events/crises? Write NA if not applicable.

Crisis	Coping Mechanism	
	Before ATI Intervention	After ATI intervention
Typhoon		
<i>early harvest of crops</i>		
<i>avail crop insurance</i>		
<i>ask for assistance from LGUs/government agencies</i>		
<i>no action</i>		
Flooding		
<i>early harvest of crops</i>		
<i>avail crop insurance</i>		
<i>ask for assistance from LGUs/government agencies</i>		
<i>no action</i>		
Drought		
<i>delayed planting</i>		
<i>adjustment of planting calendar</i>		
<i>use drought tolerant varieties</i>		
<i>practice mulching</i>		
<i>use drip irrigation</i>		
<i>Hand watering</i>		
<i>ask for assistance from LGUs/government agencies</i>		
<i>Others, specify</i>		
Pests and Diseases		
<i>spraying</i>		
<i>IPM</i>		
<i>no action</i>		
<i>Others, specify</i>		
Decrease in output prices		
<i>look for other markets</i>		
<i>did not sell</i>		
<i>sell in the usual market</i>		
Increases in input prices		
<i>look for other sources</i>		
<i>loans</i>		
Family emergencies		
<i>use social protection (PhilHealth, etc)</i>		
<i>loans</i>		
<i>request assistance from government agencies</i>		
<i>Others, specify</i>		

6.7 Did the ATI intervention result in better coping mechanism? Write NA if not applicable.

Crisis	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Typhoon					
Flooding					
Drought					
Pests and Diseases					
Decrease in Output Prices					
Increase in input prices					
Family Emergencies					

VII. FARM CERTIFICATIONS

For this section, the respondent will be asked about obtaining farm certifications and how DA-ATI interventions helped in getting such certifications. **The reference of intervention is the year and title of intervention/training on Page 1.**

7.1 Did you apply for farm certifications before and after DA-ATI interventions? Write NA if not applicable.

Certification	Before Intervention		After Intervention	
	Yes	No	Yes	No
Good Agriculture Practice (GAP)				
Organic Agriculture (OA)				
Good Animal Husbandry Practice (GAHP)				
Other (specify): _____				

7.2 Did you get farm certifications? If no, why?

Certification	Yes	No, why?
Good Agriculture Practice (GAP)		
Organic Agriculture (OA)		
Good Animal Husbandry Practice (GAHP)		
Other (specify): _____		

7.3 If yes, did the DA-ATI intervention help in getting your certification? How?

Certification	Yes	No	How?
Good Agriculture Practice (GAP)			
Organic Agriculture (OA)			
Good Animal Husbandry Practice (GAHP)			
Other (specify): _____			

Closing Message:

In behalf of the Agricultural Training Institute, the Asian Social Project Services, Inc., and the entire survey team, we would like to thank you for your time and effort in participating in this endeavor. Your participation will provide valuable information that will inform planning and decision-making for the improvement of the agriculture and fisheries extension program in the country.

MARAMING SALAMAT PO!

ANNEX



Final Survey Questionnaire
for AF Extension Workers



**Agriculture and Fisheries Extension (AFE)
Results-Based Monitoring and Evaluation (RBME) Study**

**FINAL SURVEY QUESTIONNAIRE FOR
AGRICULTURE AND FISHERIES EXTENSION WORKERS**

INFORMED CONSENT FORM

The Agricultural Training Institute (ATI), the training arm of the Department of Agriculture (DA) mandated to lead in the formulation of national agriculture and fisheries extension (AFE) program, contracted ASPSI, a private consultancy firm based in Laguna, Philippines, to implement the Consulting Services for the Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) Study. In general, the study aims to determine the results of the ATI programs, projects and activities based on the existing parameters from the AFE RBME Theory of Change model. Specifically, it aims to: review and enhance the AFE results framework, including the guidelines and tools; identify issues and challenges encountered during the implementation; and recommend policy options to further improve the ATI programs.

To achieve the above-mentioned objectives of the study, a survey of ATI trained AFE Extension Workers is being conducted. As one of the randomly selected survey respondents, we would like to invite you to take part in the survey and help us in accomplishing the questionnaire. The data/information to be collected from you include the following: socio-demographic profile, access to agriculture and fisheries interventions, and change in knowledge, attitudes, skills as a result of the training/ interventions.

Your participation in this survey is voluntary. You may refuse to take part in the research and may end the interview anytime without penalty. You are also free to decline to answer any particular question you do not wish to answer for any reason. The researcher/evaluator has no involvement in the project and your choice to respond or not will not affect you and your relationship with the LGU and ATI in any way.

There is no right or wrong answer. Our only request is your sincere and honest response to every question asked. Your responses to the survey will be recorded and we will also be taking pictures for documentation purposes. Rest assured that your identity and answers will be kept confidential and secured in compliance with the Data Privacy Act of 2012 (RA 10173). All the information that we will be collecting will be used solely for the purpose of the study.

Should you have any questions or concerns about this study or this document, please feel free to ask any questions you may have at this time or contact ASPSI.

Name: Noemi R. Quilloy / Daniel Abraam A. Agbisit
Address: 2nd Floor, MG Building 10001 Mt. Halcon St., Los Baños Subd.,
Batong Malake, Los Baños, Laguna 4030, Philippines
E-mail: aspsi.atirbmestudy@gmail.com / aspsiglobal@gmail.com
Phone: 63-49-536-3448 / 0917-819-6884

If you agree in participating to this survey, please affix your signature in the space provided. Thank you very much.

I, _____, voluntarily agree to participate in this survey and allow my data to be collected as stated above. I affirm that I am at least 18 years of age and that I am competent in my own name insofar as this consent is concerned.

Signature over printed name

Date



PSA Approval No.: ATI-2417-02
Expires on 30 April 2025

Questionnaire No: _____

Name of Enumerator/Interviewer: _____ Date of Interview: _____
Last name First name Middle Initial mm/dd/yyyy

Region: _____ Time Started: _____
hh:mm

Province: _____ Time Ended: _____
hh:mm

Year and Title of Intervention/Training (based on sampling): _____

ATI Training Center: _____

I. SOCIO-DEMOGRAPHIC PROFILE

For this section, personal information of the respondent such as name, address, sex, age, education, marital status, household size, income, and membership to organization will be asked.

1.1 Name of Respondent	_____		
	<small>Last Name</small>	<small>First Name</small>	<small>Middle Initial</small>
1.2 Home Address	_____		
	<small>Floor No.</small>	<small>House/Building Number</small>	<small>Block Name/ Lot No.</small>
	_____	_____	_____
	<small>Street Name</small>	<small>Subdivision/Village</small>	<small>Barangay</small> _____ <small>Municipality/City</small>
1.3 Office Name & Address	_____		
1.4 Contact Number	_____		
1.5 Age as of last birthday:	_____ years old		
1.6 Sex	[] Male [] Female		
1.7 Marital Status	[] Single/Never Married [] Married [] Common law/Live In [] Widowed [] Separated [] Divorced [] Annulled [] Unknown/Not reported		
1.8 Highest educational attainment	[] Early Childhood Education (Preschool, Kindergarten) [] Primary Education (Elementary School) [] Lower Secondary Education (Middle School, Junior High School) [] Upper Secondary Education (High School, Senior High School) [] Post-secondary Non-tertiary Education (Vocational Training) Vocational course: _____ [] Short-cycle Tertiary Education (Associate Degree) Course: _____ [] Bachelor Level Education or Equivalent (Undergraduate Education) College course: _____ [] Master Level Education or Equivalent (Graduate Education, Master's Degree) Masteral course: _____ [] Doctoral Level Education or Equivalent (Doctorate, PhD (Doctor of Philosophy) Education) PhD course: _____ [] No Formal Education		
1.9 Household Size	_____		
1.10 Number of working family members:	_____		



1.11 Source/s of income of respondent	<input type="checkbox"/> government employment <input type="checkbox"/> farming <input type="checkbox"/> non-farm business, specify _____				
1.12 Household monthly gross income (in Php) by source		Gov't	Farming	Non-farm business	Total
	Respondent				
	Other members				
1.3 Number of years as AF extension worker:	1.14 Current status of appointment as extension worker: <input type="checkbox"/> Permanent <input type="checkbox"/> Contractual <input type="checkbox"/> On job contract				
1.15 Member of an organization	Farmer organization: <input type="checkbox"/> Yes <input type="checkbox"/> No Non-Farm organization: <input type="checkbox"/> Yes <input type="checkbox"/> No If the answer is no, skip to Part II)				
1.16 Name of and position in the organization	If the answer in 1.15 is yes, name/s and position/s in the organization/s:				
	Name of Organization			Position	

II. ACCESS TO AGRICULTURE AND FISHERIES INTERVENTION

For this section, the respondent will be asked about the commodities common in the municipality, the level of awareness on the services provided by different government and private organizations and individuals; the extension and advisory services accessed; level of satisfaction on the extension services accessed; and the rating of extension services provided by DA-ATI in terms of importance, quality, and relevance.

2.1 What commodities are common in/specialized by your municipality?

___rice
 ___corn
 ___livestock, specify _____
 ___others, specify _____

2.2 How well informed are you about the services provided by the following service providers?

Service Providers	Not aware (1)	Slightly aware (2)	Moderately aware (3)	Very aware (4)	Extremely aware (5)
Department of Agriculture – Agricultural Training Institute (DA-ATI)					
Department of Environment and Natural Resource (DENR)					
Department of Science and Technology (DOST)					
State Universities and Colleges (SUC) (specify): _____					
Provincial Agriculture Office (PAO)					
Municipal Agriculture Office (MAO)					
Other farmers					
Farmer Organizations (specify): _____					
Others, specify _____					



2.3 Extension intervention and advisory services accessed (multiple response).

Service Providers	School on the air	E-Extension*				IEC materials	Advisory services	Training (for ATI, specify title and year)	Others (Specify)
		e-learning	e-farming	webinar	RCMAS				
DA-ATI									
DENR									
DOST									
SUCs, specify									
Private firm (specify)									
PAO									
MAO									
Other farmers									
Farmer organization, specify									
Others, specify_____									

*e-Extension Program for Agriculture and Fisheries includes: 1) e-Learning - free online courses; 2) e-Farming - Farm Business Advisory Services via the Farmers' Contact Center Technology; 3) Webinars on various agricultural technologies; and 4) Rice Crop Manager Advisory Service (RCMAS), an optimized digital agriculture application for improved crop and data management.

2.4 Other services accessed (please check)/ multiple response application.

Service Providers	Livelihood projects	Cash grant	Farm inputs	Farm animals	Machinery/equipment	Market linkage
DA-ATI						
DENR						
DOST						
SUCs (specify)						
Private firm (specify)						
PAO						
MAO						
Other farmers						
Farmer organization (specify)						
Others, specify_____						

2.5 How easy is it for you to access the service providers?

Service Providers	Very difficult (1)	Difficult (2)	Neither easy or difficult (3)	Easy (4)	Very easy (5)	Reasons for difficult/very difficult response (e.g. proximity)
DA-ATI						
DENR						
DOST						
SUCs (specify)						
Private firm (specify)						
PAO						
MAO						
Other farmers						
Farmer organization (specify)						
Others, specify_____						



2.6 How accommodating are the service providers in meeting your needs (e.g. language)

Service Providers	Not accommodating (1)	Slightly accommodating (2)	Moderately accommodating (3)	Very accommodating (4)	Extremely accommodating (5)
DA-ATI					
DENR					
DOST					
SUCs (specify)					
Private firm (specify)					
PAO					
MAO					
Other farmers					
Farmer organization (specify)					
Others, specify _____					

2.7 How comfortable are you in interacting with service providers?

Service Providers	Very uncomfortable (1)	Uncomfortable (2)	Neutral (3)	Comfortable (4)	Very comfortable (5)
DA-ATI					
DENR					
DOST					
SUCs (specify)					
Private firm (specify)					
PAO					
MAO					
Other farmers					
Farmer organization (specify)					
Others, specify _____					

2.8 Level of satisfaction with the extension services accessed from different sources.

Service Providers	Very dissatisfied (1)	Dissatisfied (2)	Neutral (3)	Satisfied (4)	Very Satisfied (5)	Reason for dissatisfaction
DA-ATI						
DENR						
DOST						
SUCs (specify)						
Private firm (specify)						
PAO						
MAO						
Other farmers						
Farmer organization (specify)						
Others, specify _____						



2.9 Rating of extension services provided by DA-ATI to AF extension workers in terms of importance.

- Very important
 - Important
 - Moderately important
 - Slightly important
 - Not important
- Explain your response _____

2.10 Rating of extension services provided by DA-ATI to AF extension workers in terms of quality.

- Very good
 - Good
 - Acceptable
 - Poor
 - Very poor
- Explain your response _____

2.11 Rating of extension services provided by DA-ATI to AF extension workers in terms of relevance.

- Very relevant
 - Fairly Relevant
 - Somewhat relevant
 - Not relevant
- Explain your response _____

III. IMPROVED KNOWLEDGE, ATTITUDE AND SKILLS FROM TRAININGS/ INTERVENTIONS RECEIVED

*For this section, the respondent will be asked about the changes in knowledge, attitude, and skills as a result of the training/intervention received from DA-ATI. This part also includes the respondent's preparation and implementation of action plan after the training, including the assessment of its relevance, effectiveness, efficiency, and sustainability. **The reference of intervention is the year and title of intervention/training on Page 1.***

a. Changes in knowledge

3.1 Degree to which you have gained knowledge, facts, and concepts from the extension interventions conducted through ATI.

- I believe that I have gained substantial knowledge, facts, and concepts from the trainings
- I perceive a moderate increase in knowledge, facts, and concepts from the training.
- I'm unsure whether my knowledge has changed.
- My knowledge has not significantly improved. Why? _____
- I have not gained any knowledge from the training. Why? _____

3.2 If you have gained any knowledge or there is moderate increase in your knowledge, how well do you retain and apply the knowledge over time as an extension worker?

- I consistently retain and effectively apply the knowledge.
- I retain some knowledge but inconsistently apply it.
- I struggle to retain and apply the knowledge.
- I forget most of the knowledge gained.



b. Changes in attitude and beliefs related to the training

3.3 Degree to which you have changed your attitude, values, and beliefs as a result of the trainings.

- I believe that my attitude and beliefs have changed for the better toward the concepts and the topics discussed.
 - I perceive moderate change in attitude and belief related to the training.
 - I'm not sure if my attitude and beliefs have changed.
 - My attitude and beliefs have not changed.
- Explain your response _____

3.4 Impact of training on participants' motivation, enthusiasm, and commitment to applying what were learned.

- I am highly motivated and committed to applying in my work what I learned from the training.
 - I am somewhat motivated and committed to applying in my work what I learned from the training
 - I am not motivated and committed to applying in my work what I learned from the training.
- Explain your response _____

3.5 Openness to change: Willingness to embrace new ideas and approaches.

- I am willing to embrace new ideas and approaches.
 - I am not open much to new ideas and approaches.
- Explain your response _____

c. Changes in Skills

3.6 Skills acquisition

- I have developed practical skills, techniques, and competencies during training
 - I have somewhat developed practical skills, techniques, and competencies.
 - I have not acquired the skill
- Explain your response _____

3.7 Skills application and transfer: the extent to which participants can effectively use these skills in work or daily life.

- I applied the skills I learned from the training in work and daily life.
- I have not applied the skills learned. Why? _____

d. Passing the Post-Test and Gaining Competencies

3.8 Did you pass the post-test on trainings attended? Yes No (if no skip to 3.11)

3.9 Have you been given a TESDA National Competency (NC) Certification on AF related subjects?

- Yes (if yes write the title of the course) _____ No

3.10 What is the level of competency certification?

- NC I NC II NC III NC IV



e. Prepared and Implemented an Action Plan

3.11 Did you prepare and submit an Action Plan after the training?
 Yes No (if no skip to Part IV)

3.12 Were you able to implement the Action Plan? Yes No

If no, why? _____
 If yes, how did you implement it? _____

3.13 How many barangays are covered in the plan? _____

3.14 What are the resources provided by the LGU to implement the plan:

- _____ Budget
- _____ Supplies and materials
- _____ Transportation/Vehicle
- _____ Additional personnel
- _____ Farm inputs
- _____ Others (Specify) _____

3.15 Are resources provided by LGU sufficient to implement the plan? Yes No

3.16 Name other sources of assistance.

Name of Source	Assistance Provided

3.17 To what extent have the implementation of your plan helped the farmers?

- ___ 1 not at all helpful
- ___ 2 slight helpful
- ___ 3 somewhat helpful
- ___ 4 very helpful
- ___ 5 extremely helpful

Explain your response. _____

3.18 On relevance, are the interventions provided consistent with the LGU development plans and priorities? Yes No

Please explain. _____

3.19 On effectiveness, are the interventions contained in the plan addressed the needs of the farmers? Yes No

Please explain. _____

3.20 On efficiency, are the interventions carried out at the time they were needed, at the least possible cost? Yes No

Please explain. _____

3.21 On sustainability, are the interventions introduced still being practiced long after they have been introduced? Yes No

What are these interventions? Please explain. _____

3.22 What problems do you encounter in implementing the plan? _____



IV. EMPOWERMENT OF CLIENTS THROUGH EMPLOYMENT TO AF-RELATED JOB COMPETENCIES

*For this section, the respondent will be asked about his/her promotion in the office after the training and if he/she has been employed in other AF related job/s. **The reference of intervention is the year and title of intervention/training on Page 1.***

4.1 After the training, were you promoted to a higher position in your office?

- No, why? _____
- If yes, what position? _____

4.2 Have you been employed in AF-related job?

- No
- If yes, what specific AF-related job? _____

V. RESILIENCY OF CLIENTS THROUGH ALTERNATIVE AF-RELATED JOB COMPETENCIES

For this section, the respondent will be asked about his/her social protection program/s and the year they were obtained and other AF job competencies.

5.1 In your job as extension worker, are you provided with social protection like insurance (GSIS or SSS) and PhilHealth among others?

Social Protection	Yes	Year Obtained	No	Why Not?
SSS				
GSIS				
Pag-Ibig				
PhilHealth				
Others (specify)				

5.2 Do you have other AF job competencies?

- No
- Yes, specify _____

Closing message:

In behalf of the Agricultural Training Institute, the Asian Social Project Services, Inc., and the entire survey team, we would like to thank you for your time and effort in participating in this endeavor. Your participation will provide valuable information that will inform planning and decision-making for the improvement of the agriculture and fisheries extension program in the country.

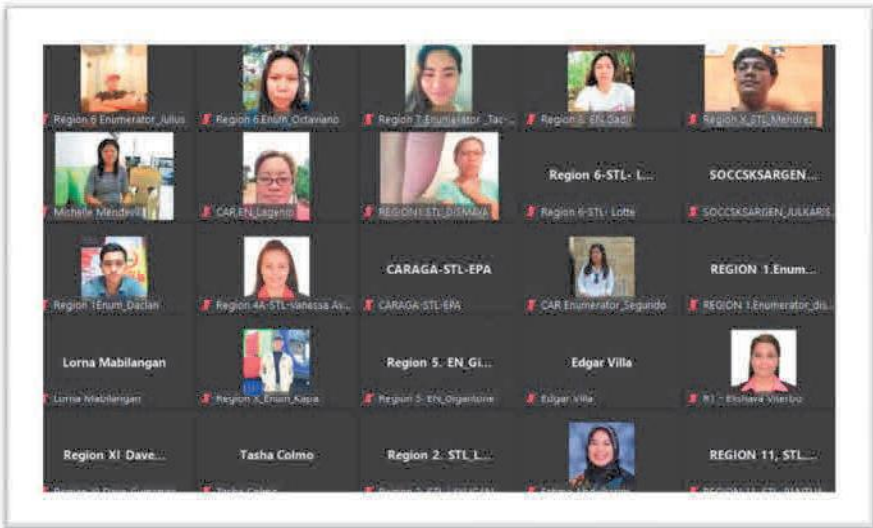
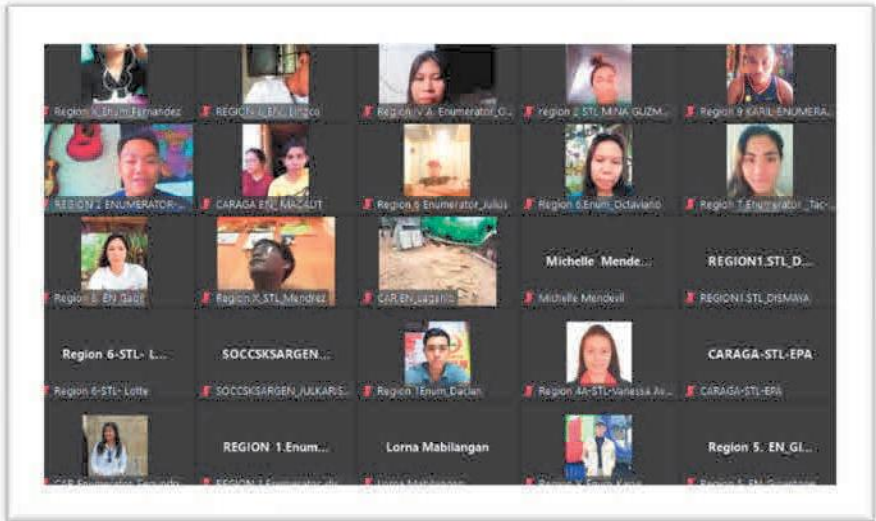
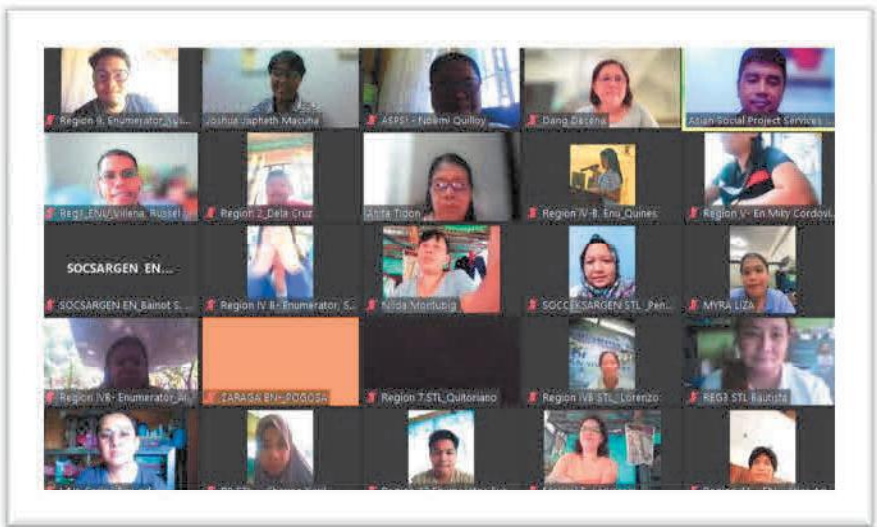
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ANNEX

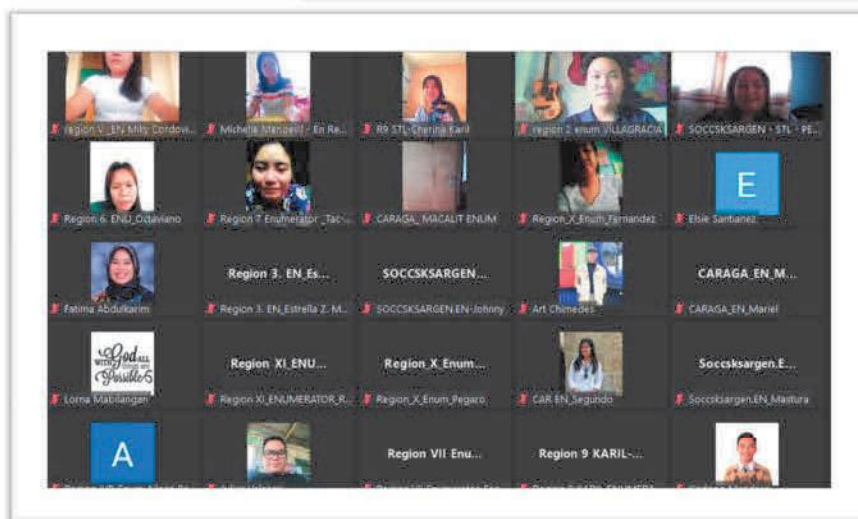
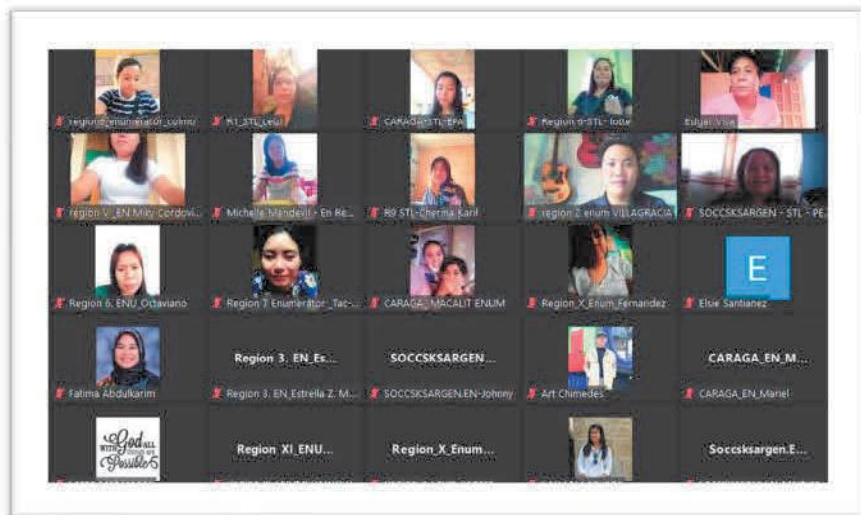
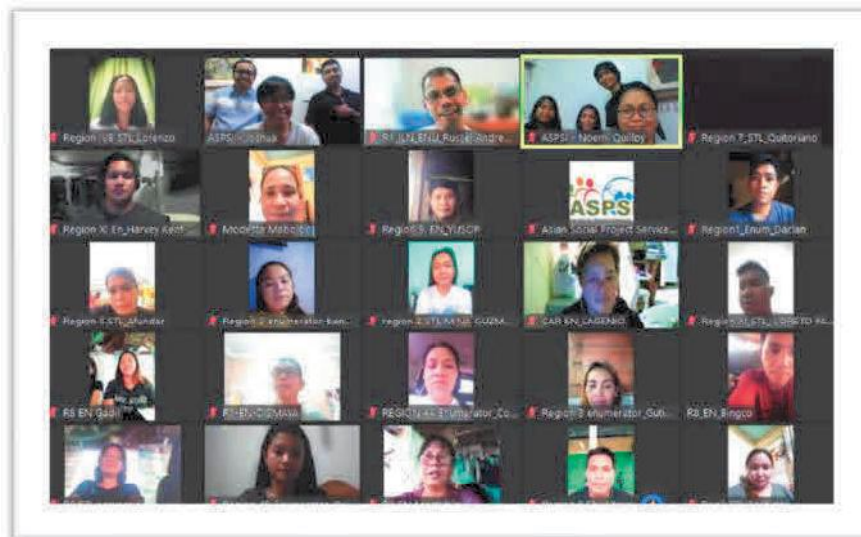


Photo Documentation

Annex D. Photo Documentation



Training Participants
 Part I - June 1, 2024



Training Participants
 Part II - June 20, 2024



Training Team and Training Participants from CALABARZON
Part II - June 20, 2024



Computer-Assisted Phone Interview with
AEW Respondent

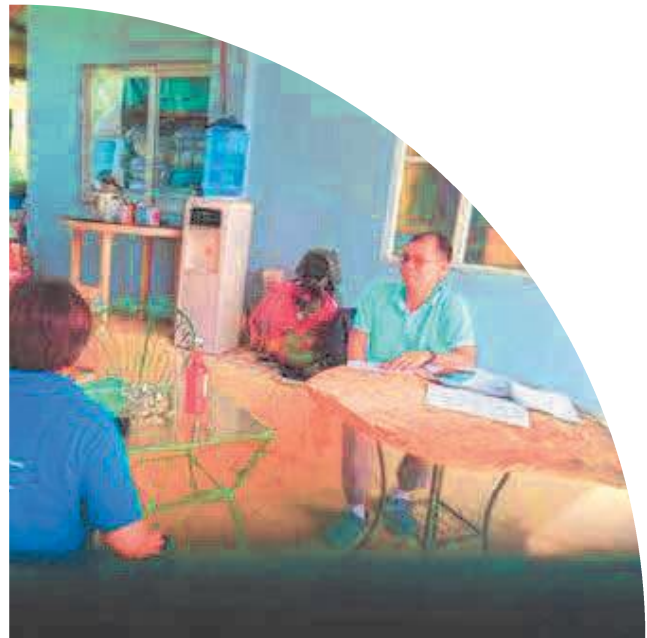


Computer-Assisted Phone Interview with
Farmer Respondent



PROGRESS REPORT NO. 2

AGRICULTURE AND FISHERIES
EXTENSION (AFE) RESULTS-
BASED MONITORING AND
EVALUATION (RBME) STUDY



2024

Submitted by:
Asian Social Project Services, Inc.

Submitted to:
Agricultural Training Institute



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August 30, 2024

ENGR. REMELYN R. RECOTER, MNSA, CESO III

Director IV
Agricultural Training Institute
ATI Bldg., Elliptical Road, Diliman, Quezon City

Subject: Submission of Deliverable 3: Progress Report No. 2 for Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) Study

Dear **Director Recoter**:

Greetings from the Asian Social Project Services, Inc. (ASPSI)!

As part of Deliverable 3, ASPSI is pleased to submit the attached Progress Report No. 2 for the above captioned project. This report contains the target study participants, the deployment of data collection teams, status of data collection, problems and challenges encountered and actions taken, and photo documentation of the data collection activities conducted.

We hope that this Progress Report No. 2 merits your kind consideration and approval.

Thank you very much.

Very truly yours,

ERNESTO O. BROWN, PhD
Project Team Leader

Noted by:

JUVY C. ROCAMORA
President, ASPSI

**Agriculture and Fisheries Extension (AFE)
Results-Based Monitoring and Evaluation (RBME) Study**

**AGRICULTURAL TRAINING INSTITUTE
(ATI)**

**Deliverable 3: Progress Report 2
REPORT ON THE COMPLETION OF DATA COLLECTION**

**ASIAN SOCIAL PROJECT SERVICES, INC.
(ASPSI)**

August 30, 2024

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Annex B – Photo Documentation of Data Collection Activities

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A. INTRODUCTION

The Agricultural Training Institute (ATI), the training arm of the Department of Agriculture (DA) mandated to lead in the formulation of national agriculture and fisheries extension (AFE) program, contracted the Asian Social Project Services, Inc. (ASPSI), a private consultancy firm based in Los Baños, Laguna, Philippines, to lead the implementation of the Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) Study. In general, the study aims to determine the results of the ATI programs, projects and activities based on the existing parameters from the AFE RBME Theory of Change model. Specifically, it aims to: review and enhance the AFE results framework, including the guidelines and tools; identify issues and challenges encountered during the implementation; and recommend policy options to further improve the ATI programs.

To achieve these objectives, the evaluation employs the Organization for Economic Cooperation and Development (OECD) – Development Assistance Committee (DAC) project evaluation criteria of relevance, effectiveness, efficiency, sustainability, and impact. To undertake this, primary data were gathered through survey of ATI trained agricultural extension workers (AEWs) and farmers and key informant interviews (KIIs) with the ATI main office and ATI regional training center representatives.

As part of Deliverable 3 for the AFE RBME Study, this Progress Report No. 2 contains the target study participants, the deployment of data collection teams, status of data collection, problems and challenges encountered and actions taken, and photo documentation of the data collection activities conducted.

B. TARGET STUDY PARTICIPANTS

As indicated in the approved inception report, the survey respondents of the AFE RBME study are the AEWs and farmers who were trained by the ATI from 2018 – 2022. Applying the Slovin’s formula with a 5% margin of error, the computed sample size per type of respondent per year is shown in **Table 1**. A total of 2,594 respondents was targeted to be covered in the survey (1,571 farmers and 1,023 AEWs).

Table 1. Computed sample size based on Slovin’s formula with 5% margin of error

Year	Population of Farmers Trained	Population of Ag Ext Workers Trained	Total Population Size	Sample Size for Farmers	Sample Size for AEWs	Total Sample Size
2018	2,445	872	3,317	344	275	619
2019	933	235	1,168	280	149	429
2020	956	252	1,208	283	155	438
2021	1,093	294	1,387	293	170	463
2022	4,969	863	5,832	371	274	645
Grand Total	10,396	2,516	12,912	1,571	1,023	2,594

As required by the TOR of this assignment, the respondent samples were proportionately distributed across the 16 ATI regional training centers of the country. Moreover, the KIIs covered key informants from ATI main office and its regional training centers who were involved in the development and implementation of the RBME system.

C. DEPLOYMENT OF DATA COLLECTION TEAMS

A total of 15 survey teams composed of 15 survey team leaders (STLs) and 48 survey enumerators (SEs) were trained and deployed to administer the survey for AEWs and farmers. To facilitate the conduct of KIIs with ATI main office and ATI regional training center representatives, three (3) KII teams were mobilized. Each team was composed of a facilitator and a documenter. The key experts served as KII facilitators while the research associates served as documenters during the interviews.

D. REPORT ON THE COMPLETION OF DATA COLLECTION

1. Key Informant Interview of ATI Representatives

The interview of key informants from ATI main office and regional training centers started on May 16, 2024 and completed on July 15. A total of 26 key informants representing the ATI main office and 16 regional training centers including the International Training Center on Pig Husbandry (ITCPH), were interviewed online using Zoom application. The KIIs were facilitated by Dr. Ernesto Brown (Team Leader), Dr. Fezoil Luz Decena (AF Extension System Expert), and Ms. Anita Tidon (Technical Writer and Qualitative Evaluation Specialist) and assisted by the two research associates (Daniel Abraam Agbisit and Joshua Japheth Macuha).

With the permission of key informants, the interviews were recorded and the recordings were transcribed, which served as reference in preparing the KII documentation report. The summary of completed KIIs is provided in the table below (**Table 2**) while the KII documentation report by ATI regional training center is attached as **Annex A**.

Problems and challenges encountered during the conduct of KIIs

The KII teams encountered problems and challenges, particularly in the scheduling and conduct of actual interviews with the ATI regional training center representatives. These included the following: delayed response or no response at all to the emailed invitation/request for KII; difficulty in contacting the key informant due to poor cell signal in the area; conflicting schedule of the key informant and the assigned KII facilitator; and postponed KII because the key informant did not show up on the scheduled interview.

To address the above problems and challenges, actions taken included the following: coordination with Ms. Cindy Alfonso, ATI Project Evaluation Officer II, who provided the direct contact information of the different ATI regional training centers; searching of contact details in the ATI website; and coordination with the ATI regional training centers for the rescheduling of interviews.

Table 2. Summary of the KIIs conducted from May 16 to July 15, 2024.

ATI Office/Region	Key Informants Interviewed		Date of Interview	Interviewer
	Name	Position/Designation		
ATI - Main Office	Bernard James Tandang	Chief of Policy Standards and Development Section	May 16	Dr. Decena and Ms. Tidon
	Cindy C. Alfonso	Project Evaluation Officer II		
	Mark Alforque	Project Evaluation Officer II		
ATI - Cordilleras	Khareen B. Tigui-ing	Development Management Officer I	May 21	Ms. Tidon
ATI - Ilocos Region	Jayvee Bryan G. Carillo, PhD	OIC, Center Director	May 27	Ms. Tidon
	Jomar Palsimon	Project Evaluation Officer I		
ATI - CALABARZON	Angelo Hernandez	Project Evaluation Officer I	May 28	Ms. Tidon
ATI - Cagayan Valley	Claris M. Alaska, DPA	OIC, Center Director, Training Superintendent I	May 29	Ms. Tidon
	Jhim Salvador	Chief, Career Development and Management Section		
	Vladimir Caliguiran	Chief, Information Services Section		
ATI - MIMAROPA	Manilyn M. Tejada, MPA, LPT	Project Evaluation Officer I	June 7	Dr. Decena
ATI - Western Visayas	Mary Ann A. Ramos, MPM	Training Center Superintendent II Center Director	June 7	Dr. Decena
	Dianne Rivera	Planning Officer/Focal person of RBME		
	Mary Jean Yupano	Designated Monitoring and Evaluation Officer		
ATI - Eastern Visayas	Hazel Grace T. Taganas	Training Superintendent II Center Director	June 10	Ms. Tidon
ATI - Central Luzon	Marciano C. Santos	Unit Head, PME Planning Officer II	June 13	Dr. Decena
	Joan P. Su-Ay	Project Evaluation Officer I CFIDP Point Person/ HR Designate		
ATI - Central Visayas	Lhea Araña	Development Management Officer I/ M & E Designate	June 13	Ms. Tidon
ATI - Davao Region	Chonna Vae Cañete	PMEU Representative	June 14	Dr. Decena
ATI - Bicol	Roberto Santos Jr.	Project Evaluation Officer Focal Person, Monitoring and Evaluation, Data Privacy Officer	June 21	Ms. Tidon

ATI Office/Region	Key Informants Interviewed		Date of Interview	Interviewer
	Name	Position/Designation		
ATI - Northern Mindanao	Cheaster Magat	PMEU Technical Support Staff	June 26	Dr. Decena
ATI - International Training Center on Pig Husbandry	Jackielyn B. Garlet	OIC Chief, PMES / Admin Officer IV	June 27	Dr. Decena and Ms. Tidon
ATI - Zamboanga Peninsula	Agustin Wagas	Planning Officer	July 3	Dr. Decena
	Decelyn Cabang	Monitoring and Evaluation Officer		
ATI - SOCCSKSARGEN	Alvin Palma	PMEU Officer	July 15	Dr. Brown
ATI - CARAGA	Teovelita Rodriguez	PMEU Officer	July 15	Mr. Agbisit and Mr. Macuha

2. Survey of Farmers and AF Extension Workers

A data collection and processing software package Census and Survey Processing System (CSPro) was used to create the Computer Assisted Personal Interview (CAPI) application in the tablets or smartphones. Employing this CAPI application in the conduct of survey with randomly selected farmer and AEW respondents, the following modes of interview were carried out by the survey teams:

- Phone interview;
- Online interview using Facebook messenger;
- Face-to-face/onsite interview.

At the end of each enumeration day when the survey teams were in a place with wireless fidelity (WI-FI) or internet facilities, the survey data were uploaded and transmitted to the server (Dropbox), and monitored by the Data Management Specialist (DMS). On a weekly basis, the DMS provided a summary report of the uploaded data that needed to be validated. These summary reports were forwarded to the STLs for their review and validation in the field.

Given the limitations encountered during data collection (please refer to the problems encountered discussed on page 7), it was proposed to ATI to increase the margin of error at 8%, which is still generally acceptable in project performance evaluation including impact assessment. The ATI through its letter dated August 14, 2024, approved this request to increase the margin of error at 8%.

Based on the revised sample calculations with 8% margin of error, the adjusted sample size was 1,265 respondents – 705 farmers and 560 AEWs (**Tables 3 and 4**).

Table 3. Computed sample size based on Slovin’s formula with 8% margin of error

Year	Population of Farmers Trained	Population of AEWs Trained	Total Population Size	Sample Size for Farmers	Sample Size for AEWs	Total Sample Size
2018	2,445	872	3,317	147	133	280
2019	933	235	1,168	134	94	228
2020	956	252	1,208	135	97	232
2021	1,093	294	1,387	137	103	240
2022	4,969	863	5,832	152	133	285
Grand Total	10,396	2,516	12,912	705	560	1,265

Table 4. ATI Training Centers and corresponding computed sample size

ATI Training Centers		Sample Size for Farmers	Sample Size for AEWs
1	ATI – International Training Center on Pig Husbandry	37	43
2	ATI - Cordilleras	58	31
3	ATI - Ilocos Region	58	46
4	ATI - Cagayan Valley	61	52
5	ATI – Central Luzon	52	39
6	ATI - CALABARZON	53	39
7	ATI – MIMAROPA	40	56
8	ATI – Bicol	42	31
9	ATI – Western Visayas	35	29
10	ATI - Central Visayas	53	36
11	ATI – Eastern Visayas	53	38
12	ATI – Zamboanga Peninsula	18	11
13	ATI – Northern Mindanao	27	23
14	ATI – Davao Region	40	29
15	ATI - SOCCSKSARGEN	28	17
16	ATI - CARAGA	50	40

As of August 30, 900 farmer respondents and 659 AEW respondents have been interviewed or a total of 1,559 survey respondents. The survey has achieved more than 100% completion rate in terms of meeting the overall sample size requirement.

Tables 5 and 6 present the number of completed survey respondents by year and by training center.

Table 5. Number of completed survey respondents by year

Year	Population of Farmers Trained	Population of AEWs Trained	Total Population Size	Sample Size for Farmers	Sample Size for AEWs	Total Sample Size	Completed Interviews for Farmers	Completed Interviews for AEWs	Total Completed Interviews
2018	2,445	872	3,317	147	133	280	178	160	338
2019	933	235	1,168	134	94	228	97	77	174
2020	956	252	1,208	135	97	232	92	80	172
2021	1,093	294	1,387	137	103	240	105	102	207
2022	4,969	863	5,832	152	133	285	428	240	668
Grand Total	10,396	2,516	12,912	705	560	1,265	900	659	1,559

Table 6. Number of completed survey respondents by training center

ATI Training Centers		Sample Size for Farmers	Total Completed Interviews - Farmers	Sample Size for AEWs	Total Completed Interviews - AEWs
1	ATI – ITCPH	37	24	43	30
2	ATI - Cordilleras	58	101	31	36
3	ATI - Ilocos Region	58	54	46	62
4	ATI - Cagayan Valley	61	39	52	51
5	ATI – Central Luzon	52	43	39	26
6	ATI - CALABARZON	53	49	39	38
7	ATI – MIMAROPA	40	54	56	83
8	ATI – Bicol	42	41	31	60
9	ATI – Western Visayas	35	54	29	34
10	ATI - Central Visayas	53	55	36	22
11	ATI – Eastern Visayas	53	98	38	44
12	ATI – Zamboanga Peninsula	18	35	11	19
13	ATI – Northern Mindanao	27	16	23	17
14	ATI – Davao Region	40	83	29	43
15	ATI - SOCCSKSARGEN	28	46	17	23
16	ATI - CARAGA	50	108	40	71
TOTAL		705	900	560	659

Applying survey weights is crucial in survey research as they help correct imbalances in the sample, ensuring it more accurately represents the population. These weights address disparities in selection probability, non-response rates, and any over- or under-representation of specific groups. By adjusting for these factors, weights can correct sampling biases and ensure the survey results reflect the true characteristics of the entire population. This involves assigning a weight to each farmer or AEW respondent based on their selection probability and response status, which enhances the reliability and validity of the findings. The final response rates will also be used to compute these survey weights.

Problems Encountered During Survey and Actions Taken

The sampling frame lack complete contact information for many respondents, with some numbers being invalid or missing altogether. This made data collection challenging, as enumerators had to resort to alternative methods, such as reaching out via social media. Despite these efforts, most attempts remained unsuccessful. When no other contact methods are available, survey teams were provided with a set of replacement contacts, not exceeding 50% of the actual computed sample size for the year and training center. However, the issue of missing or invalid contact information persisted with these replacements as well.

To present the progress of the survey and understand the specific problems and challenges encountered in each region, meetings with the STLs were conducted on July 3 and August 2. Common problems and challenges encountered during the conduct of the survey interview included the following: some survey respondents cannot be contacted because they have no contact details or have incorrect contact numbers. Some respondents did not answer the call/dropped the call while others had refused to be interviewed. Moreover, 2018-2019 survey respondents had difficulty remembering the training they attended.

Best efforts have been exerted to address these problems and challenges, the survey teams contacted the ATI training centers to ask assistance in getting the updated contact details of the selected survey respondents while some have contacted the Municipal Agriculture Offices (MAOs), Provincial Agriculture Offices (PAOs), and the different local government units (LGUs). The survey teams also used the social media (Facebook, messenger, email) to locate and contact the survey respondents. Moreover, additional project-based research assistant was hired at ASPSI office to provide assistance in locating and contacting/recontacting the survey respondents. Additional face-to-face interviews were also carried out, including those areas that were difficult to reach.

Table 7 presents the detailed problems and challenges encountered and actions taken by region.

Table 7. Problems and challenges encountered and actions taken

Region	Problems/Challenges	Action/s Taken
ATI - Cordilleras	<p>Survey respondents cannot be contacted; no contact details; have incorrect contact numbers; some respondents did not answer the call; some thought they were being scammed.</p> <p>LGUs/PAO/MAO could not provide complete updated contact details of respondents.</p> <p>While some respondents are located in one municipality, they live far away from each other (i.e. two neighboring barangays took around one or more hour of travel to be covered).</p> <p>Even the respondents from the replacement list have incorrect numbers, no contact details, and unattended. Some did not answer calls and/or dropped the calls.</p>	<p>STL went to ATI CAR to ask for updated contact details of the respondents, especially those without cell phone numbers and email addresses.</p> <p>Assisted the enumerators in contacting the respondents via emails, text messages.</p> <p>Used social media to contact the survey respondents.</p> <p>The enumerators asked the interviewed respondents if they know the other respondents in the list who live nearby and asked for their contact details.</p>
ATI - Ilocos Region	<p>Survey respondents cannot be contacted; no contact details; have incorrect contact numbers; only two enumerators conducted the survey.</p>	<p>Continued contacting/recontacting the survey respondents.</p>

Region	Problems/Challenges	Action/s Taken
	<p>Asked help from RTC, LGUs but they could not provide an updated list of respondents.</p> <p>Even the respondents from the replacement list have incorrect numbers, no contact details, and unattended. Some did not answer calls and/or dropped the calls.</p>	<p>Used social media to contact the survey respondents.</p>
ATI - Cagayan Valley	<p>Survey respondents cannot be contacted; no contact details; some who answered dropped the call</p> <p>Respondents thought they were being scammed.</p> <p>Even the respondents from the replacement list have incorrect numbers, no contact details, and unattended. Some did not answer calls and/or dropped the calls.</p>	<p>Contacted ATI-Cagayan Valley to request assistance.</p> <p>Used social media to contact the survey respondents.</p> <p>The enumerators asked the interviewed respondents if they know the other respondents in the list who live nearby and asked for their contact details.</p>
ATI – Central Luzon	<p>Almost half of the survey respondents cannot be contacted; no contact details; have incorrect contact numbers, some refused to be interviewed; old respondent cannot remember the training attended; sick respondent; respondent based in other country</p> <p>Even the respondents from the replacement list have incorrect numbers, no contact details, and unattended. Some did not answer calls and/or dropped the calls.</p>	<p>The STL/SE assigned was advised to contact the respondent abroad through his/her relative (mother) who answered the call; sick respondent replaced.</p> <p>Contacted ATI – Central Luzon to assist in obtaining updated contact details of the respondents.</p> <p>Used social media to contact the survey respondents.</p> <p>Conducted additional face-to-face onsite interview of survey respondents.</p>
ATI - CALABARZON	<p>Many survey respondents cannot be contacted; some were not answering calls, some respondents refused to be interviewed; some dropped the call; some were hesitant to respond to calls, incorrect name of respondents, deceased respondent.</p> <p>Even the respondents from the replacement list have incorrect numbers, no contact details, and unattended. Some did not answer calls and/or dropped the calls.</p>	<p>Searched through internet/social media to find possible contact information; tried contacting again, sent follow-up emails; contacted ATI-CALABARZON, but the center has same contact details.</p> <p>Replaced deceased respondent.</p> <p>The enumerators asked the interviewed respondents if they know the other respondents in the list who live nearby and asked for their contact details.</p> <p>Conducted additional face-to-face onsite interview of survey respondents.</p>
ATI – MIMAROPA	<p>Survey respondents cannot be contacted; no contact details; have incorrect contact numbers, no signal in the area; only two enumerators conducted the interview, the other one was sick</p> <p>Even the respondents from the replacement list have incorrect numbers, no contact details, and</p>	<p>Contacted ATI-MIMAROPA, but the center has same contact details and no updated contact information. Some respondents were contacted thru chat/FB.</p>

Region	Problems/Challenges	Action/s Taken
	<p>unattended. Some did not answer calls and/or dropped the calls.</p>	<p>The enumerators asked the interviewed respondents if they know the other respondents in the list who live nearby and asked for their contact details.</p> <p>Conducted additional face-to-face onsite interview of survey respondents.</p>
ATI – Bicol	<p>Problem in data synching, some were not answering calls, enumerator was not feeling well; three interviews were incomplete.</p> <p>Even the respondents from the replacement list have incorrect numbers, no contact details, and unattended. Some did not answer calls and/or dropped the calls.</p>	<p>Coordinated with the ASPSI research associate to address the technical issues in data synching; rescheduled incomplete interviews; ATI-Bicol contacted but the center has same contact details.</p> <p>Used social media to contact the survey respondents.</p> <p>Conducted additional face-to-face onsite interview of survey respondents.</p>
ATI – Western Visayas	<p>Some respondents not answering the call/ dropped the call, unattended, no contact numbers, others with incorrect numbers.</p> <p>Even the respondents from the replacement list have incorrect numbers, no contact details, and unattended. Some did not answer calls and/or dropped the calls.</p>	<p>Sent email to ATI- Western Visayas to ask assistance in obtaining contact numbers of survey respondents; visited ATI to get updated contact details; continued contacting respondents.</p> <p>Sought assistance from PAO/MAO to get updated contact details, emailed the survey respondents, sought assistance from the LGU, contacted respondents thru messenger.</p> <p>Devised a strategy wherein one enumerator visited multiple LGUs and asked for their cooperation in contacting the respondents. The contacted respondents were then referred to the other enumerators on standby to conduct the survey interview.</p> <p>Used social media to contact the survey respondents.</p> <p>Conducted additional face-to-face onsite interview of survey respondents.</p>
ATI - Central Visayas	<p>Survey respondents cannot be contacted; no contact details; have incorrect contact numbers; some were not answering the calls; there were some contact numbers that were no longer available.</p>	<p>Contacted ATI-Central Visayas, linked with MAO and PAO to get contact details.</p> <p>STLs/SEs reached out to the barangay captains to help in getting the contact details of respondents.</p>

Region	Problems/Challenges	Action/s Taken
		<p>Additional replacement and manpower were provided.</p> <p>Conducted additional face-to-face onsite interview of survey respondents.</p>
ATI – Eastern Visayas	<p>Survey respondents cannot be contacted; no contact details; have incorrect contact numbers; some were not answering the calls</p> <p>In the face-to-face survey interviews, the issues encountered included: while respondents are from the same municipality, they are far from the barangay proper and far from each other, “<i>dulo to dulo</i>”, respondent not at home during the time of visit; some respondents have already moved to different houses/locations, and some cannot be located from the address given.</p>	<p>Contacted ATI-Eastern Visayas, contacted MAO and PAO to get contact details.</p> <p>Contacted through Facebook Messenger those respondents who cannot be contacted through cellphone.</p> <p>Conducted additional face-to-face onsite interview of survey respondents.</p>
ATI – Zamboanga Peninsula	<p>Survey respondents cannot be contacted; no contact details; have incorrect contact numbers; some were not answering the calls, others refused to be interviewed</p> <p>The replacement list was exhausted twice because the replacement list also had the same issues as the main master list.</p>	<p>Contacted ATI-Zamboanga, contacted MAO and PAO to get contact details.</p> <p>Contacted through Facebook Messenger those respondents who cannot be contacted through cellphone.</p>
ATI – Northern Mindanao	<p>Many respondents cannot be reached, incorrect number, some were not answering the calls, no contact information, 2018-2019 respondents have outdated contact numbers.</p> <p>The survey team assigned in Northern Mindanao was prohibited by the local government unit of Claveria, Misamis Oriental to proceed with the face-to-face interview of farmers in the area. The team was supposed to proceed to Claveria for a three-day field work on August 8 to 10 but was not able to push through because of heavy rains and rough weather conditions. It was the Barangay Captain of Barangay Mialwang that dissuaded the team because of the weather condition that worsened the state of the roads, making it difficult to traverse.</p> <p>Another factor that hindered the survey team from conducting the face-to face interview was that the area where the team was going is a known insurgent hotspot. It was considered a threat by the LGU and they were unable to provide security to the survey team.</p>	<p>Continued contacting/recontacting the survey respondents.</p> <p>Contacted through Facebook Messenger those respondents who cannot be contacted through cellphone.</p>
ATI – Davao Region	<p>AEW respondents cannot be reached, face-to-face survey in Panabo conducted but not completed, some were not answering the calls, enumerator had technical problem with the tablet</p>	<p>Requested contact numbers of remaining respondents from Panabo; continued contacting respondents; contacted ATI but no source of updated contact details;</p>

Region	Problems/Challenges	Action/s Taken
		Replacement provided Smartphone of STL used in the survey
ATI - SOCCSKSARGEN	Some interviews rescheduled; some respondents were not responding, no contact details; some respondents refused to be interviewed and ended the call; some thought they were scammer. The main master list of respondents was exhausted along with the replacement list.	List of survey respondents who cannot be contacted/no contact details was given to Sir Alvin of ATI Region 12 to contact the POs that have contacts with the training participants. Respondents who refused to be interviewed were replaced. Contacted the respondents through Facebook which enabled them to schedule interviews with the respondents.
ATI - CARAGA	A respondent was included in the list of respondents but did not finish the training course. A majority of the respondents that trained in 2018 where unreachable. The replacement list that was given contained the same issue as the master list. A majority of the replacement respondents cannot be contacted.	Continued contacting the survey respondents, coordinated with the ATI in the region for assistance. A respondent who did not complete the training was replaced.

ANNEX



Key Informant Interview
Documentation Report

ANNEX A
KEY INFORMANT INTERVIEW (KII)
DOCUMENTATION REPORT

Office	ATI CENTRAL OFFICE
Name of Key Informant/s	Bernard James Tandang, Chief of Policy Standards and Development Section Cindy C. Alfonso, Project Evaluation Officer II Mark Alforque, Project Evaluation Officer II
Date of interview	May 16, 2024
KII Facilitators	Dr. Fezoil Luz Decena and Ms. Anita Tidon

HIGHLIGHTS OF THE KII

On the development and management of the ATI AFE RBME System

- The development of the Theory of Change (TOC) and the results-based monitoring and evaluation (RBME) system was facilitated by a consultant, Dr. Romeo Santos. The activity focused on the 10-step process in developing the RBME system for ATI. The main motivation was that management wanted to know if the interventions of ATI are working. Evidence is crucial in claiming impact of interventions.
- The system is working. It is able to provide the level of understanding of the extent of credible information on increased knowledge (as immediate result), and the long-term results need a deeper way to get the data to prove these values, hence evaluation studies are resorted to get the overall impact of interventions. The intent of the system is to provide and enable the use of the information in evidence-based policy making. Based on a study, half of the respondents in ATI middle management use the RBME system for this objective.
- There is no targeting made for each indicator. Targeting is only made for indicators that require budgets, particularly at the level of outputs. Outcome and impact indicators have no target. The respondents believed that this should be done. In determining if targets have been attained, supplemental information is used, such as adoption of technologies.
- ATI budget has increased from 1.8B to 2B, from GAA and special projects (RCEF, coconut, etc). Training centers are provided enough budget to implement their projects.
- For the data collection, each center is provided an average of P350,000 per year. Some centers outsource their data collection, while others conduct survey when they go out to the fields to conduct regular ATI activities.

On implementation of the ATI AFE RBME System

- The Central Office (CO) issues guidelines for the conduct of the RBME data collection. The cost of 350,000 is based on the DBM policy of 3% of budget to be allotted for M&E. The RBME manual contains the sampling procedure. The timeframe for the survey is September/October every year.
- The planning office, responsible for the RBME system, does not conduct on field validation of data. They rely mainly on the submissions of the Regional Training Centers (RTCs). The extent of

data validation is focused on data quality, e.g. blanks, outliers and other issues with the raw data. No ground truthing is done at the national level.

- In terms of challenges, many of the staff that were trained in RBME system data collection have left. There has been no refresher training. There is also no enumerator guide or manual to guide the new staff. There are only seven (7) staff in the Planning and M&E unit (PMEU).
- In terms of lessons learned from the implementation of the system, the key informants (KIs) said that they feel that utilization and processing of results beyond the indicator numbers should be made. A communications plan for RBME results utilization should be formulated. More use of data analytics and dashboarding can be made so that there is efficiency in data management.

On result of the data collection for the RBME system

- Questions are more focused for the RTC.

On reporting and utilization of the RBME results

- Regional centers have the option to conduct the survey for RBME themselves, or outsource them. Survey forms are downloaded, based on the RBME manual developed by the ATI Team.
- Data are submitted by the RTC to the CO via google sheets, using the templates provided, which are also based on the Manual. These are then consolidated by the Policy and Planning Division. Success stories are also submitted to reinforce the numbers generated from the RBME survey.
- Results of the RBME are sometimes used by some officers. This means, then that its use is not systematic, and is generally for reference only. Some use the system to revise training modules offered, and to reallocate funds from one training to another.

Recommendations to improve the RBME system

- Digitalization of the data processing, ensuring data quality through validation.
- Third party data collection should be made to avoid bias in sampling and analysis.

Office/Region	ATI CORDILLERAS
Name of Key Informant	Khareen B. Tigu-ing, Development Management Officer I
Date of interview	May 21, 2024
KII Facilitator	Ms. Anita Tidon

HIGHLIGHTS OF THE KII

Description of the AFE RBME Theory of Change, basis of formulation and if it has been amended

- The TOC encompasses intermediate, immediate, and long-term results. Inputs primarily involve training, where Information, Education, and Communication (IEC) materials are provided, along with human resources and capacity-building activities. Outputs include the number of people trained, the frequency of training sessions conducted, and the total number of trainings.
- Regarding outcomes, the Center considers how many clients actively apply what they have learned—whether they practice the acquired knowledge. Additionally, the Center tracks the number of farmers who have certified farms, especially those selling products not only locally but also abroad, with certified quality.
- The TOC has not been amended.

Purpose of RBME System

- The purpose of RBME at ATI is to assess the impacts and outcomes of interventions, including training programs. When implementing any intervention, it is essential to examine intermediate, immediate, and long-term outcomes for clients. To achieve this, the CO mandates conducting surveys with both farmers and Agricultural Extension Workers (AEWs) who had received ATI training. These surveys involve collecting data from a specified number of samples using the questionnaires. The results obtained serve as the foundation for planning programs in subsequent years.

Sufficiency of human, political and social resources sufficient to implement the ATI interventions/PPA

- Due to limited human resources, the Center hires Job Order (JO) personnel, typically in pairs, with six-month renewable tenures. These JO personnel play a crucial role in training activities, primarily by preparing materials, writing reports, and managing registrations. Annually, the Center conducts approximately 100 training sessions.
- Support from the national government in terms of policies and funding are sufficient. The Center had good collaboration with local government units (LGUs).

Key competencies of extension workers

- Their expertise in their respective topics is essential. For example, if they are the focal person for high-value crops, they can discuss this fairly well in the field.

Sufficiency of financial resource and its utilization

- Funds are sufficient and are being used effectively. There were times when it was reallocated for other purposes and unused until later in the year. Training courses are the first ones to be budgeted.

Efficiency constraints

- Efficiency constraint was on data collection for RBME. The common challenge was communication, particularly reliable signal since this delayed communication with the sample clients. Additionally, some clients have passed away or migrated abroad. To address this, the Center coordinated closely with the municipal agriculture office (MAO), which assisted in reaching out to people via phone calls.
- Despite these challenges, staff in the Center managed to successfully complete the assignment, without wasting time and energy. When the staff from other units travel for training in another location, the interviewers accompanied them to save on travel time and request them to assist with the interviews. Whenever other staff were available, they willingly participated in the data collection as well.

Data collection process for the RBME system

- ATI Memo and Instructions:
 - ATI issued a memo outlining the RBME assessment, specifying the target number of respondents and submission deadlines. It provided the questionnaire and dummy tables, emphasizing that each table should include a 2-3 sentence narrative.
 - Each dummy table corresponds to a question in the questionnaire and addresses a specific indicator.
- Sampling and Coordination:
 - Random sampling occurred from the annual database of participants who attended ATI training courses. Sample clients were categorized by province and municipality.
 - The Center coordinated with LGUs through formal request letters, seeking assistance for conducting interviews. The letter included interview schedules, client names, and contact information.
- Data Collection:
 - The M&E officer, along with two JOs, conducts site visits and interviews. They also collaborate with Center staff involved in ongoing ATI trainings at the identified site, requesting interviews with sample respondents.
 - Interviews are relatively quick (around 15-20 minutes), with additional time needed for translation if required.
 - Data collection occurs from March to August, aligning with the September write-up deadline.
- Data Validation:
 - During data collection, validation occurred. The AEWs assisted interviewers by reminding respondents of training course dates and titles.

- Data Entry and Management:
 - The M&E officer inputted questionnaire data into Excel immediately after daily interviews (approximately 10-15 minutes per questionnaire). Inputted data were then uploaded to Google Sheets.
- Analysis and Reporting:
 - After analyzing data and completing dummy tables with narratives, the Center director and section chief of planning and information services reviewed the submissions. Comments and suggestions were consolidated, refining the dummy tables. The final dummy tables were transformed into PDF format and transmitted to the CO, along with raw data in Excel.
 - The entire process takes approximately six months

Issues and concerns experienced during data collection

- As previously discussed, data collection faced common challenges in the Cordilleras. One issue was the unreliable signal, which caused delays in communication with sample respondents. Additionally, respondent availability posed a challenge; some have passed away or migrated to other areas. Given the three-year gap, recall problems also arose. The geography of the Cordilleras also presented difficulties in reaching certain respondents, requiring up to 14 hours of travel. When public transport was unavailable, hired vans were used to access these remote areas which were expensive.
- During interviews, respondents sometimes expected compensation, such as cash. To address this, the Center provided them with T-shirts and IEC materials—leftover items from school-on-the-air programs. In far-flung regions, interviewers even offered lunch to the sample respondents.

Capacity of the Center to carry out the activities embedded in the system

- In terms of staff allocation, the Center’s planning section consists of four permanent staff members, one of whom is specifically assigned to RBME alongside other responsibilities. For data collection, this staff member collaborated with a contractual staff to gather necessary data. According to the key informant, this allocation was sufficient, and the tasks were manageable. Additionally, the planning section coordinated closely with staff from different sections during interviews, especially when they travelled to the same locations as the sample respondents.
- Furthermore, staff members from other sections were well-informed about RBME because survey results were presented during management reviews. As for contractual staff, they were required to thoroughly read the RBME guidelines and study the questionnaires. Before heading out into the field, the responsible staff member reviewed any unclear points with them.

Other challenges experienced in implementing the system

- The key informant disclosed that there are indicators that cannot be answered using the new questionnaire (although the key informant could not recall the specific ones). It is possible that the questionnaire was not pre-tested or validated before implementation.

- Data collected was not validated for accuracy and reliability due to the trust placed in their sample respondents.

Lessons learned from the implementation of the system

- The key informant highlighted that implementing RBME is a distinct task, involving the assessment of training outcomes through client surveys. When uncertain about the information provided by respondents, data validation becomes necessary. The primary goal is to evaluate the impact of these trainings on farmers.

Credibility of the values generated by the system

- The key informant disclosed that the information generated is credible and serves as the basis for the CO's performance assessment, among other data. In the Center, post-test recommendations following training sessions contributed to enhancing the implementation of training courses.

Reporting for the RBME system by the regional centers/dissemination of the results

- Results were exclusively presented during management meetings, with no external dissemination beyond the Center. The report primarily comprised tables accompanied by succinct two to three-sentence narratives. Each table highlighted the achievements related to a specific indicator. This approach ensured that the information remained internal and was only used for decision-making within the organization. The CO prepared a consolidated report covering the results in all regions but the key informant has not seen a copy of it.

Database to capture, curate, analyze and manage the data

- The key informant is responsible for maintaining the RBME database. The files are organized by year and include both raw data and completed dummy tables. These files are shared on Google Drive, allowing access for anyone within the unit and those who conducted interviews from the other sections. Collaborators can contribute to the write-up, and they also review the data to identify additional insights not mentioned in the narrative. This collaborative approach ensures transparency, accountability, and the enrichment of the RBME process.

Use of the results of the RBME system in targeting, planning and budgeting for ATI?

- The results were not directly used for planning and budgeting within the Center. RBME did not receive significant attention during the Center's planning processes. The assumption is that only the CO takes the results into account for its planning activities. However, feedback from the field was promptly relayed to the relevant focal persons, ensuring that they consider it in their subsequent training initiatives. For planning and budgeting purposes, the Center relied on the results of training evaluations, the training needs assessment report, and consultations with stakeholders.

Clients' rating of their satisfaction with the intervention they received and if it is relevant to their own needs

- The majority of clients expressed high satisfaction with the interventions, finding them relevant to their specific needs. This positive feedback was reflected in the post-training assessment reports. However, one client expressed dissatisfaction due to a language barrier—the resource person used

Tagalog, which the client did not understand. This highlighted the importance of considering language accessibility in the trainings.

Clients suggest to improve the provisions of ATI extension intervention

- Suggestions included ensuring good physical facilities. For instance, participants noted that the venue was uncomfortably hot, especially given the current weather. Installing air conditioning for future sessions would be beneficial. Additionally, attention should be paid to the quality of food provided. Some participants found it too salty, and it is advisable to consider participants' food preferences and allergies when serving meals to avoid any issues.

Evidence of clients' increase in knowledge and confidence in discussing what they learned from ATI intervention

- While the clients appeared to have learned from the training, they still lacked confidence when discussing with their colleagues what they have learned.

Technology adoption and evidence showing that clients adopted the AF technologies

- The key informant is not fully aware. Some participants may be using the knowledge gained from the training.

Clients' description of their farming activities and resource use

- Many farmers primarily engaged in monocropping, focusing on rice or vegetable gardens. Unfortunately, integrated practices were not widely adopted. Efficient resource utilization was not commonly practiced, and chemical fertilizers were preferred over organic alternatives. Notably, organic farming remained less prevalent among vegetable growers due to inconsistent practices among neighboring gardens. However, in lowland areas, there were greater integration, where livestock and fishponds were combined with rice crops.

Clients' farming activities are sufficient in providing for their households

- The key informant believes that clients' income from farming falls short of meeting household needs, such as expenses for children's education. After the training, clients expressed a desire to receive a start-up, such as fingerlings if the training focuses on fish farming.

Evidence or observation that shows clients having an increase in income

- Income increases were more evident among clients operating learning sites, as observed by the key informant. These clients have been actively improving their facilities by upgrading and adding lodging. Notably, there has been a significant improvement in facilities compared to the basic setups they initially had. However, for small individual farmers, the key informant cannot definitively confirm the same.

Adoption of climate change adaptation and mitigation techniques and practices, social protections were provided by ATI and its sufficiency for the clients to bounce back?

- According to the key informant, training typically did not cover the topic extensively. However, farmers did implement basic measures such as water storage and farm cleaning. Additionally, they

created channels for water flow. Unfortunately, constructing greenhouses remained a challenge due to material costs.

- In cases where learning sites were affected by floods or typhoons, they requested fund assistance. If there was available budget, they received support. However, individual farmers may not always receive assistance.
- During the pandemic, the ATI distributed seeds for home planting. The Learning Sites for Agriculture (LSAs) were responsible for distributing the seeds and providing guidance. After three months, the Center checked the progress of the planted seeds. While some crops thrived, others did not. Notably, the pechay and lettuce seeds were particularly successful.

Issues and constraints clients shared that hindered farm and product certification and the assistance being provided by ATI

- The ATI exclusively certifies the LSAs. Certifications such as Good Agricultural Practices (GAP), Good Animal Husbandry Practice (GAHP), and others are issued by external agencies. The ATI's role primarily involves providing training provisions and raising awareness. For instance, in the case of GAP, ATI conducts GAP training. While farmers often expressed willingness to adopt GAP, challenges arose when neighboring farms did not follow the same practices. This inconsistency affected individual farms. Hence, there was a demand for a comprehensive training. Ensuring that everyone within a barangay will be aware and will allow synchronized interventions.
- For organic certification, the process has changed—it is now Participatory Guarantee System (PGS) instead of ICS. Ongoing training is necessary for PGS certification in organic agriculture. A common issue reported was the lack of sufficient area to meet the organic certification requirements.

Strengthening M&E system of agencies implementing ATI interventions and the aspects of the system that can be further improved

- The regional field offices (RFOs) also provided extension services. They offered training as well. Once a year, the Center meets with the RFOs to harmonize efforts, ensuring that interventions are not duplicated and involve different personnel. When similarities exist, they focused on complementary rather than identical interventions or training.
- State Universities and Colleges (SUCs) were also part of the implementation process.
- However, within the agencies, there should be a form of centralization. Currently, when the Center requests data from RFOs, it is often directed to different sections, with instructions like 'Go to that specific section.' In contrast to the Center, where most of the monitoring and evaluation (M&E) data is centralized, other agencies need to contact multiple people to obtain data.

Office/Region	ATI ILOCOS
Name of Key Informant/s	Jayvee Bryan G. Carillo, PhD, OIC, Center Director Jomar Palsimon, Project Evaluation Officer I
Date of interview	May 27, 2024
KII Facilitator	Ms. Anita Tidon

HIGHLIGHTS OF THE KII

On the development and management of the RBME System

- Dr. JB Carillo has just assumed office at ATI Region 1 on April 1. He came from Region 3, and was not significantly involved in the RBME since its inception. He recalled that the former assistant director in Region 3 attended a capacity-building activity organized by the CO. Initially, the instruction was to outsource RBME to a third-party organization. During his time in Central Luzon, it outsourced this through the SUCs. This scheme started around 2020, but he was not entirely sure. According to him, the CO recently instructed ATI-Region 1 to mainstream RBME within the organization. Specifically, they will be conducting RBME by themselves.
- Jomar attended a 10-day training together with the former assistant center director of Region 1 and an LGU official from San Nicolas, Ilocos Norte. This training took place in 2017 and marked the beginning of the Center's engagement with RBME that officially started in 2018.
- The facilitators were Mr. Bernard James Tandang and Dr. Romeo Santos. Jomar could not remember much the components of the TOC. Since 2017, there was no briefing on RBME.

Purpose of RBME

- According to the Center Chief, ATI recognizes the importance of assessing its influence on clients, particularly in terms of adoption. Historically, they have conducted numerous training programs, but tracking their impact has been a challenge. To address this, the CO has implemented the RBME framework. Through RBME, the effectiveness of their training delivery can be evaluated by quantifying outcomes. For instance, ATI aims to determine how many farmers have benefited from its programs and how many have adopted farming technologies they introduced. Additionally, RBME allows them to identify policy recommendations to enhance their program delivery.

Sufficiency of resources

- In terms of human resources, this was one of the challenges they faced. Its staff complement remained relatively unchanged despite the fact that its organizational structure was rationalized over 15 years ago. Over time, its target performance programs and budget have significantly increased, but unfortunately, the human resource complement has not kept pace. As a result, the staff at the regional center often feel the strain. Despite these limitations, the Center was able to meet its targets.
- The central office provided a window for hiring contract of service (COS) personnel, but there were specific limitations. They were allowed to hire COS staff, and one of their strategies was to have employees multitask. This approach was necessary due to the numerous targets they need to meet.

On the key competencies of AEWs

- Their soft skills, which included effective communication and overall competence, are essential. While technical expertise remained important, they have already equipped them in that aspect due to the abundance of extension service providers in the region. Currently, the Center's focus is on continually enhancing their soft skills, particularly in verbal and nonverbal communication. Non-verbal like writing proposals and reports, packaging success stories.

Efficiency constraints

- There was no efficiency constraint. They engaged in harmonization efforts with other government agencies, particularly concerning extensions. This prevented duplication of activities between ATIs and other agencies with extensions, allowing for complementary actions. Let's say RFO has funds for an extension, and it can complement ATI's activities. That was the strategy implemented in the region.
- Additionally, they ensured that participants were not caught in a tug-of-war between activities conducted by ATI and other DA agencies. They have established a strong working relationship with their counterparts at the regional office, including the Regional Field Office and other national agencies. As a result, they were able to maintain a harmonious environment without any problems.

On implementation of RBME system - Data collection

- The CO guidelines mandated a retrospective analysis of data from three years ago. Specifically, respondents trained in 2015 were surveyed in 2018, and those trained in 2016 were targeted in 2019. The region maintains a detailed database of trained farmers and AEW, facilitating the sampling process. Initial sorting of data by province assigns a unique identifier to each trainee, with duplicates removed before random selection using random.org. Additional colleagues from different divisions assisted in data collection, particularly in regions where respondents were located, such as Ilocos Norte.
- Within the PMEUE, staffing comprises a Planning Officer 2, Project Evaluation Officer 1, and DMO 1. Standardized questionnaires, provided by the Central Office, form the basis for Key Performance Indicators (KPIs) evaluation. Although guidelines were released late last year (around April), previous procedures allowed for an earlier start, particularly in 2018. Ideally, data collection commences in the first quarter to leverage regional availability and vehicle accessibility, spanning 3 to 4 months.
- Excel serves as the primary tool for data processing and tabulation, utilizing dummy tables provided by the CO. During data validation, discrepancies in questionnaire responses were checked for consistency, ensuring alignment with respondent answers. Strategies included convening respondents at centralized locations with assistance from LGUs, providing snacks as a gesture of appreciation for participation despite travel challenges.
- The allocated budget of P300,000 proved insufficient, considering various expenses like disturbance fees, travel reimbursements, and enumerator hiring needs. To manage costs, collaboration with Job Order (JO) staff from different sections, during their free time, was sought instead of hiring additional enumerators.
- Reports were compiled into Word files, summarizing each completed table in either three sentences or one paragraph per table. While the September deadline was standard, reports were submitted as

early as June when data collection started promptly. The deadline flexibility extended until September 30, with occasional extensions to November 1, as observed last year.

Issues and concerns in data collection

- There were instances when the respondents contacted were not available or had relocated to another municipality or even another province, making it difficult to find them. Some moved to places like Cebu. They were replaced, which is why there was a buffer. When it comes to recall, some of them remembered, while others needed to be reminded about the training they attended and where it was held. Some respondents have attended two or three trainings, but due to the large number of participants, there were times when only one training was attended that year, and then they were interviewed again in the next round. However, this was not common.

Capacity to carry out the activities embedded in RBME system

- Jomar believes the Center can conduct it, although their limitation lies in not being statisticians. Some data intricacies are better understood by statisticians. However, in terms of the study itself, it was manageable.
- The Center Chief suggested that if this becomes mainstreamed at the regional training center, additional manpower would greatly help. The PMEUC currently has only three permanent employees. There is just one M&E officer. The other two are planning officers and a development management officer, each with their own tasks.
- The workload was substantial, especially concerning data gathering and subsequent analysis. If they rely solely on the M&E officer, it might be challenging. Having additional manpower dedicated to RBME would be immensely beneficial.
- The instruction for this year was for ATI to take charge. Previously, Region 1 has been handling it. However, in some regions—like in Region 3—they were allowed to outsource to SUCs. This way, they avoided difficulties by paying the SUCs to conduct the RBME using available funds. But now, the CO's instruction is for ATI to handle it, which will require additional staff for data gathering and related tasks (Note: it seems the center chief is not aware that ASPSI is handling the assessment this year).
- According to the Center Chief, in Region 3, they allocated P150,000 to the SUC for conducting the study. They encountered difficulties finding an SUC that would accept the budget due to its limitations. Fortunately, over the past two years, the Center's strong partnership with them has helped gain their support. This year, the Agricultural Training Institute (ATI) will take on the task. The challenge lies in staff capacity, since the Monitoring and Evaluation (M&E) officer has other assignments. How can they effectively allocate his time to handle both regular tasks and the additional workload for the RBME? That remains a main challenge according to the Center Chief.

Challenges in implementing the system

- According to Jomar, when it comes to gathering data, they cannot immediately determine if the farmer is still there unless they coordinate with the LGU to verify if the respondents are still active. While they were assigned unique numbers, over the course of three years, they did change. They opted to visit the respondents in person. Another challenge was the accessibility of certain locations. Sometimes, due to weather conditions, reaching them becomes difficult—especially when there were only few randomly sampled respondents in an area.

- If they cannot physically visit them, the last resort was to rely on buffer respondents/replacements. On the data itself, they lack a foolproof way to verify the accuracy—especially for production data from farmers. After all, it has been three years since the last assessment. Farmers rarely keep records or hide information. Fortunately, they addressed some of the staffing gaps by having others assist during data encoding. Even at the encoding stage, they were meticulous. Just because someone answered ‘yes’ doesn’t mean they skip other relevant questions. They cross-checked to ensure consistency.
- As for the budget, they can stretch it, but if increasing it allows them to include more team members, why not? As mentioned previously, they no longer hire enumerators to avoid overburdening their resources. During the pandemic, data collection shifted to phone calls. However, the challenge arose when they encountered disconnected phone numbers.
- According to the Center Chief, one of the key purposes of RBME is to derive policy recommendations, particularly by considering the results for program planning. Based on experience—though this does not apply specifically to Region 1—sometimes the results were not fully considered. Even though the data has been generated and analyzed, it does not always inform their planning process.
- The challenge arises when the information is not effectively echoed to project officers or program coordinators. While the results and analysis exist, they often remain underutilized. There might be portions that are used, but his concern is that they become outdated. In the case of results they obtain, immediate government or institutional action is often necessary.
- However, there is a risk that by the time they propose actions based on the analysis, the need of the farmers may have already changed. Our government planning operates on a two-year advance timeline. For instance, if they receive the analysis today, they might propose actions that would not be implemented until two years later. That is the challenge—the potential gap between generating results and taking action based on those results.

Lessons learned in implementing the RBME

- According to Jomar, when dealing with ‘something,’ you can complete it as long as the planning is accurate and there is sufficient manpower. In conducting this RBME assessment, their experiences will be enriched, especially during interactions with various stakeholders. Sometimes, the farmers they interviewed were so passionate that they shared their stories extensively.
- According to the Center Chief, the data collected should influence policy formulation. Since the RBME process will now mainstream within the organization, their M&E officer should lead the program planning. When the officer identified any insights during data gathering or analysis, they promptly incorporated these into their program planning. The CO has recognized this approach, thanks to their initial advocacy, and it is now seamlessly integrated into their workflow, allowing them to utilize the data effectively through the M&E officer.

Credibility of the values generated by the system

- According to Jomar, the values generated by the system are credible because he is the one facilitating the questions together with his colleagues.

Reporting and dissemination of results

- Before submitting the results to the CO, the report consisting of tables with narratives were reviewed by top management before it reached the Center Chief. Following the review, the report was submitted in soft copy. The CO consolidated and validated the data with the regional center in case there were doubts. Jomar has seen a consolidated report only once (in 2021) since the beginning of RBME assessment. The Center does not disseminate the results externally.
- After completing the study and seeing the results, there was no immediate action taken. Ideally, the Center should respond immediately to the needs identified in the data generated by the RBME. However, due to pre-planning, it might take two years to propose their requirements. This immediate response to the needs or the data generated should be addressed.

Data capture

- The database is in Excel. This is being handled by Jomar. He handles all the databases. For the last two years, they begun using the Google Sheets. Encoding the data was done by whoever was available in the PMEU. Some did it while conducting interviews, and others who remained in the office encoded the data using Google Forms.
- As for the hard copies, the actual questionnaires—since everything was in hard copy—have handwritten answers from the respondents. Some of these hard copies were retained in the region; they were stored in the files.

Utilization of results of RBME system in targeting and planning

- The reports were not used because after the study, when the results were seen, it was no longer immediate or not immediately actionable. Ideally, they hope to respond immediately to the requirements or the data generated for RBME.
- According to the Center Chief, they have policy directives from the CO and the DA Central, which they used for targeting and planning. They also used the national expenditure program and policy guidelines from the CO, the NEAP, strategic plans for 2022-2028, but some of the information gathered from the results of the RBME system may no longer be applicable. Additionally, they utilized the results of training evaluations and conducted stakeholder consultations.

On results of data collection for RBME system – Client’s satisfaction

- The Center’s clients seemed happy seeing Jomar and his colleagues and openly shared their preferences and feedbacks. The trainings they conducted were relevant to the needs of their clients.
- However, there were times when, for instance, they live in mountainous areas, and a mechanization training they attended was not relevant to their location. However, they used the acquired knowledge, especially if they move to a non-mountainous area. The Center has clients who cultivate small plots on the mountainside, so adapting technology like rice planters can be challenging.

Suggestions to improve the provision of ATI’s intervention

- On suggestions to improve ATI interventions, such as learning sites and farm tourism, and partnerships with other agencies. Jomar mentioned that learning sites benefitted from government

interventions and often acted as "big brothers" by helping and sharing their knowledge with other farmers in the community.

- When asked about further suggestions for improvement, Jomar noted that ATI's training and technology transfer processes were generally effective, given ATI's long experience. However, he acknowledged that occasional problems arose, which were only identifiable during implementation.
- Inquired about the effectiveness of the learning sites, Jomar affirmed their success, stating that the knowledge and skills of the trained farmers have increased. He shared an example of a farmer who, after training, became a mentor and resource speaker, indicating that many trained farmers have gained enough confidence and expertise to teach others.

Technology adoption

- Jomar explained that there were several instances where farmers who initially were not learning sites operators applied the training they received from ATI to their farms, subsequently becoming ATI learning sites. This demonstrates that the training is being effectively adopted and utilized.
- Inquired about the general farming activities of these farmers, Jomar described their approach as moving towards integrated farming systems, specifically rice-based integrated farming. This system includes not only rice but also vegetables and aquaculture, such as tilapia, within the same farming area. This integrated approach is being adopted by various farmer beneficiaries.

Farming activities and resource use

- Jomar explained that the region is predominantly rice-based. He noted that many farmers, especially those who have adopted learning site practices, use their resources efficiently and sustain their farming systems. This included practices such as using crop residues to feed livestock and applying ATI-taught technologies for animal waste management to minimize wastage and reduce production costs.
- Jomar mentioned a specific program, "Palay Timpalak," where groups of farmers were trained and competed by municipality to showcase their rice-based integrated farming systems. This competition encouraged the adoption of efficient and sustainable farming technologies learned from ATI, with a region-wide search for the best practices taking place by the end of November.

Sufficiency of farming activities in providing for the households

- Specifically for the learning sites, Jomar observed that they were able to provide for their households and produce extra to sell. For small farmers, Jomar noted that those with small farming areas generally only produced enough for their family, while those with larger areas have higher production, allowing them to sell extra produce. In Ilocos, Jomar observed that farmers with small plots (0.2 to 0.3 hectares) need additional income to support their families, whereas those with around 1 hectare or even 0.5 hectares can sufficiently support their households.

Evidence or observation of increase in income

- Jomar explained that while farmers' own calculations during interviews indicated increased production, he had not personally observed significant improvements. He also mentioned that

shrinking land sizes, due to infrastructure development like bypass roads, have further limited agricultural productivity in their area.

Climate change adaptation and mitigation techniques

- Farmers often harvest their crops early if a typhoon is approaching and their rice is ready. Those caught by the typhoon used storage facilities to protect their harvest.
- Regarding social protection, Jomar clarified that ATI primarily focuses on training and does not provide seeds, fertilizers, or fuel, unlike the regional field offices, which offer these types of support.

Issues in getting farm and product certification

- Asked about the training provided for farmers on obtaining product or farm certifications, particularly in organic agriculture, Jomar explained that the main constraints were the high costs of certification and the extensive paper requirements, such as maintaining five years of farm records. For organic agriculture certification, these factors posed significant challenges.
- When discussing NSA certification, Jomar mentioned there is a specific process farmers must follow. Some farmers can comply with the requirements, but those who face difficulties usually get assistance from the LGU, especially if they understand the benefits of becoming a learning site. An endorsement from the LGU is necessary for certification, and the LGU often helps farmers who are eager to get certified.

Strengthening the M&E system of agencies implementing ATI interventions

- Asked for suggestions to improve or strengthen the M&E system for ATI agencies, Jomar suggested that while the ATI already has a functioning M&E system, the main issue is that there is only one M&E officer who is overwhelmed with tasks. For other agencies, Jomar was unsure if they had an M&E system, as one agency had asked him for notes on RBME, indicating they might still be establishing their own system.

Office/Region	ATI CALABARZON
Name of Key Informant	Angelo Hernandez, Project Evaluation Officer I
Date of interview	May 28, 2024
KII Facilitator	Ms. Anita Tidon

HIGHLIGHTS OF THE KII:

Development of RBME System and Theory of Change

- In 2017, the key informant participated in an intensive 10-day workshop to develop the framework and ToC for the AT). This workshop also marked the beginning of the Center’s work on the RBME system.
- The workshop was conducted in two batches: one for the Luzon cluster and another for Visayas-Mindanao. Representatives from the SUCs were actively involved in shaping the system. Following the workshop, initial testing of the RBME system was conducted. In 2018, ATI issued a special order or office order to fully implement the RBME system. This allowed the Center to operationalize data collection and processing for RBME.
- The ToC was developed which consistently appears in ATI documents during updates. For instance, it features prominently in strategic plans and thematic diagrams. The ToC serves as a results framework that aligns with the overall approach of ATI.
- During the 2017 workshop, the success indicators were identified—from output evaluation to impact evaluation. From 100 to 200 indicators, the indicators were narrowed down to the most relevant ones for ATI’s extension delivery services.
- The CALABARZON participants included the key informant and the VP for Extension of PUP Mulanay. The Regional Training Centers (RTCs) have the flexibility to choose participants from the SUCs and LGUs. In the case of CALABARZON, PUP Mulanay responded to the invitations. The LGUs in Region 4A were not selected. It appears that an LGU from the northern region was tasked with inviting participants.
- PUP Mulanay is part of the Regional Agricultural and Fisheries Extension Network (RAFEN). The members were consistently invited annually during consultative workshops in late January or February. RAFEN includes regional offices that are counterparts to the national agencies such as PCA, BPI, BAI, NMIS, and RFO, all SUCs in the region, including UPLB, Provincial LGUs, members from the private sector, NSA cooperators, and extension service provider partners.
- There has not been any revision of the ToC so far. The CO has not taken steps to revise the existing one.
- For RBME, it invited participants from the City and Municipal levels for a briefing on the RBME system.

Purpose of RBME at ATI

- Results of RBME are used to understand how stakeholders, particularly farmers and fisherfolk, perceive and accept ATI’s extension services. During the pandemic, stakeholders’ adaptability was assessed, looking at their perception of online training methodologies against the conventional

way of delivering extension services. Based on their perception, adjustments were made to address areas where they faced challenges.

- The computation of the targets is done by the CO, which then communicates the targets to the RTCs through a memorandum every year, except for this year. During the budget execution workshop in the last quarter of 2023 for FY 2024, they were informed that the CO has outsourced the nationwide RBME assessment to ASPSI. They were instructed to assist ASPSI in data collection by providing the contact details for municipal and city agriculture offices.

Sufficiency of human, political and social resources

- For human resources, the staff (both under permanent positions up to the COS positions) were well-trained to conduct training activities and schedules were planned to avoid overlaps. The training courses were well-managed including the durations (e.g., 3 days, 5 days), depending on the number of participants. Guidelines in the conduct of extension services were observed.

Key competencies of Agricultural Extension Workers (AEWs)

- Most AEWs have backgrounds in agriculture. Many of them are licensed agriculturists, while others hold degrees related to agriculture, such as BS Agricultural Biotechnology or agricultural engineering. AEWs are generally well-equipped with technical knowledge, although there are exceptions. For instance, in LGUs with large population, some extension workers may not have an agriculture background. In other offices, there is a focus on nutrition, where nutritionists play a key role. Overall, approximately 90% of AEWs with plantilla positions, including COS workers, hold a 4-year agricultural degree. Some are not yet board passers but their bachelor's degree background already qualifies them for work in agriculture.
- AEWs should have good communication skills. ATI has a program with modules to train new AEWs which ensures they are prepared to handle banner programs and become effective resource speakers. They are ready to deliver extension services after completing the module. Extension delivery is the topmost competency they should have.

Sufficiency of financial resources

- The Center has not experienced shortages in funding for conducting training and implementing the planned activities.

Efficiency constraints

- There were but these were easily resolved. Each banner program has its own focal person. Operational planning was conducted early in the year, aligning it with the work and financial plan approved by the CO. The Center has two training halls and a dormitory capacity for up to 50 people. To optimize resources, the Center uses the facilities based on funding—lower-funded training is conducted within the center and higher-funded ones outside. The Center collaborates with partner agencies for additional facilities.
- It anticipates an annual workload increase of at least 10%. If funding increases by 10% next year, it is possible to face a shortage of personnel. ATI can request additional staff to address this.
- There are instances where the Center also meets challenges. This year, when it collaborated with the Philippine Coconut Authority (PCA) for the conduct of series of training under the Coconut

Farmers and Industry Development Program (CFIDP), the agreement was that ATI mobilizes activities and PCA identifies participants. However, PCA did not always meet the 100% target. For instance, if the target was to train 25 AEWs, only 23 AEWs attended, with 2 farmer-leaders. These discrepancies arose when participants did not align with targets. Although PCA may transfer some attendees to farmer-leaders to avoid redundancy, this created challenges in reporting accurate accomplishments to the Department of Agriculture (DA).

Data collection and reporting

- The final output of the RBME system is submitted to the CO every end of September.
- Implementing an RBME system can be complex, especially when dealing with data collection, analysis, and reporting as presented below:
 - *Data Collection Strategy:*
 - Collected data annually from around 400 respondents depending on the number of samples provided by the CO.
 - To optimize resources, data collection was combined with other activities, such as training sessions or interviews.
 - Data collection started in March and continued until June. If there were issues and problems, data gathering was completed by the end of July.
 - *Data Processing and Analysis:*
 - Simultaneous encoding information during data collection
 - After data gathering, proceeded to data cleanup and analysis.
 - *Reporting and Templates:*
 - Used a pre-designed template provided by the CO for analysis.
 - The template included tables that were provided with brief descriptions (2-3 sentences) per table.
 - The tables were reviewed by top management for approval.
 - Submitted to CO upon approval by management.

Issues and concerns experienced in data collection

- Remote Areas and Equal Distribution of Sample:
 - Conducting activities in remote areas required extensive travel for data collection.
 - Equal distribution of samples across provinces posed challenges, for instance, in Quezon, there was only one respondent from Tagkawayan; modifying the data gathering process was necessary.
- Signal Constraints for Online Data Collection:
 - Signal availability is limited or lacking in island municipalities and highlands (e.g., Polillo group of Islands, Tingloy, Bondoc Peninsula and highlands of Tanay)
 - Collaboration with LGUs helped facilitate online interviews during farmers' meetings. Names of farmers to be interviewed were provided and they requested to attend farmers' meetings. After the meeting, Zoom interviews with the farmers were conducted.
- Logistics Challenges:
 - Logistics, including signal availability and internet connectivity, played a significant role.
 - Ensuring well-informed questionnaires and thorough interviewer training is essential.

- Terrain Challenges in Island Provinces:
 - Island provinces faced similar difficulties; terrain can be challenging.
 - Sharing experiences with colleagues from different regions helped address logistics issues.

Other reports reviewed

- For additional details as part of the templates, the Center tracked the number of training courses during a specific year, such as three years ago, reported on financial obligations and disbursement rates, number of passers for TESDA’s national certificates for the year.

Capability to carry out the RBME system activities

- *RBME Integration:* Approximately three years after launching the RBME system, it was fully implemented in the region. Recognizing the importance of RBME results, the Center was able to integrate the system into its various processes.
- *ISO Certification:* In 2018, the RTC received ISO certification. Prior to that, alignment with the RBME system ensured that the Center’s accomplishments met the requirements.
- *Preparedness for Reporting:* Despite unexpected CO facilitation, the M&E focal person and project officers were well-prepared for RBME reporting. Each year, replicating RBME efforts becomes easier.
- *Data Collection:* The Center ensures that the focal person and project officers understand which data to collect. The Monitoring and Evaluation Officer or Designated Report Officer personally identifies the necessary data for RBME reporting and actively seek necessary information from the project officers.

Credibility of values generated by the system

- The key informant ensured that the Center handled the RBME processing with utmost care. The key informant also ensured the reliability of data sources. Results were meticulously reviewed. The CO iterated with the Center, clarifying and adjusting as needed. The results were reliable.

Reporting and utilization of RBME results

- During the annual performance review in December, just before the year ended, the Center presented the RBME results. However, there was a challenge: these results were based on respondents who attended the training three years ago. As a result, they primarily provided lessons learned rather than real-time trends for immediate adjustments. The Center maintained separate reports for current trends and adaptability rates. The sudden changes experienced by some respondents during the recent pandemic rendered certain RBME data less applicable for this year’s planning. Instead, the Center prioritized lessons learned and addressed problems encountered during the current year. These insights inform the adjustments for the near future. Externally, the Center shared the RBME results with its RAFEN partners—other regional agencies in CALABARZON—either in the last week of January or early February. This was aligned with the Center’s annual regional consultative targets.

Database

- The key informant is responsible for the database, being the M&E officer.

- There is an annual database, separate for each year, in Excel format. This database serves as the data encoding system.
- Along with narrative results, the key informant submitted the Excel file containing respondents' data to the CO.
- The CO consolidated the raw data and drawn conclusions from it. They intentionally designed the data to be open-ended for easier consolidation.
- Due to modified data gathering methods, some data were collected through Google Forms and then transferred to the CO's database template.
- All data, including RBME reports, are stored digitally. Printed copies are retained for two years, following the National Archives Law of the Philippines.
- Secured soft copies of all reports are also kept. The Center uses a corporate Google account with unlimited storage in Google Drive.
- Access to the data is restricted to the key informant, but requests can be made by anyone within or outside the Center. Transparency is important, especially when politicians or others ask for data.

Client satisfaction with the introduced intervention

- Extension Workers' Satisfaction
 - Extension workers recognized the importance of capacity development.
 - They relied on the ATI for agricultural capacity development.
 - The AEWs expressed high satisfaction with ATI's interventions.
- Challenges at the Farmer Level
 - Farmers sometimes confused various agencies when discussing agricultural support.
 - Occasionally, they expressed dissatisfaction, but it was not always related to ATI
 - Interviewing farmers required probing and clarification.
- Filtering ATI's Interventions
 - When ATI's interventions were separated, most farmers expressed satisfaction.
 - There is a need to clarify that ATI is distinct from other agencies providing assistance.
 - Some farmers mistakenly associate any agency's shortcomings with ATI.
- In summary, while ATI provided excellent support, clarifying agency roles is crucial to accurately assess client satisfaction. Farmers' confusion during data gathering underscores the need for clear communication about agricultural interventions.

Suggestions to improve the provision of ATI's interventions

ATI has been responsive to the needs of its extension workers and clients. Their key suggestions and improvements are as follows:

- Diversifying Training Programs:
 - Initially, ATI's training programs focused solely on agricultural technologies. However, with the growing number of AEWs with engineering backgrounds, ATI recognized the need for professional capacity development beyond agriculture-focused topics.
 - Since 2020, ATI has modified its offerings to include training on the Special Area for Agricultural Development (SAAD) program and Quantum Geographic Information System (QGIS) for agricultural engineers. This addresses their capacity development needs.

- Adapting to Veterinarians' Needs:
 - ATI has started adapting its training programs for veterinarians, even though the Professional Regulation Commission (PRC) currently grants Continuing Professional Development (CPD) points only for licensed agriculturists and engineers.
 - Despite the lack of CPD points specifically for veterinarians, ATI offers specialized sessions for health officers in city and municipal veterinary offices. These sessions cover topics like biosecurity and blood sample collection.
 - Additionally, ATI has trained LGU staff on using QGIS to track African Swine Fever (ASF) instances in specific areas.
- Flexible Training Formats for Farmers:
 - Farmers have requested less intensive training formats due to their early morning-to-midday work schedules. Continuous 5-day or 3-day training programs result in lost farm time and production losses.
 - ATI is exploring more flexible options, such as weekly or twice-weekly training sessions, or shorter 3-day programs held in the afternoons.
- Preparation for Mandanas Ruling Implementation:
 - The full implementation of the Mandanas Ruling will devolve certain national agency services to LGUs. As a result, ATI will focus on capacitating extension workers, while farmers and fisherfolk will fall under LGUs' responsibilities.
 - ATI is incorporating extension workers' requests and suggestions from prior years into its programs, especially in CALABARZON.

Evidence of increase in knowledge and skills in clients

- The alumni, particularly the AEWs, have shown remarkable improvement. Many of them have been invited as resource speakers in ATI training sessions, confidently discussing topics in front of audiences. Additionally, they now independently handle farmer trainings during the Center staff visits to their areas. Some AEWs have even been promoted—from agricultural technicians to municipal agriculturists—thanks to the significant development facilitated by ATI interventions. Overall, these efforts enhanced professional performance and extension service delivery.

Adoption of AF technologies

- Not all farmers adopted the technologies promoted by ATI.
- Financial constraints were a common issue.
- Introducing new agricultural technologies often required additional funding.
- Some farmers initially tried the technology but struggle to sustain it.
- Over time, some reverted to conventional farming because it was more familiar and easier.
- Using the additional technologies taught required additional funding.

Farming systems and activities in CALABARZON

- Machinery and Conventional Methods:
 - Many farmers now use machinery. Those who still use conventional methods are often in areas where machinery is not accessible (e.g., elevated places).

- Diversification:
 - CALABARZON has widely adopted modern farming technology. Rice farmers, influenced by the RCEF program, have shifted away from monocropping. They now practice diversified farming, exploring new approaches.
- Benefits of Diversification:
 - Participants adopted diversification technologies because it offered additional income.
 - During idle time (before sunrise), farmers focused on other crops (e.g., vertical gardening, vegetables). Smaller crops were emphasized over large fields.
 - In sum, most farmers in the region practiced diversified farming, benefiting from both technology adoption and increased income.

Sufficiency of farming activities in providing for their household

- Farmers worked hard to provide education for their children. While farm income may not be sufficient for basic living, it covered the cost of sending their children to good schools. Some farmers aimed high, while others were content with a simple life. Those who strived for growth felt the impact of market price fluctuations. It varied for each individual farmer.
- This succinctly captured the delicate balance between survival and aspiration that farmers faced. Their commitment to education and hope for an improved life are commendable.

Evidences/Observations that show clients having an increase in income

Summary of the evidence and observations showing improvements in living conditions and income:

- **Farm Records and Interviews:**
 - Farmers maintained detailed farm records. During face-to-face interviews, they willingly shared these records. By examining these records, gradual improvements can be observed, even if they are small.
- **Engagement with Farmer Leaders:**
 - Active farmer leaders attended training sessions and engaged in regular conversations. Their livelihoods showed signs of improvement, and they shared stories of farm growth and land acquisitions.
- **Success Stories:**
 - ATI showcases success stories on their website and social media. Videos document farmers' journeys from where they started to their current progress.
- **Interns and Scholars:**
 - Interns in Taiwan and Japan demonstrated tangible progress during their internship programs. Scholars under the Organic Agriculture Program produced and harvested crops using learned technologies.
- **Potential of Simple Farmers:**
 - Internship programs, like the one in organic agriculture, unlocked potential. Successful harvests and the development of nurseries have been observed.
- **Resource Efficiency:**
 - Farmers adapted to taught technologies, leading to improved harvests and additional income. Examples included diversifying crops (e.g., rice and ducks) and reducing pesticide use.

On climate change adaptation

- Most of the Center's long-term trainings, such as the Training of Trainers (ToT), incorporated climate resiliency practices. Simple information drives were conducted on climate change to keep farmers well-informed. Climate Smart Agriculture Training were previously conducted using modules specifically designed for rice farmers. For instance, during typhoons, rice farmers were significantly affected because even a small amount of rain can cause their rice plants to fall, especially during harvest season. These rice farmers utilized climate-smart technology modules. In the conduct of various trainings, and whenever possible, adaptation and mitigation techniques were mainstreamed along with information on climate change. The farmers were informed about the reality of climate change. While there were simple mitigation and adaptation techniques that farmers can adopt, the overall approach depends on the specific needs of their farms. The LGUs play a crucial role in determining appropriate practices to help farmers sustain their farms even amidst national calamities. Climate change and mitigation techniques were incorporated into the long-term trainings, including season-long ToT, 5-day ToT, and intensive 10-day trainings.

Obtaining Farm or Product Certification

- Farmers often find the certification process for farms and products to be quite challenging. The requirements can be extensive, especially when tackled individually. In the case of organic

certification, ATI collaborated with the National Organic Agriculture Program (NOAP). Together, they have developed the PGS.

- In the PGS, farmers collectively meet certification standards, particularly for organic farming. Instead of individual farmers striving to meet standards on their own, it's akin to a group effort—an application for national organic agriculture certification. Initially, NOAP focuses on certifying farms. Once most farms are certified, attention shifts to certifying farm products. The product certification process differs, involving separate steps to verify organic status.
- While the PGS streamlines certification, individual farmers still face challenges when seeking certification from certifying bodies.

Recommendations to improve the RBME system

- **Transparency and Accountability:**
 - Clearly define the purpose and scope of the M&E system.
 - Establish mechanisms for regular reporting and sharing M&E findings.
 - Foster a culture of accountability.
- **Clear Objectives and Communication:**
 - Set specific, measurable objectives for the M&E system.
 - Develop effective communication channels among team members and stakeholders.
- **Stakeholder Involvement:**
 - Engage beneficiaries, program staff, and partners in designing and implementing the M&E system.
- **Feedback and Adjustments:**
 - Regularly review and adjust the M&E system based on feedback.
 - Ensure continuous improvement.
- **ISO Certification Standards:**
 - Align the M&E system with ISO certification standards for credibility and reliability.
- **Additional Staff:**
 - Consider organizing an M&E team to handle the increasing workload. At present, only one staff is handling the M&E. Shared responsibility enhances data quality and prevents oversight.
- **Resource Allocation:**
 - Advocate for adequate resources to support M&E activities and analyze data carefully to showcase meaningful results.

Office/Region	ATI CAGAYAN VALLEY
Name of Key Informant/s	Claris M. Alaska, DPA, OIC, Center Director, Training Superintendent I Jhim Salvador, Chief, Career Development and Management Section Vladimir Caligurian, Chief, Information Services Section
Date of interview	May 29, 2024
KII Facilitator	Ms. Anita Tidon

HIGHLIGHTS OF THE KII:

On development and management of the ATI AFE RBME System

- None of the key informants participated in the 10-day workshop to develop the RBME system. The head of the PMEU, along with a staff member from the same unit, represented the Center. However, the planning chief has retired, while the staff member has since transferred to an SUC in the region. All key informants acknowledged their familiarity with the RBME TOC. The Center Director indicated that the TOC focuses on the inputs, processes, and outputs of their training programs.

Purpose of RBME

- According to the key informants, the purpose of RBME is to assess the trainings conducted by the center over the last three years, determining their results, outcomes, and impact on target clients. Annually, the Center conducts a targeted RBME assessment specifically focused on evaluating the trainings held during the past three years. The CO provides the assessment targets, and the Center collects relevant data, inputting it into an Excel file. Subsequently, the CO processes the data, while the Center also performs localized analyses to understand outcomes at the regional level.

Sufficiency of Resources to implement the ATI interventions

- The Center Chief acknowledged that things were running smoothly in the past. However, their budget has steadily increased over time, leading to a multiplication of activities. Consequently, additional human resources are now required. At times, the staff feels overwhelmed due to the sheer volume of tasks. Currently, the Center manages numerous activities, thanks to the growing budget. For instance, when the Center implemented the Rice Competitiveness Enhancement Fund (RCEF), they received three additional staff members under COS. Additionally, for the coconut project under the Coconut Farmers and Industry Development Plan (CFIDP), the Center is awaiting approval from the Philippine Coconut Authority (PCA) to hire COS positions.
- The human resources were sufficient to implement the ATI interventions. The Center has strong partnerships/linkage with the LGUs and SUCs in the region. The Center's engagement and participation has been well established in the community.

Key competencies of extension workers

- According to the Chief of the Capacity Development and Management Services (CDMS), technical competency is crucial for agricultural extension workers. This includes expertise in commodity-based programs, such as rice production and related aspects, as well as corn. The Center covers all commodity-based programs or banner programs offered by the ATI.

- Another important aspect is social competency, which includes basic communication and facilitation skills. These skills are taught during the basic agricultural extension course as part of extension services training. Additionally, the Center offers an RP (Resource Person) development course and a training management course for the AEWs. They are expected to become trainers for farmers during various training sessions and consultations.

Sufficiency of human, political and social resources

- The Center's human resources are sufficient to implement the ATI interventions. It has strong partnership/linkage with TESDA, DTI, DOST, and DA agencies, LGUs, and SUCs in the region. The Center's engagements with these entities have been well established in the community. Everything is fine, according to the key informants.
- Additionally, the Center actively collaborates with Cagayan Valley Agriculture, Aquatic and Natural Resources Research and Development Consortium and harmonizes activities and programs with them.

Sufficiency of financial resources

- The Center's budget is sufficient to implement its planned activities and programs. However, there were instances when partner agencies made certain requests that were not part of the planned activities. The Center considered these kinds of requests as input for its work and financial plan in the succeeding years.

Efficiency constraints encountered in terms of coordination and RBME implementation

- The key informants, especially the M&E officer, said they are doing fine. The Center maintains strong relationships with the LGUs and other partner agencies. Positive interactions with farmers' organizations also contributed to smoother RBME implementation. The Center is actively working to harmonize activities with its partners to prevent any unnecessary duplication of efforts.

Implementation of RBME system - Data collection process

- The Center will support ASPSI in this year's RBME study, following a directive from the Central Office. Historically, the PMEU managed data collection, processing, and report preparation on an annual basis. The M&E officer led the study, assisted by a contractual staff member. The CO provided overall guidelines, questionnaires for farmers and AEWs, dummy tables, and the target number of respondents. The number of respondents was proportionally distributed among the provinces based on the number of trainees per province. Activities started around February, commencing with the preparation of necessary documents. Data collection begun in March.
- Data collection methods included one-on-one face-to-face interviews or phone calls, with validation conducted in the field. Prior to data collection, the PMEU coordinated with the LGUs through formal communication letters to inform them about the impact evaluation study.
- Validation of data was done in the field. Completed questionnaires were previously encoded using Excel, but in the past two years, switched to using Google Forms accessible at the CO. PMEU, specifically the M&E officer, then tabulated the data using the prescribed dummy tables, providing a brief analysis (in 2-3 sentences) for each table. Before submitting the completed tables to the CO, they were first reviewed by center management. The required tables and raw data were submitted in October.

Issues and concerns experienced during data collection

- The implementation of the RBME system was just one of the many assignments of the planning unit but sufficient time was allocated to it. One significant challenge was convening respondents in one place to facilitate data collection. When some respondents cannot attend, interviewers conducted personal visits or chose suitable replacements. Due to random sampling, there were instances when they needed to travel to distant municipalities to reach the identified respondents. To maximize efficiency, the M&E officer also combined other travel activities with RBME data collection.
- Another issue arose from the need to recall information or activities by sample respondents. Since the data pertains to extension services from three years ago, specific training sessions or technologies they were exposed to might be difficult for respondents to remember accurately.

Capacity to properly carry out the activities embedded in RBME system

- Considering the duration of the Center's RBME implementation, key informants believe it now possesses the capacity to carry out activities embedded in the system. The presence of sufficient and capable human resources, along with manageable financial resources, contributes to this capacity.

Challenges experienced in implementing the system

- Despite providing appropriate training for the AEWs, the challenge lies in their inability to execute their re-entry plans. This is primarily due to the lack financial support for their proposed programs by their respective offices. Additionally, time constraints prevented AEWs from adequately preparing or implementing their re-entry plans. It is unfortunate if their acquired knowledge is not effectively transferred to the farmers in the community.

Lessons learned in implementing the RBME

- Establishing strong relationships with research and development (R&D) institutions is crucial for sourcing cutting-edge technologies that the Center can incorporate into its IEC materials. These materials play a vital role in conveying messages during trainings, briefings, and webinars involving partners. Additionally, the Center collaborates with these institutions to identify knowledgeable resource persons/subject matter specialists who can contribute to training sessions.
- The RBME system has proven invaluable for the Center. It enables them to assess the alignment of their plans with desired outcomes and make necessary adjustments as needed. Identifying critical success factors for extension activities is paramount. Additionally, acknowledging potential constraints that might impede implementation allows the Center to proactively address them in their future programs.

Credibility of values generated by RBME

- The key informants considered the information gathered through the RBME system to be credible. The RBME system provided reliable insights for decision-making and program improvement. They believe in the honesty of clients when providing information for the RBME assessment. They have observed not only positive aspects but also constraints mentioned earlier, which can be identified and serve as valuable input for planning.

Validation of results generated by the system

- The M&E officer double-checked and verified the information provided by clients. For example, when it comes to organic farming, they validated whether the clients indeed practice organic farming and apply the appropriate technologies. This validation was done through site visits, with assistance from staff in the Office of the Municipal Agriculturist. During the RBME process, collaboration with technicians from the same office helped cross-check respondents' answers.

On results of the data collection for RBME system - Client satisfaction of the interventions received

- Based on the RBME assessment results, out of the 340 respondents in last year's survey, 48 percent answered 'very satisfied,' while 52 percent were 'satisfied' with the training courses they attended. The majority found the training relevant to their needs.

Clients' suggestions to improve the provision of ATI extension services

- The only suggestion from the AEWs is that their re-entry plan requires funding. For farmers conducting extension activities in the LSAs, consistent funding would be essential to ensure their continuous and sustained provision of technical assistance to farmers within their community. LSAs serve as the Center's partners in the field. However, due to limited funds, they sometimes cannot fully maximize their role, especially when organizing training sessions. Without adequate funding, LSAs end up primarily serving as training venues and supporting hands-on activities during training programs and field visits.
- LSAs are accredited by ATI following certain processes. ATI also organized them into associations. For example, in Bicol, there is the Bicol Learning Site Association. Similarly in Region 2, there are learning sites association for each province.
- From the farmer-trainees, other suggestions include improving the air conditioning in the venue and addressing the issue of unsatisfactory food.

Increase in knowledge and skills evident in the clients

- From the post-test after the training, the increase in knowledge was observed. Among the AEWs, after the TOT sessions they now have the confidence and skills to conduct farmers' training. The TOT sessions with AEWs used micro-teaching methodology and received coaching on how to deliver the topic properly.

Technology adoption

- Based on their record for RBME last year, 97% (329 out of 340) of the sample respondents adopted the technologies learned from the trainings they attended. For example, those who trained in organic farming are now into organic agriculture production. Some are GAP-certified and have backyard gardening. They transitioned from monocropping to integrated farming. Others who previously did not process products are now involved in processing and value-adding.

Description of farming activities

- Farmers are engaged in rice-based farming system or corn-based farming system. There are certain areas where rice and mung beans thrive. For example, in Isabela, rice and mung beans grow well together. However, in other parts of Isabela, Cagayan, and Vizcaya, mung beans are not

adaptable or productive. Some areas only yield flowers without bearing fruit. Specific regions have adapted crop rotation. Additionally, in corn-growing areas, some farmers allocate certain portions of their land for vegetable production—either for household consumption or business purposes. Most of the land, though, remains devoted to corn.

- Different provinces and municipalities have diverse practices. Cropping calendars also differ—some farmers plant earlier, while others plant later, especially near the tail end of the rice irrigation facilities. Additionally, some areas relied solely on rainfed farming, planting once a year.
- Waste like rice straw was used to feed animals, mushroom production, biomass recycling. Some utilized the waste for vermicomposting. During El Niño or other conditions, the model corn farms showcased signage making.

Sufficiency of farming activities to provide the needs of the households

- It was a nuanced situation. There are different types of farmers—tenants, landowners, and laborers. Their beliefs vary based on their circumstances, family size, and the land they cultivate. There is a prevailing mentality in the Philippines wherein when you ask a farmer about their harvest, they often say, “It’s just enough.” Rarely will they say, “My harvest is excellent; yields are high.” Even when yields are good—especially with high rice prices—they will still say it’s just enough. They downplay it for fear that they might be taxed by the BIR.

Evidence of increase in income

- There are signs that many farmers have increased their income. These are the seed growers who received rice training, and farmer leaders engaged in LSAs. These farmer leaders have significant capital. They can afford to comply with the requirements or acquire the necessary equipment and facilities to become seed growers or establish farm schools. When you no longer see vacant roads within the compound, you immediately know that the participants during the training are seed growers because almost all of them drive expensive vehicles. This is the case in ATI Region 2 when the participants are seed growers.

Climate change adaptation

- The Center’s clients were aware of mitigating measures and know what to do in case the effects of climate change occur. This knowledge was imparted through the training courses provided by the Center. Additionally, the Climate Smart Farmers Field School was broadcasted as part of its School-on-the Air program. Furthermore, the Center actively participated in the Klima Agrikultura program of the Climate Change Commission.
- In the rice ecosystem, they released irrigation water early, adjusted their planting schedule, and usually by the first or second week of September, they can harvest before the typhoons of the “ber” months arrive. This is one of their coping mechanisms for climate change. Secondly, they used high-quality seeds that are resistant to pests and environmental stressors like drought and salinity. Additionally, diversification and integrated farming systems were part of their adaptation measures.

Constraints in getting farm and product certification

- Usually, compliance with the set standards of certifying bodies requires capital and equipment. The same goes for facilities sometimes.

- For organic certification, there should be an established organic demonstration area, facilities for fertilizer production and composting and provide certain areas for storage and washing of tool and equipment. There must be a holding area for the clients who must wear personal protective equipment (PPE) provided by the farm. Additionally, there should be amenities like a comfort room.
- ATI offers training regarding organic certification and assists applicants in developing their internal control system for PGS certification. ATI works closely with the LGU and Regional Food Office of the DA to expedite their certification process. For other certifications like GAP and GAHP, the center provides briefing on the requirements needed by the certifying bodies.

On reporting and utilization of RBME results - Disseminating the results of the RBME study

- Results of the assessment were presented during the Center's planning and consultation meetings. Representatives from DA-attached agencies in the region, LGUs, the private sector, RBOs, RICs, the 4-H Club, and P4MP attended these sessions.

Database to capture, curate and analyze

- The Center maintains a training management information system, overseen by the M&E Officer. This system adheres to the Data Privacy Act, and a data sharing agreement is required before any external requests for data are fulfilled. Within the system provides details such as training titles, dates, venues, trainees' personal information, and survey responses. It serves as a repository for training-related activities and facilitates the extraction of trainee lists for random sampling during RBME assessments. Notably, there are two distinct systems: the training management infosystem and the broader management information system.

Recommendations to improve the M&E system

- The Center already has the information systems in place, starting from planning up to reporting. It is essential to establish and institutionalize these systems so that data is readily available for monitoring and evaluation. Proper training for staff in the planning, monitoring, and evaluation unit is crucial to effectively utilize the established systems.

Office/Region	ATI MIMAROPA
Name of Key Informant	Manilyn M. Tejada, MPA, LPT, Project Evaluation Officer I
Date of interview	June 7, 2024
KII Facilitator	Dr. Fezoil Luz Decena

HIGHLIGHTS OF THE KII:

On the development and management of the ATI AFE RBME System

- The key informant was part of the group that participated in the series of workshops conducted by ATI in 2016 to develop the AFE TOC and RBME system. She was able to describe, in general, the TOC, describing the input, output, outcome and impact process. Originally, the workshops came up with more than 100 indicators, and this was eventually trimmed down to 28. She said that there were some changes in the indicators, but not on the TOC itself. There were also technical guidance sessions being held yearly for regional personnel involved in RBME.
- The purpose of RBME is to comply with requirements of government and funding agencies, where many reports require data. The system provides evidence of tangible outputs of the ATI assistance, enabling the Center to assess if these are useful to clients. Although a number of beneficiaries claimed positive effects of ATI intervention, the need for data to support these claims is important.
- Indicators are uniform across all regions. The CO provides the budget to the Center, but it is the Center that determines the number of targets per indicator. Not all indicators in the RBME system have targets. The reports prepared by the Center, e.g. training reports and activity reports, helped them determine if targets have been attained.
- The resources provided to implement the ATI interventions were not sufficient. The number of activities has been increasing through the years. In 2016, the Center handled 60 activities, but currently in 2024, the number has grown to 210. The number of regular staff is the same. Although COS were hired, their training, experience and qualifications do not match the technical staff. Mostly, the COS provided support to the technical staff. In addition, many of the interventions were commodity-based (e.g. rice, corn, coconut). There was no uniformity in fund allocation across trainings; it depends on the funding. For instance, for the same number of days, some trainings were allotted different levels of funding – some have P180,000, others P250,000- depending on the source of fund.
- Two constraints were mentioned – the late release of travel orders or permissions to participate in ATI activities by LGU personnel, and weather conditions hampering travel due to the geographic locations of the islands in MIMAROPA. These have impacted on the number of participants during ATI activities.

On implementation of the ATI AFE RBME System

- ATI CO provides P250,000 per year for the RBME survey, along with the number of samples to be surveyed (264 for 2024). ATI MIMAROPA identified the names of beneficiaries to be interviewed. Proportionate sampling was done, based mainly on the training titles. They requested the help of municipal LGUs in data gathering. In the past, AEW and farmer questionnaires were the same, but now they are separated to ensure appropriateness of some questions to respondent type. The questionnaires were self-administered, leading to problems of misinterpretation of questions, especially by farmers. Some also answered inaccurately. Because of these issues, the

Center also conducted interviews of farmers when they went out to do other ATI tasks. During fieldwork, they also tried to validate responses, especially those pertaining to adoption. The Center hired JOs to input and encode the data. Cleaning and processing of data was done by the M&E section. Reports were submitted to CO using the dummy tables provided. They used Excel to encode, store and process data.

- Other sources of information and data for the RBME system were reports of project officers, training reports, and other forms for submission to CO. Some of this data, for instance, included those pertaining to SOA, and NC certifications. It is worth noting that the M&E Officer has devised a worksheet to capture the data, and this has helped in providing information on trends over time.
- The major issues were observed in data collection and quality. One constraint was financial resources due to the geographic nature of the region. On data quality, the officer observed that the same results were being generated every year, primarily because the same respondents were included in the sample. This was also because many beneficiaries were “repeat” beneficiaries, and they always have the high chance of being included in the survey. Also, many farmers did not provide honest answers, since they thought that providing positive responses may affect their chances of being included in succeeding ATI activities or being recipients of other interventions (for example questions on yield). Some AEWs also have the tendency to provide inaccurate responses so they can come out as doing their jobs. For instance, on the conduct of M&E for farmers for the trainings, they have been trained (by ATI). Thus, validation is always done to ensure that responses are accurate.
- The Center can carry out the activities embedded in the RBME system. However, similar with other ATI interventions, the implementation of the system needs additional resources, particularly manpower. There is also a need to have a uniform understanding of the questionnaire among all enumerators. For this, an enumerator’s training should be done.
- 246 sample out of the more than 3,000 beneficiaries of ATI intervention will not appropriately or accurately reflect ATI credibility or justify performance. Also as mentioned, there seems to be a bias in the responses since some respondents are the same as in previous years. Expectedly, same responses are given every year.
- Validation of results is done, as mentioned. One key finding is the issue of attribution. Because collaboration among various agencies in providing interventions looks seamless, there seems to be a blurring of lines in terms of source of funds from the point of view of the respondent-beneficiaries. For instance, launching of ATI intervention attended by the mayor would be taken as an LGU intervention.

On the result of the data collection for the RBME system

- Clients rate their satisfaction level of ATI interventions using the ATI overall activity evaluation mechanism. This system rates resource persons, food, venue, and other logistical arrangements. In general, clients rated ATI interventions to be highly relevant to their needs. This satisfaction feedback was analyzed for each training and was reported during management reviews.
- Overall, client suggestions for the improvement of ATI’s extension activities focused more on accessibility of venue, venue itself, food, presentation materials used by resource persons (some resource persons use old-fashion powerpoint slide decks, while some clients prefer the modern look using Canva, etc).

- In terms of increase in knowledge and skills of clients, the M&E officer said that they observed some learnings and insights. In some cases, beneficiaries have the overall or superficial knowledge about the topic, but based on feedback, they have now more in-depth knowledge as a result of the training.
- Clients said they adopted the technologies learned from the trainings. Based on validation, many clients have replicated or applied what they learned in their farms.
- Description of farmer clients mostly fit the smallholder farmers and their farms.
- There are some evidence or observation showing overall increase in income. However, the M&E officer said that this should not be attributed solely to ATI intervention. While ATI provided interventions in the production side, as well as on the soft skill side (such as farmer business schools), other agencies, such as DTI provided inputs and training on value addition; while some agencies linked the farmers to other agencies for input provision and marketing of products.
- In terms of adoption of climate change related techniques and practices, clients were observed to participate in trainings such as climate resilient farmer field schools, tree planting activities, use of early maturing rice varieties, and early harvesting of produce to avoid negative effect of typhoon and flooding. ATI linked the farmers with PCIC.
- ATI provided certification for farms that aims to be learning sites. Criteria for this included among others farm size, track record in technology showcasing, and other records. Some applicants were unable to meet these criteria. For the other certifications such as OA and GAP, interventions focused on provision of trainings (GAP for crops), and linking them with certifying bodies.

On reporting and utilization of the RBME results

- The results of the RBME surveys were submitted to the CO using the dummy tables provided. As far as she can recall, the RBME was reported to the ATI MIMAROPA Center only once. However, copies of the RBME reports are available in their office. It is sometimes being used by their planning office as reference.
- ATI MIMAROPA used Excel Worksheets as their main database platform to capture, curate, analyze and manage data for RBME. The system is described above – data from questionnaires were encoded by JOs, cleaned by M&E Office, processed using dummy tables provided by CO. The M&E office designed a worksheet to capture all information, including secondary data from training and activity reports to complete the RBME report.
- The result of RBME has not been used in targeting, planning, or budgeting by ATI MIMAROPA. It is however useful in selecting participants of future ATI interventions.

Recommendations to improve the RBME system

- Results should be disseminated to focal officers, and popularized for better understanding. RBME results should inform Center planning processes.
- Additional resources, particularly budget.
- Increase number of respondents to ensure representativeness of sample.
- Training of enumerators.
- Others as mentioned in the discussions above.

Office/Region	ATI WESTERN VISAYAS
Name of Key Informant/s	Mary Ann A. Ramos, MPM, Training Center Superintendent II Dianne Rivera, Planning Officer/ Focal Person of RBME Mary Jean Yupano, Designated Monitoring and Evaluation Officer
Date of interview	June 7, 2024
KII Facilitator	Dr. Fezoil Luz Decena

HIGHLIGHTS OF THE KII:

On the development and management of the ATI AFE RBME System

- The main respondent, Ms Dianne Rivera, is not aware of the AFE TOC. She is only aware that instructions related to activities for RBME comes from the CO. The Center Director, although a long-time employee of ATI, is new and also not familiar with the TOC. They are however familiar with RBME.
- The purpose of RBME is to assess adoption rates and impact of ATI interventions, particularly trainings. The purpose of RBME is met since they are able to go back to the participants and determine the effects of their trainings
- CO sets the targets for each indicator.
- In terms of resources, the Center is allowed to hire COS. This has helped the Center, but they need more personnel to implement the programs of ATI. Although qualifications of Center personnel are already okay, they need continuous upskilling and reskilling. This is supported by CO, as currently, there are a lot of trainings being conducted for the ATI personnel in the regions. Currently, the ATI Director has encouraged Regional ATI personnel to serve as resource persons. Financial resources for the programs are sufficient to enable the Center to carry out the target programs.
- No constraints in implementation were observed.

On implementation of the ATI AFE RBME System

- Data collection for RBME is conducted yearly since 2018. A budget of P300,000 for around 300 respondents is downloaded by the CO to the RTC every year. Since 2023, the survey for Region 6 was outsourced, including the encoding and processing of data based on the dummy tables provided by CO. The number of respondents is pre-determined by CO, and the RTC will identify the specific samples based on proportionate random sampling.
- ATI has a Training Management Information System to manage all information related to the trainings conducted. This is one of the major sources of the RTC in generating data and information related to RBME implementation and reporting.
- Major issues and concerns experienced by the Center was the identification of respondents for the survey. They requested the help of municipal LGUs in data gathering; the MLGUs gathered the beneficiaries together in one place, however, some farmers were unable to come. A replacement was done, but the interviews were conducted on site. Since the number of respondents was determined at the CO, the RTC did proportionate sampling by province and activity.

- The RTC seems to have the idea that the RBME system is all about data collection, processing and analysis. Accordingly, since the data collection is outsourced since 2023, there were no reported issues on capacity related to RMBE.
- On the valued generated by RBME, the RTC thinks that this can be improved by increasing the number of samples. The 360-sample size seem to be not enough to generate a more credible result, and does not accurately reflect the performance of ATI.
- Validation of results generated from the RBME surveys were done. During the conduct of other ATI activities and interventions, the officers interviewed the beneficiaries about improvements in yield and income, observed changes in the farm and the household and other indicators to verify if the responses were consistent with the reality in the farm.

On the result of the data collection for the RBME system

- Clients provided satisfaction rating for ATI interventions using the overall training satisfaction. Based on reports discussed during management reviews conducted every semester, all feedbacks were positive, and relevant to the needs of the clients.
- Some of the comments to improve the provision of ATI's extension interventions included the type of training, improvement on the conduct of training particularly pertaining to venue, food and sometimes, resource persons.
- In terms of evidence of improvement of knowledge and skills, the key informants observed that many of the AEWs trained by ATI have been promoted. Re-entry monitoring plans to validate this at the farmer level, however, has not been conducted; a directive from CO to monitor the status of re-entry plans have been made. Results will be able to provide a good indication on the improvement of knowledge and skills, as well as adoption of technologies.
- Learning sites cooperators have become resource persons in trainings and have shown mastery in some technologies. Some also are adopting community gardens. For livestock in particular, many of the trainees on artificial insemination (AI) have become entrepreneurs, resulting to better income and improving their level of living.
- For farmers practicing AI, they were required to maintain records. These records have shown that the 2 boars given to cooperators under the AI *sa Barangay* program have produced enough semen to be sold to other farmers. For instance, one farmer reported 9 AI services per week for a price of P1,500 per AI service. Participants from the FBS program, particularly coconut farmers reported that they are now into processing of VCO, copra, processing/packaging and marketing of young coconut, with the help of other agencies such as DTI and private entities, and as a result of clustering by commodity and management by AEWs. These farmers have improved income, were able to repair/build houses and send their children to school in the nearby cities (e.g Iloilo City).
- The RTC implemented agri-klimatura program, a decision-making tool for rice farmers primarily to adjust planting calendar as a result of forecasting weather and climate events. However, the program was constrained by support service availability as this needed computer that LGUs cannot provide.
- RTC provided trainings on GAP, HACCP and OA.

On reporting and utilization of the RBME results

- Reporting of RBME results was done using the templates or dummy tables required by the CO. Analysis were also done, as some narratives were required, including success stories to provide more evidence.
- Data and information from the RBME were also used by the RTC in planning, in preparing the budget execution documents (BEDs), and in determining future trainings.
- The RTC used Excel to encode data and process outputs from the RBME survey. These were submitted in Excel format to the CO. The raw data were retained at the RTC.

Recommendations to improve the RBME system

- A profile of AEW is needed to avoid duplication of trainings, and to monitor impact of training on the AEWs. The latest database on AEWs contain data from 8 years ago and are not usable anymore. It is noted that turnover rate of AEWs is high, as they are highly dependent on the change in administration of the MLGUs.

Office/Region	ATI EASTERN VISAYAS
Name of Key Informant/s	Hazel Grace T. Taganas, Training Superintendent II, Center Director MJ Pepe, Development Management Officer I
Date of interview	June 10, 2024
KII Facilitator	Ms. Anita Tidon

HIGHLIGHTS OF THE KII:

On development and management of RBME system - Formulation of TOC

- Ms. Taganas participated in the creation of the TOC when she was the Assistant Center Director (PCS-1) at RTC-8. The formulation involved two phases of workshops organized by the CO, which she attended along with a former M&E staff member.
- The workshops provided inputs on crafting the TOC and identifying indicators. The process was structured with contributions in a workshop setting, where participants added inputs based on a pre-defined form. The TOC was broken down into inputs, activities, outputs, short-term results, mid-term and long-term effects, outcomes, and impact.
- The activities were guided by the thematic program of the institute, focusing on capability building, knowledge product provision, partnerships, and support services. Climate change initiatives were emphasized across all activities.
- Indicators were identified for each stage (outputs, results, effects, outcomes, and impact) based on the structured process during the workshops.
- Ms. Taganas found the exercise eye-opening and challenging, particularly as it was her first significant involvement in M&E. Despite initial hesitation, she appreciated the guidance provided by the skilled facilitator. She expressed confidence in being able to develop a TOC for other projects in the future. In fact, the skills she learned were applied to a tier 2 program, where they attempted to create a TOC. This attempt was not fully polished or followed up, but the initial effort was made.
- Ms. Taganas noted that there have been no major revisions to the TOC. There might have been some additions or changes in implementation or indicators, but she was not entirely sure.
- The staff member who was initially trained had resigned, and their successor had to learn the TOC.

Purpose of RBME System

- According to Ms. Pepe, the RBME system was adopted by ATI to ensure that their future interventions are grounded in the results of past and present training programs and activities. It provides a robust basis for planning and implementing future programs and projects by utilizing the results and insights gained from previous efforts.
- The system allows for evidence-based decision-making. It enhances the effectiveness and relevance of ATI's interventions by learning from past experiences and outcomes. It aims to improve the overall impact of ATI's programs through informed and data-driven strategies.

- The RBME system serves its intended purpose by strengthening the foundation for future program implementation. By basing decisions on the results of previous activities, ATI ensures continuous improvement and relevance in their training and other initiatives.

On indicators

- The CO based the targets on commitments made to the DA. The DA sets certain targets that ATI is required to meet, influencing the targets for the RBME indicators. These targets often align with broader departmental goals and commitments.

On sufficiency of human, political and social resources to implement ATI interventions

- According to Ms. Taganas, the CO provides guidelines for new programs and activities, which serve as a guide for implementation. These guidelines ensure that regional centers follow a structured approach, preventing any operational uncertainties.
- Human resources are a challenge, especially given the increasing number of activities. The CO is aware of these challenges, as the RTCs frequently report on vacant positions and the need for additional personnel. The approval of costs or contracts for services helped mitigate the shortage of permanent staff. Strategies such as tapping learning site cooperators, who assisted particularly with farmer-level activities, have been effective in managing the workload.
- Last year, Region 8 managed a significant increase in activities through strategic resource management. There was a reliance on available resources and innovative strategies to implement programs despite the limitations in personnel. However, an increase in the number of personnel would be beneficial, as current staff often multitask to handle the workload.
- Training contract staff can be challenging because they may leave after being trained, creating a cycle of training and turnover. Despite these challenges, the current staffing levels have been sufficient to manage the workload.
- There were no significant issues with technical expertise. Region 8 benefitted from its location at Visayas State University, which provided easy access to technical expertise. The region is actively involved in a consortium, allowing them to tap into a wide range of technical resources.
- Collaborations with LGUs and the DA also enhanced the availability of technical expertise.
- In summary, while ATI faced challenges with human resources, especially given the increasing number of activities, strategic resource management and innovative strategies have allowed effective implementation of programs. The policy environment was well-structured, with guidelines provided by the CO. Technical expertise was readily available through collaborations and the region's location at Visayas State University. An increase in personnel would be beneficial to alleviate the multitasking burden on current staff.

On financial resources sufficiency

- According to Ms. Taganas, ATI is experiencing an increase in financial resources. The challenge lies in efficiently utilizing the growing budget, which Ms. Taganas humorously referred to as "ang daming pera" (a lot of money).

- However, there was a mismatch between the growing budget and the number of human resources. Despite the increase in financial resources, the number of staff, particularly in the administrative section, has not kept pace.
- The administrative section, in particular, was understaffed. For example, they currently have no accountant due to a recent resignation. The rationalization process has reduced the compensation for administrative positions, making it difficult to retain staff. Previously, their accountant had a salary grade of 16, but it has now been reduced to 12. This reduction in compensation has led to high turnover, with the role often serving as a steppingstone for accountants who quickly move on to better opportunities. The resignation of their accountant has left a significant gap in their administrative capabilities. This issue was widespread across the network, affecting the overall efficiency of financial resource management.

On efficiency constraints

- The Center resolved the inefficiencies in the data collection process by using the Open Data Kit (ODK). ODK allows for faster data collection and quicker returns, ensuring data is reliable and directly encoded for analysis. This innovation streamlined the implementation of programs and projects, making the process more efficient. It coordinated with the LGUs for data collection and trained AEWs to collect data as they were familiar with their local areas and the participants. They were trained to use the ODK which works offline and only requires an internet connection for data submission. This method leverages local knowledge and ensures accurate and efficient data collection.
- On duplication of efforts, this was avoided by fully coordinating with the RFO 8 in implementing different banner programs. The SOP included linking with agencies like the Philippine Coconut Authority (PCA) for programs such as the Coconut Farmers and Industry Development Plan (CFIDP). Coordination involved identifying priority participants and ensuring they received the necessary inputs and training. ATI participated in planning activities organized by RFO and other partners. Similarly, when ATI organized planning activities, they included different coordinators from various partner agencies. This collaborative approach ensured alignment and efficient use of resources.
- ATI conducted regular stakeholder consultations to ensure comprehensive planning and coordination. These consultations helped in aligning efforts, sharing resources, and avoiding duplication of activities.

On implementation of the RBME system - Data collection

- Ms. Pepe discussed the data collection and processing methods used by their Center since 2018. Initially, the center collected data by traveling, conducting interviews, and searching for relevant information directly. Over time, they evolved their methods, trying out Google Forms and Google Sheets to improve efficiency. For the past two years, they have implemented the ODK for data collection.
- The Center did not outsource data collection; instead, they collaborated with AEWs, providing them with incentives of P 250 per questionnaire to assist in data collection using ODK. The questionnaires originate from the CO, and the Center ensured data reliability and accuracy through the Toolbox data server, which recorded the location and contact information of respondents. They also required a selfie with the farmer to verify that field interviews have taken place.

- Once the data was collected, the Center processed and analyzed it using SPSS. They followed dummy tables provided by the CO for data tabulation and submission. Additionally, the Center conducted and maintained a full, detailed study internally, besides submitting the required tables to the CO.

Reports reviewed to get the needed information

- Ms. Pepe explained that they reviewed various reports, including training reports, TMIS (Training Management Information System) reports, and POGR (Project Operation and Control Reports). They examined pre-test and post-test results to assess increments and analyze financial data to understand the absorptive capacity of their budget. Recognizing the need for efficiency, they transitioned to an online system, enabling quick access to information without the need to retrieve physical documents. This innovation streamlined their process, allowing them to gather and utilize necessary data more efficiently.

Issues and concerns in data collection

- Ms. Pepe highlighted the initial challenges that led them to adopt the ODK. At first, the team traveled to collect data and relied on printed questionnaires. They retrained AEWs to handle the data collection. However, this approach often resulted in delays, as the data collection process did not always adhere to their targeted time schedules.
- To address these issues, they transitioned to using ODK, which operates offline. They conducted 1-3 batches of orientation sessions for the extension workers, simplifying the process by allowing data collection via mobile phones. This innovation expedited data turnover and eliminated the need for physical survey forms, which were prone to damage from rain and other elements. The accessibility of digital forms on mobile phones made it easier for AEWs to submit data promptly.
- In addition to providing incentives, the Center also offered load allowances, further motivating the AEWs. The workers were pleased with this method, as it made data collection more convenient and efficient. They could visit respondents' homes with just their phones and send the collected data immediately. This transition to ODK effectively resolved the initial issues and significantly improved the data collection process.

Capacity of the center to carry out the activities embedded in the RBME system

- Ms. Taganas explained that the Center has limited number of staff in the PMEU. There is only one M&E Officer, along with a Planning Officer and a Development Management Officer (DMO), Ms. Pepe, who is primarily responsible for RBME. Despite this small team, they managed to perform their tasks effectively by utilizing the ODK and collaborating with extension workers.
- Ms. Taganas noted that the use of ODK has been a significant innovation, enabling the center to overcome human resource limitations. Orientation for extension workers on ODK took just one day, and the Center only needed to cover food and accommodation costs. Many extension workers in the region were already trained and familiar with ODK, simplifying the process. The small team, despite its size, has managed to implement the system effectively.

- Asked if the activities in the RBME system could still be carried out despite the limited staff, Ms. Taganas affirmed this, stating that the key is to explore all available options and leverage their existing system. They can outsource certain tasks, such as integrating data into ODK, which is cost-effective. Collaboration with the university has also been beneficial, as it provided additional support and resources, ensuring the successful implementation of the RBME system.

Lessons learned from implementation of the system

- About the lessons learned in implementing the RBME, Ms. Pepe acknowledged the insights shared by Ms. Taganas about how data from the past three years might not always be the most useful for future program planning due to its age. Instead, data from the past year is more relevant and should be revisited for immediate and intermediate indicators. This phased approach allows for better alignment with the immediate and intermediate results indicators, making the data more actionable.
- Regarding the follow-up process after training sessions, Ms. Pepe explained that they have a re-entry plan to revisit participants six months after the training. They also conducted evaluation studies, particularly for large or multiple batches of training sessions, to assess the impact and sustainability of their programs. While these evaluations were not done annually, they provided valuable insights to the CO upon request.

Other challenges in implementing the system

- Although Ms. Pepe mentioned their difficulties with data collection, she explained that they had effectively addressed this issue by adopting the ODK. This solution had significantly streamlined their data collection process, making it more efficient.
- Ms. Pepe highlighted that their RBME report for the previous year was completed by July, thanks to the timely collection of data facilitated by ODK. This efficiency allowed them to submit their reports promptly.
- Ms. Pepe also confirmed that the budget was adequate. They no longer needed to hire additional people for travel, as the ODK system reduced these requirements. Furthermore, they could charge the accommodation costs of their participants to the office dormitory, minimizing expenses. Additionally, the two-page paper questionnaires used for the RBME survey, based on the required number of respondents, did not pose a significant financial burden. Thus, they managed to conduct their activities within the allocated budget effectively.

Lessons learned from implementation of the system

- The discussion revealed several lessons learned in implementing the RBME system. One significant lesson is the realization that immediate data is more useful than older data. Data from the past three years is often less relevant for future programs and projects, whereas results from the previous year or after one year are more applicable for current decision-making. To address this, phased implementation of studies is suggested, where immediate results indicators are assessed shortly after interventions, while intermediate and impact indicators are evaluated later.
- Another lesson learned is the limited control over external influences. The ATI's interventions are primarily training-focused, and other effects from projects or programs by other agencies can impact the overall results. This factor limits the weight of the RBME results.

- Regarding follow-up after training, a re-entry plan is in place to check in with participants six months after training. Additionally, the center conducts evaluation studies, but not annually. These studies are done for larger batches of training programs, and the CO occasionally requests these evaluations to assess the effectiveness and sustainability of projects.
- In terms of reporting and utilization of RBME results, the Center filled out dummy tables provided by the CO with narratives and presents full-blown reports during midterm and year-end reviews. To streamline the reporting process, the Center used a single socio-demographic table instead of separate tables for age, sex, and civil status. This approach allowed for more cohesive and connected discussions in the reports. The CO has accepted this method, focusing more on the encoded data rather than the specific format of the write-up. For data management and analysis, the Center provided raw data to the CO in Excel format but uses SPSS internally for data analysis and table creation. SPSS is preferred for its ease in table creation and data manipulation, producing better-looking tables.

On results of data collection for the RBME system - Client satisfaction on the effectiveness of the intervention

- Ms. Pepe explained that during training, participants provided feedback on the relevance and satisfaction of the interventions through an overall feedback form provided by ATI. This form is a standard procedure used after every training session.
- Inquired if the satisfaction levels of extension workers differ from those of farmers, Ms. Pepe clarified that both groups filled out the same overall satisfaction form after training sessions. This form collected feedback on various aspects, including the relevance and overall satisfaction of the training received.
- Ms. Taganas added that the satisfaction rates have generally been high for both farmers and AEWs. This indicates that the participants are largely satisfied with the interventions and training provided by ATI.

Suggestions to improve the provision of ATI's extension interventions

- Ms. Taganas confirmed that clients often offer feedback and suggestions for specific activities. While not everyone provided input, field-based participants frequently requested more time for practical sessions, especially for activities requiring strict adherence to processes. Acknowledging the heterogeneous nature of training batches, Ms. Taganas noted that time requirements can vary among participants, and they strived to balance these needs. They ensured that skill development training included more practical sessions than lectures. She highlighted the use of certified agricultural learning sites for training, where participants can directly experience practical aspects. Many training sessions, in collaboration with local LGUs and trained learning site cooperators, were conducted at these sites, providing hands-on learning for farmers. Training at the Center was typically reserved for AEWs and TOT activities, with some TOT sessions also conducted on farms.

Evidence of increase in knowledge and skills in the clients

- Ms. Taganas highlighted significant initiatives such as the 2023 rice-focused Farmer Field Schools (FFS), where 60 training batches were conducted. She explained that many farmer-level trainings, particularly under the Coconut Program, were conducted by local AEWs in collaboration with learning site cooperators. Positive feedback from evaluations indicates the effectiveness of these trainings. Participants visited benchmarking sites like a farm in Baybay, Leyte, and the National

Coconut Research Center at the university, expressing that they learned a lot and found the training valuable. This empowerment is evident as trained farmers and extension workers are now capable of educating their peers. Additionally, the Digital Farmers Program tapped into the expertise of AEWs, further demonstrating the successful transfer of knowledge and skills.

Adoption of AF technologies

- According to Ms. Taganas, within the Rice Competitiveness Enhancement Fund (RCEF) programs, there was variability in adoption. Some farmers fully adopted the technologies introduced, particularly the K-Check system, which covered various aspects such as land preparation and fertilization. However, other farmers only adopted certain elements of the introduced technologies, often integrating them with practices they were already using. While not all technologies were fully adopted by every participant, significant aspects were implemented, with some farmers adopting seven out of the nine recommended practices. This selective adoption indicates that while full adoption is not universal, key technologies are being integrated into farming practices.

Farming activities of clients

- According to Ms. Taganas, farming in the region is generally integrated, with small farm sizes being common. Rice is more prominent in Leyte. Vegetables, mainly "pinakbit" crops, though some "chop suey" vegetables are also grown. Fruits like jackfruit, banana, and cacao are significant crops in the region, along with rootcrops. Corn and small ruminants are included in the livestock sector.

Sufficiency of farming activities to provide for household needs

- Ms. Taganas only highlighted the success of their learning sites. Many farmers at these sites have found farming to be productive and profitable, transforming their activities into enterprises. These farmers have taken steps such as obtaining BIR receipts and registering with PhilGEPS, enabling them to participate in government procurement processes. This registration allowed them to transact with the government, participate in bidding, and cater for training events held on their farms. She cannot say the same for the small farmers.

Evidence of increased income

- Ms. Taganas confirmed improvements in the income of farmers operating the learning sites, noting that while she did not frequently visit different learning sites, she often observed positive changes and improvements in the farms she visited. She mentioned that many farms have shown significant progress, with some requesting elevation to higher levels of certification. To achieve level 2 certification, farms need to have specific required facilities, indicating substantial improvements.
- Ms. Taganas also affirmed that non-learning site farmers have also shown progress. She provided an example of an intern who, after completing an internship program supported by the ATI, successfully implemented what he learned on his farm. The intern's success drew attention from the National Organic Agriculture sector, which sent representatives to observe his methods. This success story has inspired other farmers to seek certification as learning sites, resulting in new applications for the program.

Climate change adaptation and mitigating measures

- Climate change adaptation is integrated into the ATI's thematic programs, with a significant focus on it. Ms. Taganas cited the case of Typhoon Odette, which affected many farmers in Southern Leyte. Despite the devastation, the farmers were able to bounce back, and she mentioned a specific learning site in Sugod where crop diversification helped some crops, like singkamas (jicama), survive the disaster. The DA-RFO has also assisted by adjusting planting calendars to account for expected typhoon seasons, helping farmers cope with the changing climate.
- Farmers sometimes harvest crops in advance if a typhoon is approaching. For fruit trees, they pruned them, and they also created canals around plots to manage excess water. Some farmers resorted to prayer and hope when they have no other options.
- Ms. Taganas explained that ATI primarily encouraged farmers to get insured with PCIC (Philippine Crop Insurance Corporation) and offered small financial assistance to their learning site cooperators, which can be availed once every three to five years, depending on the availability of funds. ATI's financial assistance was minimal, and they sometimes requested additional funds from their CO. For more substantial aid during calamities, Ms. Taganas stated that the DA was the primary provider of extensive assistance.

Constraints that hindered clients from getting farm and product certification

- Inquired about the difficulty and accessibility of farm and product certification for farmers. Ms. Taganas explained that while third-party certification was challenging, the DA was easing the process through the PGS. This system is simpler than third-party certification and still recognized by BAFS (Bureau of Agriculture and Fisheries Standards). Region 8 has seen an increase in certified organic farms via PGS. For GAP certification, Region 8 benefitted from involvement in the GAP project with Visayas State University and ACIAR (Australian project).
- Ms. Taganas indicated that ATI offered training and helped farmers prepare the necessary documents and made farm improvements before inspection and audit. The expenses for ATI mainly covered training costs, while the DA provided additional support, particularly in logistics for inspections.
- When asked about the costs for farmers, Ms. Taganas noted that farmers did not have to pay for PGS certification. The RFO also assisted with transport for inspections, and training activities were often conducted directly on farms.
- Regarding the time required to obtain certification, Ms. Taganas explained that it depends on the timely submission of documents but generally it did not take long due to predefined templates and structured workshops.
- Ms. Taganas emphasized that certification allows farmers to claim their products as organically produced, which is increasingly in demand among health-conscious consumers. In Ormoc City, the LGU has established a dedicated market for certified organic products.

Reporting and utilization of RBME results

- Regarding reporting and utilizing RBME results, Ms. Taganas noted the Center's practice of creating full-blown reports presented during midterm and year-end reviews. Ms. Pepe mentioned that they did not strictly follow the dummy tables provided by the Central Office, which required

separate analysis for age, sex, and civil status. Instead, they consolidated socio-demographic data into a single table, allowing for a more coherent and connected narrative. This approach ensured continuity and a more comprehensive discussion.

- Ms. Tidon asked how the CO reacted to their deviation from the provided format. Ms. Pepe explained that the CO mainly used the data for analysis and was satisfied as long as the necessary data were encoded and submitted. The Center keeps a detailed database, using SPSS for data analysis and management, while providing the CO with data in Excel format. Ms. Pepe highlighted the advantages of using SPSS, including easier table creation and data manipulation, which enhances the quality and appearance of their reports.

Recommendations to improve the RBME system

- To improve the Monitoring and Evaluation (M&E) system for agencies implementing ATI interventions, including RFOs, partner agencies, and SUCs, Ms. Taganas suggested having a unified system and consistent indicators across all agencies providing extension services that would simplify the process. She noted that within the DA, various tools and evaluation methods are used, leading to inconsistencies and inefficiencies.
- Ms. Taganas also recommended that all agencies should agree on a standard set of data to be collected and shared. This would prevent multiple agencies from repeatedly requesting the same information from clients, reducing redundancy and client burden. She emphasized the need for a discussion among agencies to establish a standardized system for data collection and sharing.
- While ATI is already introducing some standard practices in coordination with other agencies, full adoption varies. Ms. Taganas highlighted the importance of identifying the basic indicators, especially within the RBME framework. She questioned whether the immediate focus should be on empowerment or other outcomes and suggested defining clear basic indicators for these goals to ensure clarity and consistency in data collection.

Office/Region	ATI CENTRAL LUZON
Name of Key Informant	Marciano C. Santos, Unit Head, PMEU Planning Officer II Joan P. Su-Ay, Project Evaluation Officer I CFIDP Point Person/HR
Date of interview	June 13, 2024
KII Facilitator	Dr. Fezoil Luz Decena

HIGHLIGHTS OF THE KII:

On the development and management of the ATI AFE RBME System

- Respondents were involved in the training on RBME, but not involved in the formulation of the TOC. However, the TOC was also discussed during the trainings. Basis for TOC was a focused group discussion, with selected centers, then presented to TWG for reaction.
- Initial outputs of TWG have been adjusted, based on the changes in administration (national government). Indicators for CO, RTC and LGUs have also changed.
- Policy and Planning Division of ATI has set the standard, especially in relation to the certification requirement for ISO 2001:2015. Indicators were formulated to have common standard indicators for all RTCs. Purpose of the RBME was attained, since the indicators were measured monthly, quarterly, semi-annually, and annually. The results were used in annual review in the quality management system.
- ISO certification was by cluster. CO, 6 RTCs, 9 RTCs
- Targeting of indicators was done during planning period – number of participants, type of participants, trainings, etc. were targeted.
- Online monitoring (online monitoring system, OMIS, in excel format, which is part of the Online Planning Monitoring and Evaluation System, OPMES) of targets is in place. Every time accomplishments were done; these were inputted into the online monitoring system by the M&E officers. Online monitoring was for whole of ATI, using google sheets. In the reporting, they used Training Management Information System (TMIS) for each training accomplishment. TMIS contains details of participants, evaluation, details of RP, highlights, pre and post-test (60% passing), impressions, documentations, photos. TMIS is accessed by RTC. TMIS is administered by CO. Data encoded by the training management team, reviewed by M&E officer (for details, coding etc), approval by Center Director and validated by CO. Consolidation was done through online monitoring. TMIS was implemented in 2020. TMIS figures, however, sometimes did not match the raw data (in excel); hence, RBME was based mainly from the online monitoring system rather than on the TMIS. Although TMIS can be sourced, but this still needs to be checked.
- Funds were sufficient to fund all activities and interventions - budget was around P100M. While scope was very large, manpower was lacking. Target obligations and target disbursements were met. Because ATI was only merged (due to devolution) from provincial to regional scope, out of the 27 staff, only half are technical, hence manpower is lacking. COS were hired for admin staff.
- Mobility was also an issue, since there were only 3 vehicles. Rental expenses were high. Purchase of vehicle was not possible.

On implementation of the ATI AFE RBME System

- Uses OMIS as source of data for RBME.
- Primary data collection used questionnaire (from CO) administered by third party (SUC-Bulacan Agricultural State College). Based on the number of total participants reported from the Region, CO used a formula to determine number of samples. Then sampling was randomized using a website. In 2021, sample respondents covered 63 farmers and 17 AEWs (total of 80), budget was P150,000. In 2023, budget was P175,000, which covered 366 farmers and 88 AEWs. Some interviews were done through phone, not necessarily face-to-face. Third party processed the data using the dummy tables, and submitted report (soft and hard copy). Raw data was not submitted. Survey was done in the last quarter of the year. If money is downloaded early, RTC coordinates with BSAC so that report is submitted by October. Budget was not sufficient. But since online or mobile was allowed, then third party agreed to do the survey.
- Beneficiaries can be the same but for different training. No idea if respondents can also be the same every year.
- On issues and concerns on data for RBME, respondents selected using randomizer were not available. Replacement was provided. List was given to third party and they were the ones who selected the respondents. Budget for data gathering was low.
- On the capacity to implement RBME activities, RTC in the past hired enumerators, then analysis was done by another group. However, problem arose when data needed were not provided adequately, hence third party was resorted for enumerators and analysis. RTC 3 can no longer accommodate due to lack of personnel. Only 4 personnel in the M&E, in addition to tasks on activity focalships.
- On lessons, outsourced is better compared to inhouse surveys. Also, if the survey is conducted inhouse, bias will become an issue since M&E staff also has training workloads.
- Values generated by the report probably reflected the ATI performance in the region. On adoption rate, however, they were not confident since they were not sure of the technology adoption pathway from trainings. Although the adoption rate target was achieved, it was unsure how this has been translated in the field. No validation on the ground was done by the RTC. Report was forwarded directly to the PPD. One validation by CO was on export data, but this was confirmed to be erroneous.

On the result of the data collection for the RBME system

- Clients' satisfaction rating was done through training evaluation. Knowledge gained was determined through pre and post test scores. Client's rated all trainings to be relevant using training evaluation form.
- Increase in knowledge after the training was monitored through the re-entry action plan. This was done starting in 2024. Adoption of technologies was possible during validation of re-entry plan. During management reviews, adoption rate was reported. RBME report, however indicated that clients have increased knowledge and awareness, and they wanted to have a more developed entrepreneurship skill.

- Overall suggestion of clients on how to improve provision of services were collected from evaluation of trainings.
- Main beneficiaries of ATI were extension workers and farmer leaders. It is the AEW workers who know what types of farmers are being served.
- No data on increases in income, because they did not want to attribute the economic transformation of farmers to trainings alone, but to changes in knowledge, attitudes, habits. Economic value will be difficult to determine.
- Climate change adaptation and mitigation practices included organic agriculture, early maturing varieties, water conservation, IPM *sa kalikasan* integrated in inbred rice trainings, and others which were all part of some modules.
- Assistance provided in relation to GAP, HACCP etc. included capacity building (trainings) on products with PNS.

On reporting and utilization of the RBME results

- Report provided by third party was submitted to CO, together with dummy tables. Report was also shared with focal persons within RTC; however, this was not really used within the center. Report was not used in planning, budgeting and targeting. These targets were based on requirements from CO, in terms of priorities, etc. Data driven activities were the latest advisory for the WFP using available data to support why these will be implemented. The result of RBME was not consumed at the region, but by the CO who consolidated the report into one document.

Recommendations to improve the RBME system

- The recommendations can be used in planning at the regional level.
- Perspective of the third party and the RTC may be solicited, in terms of the design of the system, as well as in the revisions of the indicators and system, for further improvement.

Office/Region	ATI CENTRAL VISAYAS
Name of Key Informant	Lhea Araña, Development Management Officer I/ M&E Designate
Date of interview	June 13, 2024
KII Facilitator	Ms. Anita Tidon

HIGHLIGHTS OF THE KII:

On development and management of the RBME system

- Ms. Arana confirmed her involvement in the RBME system's development alongside Dr. Romeo Santos. She participated in a drafting workshop that lasted approximately ten days. The workshop included discussions on the TOC, where they examined inputs, outputs, outcomes, and the long-term impact. According to her, the process categorized questions within the RBME to align with outputs, outcomes, and impact. Indicators were also developed during the workshop. For outputs, indicators included metrics such as the number of participants trained, the number of training sessions conducted, and the number of Information, Education, and Communication (IEC) materials produced. For outcomes, indicators measured the application of knowledge gained from the training.
- Ms. Arana further explained that the TOC is essential to answer the question of "So what?" This means understanding the impact of the intervention provided by assessing what happens after the intervention. It helps measure the outcomes and effectiveness of the interventions implemented.
- Asked about the assumptions made during the development of the TOC and if there have been any changes since its final crafting, Ms. Arana seemed uncertain about specific assumptions but noted that the CO consolidated the TOC and then issued a memo to institutionalize it in the region.
- Asked if she feels equipped to create a TOC for another project and if the learnings from the initial process have been applied, Ms. Arana responded affirmatively. She mentioned participating in crafting indicators and planning. Her role included being a speaker and contributing to the process of developing the TOC.

Key competencies of AEWs

- Apart from experience, AEWs should be well-rounded and knowledgeable about various commodities, even outside their primary focus areas. They should have a good understanding of various commodities, and even if they specialize in one area (e.g., corn), they should be knowledgeable about other high-value crops as well. This breadth of knowledge contributes to their effectiveness as technicians along with broad experience in agricultural practices. In addition, extension workers should have a thorough understanding of their localities and know the people they are working with, which would allow them to be more efficient and effective in their tasks. All these make them valuable resources in their LGUs

Sufficiency of financial resources

- Financial resources for ATI interventions were generally sufficient and well-managed. For example, training activities were adequately funded, with no reported issues or complaints. The financial resources were sometimes more than enough, with challenges in fully utilizing the budget.
- The main constraint was the lack of sufficient manpower, despite adequate financial resources.

On implementing the RBME - Data collection process

- Initially, Ms. Arana and one other staff member (a Job Order (JO) employee) were responsible for data collection. Later, they were allowed to hire enumerators to assist in the process. By the second year, Ms. Arana, along with few colleagues from the PMEU, continued the data collection. They maximized the use of available staff, including requesting help from ATI colleagues if they happened to be around data collection site. Four main people in the section handled the data collection, sometimes utilizing additional help when needed.
- Ms. Arana was the primary person handling RBME and was responsible for consolidating and analyzing the collected data. She mentioned that while enumerators were sometimes used, she and her colleagues often directly handled data collection and encoding. There was an instance when the analysis was outsourced to a private individual to meet deadlines, but the data provided was pre-proofread.
- Validation of data was a crucial part of the process. There were instances when data collection by local technicians led to issues, such as technicians submitting questionnaires without interviewing respondents. This issue led to stopping the use of local technicians for data collection to ensure reliability. The payment for data collection by technicians was around P150 to P200 per questionnaire, which included transportation costs due to the distance of respondents.
- The use of local technicians initially seemed beneficial due to their familiarity with the area and respondents. However, validation issues arose when it was discovered that some questionnaires were filled out without proper interviews. Ms. Arana emphasized the importance of validating data to ensure its accuracy and reliability.
- Overall, while the data collection process faced challenges, such as reliability issues with local technicians and the need for validation, the team adapted by leveraging internal resources and outsourcing analysis when necessary to meet reporting standards and deadlines.

Reports reviewed

- The report included the pre- and post-training test results to determine the coverage and effectiveness of their training sessions. These reports containing the total number of participants catered to, the number of learning sites involved; other training-related data, were submitted to the Central Office.

Issues and concerns experienced during data collection

- Ms. Arana highlighted that a significant challenge was the lack of detailed addresses for respondents. Often, they only had the municipality and barangay without specific purok details, making it difficult to locate participants. To address this, they arranged for respondents to be summoned to the LGU and provided them with transportation fares to travel to the LGU. While this expedited the data collection process, it also led to complications. Some technicians included individuals not on the list, leading to extra expenses and logistical issues. Although these respondents were not supposed to be interviewed, they were still compensated for their travel expenses out of fairness, adding to the overall cost.
- Ms. Arana also explained that they did not conduct group interviews. Instead, they used an open data kit, requiring individual interviews to skip the encoding step. The open data kit featured skip logic, allowing irrelevant questions to be automatically bypassed, which significantly sped up the

process. Despite the challenges, with three to four interviewers, they could complete around five interviews per hour. The approach of using open data kits and gathering respondents at the LGU helped streamline the process and improve efficiency.

Capacity to properly carry out the activities embedded in RBME system

- Ms. Arana confirmed that their center has the capacity to properly carry out activities in the RBME system, having been implementing it since 2017. The primary issue however was balancing RBME activities with other deliverables, particularly training targets that also needed to be met within the year.
- The main problem was the lack of manpower. Ms. Arana mentioned that this was a common issue across other regions as well. The dual responsibilities of handling RBME and conducting training led to delays in implementation.
- Ms. Arana's role as an M&E specialist involved more than just RBME. She conducted training, shared consultation duties with a planning officer, and handled intern management at the center.
- She was also involved in internal quality audits for ISO, acted as a document control officer, and reviewed reports after training sessions. Additionally, she occasionally served as a speaker for other training sessions. Ms. Arana estimated that RBME constituted about 30-40% of her overall workload, depending on other concurrent tasks.
- Despite the significant percentage, RBME was not her sole focus. The need to complete various deliverables within the year required her to maximize her time efficiently.
- While the center was capacitated to implement RBME activities, the workload was substantial and multifaceted, leading to challenges primarily related to manpower. This issue was not unique to their region but was a common concern across other regions as well.

Issues and concerns/challenges in implementing the system

- Ms. Arana explained that guidance from the CO was provided, but the budget was limited. They had to integrate RBME expenses into other activities to cover costs, especially for data collection, which was challenging due to the region being composed of islands.
- The budget for RBME was small, requiring creative solutions to cover expenses. This included integrating data collection costs with other activities.
- Initially, only Ms. Arana handled RBME along with her role as the report officer for the region. They had a Job Order staff who assisted. Over time, they outsourced enumerators, collected data themselves, and enlisted LGU technicians as enumerators. They also used innovative tools like the COBO Open Data Kit (ODK) for data collection.
- Currently, there are two people focusing on M&E in the region.

Lessons learned from implementing the system

- Ms. Arana indicated that while some data points can partially justify ATI's performance, a more in-depth analysis is necessary. She noted challenges in establishing a clear before-and-after comparison due to varying respondents each year, which complicates the assessment of consistent

trends. Ms. Arana emphasized that their current tools may not fully capture all significant aspects needed to definitively assess ATI's performance, suggesting further refinement and deeper analysis are essential to provide a comprehensive evaluation.

Credibility of the values generated by the system

- Ms. Arana explained that they thoroughly checked and validated the data. They used qualifying questions to ensure consistency in the respondents' answers. If there were discrepancies or inconsistencies in the answers, they followed up with the respondents. For instance, if a respondent gave conflicting answers about their attendance in climate change mitigation training, they revisited the respondent for clarification.
- The validation process sometimes extended beyond the initial data collection phase. They contacted respondents even after data collection if any anomalies were found. An example given was related to climate change training. If a respondent stated they did not attend the training but mentioned applying something related to it, they would revisit and clarify the discrepancy. This follow-up process helped ensure that the data collected was accurate and reliable. They cross-checked answers and validated any conflicting information to maintain the credibility of their data.

On results of data collection for RBME system - Client satisfaction with the interventions they received

- Ms. Arana indicated that satisfaction rates were consistently high, around 90% or more, over several consecutive years of data collection. Respondents largely affirmed the relevance of the trainings to their specific needs, as reflected in the survey results where the majority responded positively to relevant questions regarding their satisfaction with the interventions and the perceived relevance of the trainings.

Suggestions to improve ATI extension intervention

- Ms. Arana initially noted that such suggestions were not specifically included in the RBME questionnaire, but in post-training evaluations, clients did offer recommendations for areas of improvement. These included requests for more training sessions related to specific topics covered, indicating a desire for continued learning opportunities.
- Regarding the conduct of ATI trainings, Ms. Arana mentioned that clients generally found the trainings satisfactory. They expressed satisfaction with the training venues, food, and the competence of the resource persons. However, some feedback highlighted a desire for resource persons to have more engaging personalities or a sense of humor. Despite this, participants appreciated the technical expertise provided by the resource persons.
- One recurring suggestion was to allocate more time for training sessions, as participants sometimes felt rushed and desired more comprehensive coverage of the topics. Overall, the feedback indicated that while improvements were suggested, the ATI's training programs were generally well-regarded and seen as beneficial for the participants' learning and development.

On increase in knowledge and skills evident in clients

- Ms. Arana explained that while ATI primarily targets Agricultural AEWs and technicians, there have been instances where farmers who participated in ATI programs eventually became speakers or leaders within their communities. However, historically, the majority of participants sent by the

ATI were farmer leaders rather than direct farmers. This trend has recently shifted with programs like CFIDP, which specifically target farmers. This shift has allowed for more direct interaction and engagement with farmers themselves, rather than solely focusing on farmer leaders or intermediaries like technicians.

On adoption of AF technologies

- Asked about the evidence of technology adoption among their clients from the ATI interventions, Ms. Arana admitted that there was a lack of proper documentation on this matter, with only one or two instances documented informally. However, she noted that there have been observed increases in technology adoption, particularly in rice farming such as the use of the Palay Check system or lowland irrigated techniques. Farmers have shown improvements in their practices, such as the timing of fertilizer application, which was validated through interviews conducted during RBME assessments. This served as indirect evidence that farmers have indeed learned from ATI interventions and applied these learnings in their agricultural practices.

On farming activities

- Ms. Arana described that many farmers in their region still adhered to traditional farming practices, and they tend to adopt new interventions only after seeing them proven effective. This cautious approach was reflected in their limited resources; many farmers lack the financial capacity to fully implement new technologies like additional fertilizers or other necessary inputs.
- The commodity focus in Central Visayas, according to Ms. Arana, includes rice, corn, and coconut. She acknowledged that coconut is particularly prevalent among farmers in the region. Despite the traditional nature of their farming practices, Ms. Arana noted that farmers believed their activities were sufficient to meet household needs. They allocated part of their harvest for consumption and sell the surplus to finance farming activities like land preparation.

Sufficiency of farming activities to provide for household needs

- Given the traditional methods and limited land holdings (averaging 0.4 to 0.5 hectares), Ms. Arana explained that while farming provides for food consumption, many farmers supplemented their income through labor in construction or through remittances from family members working abroad or in private employment. This diversified income strategy is necessary because relying solely on farming income often proves insufficient.

Evidences of increase in income

- When asked about the increase in income and productivity solely from farming activities, Ms. Arana mentioned that noticeable improvements were primarily observed in rice farming. Farmers have seen increases in their productivity, particularly in terms of yield per hectare or per cavan of rice. When farmers applied recommendations such as those related to recommended crop nutrients (RCN), their production significantly improved, and these results were well-documented.
- However, Ms. Arana noted that for other crops, she could not identify concrete examples of similar improvements or documented increases in income solely from farming activities. The focus remained on rice as the crop where tangible productivity gains were observed due to the application of agricultural recommendations.

Adoption of climate change adaptation and mitigation measures

- Farmers were observed to plant trees as barriers, establish canals, and utilize contour farming to prevent soil erosion. These practices were part of their efforts to mitigate the impacts of flooding and other natural disasters. Ms. Arana confirmed that these techniques were included in ATI's training programs.
- Regarding specific scenarios like typhoons or droughts, Ms. Arana mentioned that while insurance through agencies like PCIC is encouraged, there was limited direct support during actual calamities such as floods. Farmers typically harvest what they can and take measures to protect their livestock, like hiding them. However, there was a general reliance on prayer during these situations, acknowledging the uncontrollable nature of natural disasters.
- With respect to social protection, Ms. Arana clarified that while they offered training and sometimes seeds, there was no direct financial assistance provided. Additional support, such as crop insurance, was encouraged but not consistently availed by farmers due to lack of awareness or perceived barriers. Ms. Arana acknowledged the need for more institutionalized approaches to disseminating information on crop insurance and financial support options to ensure farmers are better prepared and supported during crises.

Issues and constraints in getting farm and product certification

- Ms. Arana shared insights based on RBME results since 2017, indicating minimal adoption of certifications such as organic or GAP (Good Agricultural Practices) in Region 7. She noted challenges faced by farmers in meeting certification requirements, such as separate storage for chemicals and establishment costs like building toilets, which are often beyond their means given small average landholdings.
- Farmers appreciate the importance of certification for market competitiveness but find it impractical due to stringent requirements. Ms. Arana highlighted that despite training initiatives covering certification processes like GAP and HACCP in the past, few participants pursued actual certification afterward. She mentioned anecdotal cases of interest in organic certification but noted a lack of respondents pursuing third-party organic certification.
- Regarding specific commodities in Cebu, Ms. Arana noted a lack of certified products despite local production of items like corn and ube. Training once focused on certification (around 2016-2018) but has since tapered off, with recent trainings no longer including certification modules. Ms. Arana attributed this decline to a shift in ATI's training priorities over the past few years.
- RBME results reflected the reality that while farmers acknowledge the benefits of certification, practical barriers prevented widespread adoption, contributing to the limited number of certified farms and products in Region 7.

On reporting and utilization of results of RBME study - How the results of RBME study are done

- Ms. Arana outlined the process used by their organization. She explained that data was entered into dummy tables, which included narrative reports, and then submitted to the CO via email. She further elaborated that she presented these results during the year-end or management reviews, highlighting key metrics such as client satisfaction and the adaptation of re-entry plans by participants.

- The review process involved feedback loops where results were shared back with relevant stakeholders. However, Ms. Arana noted a common issue with the RBME reporting: the feedback often consisted of simple yes/no responses, leading to questions about the depth and detail of the data collected and reported.

Database

- Ms. Arana confirmed that there is a separate database specifically for RBME data, which is updated yearly and maintained in Excel files. This database is distinct from other M&E data, and each year's RBME data is stored in a separate folder. She also mentioned that external requests for data require an official letter due to data privacy policies.
- Ms. Arana emphasized the importance of having a comprehensive system for managing RBME data, suggesting that it should be integrated from the start of any ATI project or intervention. She recommended that each project should have a clear TOC with attached RBME tools to measure progress over specific periods, such as one year or three years. Additionally, she highlighted the need for establishing baseline data at the beginning of projects to enable proper comparisons and evaluations.
- Currently, the lack of baseline data poses a significant problem for measuring the true impact of ATI interventions. Ms. Arana suggested that data collection methods, even those based on recall, could be used to establish some form of baseline. However, the existing RBME tool is not sufficient for this purpose. To improve the system, she proposed that planning should include initial baselines, regular evaluations of outputs, outcomes, and impacts, and follow-up evaluations after a few years to capture long-term impacts.

Results of the study use in targeting, planning

- Ms. Arana confirmed that while the RBME results were considered in planning, the influence was somewhat limited but still present. She provided feedback on the RBME outcomes, such as client demographics served and the number of marginalized clients trained, which can be factored into planning decisions. For example, areas that have been overly served were identified, and planning can be adjusted accordingly.
- Ms. Arana also mentioned that certain metrics, such as the percentage of clients who reported increased knowledge or those passing the post-test, were used to inform planning. They set standards, such as requiring 60% of participants to pass post-tests, and this data was fed back to planners. Additionally, the adherence to scheduled interventions and the percentage of action plans adopted by clients were tracked and reported.
- Overall, while the results were used in planning, their impact was balanced with directives from national levels. Ms. Arana maintains the RBME database, ensuring that data, even if a few years old, is available for reference and planning purposes.
- Ms. Arana's recommendations are to focus on integrating RBME processes into project planning from the start, establishing baselines, and systematically evaluating and comparing data to measure the effectiveness and impact of ATI interventions accurately.

Recommendations to improve the RBME system

- Ms. Arana suggested the need to establish M&E systems within these agencies because, in reality, many of them, especially LGUs, do not have established M&E systems. The Municipal Agriculture Offices often have outdated methods for data storage, like steel cabinets.
- Many LGUs struggle with basic data management tasks. For instance, counting the number of people in a barangay is done manually, and many are not familiar with Excel functions like pivot tables, making data collection and analysis difficult. Therefore, strengthening M&E systems at the LGU level is crucial, and additional manpower is needed to handle this effectively. Other agencies also need to establish their M&E systems.
- Ms. Arana has initiated a ladderized M&E training program, providing basic M&E and information knowledge management courses in two batches. This pilot project targets LGUs, and she planned to move to a third phase. Those who complete the initial training will receive coaching to establish their M&E systems. This ongoing project aims to show progress by July. She will revisit their re-entry plans to assess who has made progress. This is her current approach to establishing M&E systems in LGUs.
- RFOs also struggle with establishing their M&E systems. They often request M&E support from ATI, indicating that their systems are not fully developed.
- To improve the M&E system, the main issue is that M&E was not highly valued in many agencies, leading to frustrations for M&E officers. There was a general lack of appreciation on the importance of M&E, and officers often faced resistance when presenting factual data. Feedback was sometimes perceived as criticism, which created an adversarial relationship between M&E officers and the staff they were evaluating.

Addition information on AEWs re-entry plan

- Ms. Arana explained that AEWs generally completed re-entry plans and addressed farmers' questions effectively in the field. However, there were instances where re-entry plans were not aligned with the training, leading to implementation challenges.
- She currently tracked this data based on respondents from the system and plans to update it within the year to reflect the percentage of AEWs implementing re-entry plans. She mentioned that institutionalizing re-entry plan monitoring has been limited due to manpower constraints and that only around 40% of AEWs have been tracked for re-entry plan implementation, varying by commodity.
- Ms. Arana confirmed that AEWs were often replaced, particularly those on job orders, after elections. This political turnover affected the continuity and effectiveness of the training. Despite efforts to send only regular or permanent staff for training, LGUs often have limited regular staff and resort to sending job order employees who may not remain post-election.

Office/Region	ATI DAVAO
Name of Key Informant	Chonna Vae Cañete, PMEU Representative
Date of interview	June 14, 2024
KII Facilitator	Dr. Fezoil Luz Decena

HIGHLIGHTS OF THE KII:

On the development and management of the ATI AFE RBME System

- Respondent was not aware of the TOC, but followed the guidelines handed down by the CO for the RBME process as she was hired in 2019. In 2022, she was trained only on RBME by CO, together with 3 PLGUs.
- Purpose of RBME is to see output and outcome of training on the farmers and participants – how training was able to contribute to the lives of farmers, after 3 years. Based on the RBME, results indicated that trainings have contributed to the improvement of lives of farmers. But validation showed that there were many factors that needed to be considered that contributed to the improvement of lives of farmers.
- In terms of targeting, Reg. 11 used work and financial plan for all programs. In determining attainment of targets, there was a localized monitoring of targets and accomplishments, monitored monthly, based on WFP. Every end of training, there was a Training and Activity Accomplishment Report submitted after 3 days of training. This was reviewed before final approval in the Training Management Information System where CO has access.
- Financial resources were enough to implement activities, since trainings have standard costing. However, personnel were lacking since there were only 27 Plantilla positions in Region 11, including administrative staff. There were only around 15 technical staff, who conducted the activities which were sometimes done simultaneously. Sometimes only 1 staff coordinated one training, and this staff facilitated the training and also served as resource person. If two trainings in a month, reporting was sometimes delayed. COS were mostly administrative staff.

On implementation of the ATI AFE RBME System

- Data were collected by the ATI RTC using the form from CO. Before the start of the survey, there was orientation by the M&E officer to ensure uniform understanding of the questionnaires.
- Sample size was determined by the CO, but proportionate sampling (by province) was done by RTC based on the consolidated list on clients trained (yearly). Used Slovin's sampling formula. In 2023, respondents were 254 farmers and 64 AEWs. Budget was more than P100,000. Encoding, processing of data, and report writing were done by the RTC. Followed the dummy table downloaded by CO.
- Results were submitted to CO, together with raw data. Secondary data needed for the indicators not included in the survey were taken from files and reports.
- Challenges encountered in data gathering included replacement of sample (if identified respondent was no longer available e.g. died), needed assistance from MAGRO, although a master list was available. Additional samples were pre-identified in cases these were encountered.

- Quality of data was credible if based on answers from farmers alone. However, the questionnaire seemed to be generating data on perception, and not based on evidence that can be validated. For instance, even if farmers said that trainings were able to increase income, the enumerator cannot readily validate the extent of the effect of training on farmer's income. Although choices included "moderate, etc.," there was no way of validating the response (not quantified).
- Survey was conducted differently. Some provinces (with help of LGU) gathered the respondents in one place, in this case validation on what was happening in the farms cannot be done. In some provinces, surveys were done in the house; if house was near the farm, then validation was possible.

On the result of the data collection for the RBME system

- In general, clients' satisfaction rating for ATI, especially trainings, was high. Trainings were also said to be relevant.
- Suggestions of trainees to improve ATI services based on feedback forms were more on facilities, logistics, food. Technical comments were more on the delivery such as to laymanize the technical terms used, or translate into vernacular.
- Evidences on improvement in knowledge and skills were measured using pre and post tests during trainings, not through RBME.
- Re-entry plans monitoring should have been done by training officers every after 6 months. Not all were monitored, due also to lack of manpower. No idea on whether all re-entry or action plans are being implemented. Data has not been analyzed to provide this information.
- Farmer beneficiaries, in general, are smallhold farmers. There are also large farmers who become learning site cooperators.
- Contribution of ATI trainings on income of farmers was sometimes evident. For example, some said that practices adopted from trainings really resulted to increase in production and income (although dependent also on the market).
- Climate change related techniques and practices – mulching, drip irrigation. Not sure if these were from ATI trainings, although many trainings included climate resilient agriculture topics.
- No interventions on social protection, but information on this has been included in information caravan activities of ATI.
- On certifications, GAP, GAHP etc., walk in clients were provided some technical knowledge, and endorsed to regional DA. ATI also provided trainings on GAP, and videos on the certification process was available. One of the learning sites is GAP certified.

On reporting and utilization of the RBME results

- Other than submission to CO, the result was cascaded to the management, and also during local chief executive (LCE) briefings. M&E specialists presented the results. At the RTC level, results were only for information and not used for planning. The current targeting system is focused on directives from CO.

- Data base to capture and curate RBME used google drive. No system.

Recommendations to improve the RBME system

- Improve the questionnaire to include quantification of evidence of adoption or results of interventions.

Office/Region	ATI BICOL
Name of Key Informant	Roberto Santos Jr., Project Evaluation Officer Focal Person, Monitoring and Evaluation, Data Privacy Officer
Date of interview	June 21, 2024
KII Facilitator	Ms. Anita Tidon

HIGHLIGHTS OF THE KII:

On RBME and Theory of Change

- The respondent was hired by ATI in 2019 or roughly two years after the development of the RBME system. He described the RBME TOC as one where ATI has a dedicated end-goal in achieving its objectives across various programs. The RBME approach involves following a results framework and documented procedures.
- The basis for formulating the TOC lies in the ATI’s focus on agriculture and fisheries extension. Specifically, it aims to enhance the capacity of LGU extension workers, farmers, and other clients.
- The respondent believes that the TOC remains relevant, but if any amendments are necessary, they should address urgent concerns.

Purpose of RBME System

- The purpose of the RBME is to assess the outcomes of the interventions. So far, this approach has been beneficial because it allows ATI to promptly observe the immediate results of the interventions. Additionally, it facilitates monitoring after the completion of training and other ATI activities, which is crucial.

Updating the indicators

- The indicators are comprehensive and relevant because they not only gather details about clients but also track changes in their practices through technology adoption. If updates are necessary, they can focus on related activities beyond just training, depending on the types of interventions received by clients. For instance, one of the questions in the questionnaire pertains to the interventions clients have received. If it is IEC, the respondent suggested adding follow-up questions: Is it utilized? How important are reference materials provided to them? After receiving reading materials, do they read and use them? This is important because ATI distributes a significant number of IEC materials to its clients.
- It may also include grants, ICT and tables and chairs provided by ATI to LSA and how these are utilized.

Sufficiency of resources to implement the ATI interventions

- Human resources to implement the interventions are currently managed by the information services unit. Manpower was insufficient. The Center outsourced technical experts for topics that fall outside the expertise of ATI. Implementation of the intervention was guided by policies emanating from the CO.
- Financial resources were sufficient. All proposed activities for each thematic area were funded.

Key competencies of Agricultural Extension Workers (AEWs)

- AEWs should have expertise in community organizing, extension approaches, and planning. However, at the LGUs, AEWs still require capacity building for effective program implementation. Currently, many AEWs are implementing programs from different regional offices, as LGUs do not have specific programs of their own. Therefore, it is essential for LGUs to develop their planning capacity of their AEWs.

Efficiency constraints

- Annually, the Center conducts 150-200 training sessions. However, there is a shortage of Plantilla positions—only 26 are allocated—despite a substantial budget and numerous training programs. Nearly all units within the Center handled training projects, with staff serving as project officers. This sometimes required them to perform functions beyond their designated roles. Nevertheless, the Center managed to carry out its planned activities by maximizing staff utilization.
- Additionally, the Center must implement extension interventions mandated by higher authorities, even if they were not initially proposed. To address this, the number of intervention activities was distributed across all units and assigned to staff with agricultural backgrounds. Meanwhile, the planning and monitoring unit has existing Plantilla position vacancies that need to be filled.

On implementation of the RBME system - Data collection

- According to the key informant, the Center undertook data collection between 2018 to 2021. However, a significant issue emerged due to bias: those conducting the training were also involved in monitoring. This practice raised ethical concerns, as data collectors ideally should not be directly connected to the training process. Despite this challenge, the Center made efforts to ensure the credibility of the data. Each province had an assigned enumerator who reported on the data gathering status weekly. Enumerators presented their findings in the field after collecting data, and the results were shared with technical operations staff. The respondent (Mr. Santos) played a key role in consolidating and refining the narratives, having these reviewed by top management, then transmitted to the CO after final refinement.
- In subsequent years, the Center outsourced data collection, partnering with CBSU for data handling, analysis, and interpretation. The final report was collaboratively prepared with CBSU. To validate and verify the information, a designated staff member consolidated all gathered data, which was then checked, initially interpreted, and presented to various stakeholders, including the planning and monitoring unit, the Assistant Center Director, and program coordinators for different commodities. Additionally, they reviewed re-entry plans prepared by trainees.

Issues and concerns experienced during data collection

- Challenges during data collection included locating respondents. To address this, the Center sought assistance from municipal offices to cover the barangays served by the training. Another challenge was obtaining production and income data, as many respondents did not maintain records. Other alternative data collection methods, such as phone interviews, were explored in case face-to-face interviews were not possible.
- Notably, this year, data collection has become centralized at ATI, leading to improved procedures and adherence to research ethics.

Capacity of the Center for RBME Activities

- The Center is well-equipped to carry out the activities embedded in the RBME system. Staff members have undergone RBME training facilitated by ATI CO (five training programs conducted). Furthermore, the Center staff actively conducted M&E training in LGUs and introduced the RBME concepts. Each LGU received two training sessions, with planning unit staff serving as resource persons. This capacity-building approach ensured effective implementation of RBME practices.

Lessons learned from implementing the system

- One significant lesson identified is the critical role of valid and reliable data in the planning process. It serves as the foundation for decision-making, whether there is a need to revise existing plans or assess their alignment with expected goals and outcomes.
- Additionally, within the context of ATI's mandate, staff members have gained insights into the RBME system and how to do it.

On results of data collection - Clients' satisfaction with the received interventions

- During the training sessions, participants inquired when their next training will be. This implied that they were satisfied with the interventions received. Some farmers even attributed their farms becoming learning sites for agriculture (LSAs) to the ATI.

Improving ATI extension services

- Clients have suggested a more direct application process for attendance at ATI training. Currently, ATI's regional protocol requires farmers to obtain an endorsement from the LGU. However, this prioritizes those who have political alliances.

Knowledge and skills enhancement

- During site visits, trainees demonstrated increased knowledge and skills by implementing technologies such as vermicomposting and swine production techniques.

Technology adoption

- Clients compared their previous practices with the techniques they have learned during training sessions. For instance, in livestock, they have adopted technologies to manage waste odor and repurposed waste for useful applications. Similarly, in crop farming, clients have embraced the use of apps to determine the recommended fertilizers and weedicides. This approach ensures that they stay informed and implement effective methods in their agricultural endeavors.

Income increase evidence

- While obtaining evidence of income increase can be challenging due to concerns about reporting to the BIR (Bureau of Internal Revenue), farmers consistently expressed gratitude for the support provided by the ATI.

Adoption of climate change technologies

- The Center allocated two to three hours in its training module for discussing climate change and strategies to mitigate its effects through the adoption of climate-resistant technologies. Given Bicol's vulnerability to typhoons, farmers were encouraged to cultivate climate-resistant crops/drought resistant crops including root crops and other relevant technologies that thrive even in adverse conditions. Additionally, crop insurance orientation was provided. Adoption of these technologies is being practiced.

Certifications

- *LSA Certification*: ATI only provided LSA Certification. Farmers may encounter constraints in meeting requirements, such as obtaining endorsement from the LGU and creating a five-year development plan for their farm.
- *Other Certifications (GAP and GAHP)*: For certifications like GAP and GAHP, ATI's role involved membership in the technical working group that validated applications. Additionally, ATI conducted briefings on the certification requirements from relevant agencies. The inclusion of this content in training modules depends on the specific type of training.
- *Product Certification Requirements*: Product certification requirements are not yet covered in the training modules. This is being worked on with the management.

Reporting of results

- The RBME results were initially presented to the Center's top management. Once approved, they were submitted to the CO. Some LGUs and RFO also requested presentations of these results during their consultation meetings. The Monitoring and Evaluation (M&E) focal person represented the management during these presentations.
- The RBME results were utilized during assessments and consultations conducted by the ATI.
- The CO used Google Forms to track data collection on the ground, even before data analysis. The raw data in Google Forms were accessible to the CO.

Database capture

- The databases are centralized and managed by the Monitoring and Evaluation (M&E) focal person through corporate email.
- There is a Google Drive dedicated to storing all M&E data.
- Additionally, there are two systems in place: The Training Management Information System and the Planning and Evaluation Information System
- RBME data is organized by year and maintained in the data bank allocation within Google Drive.
- Each year, the M&E focal person downloads all uploaded data and keeps an offline backup in the office for security.

Recommendations to improve the RBME system

- Training and Capacity Building:
 - The ATI has taken the initiative to establish an M&E system at the LGUs. Initially, all provincial agriculturists and veterinarians were trained. It is important to note that the provinces currently lack dedicated M&E officers, and no M&E activities are being conducted there.
- Collaboration with Regional Field Offices (RFOs):
 - RFOs have established M&E divisions, and ATI has shared its experiences and best practices with them.
 - Through this collaboration, ATI aims to achieve harmonization and complementation of activities, as well as resource sharing.
 - When both agencies conduct similar training programs, they resolve any potential conflicts by specifying their respective clients. For instance, livestock training programs fall under ATI, while other training programs are managed by the DA.
- Funding Challenges and Training Content:
 - Not all of ATI's training programs are currently funded. As a result, RFOs may conduct their own training sessions using content like that provided by ATI.
 - During the annual planning period in February, consultations were held with concerned DA agencies conducting training. DA counterparts also participated in ATI's planning process.

Office/Region	ATI NORTHERN MINDANAO
Name of Key Informant	Cheaster Magat, PMEU Technical Support Staff
Date of interview	June 26, 2024
KII Facilitator	Dr. Fezoil Luz Decena

HIGHLIGHTS OF THE KII:

On the development and management of the ATI AFE RBME System

- The respondent was not formally briefed about the RBME, its origins, objectives, objectives and other purposes, hence not aware of its TOC. The staff in charge that was included in the original orientation already resigned. Respondent, however, used to assist the said staff. Her understanding of the RBME is through the questionnaires downloaded by the CO.
- The purpose of RBME is to evaluate the effectiveness of trainings of ATI, if the participants are able to apply the learnings and to measure returns on investment on these trainings. This purpose has been met.
- The indicators have not been updated. The indicator numbers are not targeted.
- Resources, particularly budget for ATI RTC 10 has gone down. Lacks personnel. In terms of sufficiency, maybe sufficient. Transportation and enumerators are lacking.

On implementation of the ATI AFE RBME System

- CO provided the required number of respondents; for 2023, 280 farmers and 100 AEWs. Random sampling was done. The RTC used to hire enumerators, and cleaning, processing of data, as well as interpretation based on the tables provided by the CO were done by the RTC planning staff. However, some issues and concerns arose about the data.
- For 2024, RTC 10 has not received a memo yet. They were, however, informed that the CO will directly contract out to a 3rd party the enumeration and processing of data for Region 10. RTC will provide the data for the samples. Respondent thought that this is better to avoid bias.
- After the issues on data with the enumerators, RTC 10 hired AEWs as enumerators. They conducted the interviews when they went to the field. They used google sheets, so the raw data were available in spreadsheets. If internet signal was not good, they inputted directly into the spreadsheets and provided RTC soft copies of the raw data. Key informant was the one who processed the data. Non-AEW enumerators had problems tracing the participants, since they did not know them.
- The problems encountered included low manpower for the Center to conduct and process data for RBME, beneficiaries sometimes cannot be located, and one day activities should be included.
- Validation was not done on the ground when the AEWs were the ones conducting the interviews. But when the RTC did the interviews, validation was conducted.
- Data from RTC (financial, other physical accomplishments) were also used in providing data for the RBME).

On the result of the data collection for the RBME system

- Clients generally rated the interventions (trainings) positively. They indicated that they have learned many things. The trainings were also deemed relevant. One example is that an RBO was established as a result of the trainings, and learning sites were also put up and has been accredited.
- In the past, farmers were not very convinced about the utility of trainings, because they wanted on-site demonstrations. Therefore, most of the participants were the wives who also has the ability to influence the husbands in decision making in the farms. There was, however, a change in attitude where male farmers were also attending.
- Some beneficiaries of trainings showed evidence of increase in knowledge and skills, especially those who put up Learning Sites, and became resource persons in some trainings in these learning sites.
- In terms of adoption and their evidence, one RBO formed as a result of ATI training also went on to become a cooperative which now has businesses, including lending. This has resulted to increase in income of the members.
- Clients were generally smallhold farmers producing rice, corn, livestock, RBOs, women and youth, as well as AEWs from the LGUs.
- KI says that climate change did not severely affect Northern Mindanao. No typhoons, drought or flooding. On rice trainings, some practices such as early maturing varieties were discussed.
- ATI 10 conducted trainings on GAP as well as on Participatory Guarantee System, a special training for would be PGS inspectors (for group certifications like coops).

On reporting and utilization of the RBME results

- Results of surveys and data from other sources were tabulated and analyzed. These were checked by the division chief and the center director before submission to CO. However, these results were not used in the Region.
- As mentioned, the data were maintained in google sheets and excel files. Most data related to the trainings were stored in the Training Management Information System.

Recommendations to improve the RBME system

- Results of RBME should be considered in planning.
- Data collection should be such that integrity is always being considered.

Office/Region	ATI ITCPH
Name of Key Informant	Jackielyn B. Garlet, OIC Chief, PMES/ Admin Officer IV
Date of interview	June 27, 2024
KII Facilitator	Dr. Fezoil Luz Decena and Ms. Anita Tidon

HIGHLIGHTS OF THE KII:

On the development and management of the ATI AFE RBME System

- Key informant was not involved in the development of TOC. She was designated in RBME work in 2022 only. Also, not aware of TOC, but other staff were aware. No formal turnover was done. She thinks that the purpose of RBME is to track the results of the training provided to participants, monitoring of what happened after the training, including monitoring of action plans. Also, she thinks that only training is included in RBME.
- Resources in ITCPH interventions were not sufficient. Only 28 Plantilla positions, and also with JO assigned in farms (6), admin and finance (5) and technical JOs (3). No problem in coordination with LGUs and national government. Budget was sufficient to implement the initiatives, especially for trainings (under the National Livestock Program). For maintenance of facilities, however budget was not sufficient. Community engagements were also okay, since pilot projects were done in Batangas where ITCPH is located.
- Every year, invitation letters were sent to LGUs informing them of availability of trainings to enable them to identify AEW training participants. At most 2 participants per region per training is the targeted number, prioritizing the areas which has large pig production such as CALABARZON, Region 3, Visayas, and Mindanao. Pig husbandry (2 weeks), AI (1 week), waste management (2 weeks), are the usual courses. Training is free for government agencies, then with payment for private agencies. This becomes the source of income for maintenance of laboratories and other facilities. Participants to trainings have a downtime of 2 days before they can enter the farms due to ASF.

On implementation of the ATI AFE RBME System

- CO provided the number for target respondents, based on Slovin's formula. However, there were issues related to identification of respondents because some beneficiaries have attended more than one training. As a solution, they selected participants who have participated in only one training. In cases where they considered trainees with multiple trainings, they were requested to answer for one training only. They called up participants individually. This issue has been raised to the CO through the recommendations in the reports. However, there has been no response to this issue.
- Other issues related to RBME included long questionnaire (6 pages). The key informant thinks that the RBME survey answered all the indicators in the RBME system. Coverage was nationwide hence the lack of staff was also a problem.
- Budget for RBME was quite small. Hence, they used other means such as call, zoom, etc. However, they also went to places with high number of ITCPH alumni.
- ITCPH provided trainings on pig husbandry, around 30-40 trainings in one year, with a nationwide coverage. Hence, RBME survey was also nationwide involving around 300 – 323 respondents.

- Staff assigned to oversee RBME met the deadlines set by the CO. ITCPH conducted the survey via email at the start of the year, using google sheets. This has a response rate of only about 10 percent in a month. Alumni also were interviewed via phone if they were willing. Respondents who did need respond were re-sent emails. Filled out questionnaires were validated if there were deficiencies via phone call to the respondents. Tables provided by CO were filled out based on the data from the survey. Since 2023, CO only gets the data, no more narrative is needed. Submission of reports were done via email, copy furnished the records section and center director.
- Staff spent about 2 hours in a day for the RBME.
- Other documents as source of RBME were based on results of pre and post tests of trainings, such as the training and other activities completion report.
- Lessons learned included: learning how to write reports on RBME, difficult to write with small data; that RBME is important and is a source of information on how to improve delivery of services.
- Some validation was done, but in general they took the values at face value. Validation was done through phone.

On the result of data collection for the RBME system

- Key competencies of AEWs included technical knowledge and skills so they can effectively transfer the technologies to the farmers. For long courses, educational background should be related to agriculture and livestock. Attitude is also important.
- Re-entry plan was required, especially in long courses. These were monitored. They also conducted alumni field monitoring to validate if the participants adopted the technologies learned from the course. Some LGUs did not provide support for the re-entry plan (e.g. establishment of a techno-demo farm). Re-entry plans relating to conduct of courses were attained.
- Trainees were generally satisfied based on the evaluation of trainings done. Some suggestions included longer duration of training (more than 2 weeks), more on-farm trainings (traineeship where each trainee was assigned one pen). Resource persons were staff of ITCPH.
- Practical exams were done (e.g. castration) and participants were graded according to the skills exhibited.
- Trainees also became trainers, since they were also taught skills on this, such as training needs assessments, etc.
- Evidences of technology adoption was found during alumni monitoring, although this was not very high, because of expense (e.g. tunnel ventilation). AI has high adoption rate. Pig husbandry courses has resulted to improved skills as these were generally adopted. One participant who used to plant corn has converted to pig husbandry and is now doing AI in his farm and in the neighboring farms thereby increasing his income. Other trainees have also increased their sow level from 1 to 5. Using these indicators, ITCPH saw the effectiveness of their trainings.
- Small hold livestock raisers make up around 70-80 percent of the trainees, with sow level of 5-10. Large farms who participated in the trainings were usually the second-generation owners. OFWs and other interested would-be pig raisers were also accepted into the trainings. Most of these

trainees also have other sources of income. For those who went into swine raising only, increases in their incomes were also monitored by ITCPH after their training. Some participants claimed that swine raising alone can provide enough income for their families especially for 10-sow level. Increase in piglets as a result of the trainings was the main basis for saying that the training was effective.

- Climate change was part of the trainings, especially in pig husbandry in the housing and animal waste management modules. Livestock emergency guidelines was part of the training, which included where farmers should bring their livestock in cases of calamities (e.g. Visayas area)
- Farmers improved their biosafety protocols to safeguard their swine farms against ASF. Farmers were also taught about the importance of foot bath, concentration of disinfectant, etc. These were adopted.
- On social protection provided by ITCPH such as for ASF, they only provided inquiries especially if they needed help on what they need to do in cases of emergency. They asked LGUs to visit the farms. ITCPH trained the LGUs on detection of ASF, such as swabbing. No direct social protection for the farmers was provided, as these were not consistent with their mandate.
- ITCPH did not certify swine farms. GHAP topics were included in the trainings. Assessment for NCII (by TESDA) for swine farming is one of the services by the ITCPH.
- Certification from DENR for environmental compliance certificate (ECC) was one of the main hindrance of swine farms. Appropriate waste management was part of the module of ITCPH.
- Meat processing course for women, AEWs, senior citizens was provided.

On reporting and utilization of the RBME results

- ITCPH has a database for RBME. Alumni database (with system application) updated every course; database on questionnaire updated every time a new response was received (using excel from google sheets). Only the staff assigned can assess the database. Training and other activities database were updated weekly.
- Results of RBME were used in operational planning. During the presentation, this was the source of baseline data from previous years. Results were presented during the planning
- Results were presented to MANCOM, however, since 2023, when CO does not require narrative reports, they only email the report copy furnished the Center Director

Office/Region	ATI ZAMBOANGA PENINSULA
Name of Key Informant/s	Agustin Wagas, Planning Officer Decelyn Cabang, Monitoring and Evaluation Officer
Date of interview	July 3, 2024
KII Facilitator	Dr. Fezoil Luz Decena

HIGHLIGHTS OF THE KII:

On the development and management of the ATI AFE RBME System

- The key informants are aware of the TOC. Ms. Decelyn was involved in the formulation of the TOC. The TOC describes how interventions to clients have impact on their lives. The TOC has not been revised, as far as they can remember.
- The purpose of the RBME is to assess the effects of the interventions to the clients, and assess whether these interventions are effective, and relevant as per the mandate of the ATI. In their opinion, this purpose is being met by the RBME system.
- Targeting for RBME was done for the trainings, particularly the number of participants. For other indicators, no targeting was done.
- Financial resources were enough since budget was provided based on the indicative budget which was done 2 years ahead. They lacked human resources to implement the programs, especially the RBME.
- Efficiency constraints included lack of Plantilla positions, leading to overloading of staff. There were also only 2 vehicles, so they resorted to vehicle rental. The total cost of rentals was way beyond the cost of vehicles, if purchased.

On implementation of the ATI AFE RBME System

- RTC 9 has implemented the RBME survey themselves and has also experienced contracting out the survey to a 3rd party (JH Cerilles State College). For the 3rd party survey (2022), the budget was P150,000. They did face to face interviews. In 2023 and before 2022, the survey was conducted by ATI RTC 9, with the M&E specialist as the lead, and hired JOs as enumerators. For 2023, the budget allotted was P200,000 for 333 respondents. The data processing report was done by the M&E specialist. The number of samples was provided by the CO, and ATI RTC 9 did the stratified random sampling to determine the samples per province and municipality. For them, the 3rd party survey was better as there was no bias in selection of respondents. When the ATI was the one conducting the survey, if the sampled respondent was unavailable at the time of the survey, they interviewed whoever was available, or who they knew in the area.
- RTC 9 believes that the survey for 2024 is outsourced by CO to ASPSI.
- Other sources for the RBME reports included work and financial plan of the Center, as well as the TMIS.
- The values generated from the RBME was perceived to be credible and reflected the performance of the ATI in the region. Most of the feedbacks were positive. However, the key informants

believed that there were credibility issues since they were the ones who implemented the interventions, thus another group (3rd party) should do the data gathering and analysis.

- No validation was made regarding the values generated from the surveys.

On the result of the data collection for the RBME system

- 96.8% of AEWs were highly satisfied with ATI trainings, while only 66% of farmers were highly satisfied. Although farmers believed that the trainings were relevant, they expected to receive inputs and other support to enable them to adopt the technologies and practices learnt from the trainings.
- The key informants believed that there is a need to change some of the trainings from general topics on production, to more specific how to's in specific areas in the production, and also along the value chain.
- More trainees expressed the need to have entrepreneurship trainings, however, they expected support including financial support.
- Increase in knowledge and skills were measured using pre and post-test scores, as well as hands-on activities. Monitoring of re-entry plans were also underway, although budget for this was lacking. Some re-entry plans involved re-echo of trainings, and these were found to be implemented. Re-entry plans involving production were generally not implemented due to lack of inputs, eg. Rubber nursery establishments.
- Most of farmers served by ATI were small holders, many were also farmer leaders. The commodities included high value crops such as cacao, coffee, and coconut; native animals such as chicken and pigs, as well as goats; vegetables; corn; and rubber.
- Clients who were involved in Learning Sites have shown improvement in their performance, have improved their products and were able to establish linkages.
- There are currently no trainings related to climate change; in the past, climate change related practices were incorporated in the trainings, including in FBS modules and in OA trainings.
- ATI RTC 9 provided trainings on OA, GAP, and PGS. PGS trainings were TOT, as they were expected to train other farmers as well. There are currently five (5) groups being trained for PGS, and one (1) group already has a certification

On reporting and utilization of the RBME results

- RBME results, per se, were not formally used in decision making. However, since program officers were provided feedback on these results, they used these information to inform their specific planning and decision-making processes.
- The Center keeps a hard copy of the RBME results and data; they do not maintain electronic database for RBME

Recommendations to improve the RBME system

- RBME surveys should be conducted by a 3rd party to avoid bias. In general, the 3rd party contractors would have more experience, theoretical knowledge, and skills in data processing and analysis. A macro perspective is necessary.
- RBME reports should be used in planning. This can be used in determining what interventions have been utilized or adopted, hence this will also provide information on what is needed by the clients.
- An electronic or digital program or information system would be helpful. Analytics are needed, including dashboarding of results would help the Center in generating information.
- A separate unit in the Center for RBME may be worth considering, since M&E section has many tasks to be done.

Office/Region	ATI CARAGA
Name of Key Informant	Teovelita Rodriguez, PMEU Officer
Date of interview	July 15, 2024
KII Facilitators	Daniel Agbisit and Joshua Macuha

HIGHLIGHTS OF THE KII:

On the development and management of the ATI AFE RBME System

- The key informant is aware of TOC, and was involved in the 2-phase trainings, which had a series of workshops for TOC and RBME and its indicators, how projects will be implemented, expected results both long term outputs, and impacts (input, output, outcomes, impacts). She is aware that there were 200 indicators, initially, then trimmed down to 28 based on “debate”. TOC has not been revised since 2016. Implementation of RBME started in 2018. Changes were made in the AEW forms only.
- RBME purpose is to monitor budget of government, especially by ATI; to evaluate whether the investments have been effective and has effects on the beneficiaries or clients, and whether the interventions can be duplicated by other agencies. RBME was effective in meeting this purpose.
- Results of RBME was submitted to the CO, who consolidated at the national level; and presented to the congress for funding purposes.
- Provincial consultations were done (one day per province), where training and extension needs were gathered, which were also based on their stakeholders (farmers). Targeting was up to municipal level; however, CO also provided the targets based on national programs and requests from Congress, and other priorities. Now, the focus of ATI RTC is the AEWs. These targets were generally met.
- Constraints in human, political, financial resources to implement the RBME – RBME has allotted budget. However, there were human resource constraints as there were only 3 Plantilla positions in M&E plus one COS. They were the ones conducting the RBME survey. There was full support from management, and fund was provided.

On implementation of the ATI AFE RBME System

- Data were collected based on the guidelines from the CO. CO provided the number of respondents per region. They identified the respondents based on the list of participants of trainings three years prior. After identification, they coordinated with the LGUs (as per their protocol). They also asked the help of LGUs to gather the respondents where they can be interviewed. Some participants were no longer available – left the area, died, or cannot be contacted anymore. Respondents were randomly selected from the participants based on random sampling procedure.
- Secondary information included training reports, physical reports, etc.
- Training Management Information System was downloaded by the CO, where information on the trainees is stored. This was used only in 2021 – 2024; previous data are still in Excel. Individual records of trainees were updated when they become trainees again.

- Issues and challenges faced during data gathering included unavailability of respondents – either have relocated, or died. These respondents were replaced. Other challenged included lack of human resource to conduct the survey. They coordinated with LGUs for assistance to locate the farmers through the AEWs.
- RBME surveys were part of their workplan hence they were implemented every year. Lessons learned included to be always courteous, maintain good partnerships and relations with the LGUs and clients. Credibility is also important.
- Validation of results of RBME was done. Follow up or probing questions were done to ensure data credibility. They also crossed validate with their other data they have in their office.
- Results reflected the performance of the RTC.

On the result of the data collection for the RBME system

- Overall, clients were satisfied, but some also indicated a certain level of dissatisfaction. These were those who expected services from ATI that were not within the ATI's mandates, e.g. provision of seeds, financial support. However, most of the participants have positive feedback on the trainings.
- ATI interventions were relevant to the beneficiaries. After 3 years, farmers almost always forget the problems during the training (logistics, food, etc.)
- Field validation showed that farmers adopt; but some portions did not adopt due to reasons such as farmers were already old, no capital, has health problems, etc. Technology adoption was observed, for instance in corn production, urban agriculture, vegetable farming; AEWs were also able to teach the farmers.
- Commodities are coconut, cacao, etc. In ATI, the commodity programs with budget were rice, corn, HVCC, and trainings were conducted on these commodities.
- The key informant cannot say if farmers income were enough for their needs based on the results of the survey. Based on observation, however, farmers said that price (of rice) was low, resulting to low net income. But farmers did not indicate if these were enough for their needs. Increased yield was observed, but problem was in the low price. Farmers also diversified so they can have income while waiting for rice harvest.
- Climate change and mitigation practice topics were taught in some trainings. Some farmers were not aware of insurance, others thought that availing insurance for their crops entails a lot of hassles. Only about 5 out of 190 trainings in a year were on climate smart agriculture.
- Coping mechanisms during typhoons included early harvesting, use of planting calendar to avoid typhoon months.
- Trainings on certifications (GAP, OA, PGS) were conducted by ATI. Some trainees were already certified. ATI provided guidance during the certification process.
- Increased knowledge was observed from the trainings. Adoption was high. These beneficiaries can confidently discuss their knowledge and experience gained from the implementation of the technologies learned from the training. AEWs became resource persons.

On reporting and utilization of the RBME results

- Results of the RBME were submitted to the CO, which were consolidated into a full report at the national level (book). This was also reported at the RTC. Results however were not fully used in regional planning.
- Database of RBME results is maintained, containing the dummy tables required by the CO.
- Results of provincial consultations sometimes indicated similar results for training needs assessments.

Recommendations to improve the RBME system

- Digitalize the RBME especially for data gathering.
- Implement the rationalization plan to increase staff of the centers.

Office/Region	ATI SOCCSKSARGEN
Name of Key Informant	Alvin Palma, PMEU Officer
Date of interview	July 15, 2024
KII Facilitator	Dr. Ernesto Brown

HIGHLIGHTS OF THE KII:

On development and management of the ATI AFE RBME System

- Mr. Palma described the system as a concept to achieve the desired goals of the Center. He only has basic understanding of the TOC as he only became the Monitoring and Evaluation Officer two years ago. In his opinion, the TOC is a reference for the monitoring and evaluation of the interventions. He was not involved in the conception of the indicators.
- Mr. Palma has partial knowledge about the RBME, since he is a recently hired staff of the Center, obtaining the position 2 years ago. For him, this is just a concept, a pathway from inputs to desired change of ATI, which could be utilized to achieve the organizational goal of the Center.
- There was a limitation in terms of manpower as only two people worked in the PMEU. They covered the entire region, as well as the Provinces of Basilan, Sulu, Tawi-Tawi, and Maguindanao. They hired COS for special projects and other programs.
- The financial budget was also limited.

On implementation of the ATI AFE RBME System

- The implementation of the RBME this year was commissioned to the consortium of SUCs, in order to avoid biases in the study. During the previous years, it was the Center that conducted the study.
- The PMEU lacked manpower to undertake the RBME since they only have two personnel, who also have other responsibilities in the Center. Hence, the implementation of the RBME was outsourced.
- It was further shared that the Municipal Agriculture Office (MAO) is an institution that is important to the RBME. Another are the participants, both farmers and AEWs as they are the respondents of the RBME. All of them actively participated in the activities initiated by the training center.
- Data collection was done through survey interview. The CO provided the target number of respondents for interview.
- One of the issues encountered during the data collection was that some respondents were unavailable during the field visit for conducting the interviews.

On result of the data collection for the RBME system

- After the data collection, data were manually encoded using Excel program.
- The PMEU did simple analysis of the data collected. This included simple statistics such as percentages. Then, the analysis was submitted to the CO.

- If there were some missing data written by the respondents, the personnel from the regional office filled up the missing data.

On reporting and utilization of the RBME results

- The Center has facilitated the establishment of LSAs wherein AF technologies have been practiced by the farmers. These sites received assistance from ATI based on what the farmers needed. Previously, there were 2 or 3 LSAs, but as of the time of interview, only one LSA remains as the other LSAs did not renew their certification.
- Overall, the interventions of ATI have a significant impact to the stakeholders. They received positive feedback from both the farmers and AEWs, saying that the training was significant. Some also expressed that their income has increased after the training.
- When asked to rank how relevant the RBME was, Mr. Palma ranked it very relevant. He also said that the system was effective. In terms of efficiency, he explained that they were able to make use of most of their budget.
- A ladder approach was desired by ATI from ordinary farmers that would then apply for LSA then level up to extension service providers. These extension service providers would then provide training to other farmers or they sometimes submit proposals that ATI would then fund.
- The Center has received recognition from Philippine Society for Agriculture and Biosystems Engineer (PSABE) because they ranked as first CPD provider for the Agricultural Bio systems Engineer.

Recommendations to improve the RBME system

- It was recommended to have more staff who would be a big help to improve the implementation of the RBME System.
- Increase in the budget for the implementation of the system was also brought up.

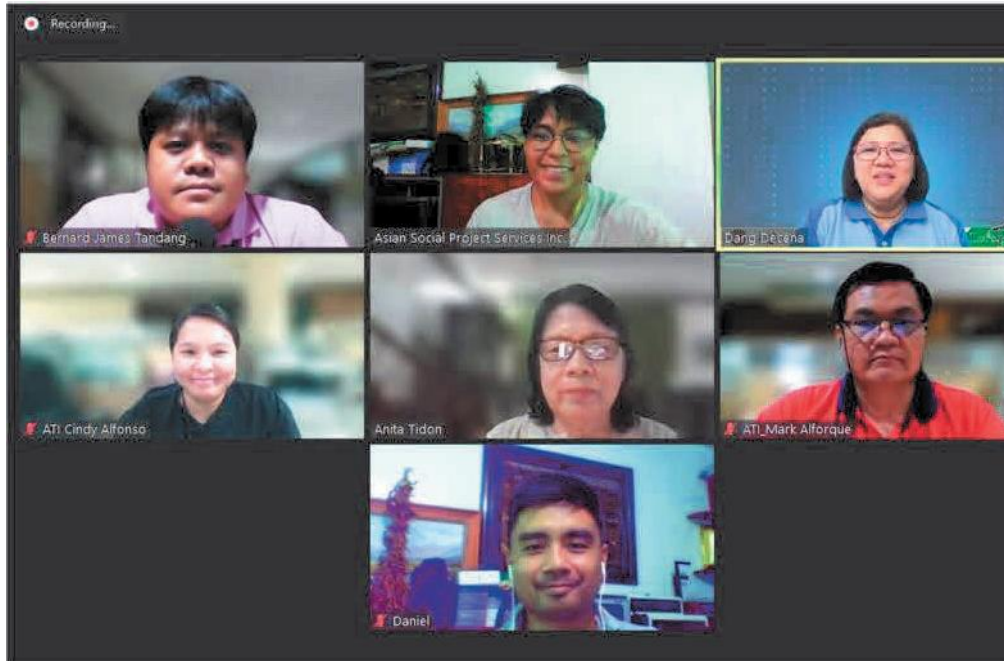
ANNEX



Photo Documentation of
Data Collection Activities

ANNEX B
PHOTO DOCUMENTATION
OF DATA COLLECTION ACTIVITIES

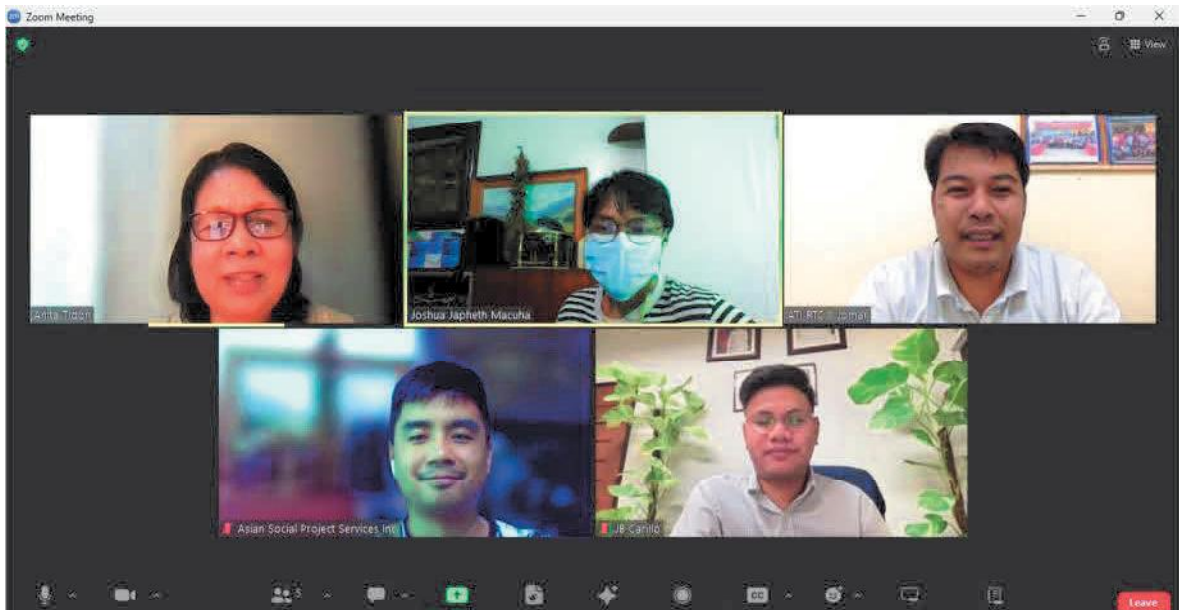
A. Key Informant Interviews with ATI Central Office and Regional Training Centers



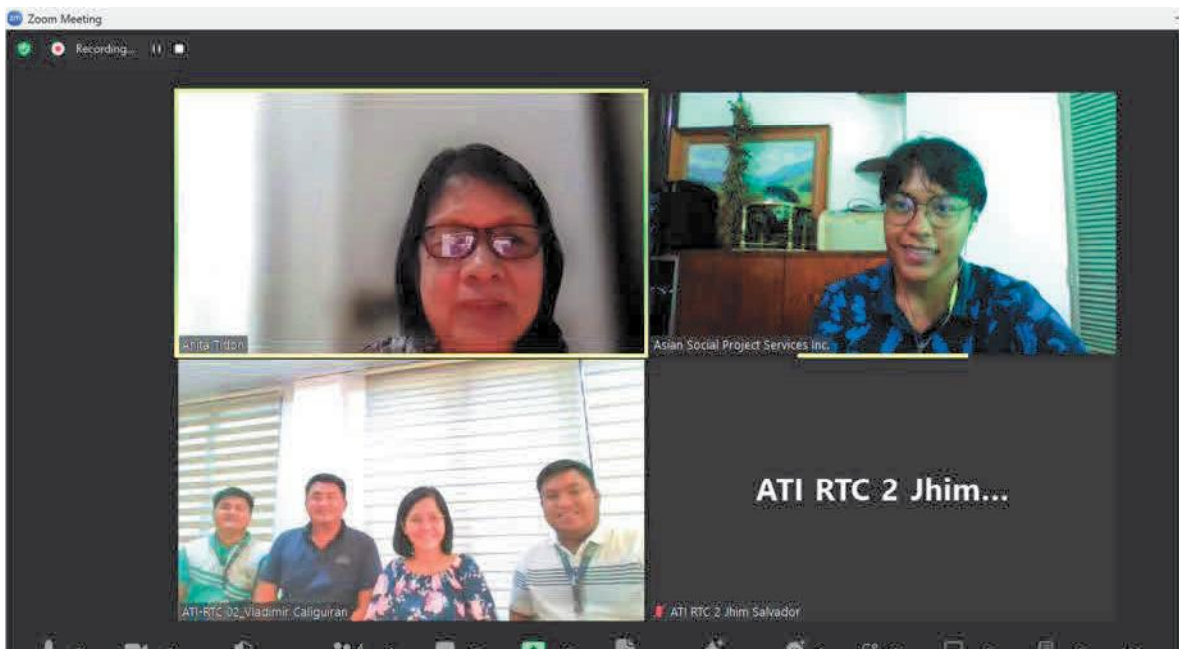
KII with ATI Central Office



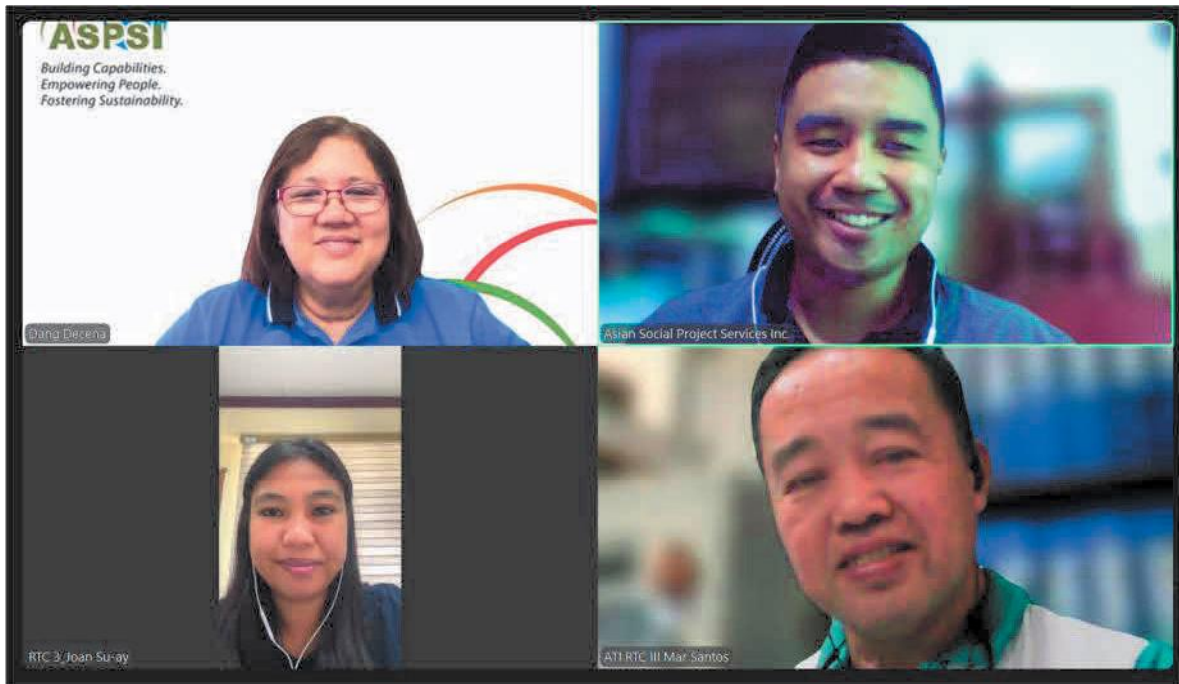
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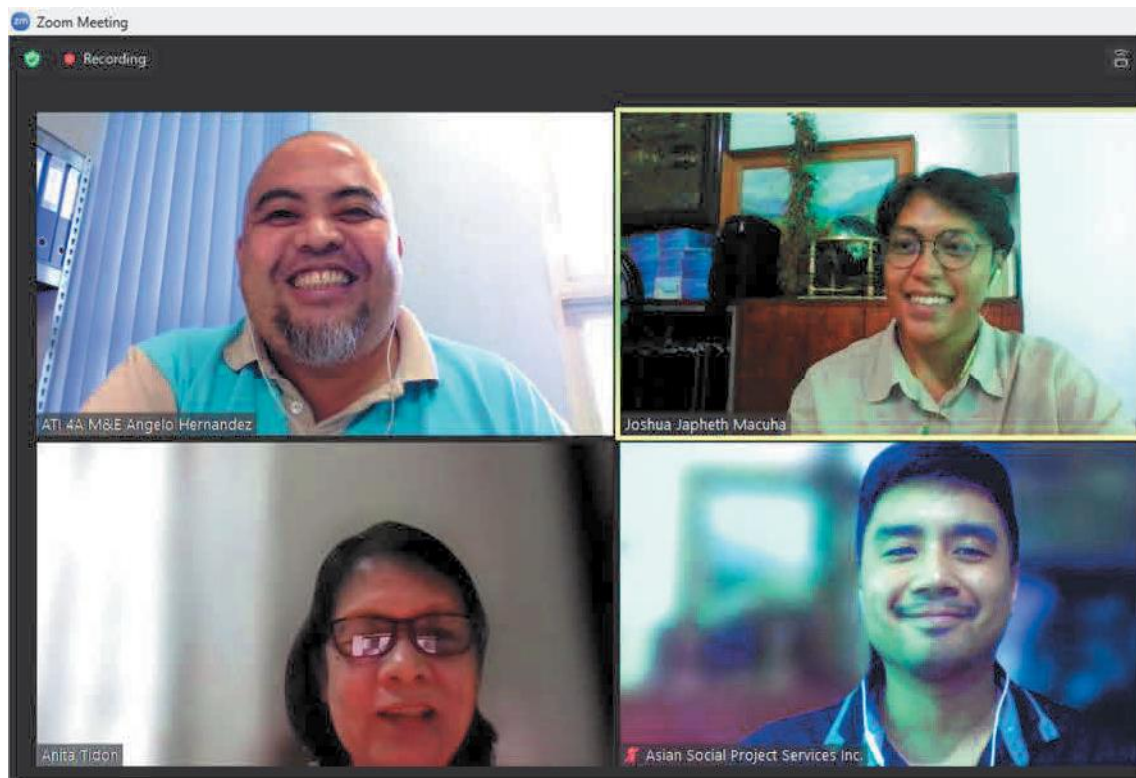
KII with ATI - Ilocos



KII with ATI - Cagayan



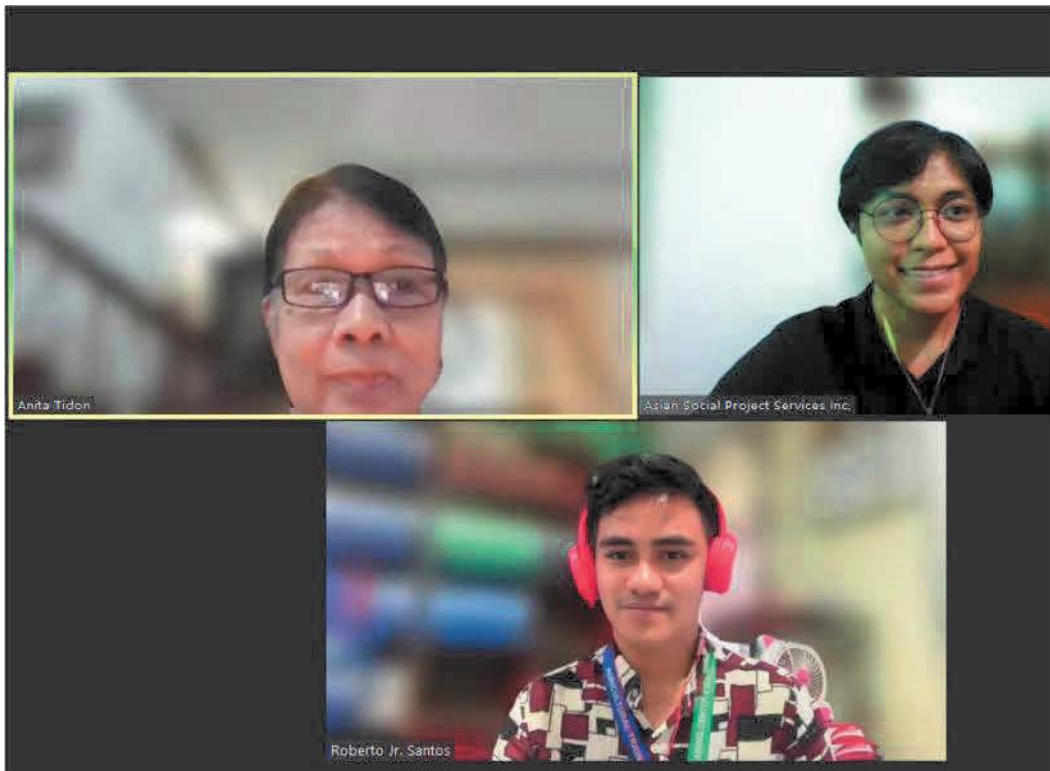
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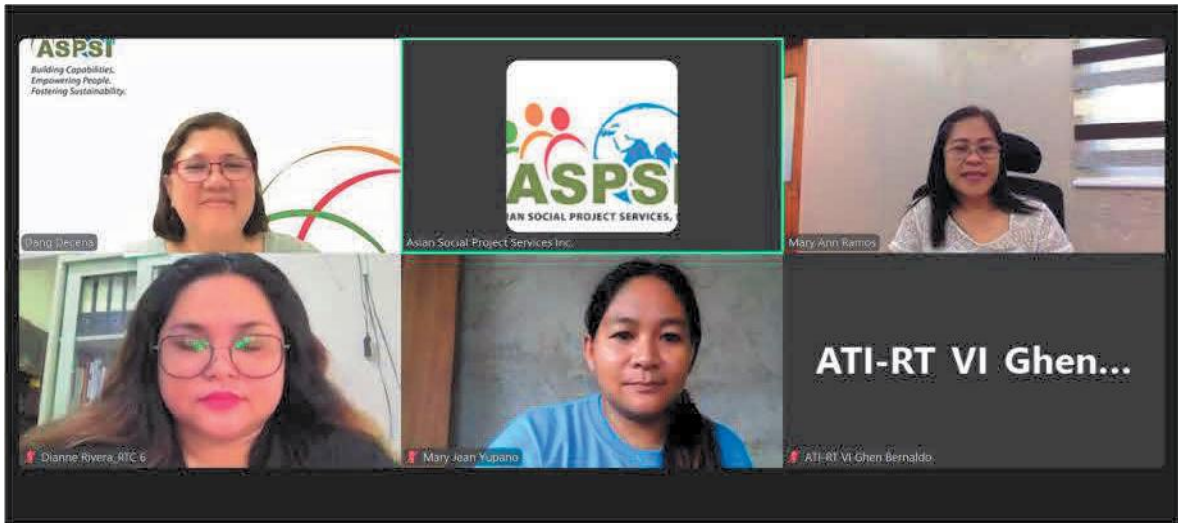
KII with ATI – CALABARZON



KII with ATI 4B MIMAROPA



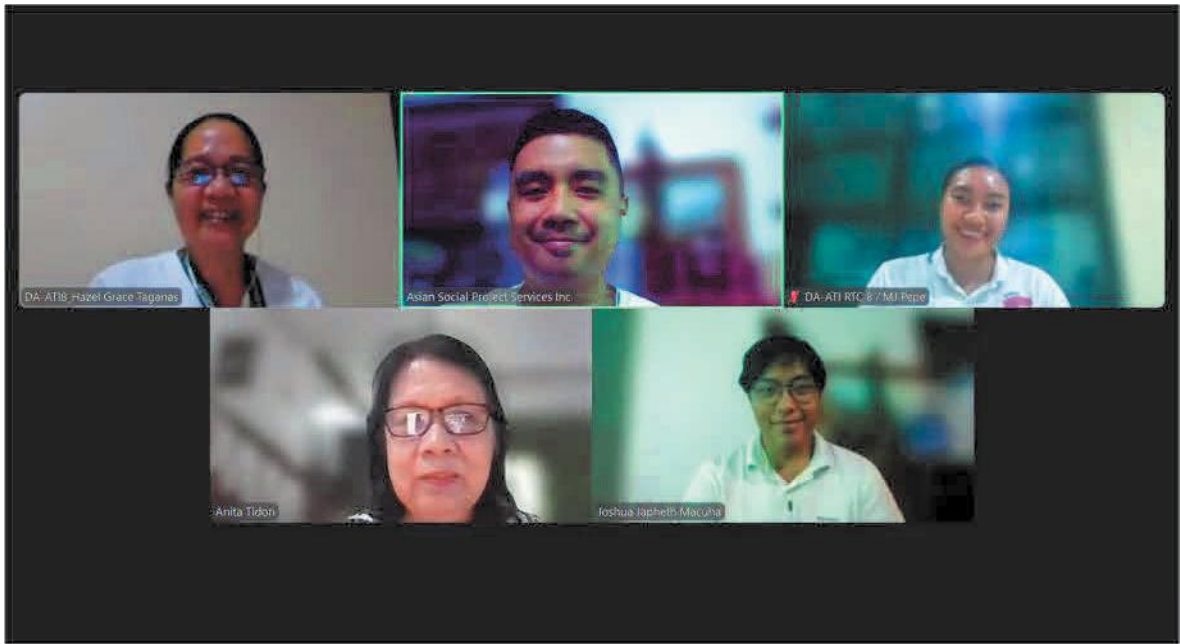
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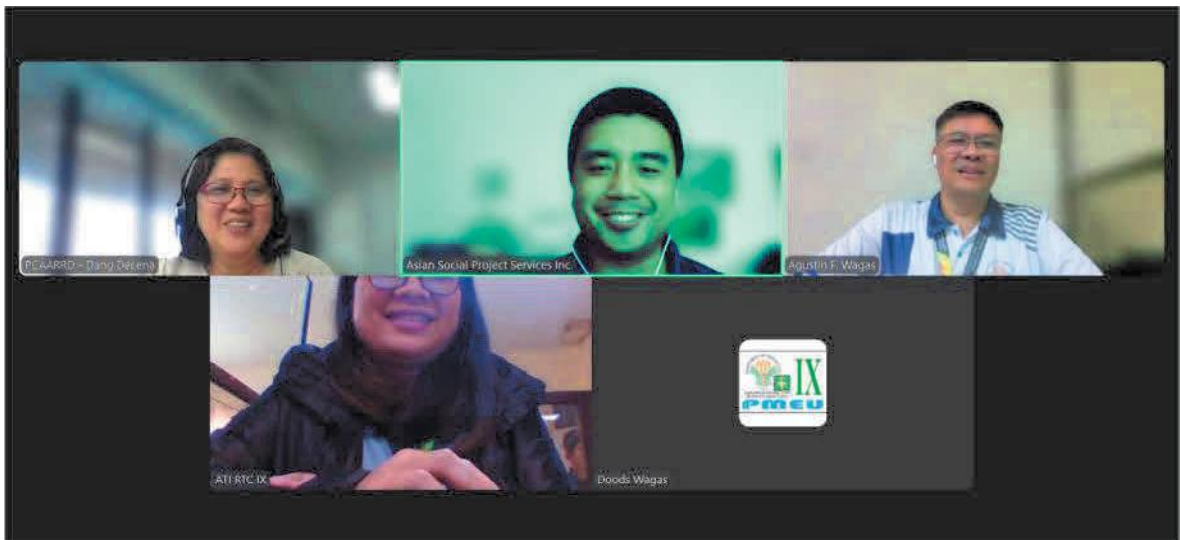
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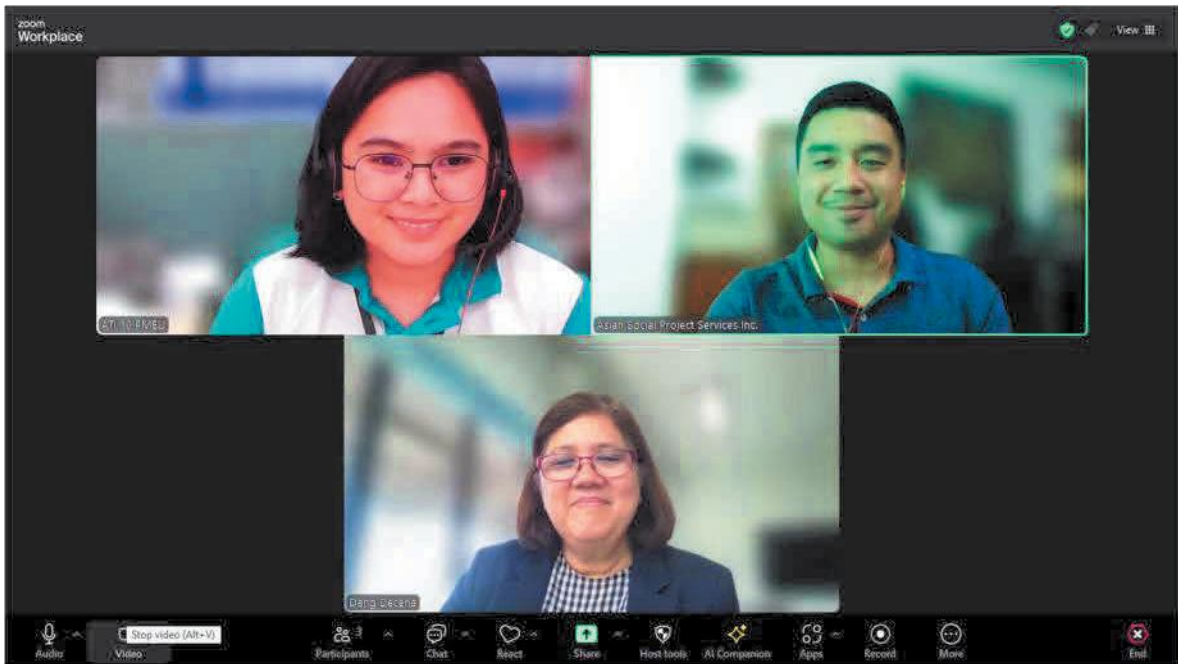
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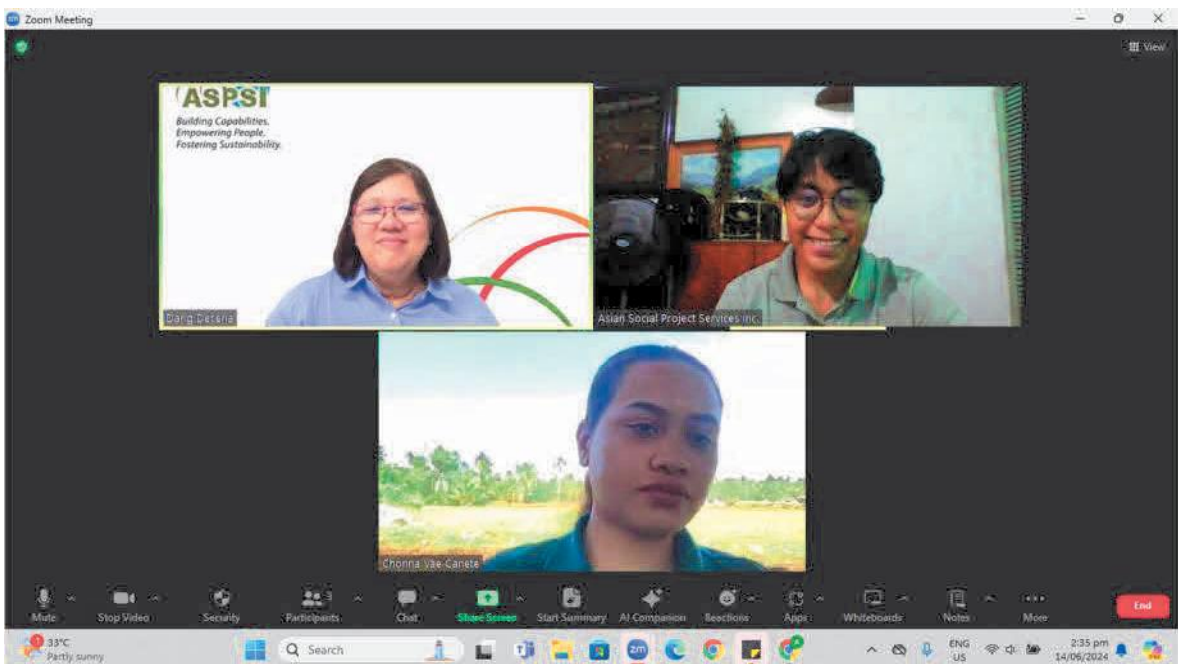
KII with ATI - Eastern Visayas



KII with ATI - Zamboanga



KII with ATI - Northern Mindanao



KII with ATI - Davao



KII with ATI - SOCCSKSARGEN



KII with ATI - CARAGA

B. Survey of Farmers and Agriculture Extension Workers (AEWs)



Face-to-face interview in Ilocos Norte



Face-to-face survey in Ilocos Norte



Face-to-face survey in Abra



Face-to-face survey in Albay



PROGRESS REPORT NO. 3

AGRICULTURE AND FISHERIES
EXTENSION (AFE) RESULTS-
BASED MONITORING AND
EVALUATION (RBME) STUDY



2024

Submitted by:
Asian Social Project Services, Inc.

Submitted to:
Agricultural Training Institute



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September 23, 2024

ENGR. REMELYN R. RECOTER, MNSA, CESO III

Director IV

Agricultural Training Institute

ATI Bldg., Elliptical Road, Diliman, Quezon City

Subject: Submission of Deliverable 3: Progress Report No. 3 (Preliminary Report) for Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) Study

Dear **Director Recoter**:

Greetings from the Asian Social Project Services, Inc. (ASPSI)!

As part of Deliverable 3, ASPSI is pleased to submit the attached Progress Report No. 3 (Preliminary Report) for the above captioned project. This report contains the executive summary, rationale and objectives, review of literatures, methodology, results and discussions, and summary, conclusions and recommendations. The results of the AFE RBME study are discussed and presented as a whole covering the period 2018 to 2022. The discussion of the results by training center by year will be included in the final evaluation report.

We hope that this Progress Report No. 3 merits your kind approval.

Thank you very much.

Very truly yours,

ERNESTO O. BROWN, PhD

Project Team Leader

Noted by:

JUVY C. ROCAMORA

President, ASPSI

**Agriculture and Fisheries Extension (AFE)
Results-Based Monitoring and Evaluation (RBME) Study**

**AGRICULTURAL TRAINING INSTITUTE
(ATI)**

**Deliverable 3: Progress Report 3
PRELIMINARY REPORT**

**ASIAN SOCIAL PROJECT SERVICES, INC.
(ASPSI)**

September 23, 2024

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ANNEXES

Annex 1: The AFE Results Indicators

Annex 2: RBME Reference Materials

Annex 3: List of KII Respondents from ATI Central and Regional Offices

LIST OF ACRONYMS

ATI	Agricultural Training Institute
AEW	Agricultural Extension Worker
AFE	Agriculture and Fisheries Extension
BASC	Bulacan Agricultural State College
CALABARZON	Cavite, Laguna, Batangas, Rizal, and Quezon
CAPI	Computer Assisted Personal Interviewing
CAR	Cordillera Administrative Region
CBSUA	Central Bicol State University of Agriculture
COS	Contract of Service
DA	Department of Agriculture
DAC	Development Assistance Committee
DAP	Development Academy of the Philippines
DBM	Department of Budget and Management
DENR	Department of Environment and Natural Resource
DIME	Digital Imaging for Monitoring and Evaluation
DOST	Department of Science and Technology
DSWD	Department of Social Welfare and Development
DTI	Department of Trade and Industry
FAO	Food and Agriculture Organization of the United Nations
GAA	General Appropriations Act
GAHP	Good Animal Husbandry Practice
GAP	Good Agricultural Practice
GMP	Good Manufacturing Practice
GSIS	Government Service Insurance System
HACCP	Hazard Analysis Critical Control Points
IEC	Information, Education, and Communication materials
IPM	Integrated Pest Management
ITCPH	International Training Center on Pig Husbandry
JO	Job Order
KII	Key Informant Interviews
KMME	Kapatid Mentor ME
LGU	Local Government Unit
M&E	Monitoring and Evaluation
MAO	Municipal Agriculture Office
MIMAROPA	Mindoro Occidental, Mindoro Oriental, Marinduque, Romblon, and Palawan
MSME	Micro, Small, and Medium Enterprise
NAT	National Achievement Test
NC	National Competency
NCC	National Competency Certificate
NEDA	National Economic and Development Authority
NEPF	National Evaluation Policy Framework
NGAs	National Government Agencies
NGO	Non-Governmental Organization
OA	Organic Agriculture
OCA	Organizational Capacity Assessment

OECD	Organization for Economic Co-operation and Development
Pag-IBIG	Pagtutulungan sa Kinabukasan, Ikaw, Bangko, Industriya at Gobyerno
PAO	Provincial Agriculture Office
PAPs	Programs, Activities, Projects
PDP	Philippine Development Plan
PhilHealth	Philippine Health Insurance Corporation
PMEU	Planning, Monitoring and Evaluation Unit
PO	Private Organization
RBM	Results-Based Management
RBME	Results Based Monitoring and Evaluation
RCEF	Rice Competitiveness Enhancement Fund
SDGs	Sustainable Development Goals
SOCCSKSARGEN	South Cotabato, Cotabato, Sultan Kudarat, Sarangani, and General Santos City
SSS	Social Security System
SUCs	State Universities and Colleges
TESDA	Technical Education and Skills Development Authority
TNA	Training Needs Assessment
TOC	Theory of Change
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund

EXECUTIVE SUMMARY

The study was conducted to evaluate the Agriculture and Fisheries Extension (AFE) Results Based Monitoring and Evaluation (RBME) System. The system consists of a theory of change (ToC) and results framework of 28 indicators designed to measure whether the DA-ATI interventions in terms of programs, activities and projects (PAPs) translate to higher order outcomes and impact. The evaluation specifically aimed at reviewing and enhancing the results framework; identifying issues and challenges encountered during implementation; and recommending policy options to further improve the DA-ATI programs.

The study employed concurrent mixed method approach, which involved parallel collection of both quantitative and qualitative data and convergent analysis to provide equal weights on the quantitative and qualitative aspects of project performance and impact. To determine the results of DA-ATI's PAPs, the study validated the RBME results in the field by reviewing outputs and outcomes based on OECD-DAC criteria of relevance, effectiveness, efficiency, sustainability, and impact.

Descriptive analysis was employed to summarize and describe the main features of the dataset such as central tendency, dispersion and distribution. Inferential analysis was used to determine whether significant differences exist between the variable means in two time periods (paired t-test for before and after) and binary logistic regression to determine the factors affecting the adoption of the technologies and practices promoted by DA-ATI. Thematic analysis was employed as a qualitative method to identify, analyze and build narratives on themes emerging from the data.

The study found limited uniformity in the conceptual understanding and operationalization of the AFE RBME across regions, especially its ToC and Results Framework. While some staff particularly those involved in the earlier workshops were familiar with the System, a number of regional staff particularly those who were newly hired lack formal orientation and understanding of the System. The implementation across regions followed a structured yet diverse approach based on central guidelines but adapted to each region's specific needs. However, all regional centers appreciate the importance of RBME especially in evaluating the effectiveness of DA-ATI interventions, determination of technology adoption rates and the achievement of higher order outcomes and impact. It is also an important tool in determining stakeholder's perception and feedback about the various programs being implemented.

The various regions employed different approaches to RBME implementation depending on the logistical challenges and available resources. Regional centers varied widely in terms of capacity to manage the System. Some regional centers faced manpower shortages and lack of expertise, indicating a need for more staff and training to support the growing demands of RBME. Other regional centers have addressed capacity issues by outsourcing data collection to academic institutions to cope with the limited capacity of the Center and also to avoid bias. In regions where data collection was done by the Center's M&E officers, assistance was sought from agricultural extension workers to serve as enumerators.

A review of the RBME reports from 2016-2017 and 2018-2022 show that the values for the set of indicators on increase access declined in the latter period largely due to the pandemic restrictions, while indicators measuring improved attitudes, skills and knowledge of clients remained stable with 90% of clients reporting improvement in knowledge and high satisfaction level with the interventions provided. Indicators on client productivity including farm

diversification, value adding and increased income remained consistent in both periods. As in other M&E systems, the most important concern in the AFE RBME system is the credibility of the results generated from this platform. In general, the key informants interviewed as part of the study still believe that the system is robust and the integrity of the data collected remains solid.

The main challenges in AFE RBME implementation revolved around the inadequacy of manpower. The strategy of outsourcing the survey activities is being employed already by a number of regional centers, albeit this cannot be relied upon completely as financial resources to fund this are also limited. The hiring of contractual staff to complement the few regular staff somehow works, but the smooth implementation of the program is affected as it is difficult to build institutional knowledge of the System due to high turnover rate of contractual personnel.

The study also found that the DA-ATI beneficiaries are just as satisfied with the service they received as those received from other government agencies. They reported ease in accessing the extension services. In fact, DA-ATI fares better than other National Government Agencies (NGAs) and LGUs as fewer respondents reported having difficulty in accessing the services provided. As could be expected however, the private sector extension service providers (agro-chemical companies) enjoy the highest client satisfaction when pitted against government agencies, including DA-ATI. These private players are more operationally agile unlike government agencies, which have to comply with government prescribed regulations in their operation.

A significant number of beneficiaries (40%) reported to have adopted the technologies/improved practices they learned from the various trainings of DA-ATI. Such adoption resulted to increased yield as reported by almost 35% of beneficiaries, improved quality of plants and animals (23%), less pests and diseases (20%) and lower input use (15%). Those who did not adopt the technologies reported they were constrained by high input prices (21%), non-availability of inputs (15%), difficulty in application (7%), and irrelevance of the technology in the particular circumstances of their farms (32%).

Majority of the beneficiaries claimed the ATI interventions helped them develop skills that are empowering and make them more resilient. These include skills on business management, workforce management and record keeping; communication and negotiation as well as mindset improvement. The interventions also covered market development and expansion, social media or online selling and technical skills on value adding (e.g., meat and fruit processing), farm management, product development, certifications, as well as new technical skills such as artificial insemination and organic agriculture, among others.

The study determined the level of adoption for the various types of technologies promoted by DA-ATI through trainings and other platforms. The levels of adoption were categorized into three: high, partial and non-adoption. Results show that there is an almost equal percentage of beneficiaries reporting full and partial adoption, with minor percentages reporting non-adoption. The study found very high adoption index (0.65 to 0.80) regardless of commodity indicating the effectiveness of the DA-ATI interventions in influencing farmers to shift to technologies and practices that can improve farm performance.

The results of the binary logistic regression analysis indicate that several factors, including sex, commodity type, type of ATI intervention, and specific ATI regional centers (Ilocos Region,

Western Visayas, Davao, and SOCCSKSARGEN), significantly influence technology adoption.

Specifically, female farmers are 38.73% less likely to adopt the technology or practice compared to male farmers. Additionally, those who received interventions focused on non-crop commodities from ATI are 54.25% less likely to adopt the technology or practice than their counterparts who received crop-focused interventions.

Moreover, farmers who participated in both training and other interventions from ATI are 2.0888 times more likely to adopt the technology or practice than those who attended training only. Farmers trained in the ATI-Ilocos Region show a 3.2921 times higher likelihood of adoption compared to those trained in ATI-ITCPH. Similarly, those trained in ATI-Western Visayas are 3.3612 times more likely to adopt the technology or practice than those from ATI-ITCPH.

Conversely, farmers trained in ATI-Davao are 72.57% less likely to adopt the technology or practice compared to those trained in ATI-ITCPH, and farmers trained in ATI-SOCCSKSARGEN are 94.70% less likely to adopt compared to those trained in ATI-ITCPH.

Conclusions and Recommendation

The study concludes that the AFE RBME System has generally been relevant and effective as evidenced by the favorable feedback from its beneficiaries, the high rate of adoption of technologies/practices promoted and enhanced empowerment and resilience of its clients. The System continues to be perceived as robust and the integrity of the data collection process remains solid. However, the system is beset with operational issues which could undermine efficiency and sustainability. Among others, these include the lack of uniformity in the conceptual understanding of the System and its elements, primarily the ToC and results framework; limited technical capacity to manage the System; and the persistent manpower shortages being experienced in most regional offices. The disparity in regional capacities to effect technology adoption as empirically validated by the binary logistic regression model, probably reflects already the regional disparity in the capacity to manage the AFE RBME System.

Capacity issues, particularly related to manpower and limited expertise, figured prominently as among the significant barriers to more effective operationalization of the AFE-RBME System. Some regional centers addressed this by outsourcing data collection to academic institutions, while others utilized agricultural extension workers as enumerators. However, reliance on outsourcing is limited by financial constraints, and the high turnover of contractual staff undermines institutional knowledge of the system.

The study recommends the following measures:

1. Conduct an in-depth organizational capacity assessment (OCA) to determine capacity gaps and disparity across regional centers in the management and implementation of the AFE-RBME System. In addition to gauging organizational and technical capacity, the assessment should consider geographical coverage in terms of size and accessibility as these are important determinants of the cost of data collection.

2. Strengthen staff capacity and training. A comprehensive orientation and training program should be developed and implemented for all ATI staff especially the new ones including contractual staff. A periodic (e.g, annual or biennial) ATI wide conference involving the regional staff handling the RBME System should be held for the review of the System and sharing of lessons learned and best practices.
3. Continual improvement should be pursued by regularly examining the ToC, results framework, and basic assumptions of the RBME System. While the study found these elements as still logical and feasible, constant assessment will enable updating the various elements to keep up with the challenges emerging in the course of implementation.
4. Employ more gender responsive approaches in the delivery of DA-ATI interventions. The study found that female beneficiaries are 39% less likely to apply the technologies promoted compared to male beneficiaries. Such disparity highlights the need for designing and implementing interventions more relevant to female farmers.
5. Strengthen the role of DA-ATI in the provision of input support. The study found that technology adoption is constrained by high input cost and accessibility. While DA-ATI is primarily focused on knowledge dissemination through trainings and other extension service modalities, the Institute may consider closely collaborating with other government agencies and private partners for the provision of input support and enhancing the accessibility of inputs especially for small farmers.
6. Expand and sustain interventions designed to enhance empowerment and resilience. The study found that the DA-ATI interventions have considerable positive impact on empowerment and resilience of farmers, with many expressing higher confidence in dealing with crisis situations. As agriculture-based livelihoods are inherently vulnerable to various shocks, the interventions proven to improve empowerment and resilience should be expanded and sustained. These include interventions to improve market access, certification and value adding, among others.

A. RATIONALE AND OBJECTIVES

The Agriculture and Training Institute (ATI) is the training arm of the Department of Agriculture (DA) mandated to lead in the formulation of national agriculture and fisheries extension (AFE) program; prepare an integrated plan for publicly- funded training programs in agriculture and fisheries; formulate and issue guidelines in planning, implementing, monitoring and evaluating AFE programs; and assist the local government units extension system by improving their effectiveness and efficiency through capability building and complementary extension activities such as technical assistance, training of LGU personnel, improvement of physical facilities, extension cum research and information support services.

To properly and systematically account for the results of the Institute’s policies, programs, projects and activities, ATI uses its AFE Results-Based Monitoring and Evaluation (RBME) System. The system strengthens the transparency and accountability aspects of ATI’s operation by providing a mechanism to ascertain whether resources used are well spent and have attained their intended results. The system also helped promote learning in the organization as it demonstrates the why’s and how’s of the success of the interventions, thereby informing policy and program planning.

The AFE RBME system involves tracing how ATI interventions and activities lead to immediate, intermediate and long-term outcomes, and how these contribute to the attainment of societal goals of food security, poverty reduction and increased social equity (**Table 1**). A total of 28 indicators were identified to provide evidence to the attainment of these outputs and outcomes (**Annex 1**). Annual data collection, processing and analysis were done in the ATI Training Centers.

Table 1. The AFE Theory of Change Model

INPUT	ACTIVITIES	OUTPUT	IMMEDIATE	INTERMEDIATE	LONG TERM	SOCIETAL GOALS
Manpower	Provide knowledge products and services	Knowledge products and services provided	Increased access to interventions	Increased productivity of clients	Increased competitive-ness of clients	Food security
Money		Capability building activities provided				
Machineries	Provide capability building activities	Capability building activities provided	Improved attitude, skills, and knowledge of clients	Increased empowerment of clients	Increased resiliency of clients	Poverty reduction
Methods	Establish partnerships	Partnerships established				
Time	Develop AFE innovations	AFE innovations developed	Improved provision of interventions			Increased social equity
	Provide climate change initiatives	Climate change initiatives provided				
	Provide enabling environment	Enabling environment provided				

With the RBME system fully operationalized at ATI, it would be useful to determine the results of the ATI programs, activities and projects (PAPs) as gauged against the set of indicators/parameters prescribed in its RBME system. Such evaluation would not only provide evidence-based demonstration of the relevance and overall significance of ATI's PAPs, but may generate important insights on how to further improve ATI's RBME system.

In general, the study aimed to determine the results of the ATI programs, projects and activities based on the existing parameters from the AFE RBME ToC model. Specifically, it aimed to:

1. Review and enhance the AFE results framework, including the guidelines and tools;
2. Identify issues and challenges encountered during the implementation; and
3. Recommend policy options to further improve the ATI programs.

B. REVIEW OF LITERATURES

Results-based monitoring and evaluation (RBME) is a framework that helps development practitioners and stakeholders to measure and assess the performance and impact of their policies, programs, and projects. It is based on the principles of results-based management (RBM), which aims to improve decision-making, accountability, and learning by focusing on the outcomes and impacts of interventions rather than the inputs, activities, and outputs.

The National Economic and Development Authority (NEDA) has developed a comprehensive guide for government agencies on how to design, conduct and use evaluation to improve public sector performance and accountability. It introduces the National Evaluation Policy Framework (NEPF) which aims to institutionalize a culture of evaluation in the government (NEDA and DBM, July 2010). Along this is a chapter from the Philippine Development Plan (PDP) 2023–2028 titled “Plan Implementation, Monitoring, and Evaluation”, which outlines the strategies, mechanisms, and tools for implementing, monitoring, and evaluating the PDP 2023–2028, the medium-term development plan of the country. It also discusses the role of various stakeholders, including the private sector and civil society, in ensuring the achievement of the PDP goals and objectives. It also explains how the results-based M&E can help to enhance the relevance, effectiveness, efficiency, impact, and sustainability of interventions (PDP 2023-28, Chapter 16).

Moreover, a project by the Development Academy of the Philippines (DAP) called Project DIME, which stands for Digital Imaging for Monitoring and Evaluation utilizes existing technologies such as satellite imagery, drones, and geotagging for M&E of government projects and also engages citizens and civic organizations through participatory monitoring (DAP Project DIME, 2021). The Department of Social Welfare and Development (DSWD) implemented its national monitoring and evaluation systems, social protection and the SDGs and highlights the experiences, challenges and the way forward for DSWD in setting up its monitoring and evaluation system. The initial years were met with resistance and even indifference as officials were yet to be convinced and human capacities and processes were not yet developed to implement such reforms. Results-based thinking had to be integrated not just into M&E, but more so into the DSWD management processes from planning to budgeting and performance management, to be able to sustain the reform. International development partners played an important role but political will from officials and staff was most critical. In the advent of the Sustainable Development Goals (SDGs), new challenges arise not just for the DSWD M&E system but for the whole of national government (Alday and Sebastian, 2017).

A report by the World Bank (2019) titled “PHILIPPINES: Assessing the Effectiveness of MSME and Entrepreneurship Support” evaluated the MSME programs implemented by the Department of Trade and Industry (DTI) and the Department of Science and Technology (DOST) using a RBME framework. It also provides recommendations for improving the design, implementation, and coordination of MSME support policies and programs. Also, a report by UNDP (2021) titled “Evaluability Assessment of the Micro, Small, and Medium Enterprise (MSME) Development Plan and Priority Programs under the MSME Development Plan with a Process Evaluation of Government Support” presented the findings of an evaluation of three MSME programs: Kapatid Mentor ME (KMME), Pondo sa Pagbabago at Pag-aseño (P3), and Negosyo Center. It uses a RBME framework based on the ToC, evaluability assessment, and impact pathway analysis.

A study by Gumz and Parth (2007) compared the project monitoring practices in three industry sectors: government, NGOs, and construction. They proposed a nine-step process for monitoring projects using an RBME framework, and discussed the benefits and challenges of applying it. A study by Kusek and Rist (2004) presented a comprehensive handbook for development practitioners on how to design and build an RBME system. They outlined a ten-step model that covers the readiness assessment, the design, the management, and the sustainability of such systems.

Another study by FAO (2019) provided an overview of the concepts and methods of planning, monitoring, and evaluation for learning and performance improvement in agricultural development. It explained how RBME can help to enhance the relevance, effectiveness, efficiency, impact, and sustainability of interventions. A research study by Okello (2021) examined the nexus between M&E data management and project performance with a focus on infrastructural projects. They analyzed relevant models, theories, and empirical literature on M&E data management and project performance, and suggested some best practices for improving data quality and utilization.

The validation study titled Monitoring and Evaluation Framework to Track and Assess the Results of Interventions Aimed at Changing Attitudes and Social Norms Towards Children with Disabilities in Europe and Central Asia (2019) aims to track and assess the results of interventions aimed at changing discriminatory attitudes and social norms towards children with disabilities. It is part of a package of materials developed by Drexel University and the UNICEF Europe and Central Asia Regional Office. It provides guidance on how to measure changes in attitudes and social norms using quantitative and qualitative methods. On the other hand, the Philippines: National Climate Change Action Plan RBME System aims to monitor and evaluate the progress and impacts of the climate change adaptation and mitigation interventions in the country. It also discusses the institutional arrangements, data sources, and challenges for implementing the system.

The project titled Monitoring and Evaluation Tool of the Department of Education in the Case of Iligan City Division Philippines describes and analyzes the M&E tool used by the Department of Education in Iligan City, which is based on the results-based performance management system (Salvador and Canencia, 2015). It also evaluates the effectiveness, efficiency, and usefulness of the tool for planning, budgeting, and decision-making. The study used the descriptive – evaluative method and analyzed both descriptive and inferential statistics. General findings revealed that monitoring and evaluation tool was not piloted in the field at the same time performance indicators were not known by the teachers. It is also noted that teacher’s

overall very satisfactory (VS) rating does not correspond to National Achievement Test (NAT) rating for the last (4) four years. Subsequently, a localized Monitoring and Evaluation tool was created with proper information dissemination and piloting so that teachers are aware of what to do during the class observation. Moreover, monitoring and evaluation must come up with skills indicators that would measure the skills transfer to ensure performance development of students that can compete globally.

C. METHODOLOGY

1. CONCEPTUAL FRAMEWORK

Viewed against the RBME framework employed in most development programs (**Figure 1**), the AFE RBME study may be situated along the evaluation stage, specifically the stage of managing and using evaluation results. In the case of AFE RBME study, evaluation can yield a number of valuable insights on the robustness of the design logic, the appropriateness of the strategies and the extent by which stakeholders subscribe to such strategies, among others. The insights and specific lessons from the evaluation can then be used for specific adjustments along the RBME cycle for a true results-based monitoring and evaluation of the plans/programs.

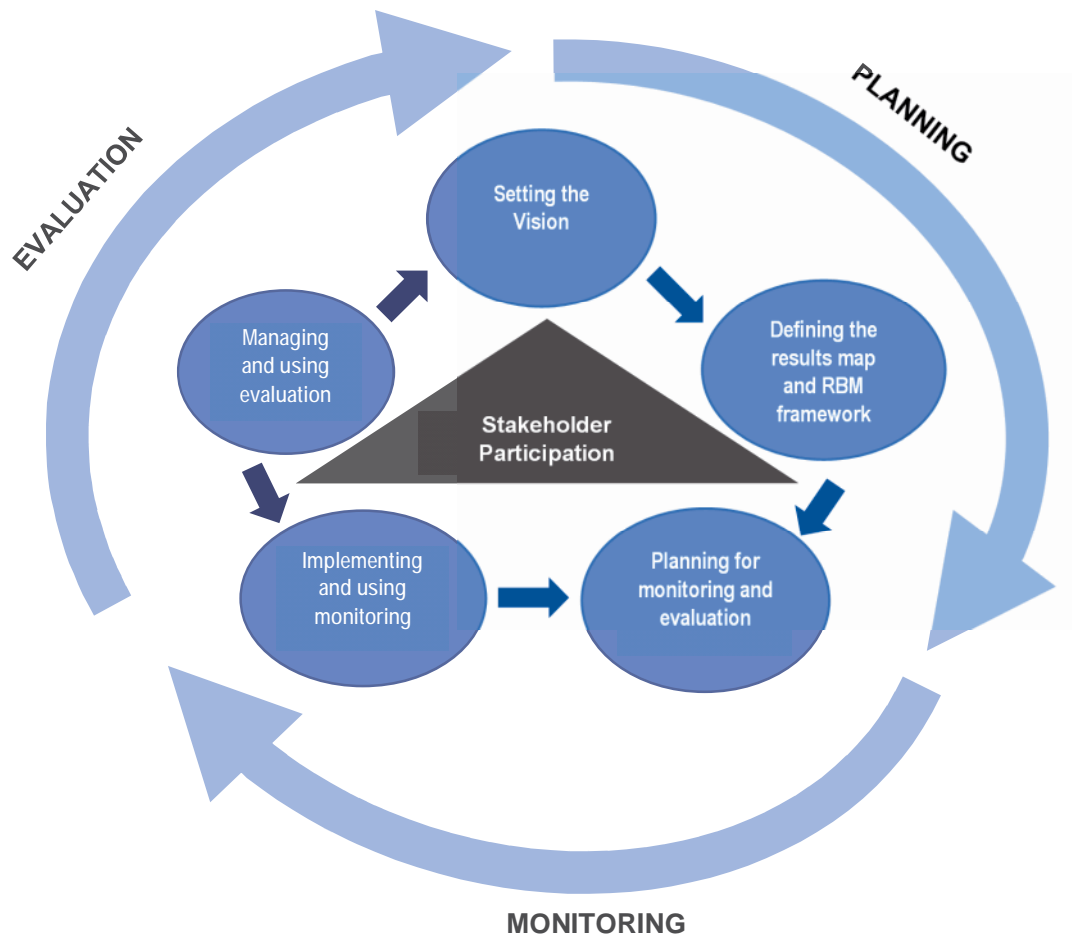


Figure 1. Results-based Monitoring and Evaluation Framework

The evaluation study was cast along the ToC and impact pathway framework (**Figure 2**). This is ideal considering that the AFE programs and projects are built around a set of results frameworks believed to be necessary for the achievement of the plan’s long-term goals. The results framework (or impact pathway) is a logical order of and assumptions about the activities and events relating to the inputs to be used, the process to be employed, the outputs to be produced, the outcomes to be generated and the impact to be made. The causal relationship between one activity or event with another depends largely on the overall context and specific circumstances within which the process of change is to take place.

A ToC defines all the building blocks required in a given context and circumstances that may bring about the achievement of a desired change. As a planning and evaluation framework for social change, it requires participants to be clear on long-term goals, identify measurable indicators of success, and formulate actions to achieve the goals. It differs from logic models as it requires stakeholders to articulate underlying assumptions which can be tested and measured, and shows a causal pathway (i.e. impact pathway) from here to there by specifying what is needed for the goals to be achieved.

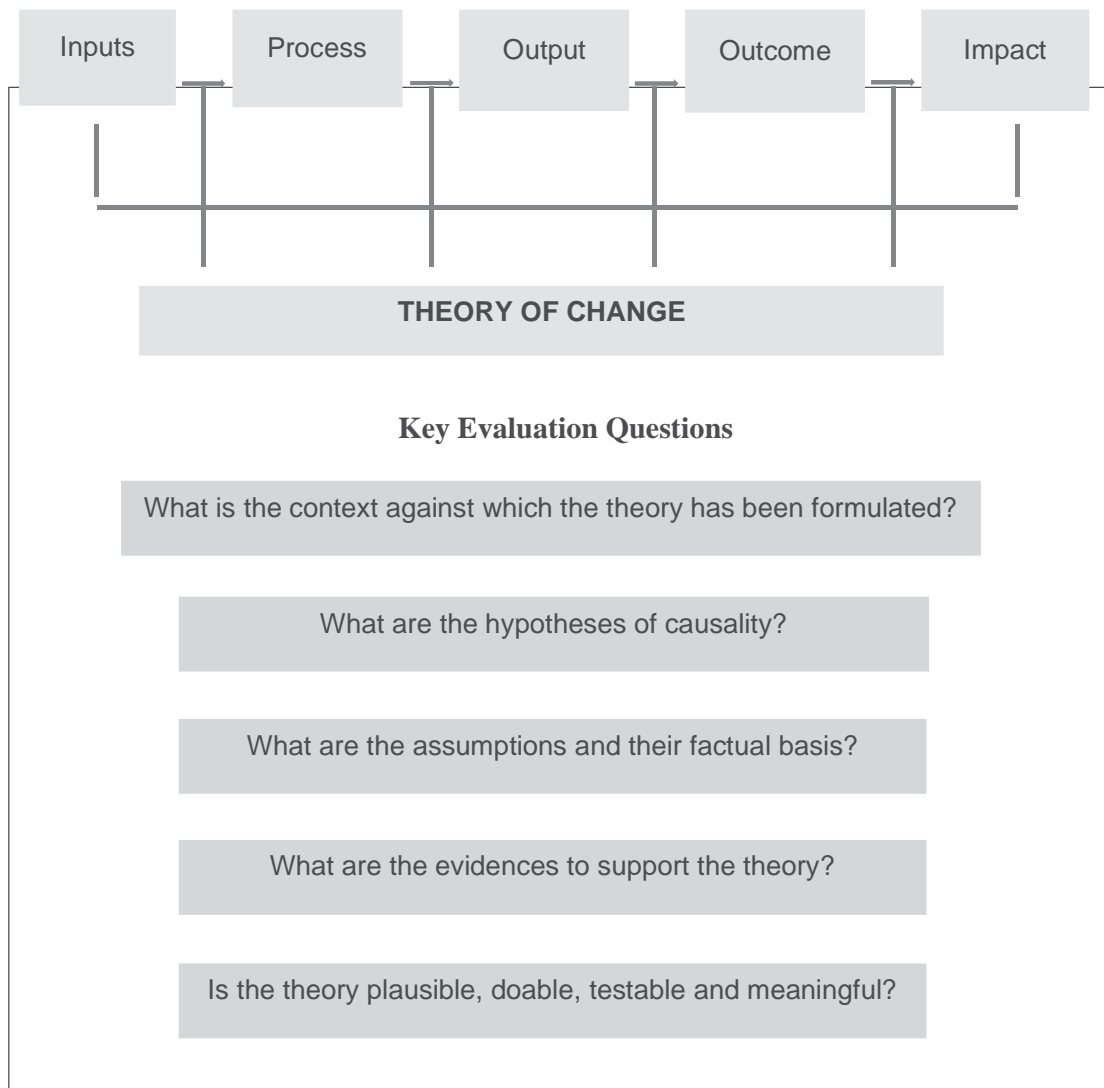


Figure 2. Theory of Change and Evaluation Key Questions

In the AFE RBME study, the examination of the ToC entailed answering at least five key questions relating to: (1) the context of the plan; (2) the hypotheses of change; (3) explicit and implicit assumptions; (4) evidences to support the theory; and (5) whether the theory is plausible, doable, testable and meaningful.

A ToC should be plausible, doable, testable and meaningful for planned interventions to succeed. Plausibility relates to the logic of the model and whether or not the various stakeholders believe the model is correct. A doable theory is one where human, political and economic resources are seen as sufficient to implement the strategies of the theory. Testability necessitates that stakeholders believe there are credible ways to discover whether the results are as predicted. Finally, the change being pursued should be important and the magnitude significant enough for the theory to be meaningful.

2. ANALYTICAL PROCEDURE

The study employed concurrent mixed method approach, which involved parallel collection of both quantitative and qualitative data and convergent analysis to provide equal weights on the quantitative and qualitative aspects of project performance and impact. Both primary and secondary data were used. Primary data were collected through a survey of DA-ATI beneficiaries (farmers and agricultural extension workers (AEWs) using telephone/online and face-to-face Computer Assisted Personal Interviewing (CAPI) based on pre-tested structured questionnaires. Key informant interviews (KIIs) of representatives from the DA-ATI central and regional offices were also carried out to gather information related to the development and operation of the AFE RBME System. Secondary data were obtained from the AFE RBME data base and from available reports.

2.1 Determination of results of ATI programs, projects and activities (PPAs) based on existing parameters from the AFE RBME ToC Model

To determine the results of the ATI programs, projects and activities, the study validated the RBME results in the field by reviewing outputs based on parameters of relevance, effectiveness, efficiency, sustainability, and impact. The validation was done with LGU extension workers and farmers trained by ATI, using the indicators enumerated in the AFE results indicators table (**Annex 1**). Changes along these indicators were measured by looking at values across time (2018-2022) or comparing baseline values with annual values. These indicators include the following and summarized in **Table 2**:

- ✓ Relevance to determine whether the interventions are consistent with national or local development plans and priorities, and needs of the clients.
- ✓ Effectiveness to ascertain if the interventions addressed the needs of the clients; also look at accomplishments in terms of targets vs outputs year on year and total.
- ✓ Efficiency to see if the interventions were carried out at the time they are needed, and at the least possible cost.
- ✓ Sustainability to evaluate if interventions introduced are still being practiced long after these have been introduced.
- ✓ Impact to see if the interventions resulted to changes in income and welfare of the clients.

Table 2. AFE results indicators to be examined

Group	Indicators
Farmers	<ul style="list-style-type: none"> • Change in attitudes, skills, and knowledge by looking at the perceived change in knowledge based on the provided intervention, post test scores, TESDA National Competency Certifications on agriculture and fisheries related subjects, adopters of new technologies and practices, and farmer's rating on the interventions; • Change in productivity of clients by looking at proportion of clients using diversified farming techniques, those venturing into value addition of products, and those showing improved practices resulting in increased income. • Empowerment of clients by examining proportion of clients who became agripreneurs, including the marginalized clients; • Resiliency by determining proportion of clients with personal, crop and livestock insurance, and increased confidence in coping from unfortunate events, adopted adaptation and mitigation measures, and adaptability • Change in competitiveness through certifications in GAP, OA, GAHP, Halal, GMP, HACCP and others; supplying institutional and commercial buyers and exports.
Extension workers	<ul style="list-style-type: none"> • Changes in attitude, skills, and knowledge by measuring increase in knowledge based on provided intervention, post-test scores, TESDA National Competency Certifications on agriculture and fisheries related subjects, implementation of the trainee's action plans, and satisfaction rating • Empowerment of clients through employment to AF-related jobs or promotions; • Resiliency of clients through alternative AF-related job competencies.
Other clients	<ul style="list-style-type: none"> • Changes in services and systems and procedures by examining how interventions were implemented, based on ratings on interventions in terms of relevance, timeliness and absorptive capacity of partner and implementing institutions. • Empowerment of clients through increased number of learning sites elevated into schools for practical agriculture and number of schools and farm tourism sites.

2.2 Descriptive and Inferential Analysis

Descriptive analysis was employed to summarize and describe the main features of the dataset such as central tendency, dispersion and distribution. Inferential analysis was used to determine whether significant differences exist between the variable means in two time periods (paired t-test for before and after) and binary logistic regression to determine the factors affecting the adoption of the technologies and practices promoted by DA-ATI.

Logit Model for Technology Adoption

$$\text{logit (Adoption)} = \beta_0 + \beta_1 \text{AGE} + \beta_2 \text{SEX} + \beta_3 \text{HHS} + \beta_4 \text{ED} + \beta_5 \text{YF} + \beta_6 \text{FO} + \beta_7 \text{CT} + \beta_8 \text{ATI} + \beta_i \text{R}_{is} + \varepsilon$$

<u>Variables</u>	<u>Variable Definition</u>
Adoption	Adoption dummy variable (0 if non-adopter; 1 if adopter)
AGE	Age of respondent
SEX	Sex dummy variable (0 if male; 1 if female)
HHS	Household size
ED	Years of formal education
YF	Years in farming
FO	Farm ownership dummy (0 if non-owner; 1 if owner)
CT	Commodity type dummy (0 if crops; 1 if non crops)
ATI	ATI intervention dummy (0 if training only; 1 if training plus other intervention)
R _{is}	Regional center dummy where i is from 9 to 24 since there are 16 regional centers including ITCPH
ε	Error term

2.3 Thematic Analysis

Thematic analysis was employed as a qualitative method to identify, analyze and report patterns or themes emerging from the data. This was used mainly in summarizing and drawing insights from the various KII results involving the DA-ATI central and regional offices.

3. SAMPLE SIZE DETERMINATION

The respondents of the study are the agricultural extension workers of the LGUs and the farmers who were trained by the ATI from 2018 – 2022. To determine the sample size, Slovin’s formula was applied with an 8% margin of error:

$$n = \frac{N}{1+Ne^2}$$

where :

n = sample size

N = population size

e = margin of error at 8%

Based on the above formula, the calculated sample size was 1,265 respondents – 705 farmers and 560 AEWs (**Table 3**).

Table 3. Computed sample size based on Slovin’s formula with 8% margin of error

Year	Population of Farmers Trained	Population of AEWs Trained	Total Population Size	Sample Size for Farmers	Sample Size for AEWs	Total Sample Size
2018	2,445	872	3,317	147	133	280
2019	933	235	1,168	134	94	228
2020	956	252	1,208	135	97	232
2021	1,093	294	1,387	137	103	240
2022	4,969	863	5,832	152	133	285
Grand Total	10,396	2,516	12,912	705	560	1,265

Upon completion of the survey, 900 farmer respondents and 658 AEW respondents have been interviewed or a total of 1,558 survey respondents. **Table 4** presents the number of completed survey respondents by year.

Table 4. Number of survey respondents by year

Year	Sample Size for Farmers	Sample Size for AEWs	Total Sample Size	Completed Interviews for Farmers	Completed Interviews for AEWs	Total Completed Interviews
2018	147	133	280	178	160	338
2019	134	94	228	97	77	174
2020	135	97	232	92	80	172
2021	137	103	240	105	102	207
2022	152	133	285	428	239	667
Grand Total	705	560	1,265	900	658	1,558

D. RESULTS AND DISCUSSIONS

1. EVALUATION OF THE AFE RBME SYSTEM: DESIGN FRAMEWORK AND OPERATIONAL PERFORMANCE

1.1 Overview of the AFE RBME System

The AFE RBME system is an integral part of ATI's overall M&E system designed to track outputs, outcomes and impact of ATI's interventions. Output level monitoring constitutes the first level in the M&E system and involves tracking and evaluating the agency's targets and achievements. It includes procedures for submitting reports to the DA and other oversight bodies which, among others, include training and activity completion reports, monthly physical reports as well as narrative and other reportorial requirements of the DA. The RBME system comprises the second level and entails the monitoring and evaluation of outcomes through regular data collection from farmers and AEWs to assess the effectiveness of ATI interventions. This component evaluates whether ATI's policies, programs, and projects have achieved their intended outcomes and produced positive results for beneficiaries. It aims to enhance ATI's understanding of intervention effectiveness, promote accountability, and report performance transparently to the public. Impact evaluation constitutes the third component and is done both internally and through independent external evaluators.

The AFE RBME system is anchored on a ToC and results framework consisting of 28 identified results indicators (Annex 1) that generally gauge whether the outcomes which the ATI interventions are intended to generate have actually been realized. In a nutshell, the system theorizes that improving client's access to agricultural extension interventions will lead to improvement in attitude, skills and knowledge, which in turn will result to increased productivity, empowerment, resiliency and competitiveness of the farming sector. The set of indicators are designed to capture changes over time in the various elements of this logic model. Specifically, the AFE RBME system aims to:

- a. Organize the data and information of the ATI as it encourages better management and storage of information, particularly for the data needs of the RBME system;
- b. Make recommendations aimed to prompt the examination of existing problems and issues and to improve the delivery of programs and services; and
- c. Communicate with the general public and other stakeholders the results of the interventions conducted by the ATI and its partners over the past years.

The AFE RBME is a continual process of gathering and assessment of information. Monitoring is concerned with the regular gathering of information to assist in timely decision making at each step in the intervention process while evaluation is concerned with the assessment of achievement of milestones/outcomes following the results framework. The AFE RBME system is an internal process designed to shed light on the questions of "so what?", "how?" and "why?" which are fundamental inquiries involving government programs which use public funds. The primary approach consists of periodic client surveys at the regional level typically administered by the Planning, Monitoring and Evaluation Unit (PMEU) of ATI's regional centers. Among others, the survey gathers information on extension intervention received by the respondents (AEWs and farmers), use and application of the knowledge derived, farm productivity, resilience and competitiveness. These data are processed and analyzed and the results are used to inform the planning and delivery of subsequent activities/interventions.

1.2 Review of Design and Operational Performance

The study examined the development and implementation of the AFE RBME System to provide context on the evaluation of the outcomes and impact of the various PAPs, which the System was designed to track. This was done through comprehensive review of relevant documents and KIIs of ATI personnel involved in the development and implementation of the System itself. The relevant documents reviewed are listed in **Annex 2** while the list of KII respondents from the central and regional offices are provided in **Annex 3**. Among others, the examination delved into the development of the AFE RBME ToC, the operationalization of the System, the level of appreciation and understanding of personnel who are tasked to manage the System as well as the implementation challenges being encountered by these personnel.

Development and Management of the AFE RBME System

The development of the AFE RBME System was initiated in 2016 and took off from the development of the ToC as a first step. This was facilitated by an external expert who guided the various regional centers and stakeholders in navigating the intricacies of the whole process. The changes which the AFE system intends to achieve for its clients were identified and the various pathways by which such changes can be achieved given the context and circumstances of the clients and the explicit and implicit assumptions that must be realized were clarified during the workshops.

The ToC framework was established to track the inputs, outputs, outcomes, and impacts of ATI's activities, primarily focusing on training programs for farmers and Local Government Unit (LGU) extension workers. These indicators measure not only the number of training and participants but also the real-world application of the knowledge gained, such as the certification of farms and agricultural practices that benefit local and international markets. The System was initially designed to track over 100 indicators which were then reduced to 28 by the time it was operationalized in 2018.

However, results of KIIs revealed limited uniformity in the understanding and implementation of the ToC and RBME across regions. While some staff especially those involved in the earlier workshops were familiar with the System, a number of regional staff particularly those who were newly hired lack formal orientation or were involved only after its implementation. This disparity underscores the need for continuous training and formal turnover processes to ensure that the ToC and RBME are effectively utilized across all ATI centers.

While regions like CALABARZON and Central Visayas are more familiar with the system and have been actively involved in its development, other regions such as Davao and Northern Mindanao are less informed, often relying on central office directives without a comprehensive understanding of the ToC framework.

On the Implementation of the AFE RBME System

The implementation across various regions of the country follows a structured yet diverse approach based on central guidelines but adapted to each region's specific needs. Following the guidelines from the Department of Budget and Management (DBM), at least 3% of ATI's budget is allocated for M&E. This is used mainly in the conduct of annual survey to gather information on the indicators being tracked. The sampling for this survey is based on Slovin's formula at 95% confidence level and 4% margin of error. Data collection span from March to

August with report preparation expected to be completed by September. The PMEUs in each region lead the data collection and analysis.

The various regions employ different approaches to RBME implementation depending on the logistical challenges and available resources. Some regions outsource the data collection to academic institutions such as Bulacan Agricultural State College (Central Luzon), CBSU (Bicol) and JH Cerilles State College (Zamboanga). This is to cope with the limited capacity of the Center and also to avoid bias. In regions where data collection is done by the Center's M&E officers, assistance is sought from agricultural extension workers to serve as enumerators. Data is processed in Excel and submitted to the Central Office in the required format.

The study found that various regions varied widely in terms of capacity to manage the System. The regional centers in Cordilleras and Cagayan appear to have adequate staff as they were able to leverage their partnerships with the LGUs. Regions like Ilocos faced manpower shortages and a lack of statistical expertise, indicating a need for more staff and training to support the growing demands of RBME. On the other hand, regions like Western Visayas and Eastern Visayas have addressed capacity issues by outsourcing data collection and partnering with universities and extension workers.

Purpose of the RBME System

The AFE RBME System serves multiple purposes across its regional centers, primarily focused on assessing the effectiveness, outcomes, and impact of ATI's interventions. A key informant from the ATI Central Office said the system is designed to provide credible information on both immediate and long-term results, particularly to support evidence-based policymaking. The study found that about half of ATI's middle management actively uses the RBME system for this purpose.

The System is crucial for evaluating effectiveness according to key informants from Cordilleras and Ilocos ATI regional centers. According to these key informants, the System enables the assessment of adoption rates of technologies promoted by their centers. In ATI Cagayan Valley, a key informant claimed they use the System to track the results and impact of trainings over the past three years, while in CALABARZON, it also aids in understanding stakeholder perceptions, particularly in adapting to online training during the pandemic.

According to the key informants from the regional centers in MIMAROPA and Bicol regions, their centers employ the System to comply with government and funder requirements by providing data that demonstrate the tangible outputs of ATI's assistance. For the key informant in Eastern Visayas, RBME forms the basis for evidence-based decision-making, ensuring that future programs are grounded in the results of past interventions. This system helps improve the relevance and effectiveness of ATI's initiatives.

For key informants in Zamboanga, Northern Mindanao, and Davao, the System evaluates the effectiveness of training, particularly the practical application of knowledge by participants. For SOCCSKSARGEN, RBME is seen as a pathway from inputs to desired changes, while in Caraga, it monitors budget effectiveness, evaluating if interventions benefit clients and can be replicated by other agencies.

On the whole, RBME allows ATI to measure the outcomes of its programs, make informed adjustments, and ensure that their interventions meet the intended objectives.

Sufficiency of Financial and Human Resources for RBME

The ATI operates with varying levels of resource allocation across its regional centers, despite an overall increase in its budget from PHP 1.8 billion to PHP 2 billion through the General Appropriations Act (GAA) and special projects (e.g., RCEF, coconut). Nevertheless, the study found significant challenges in the inadequacy of human resources, not to mention some common operational constraints.

At the Central Office, enough budget is allocated for data collection, with centers receiving an average of P 350,000 per year. Some centers outsourced their data collection, while others incorporated it into their field activities. A key informant from ITCPH pointed out to the insufficiency of resources for facility maintenance despite adequate budget allocation for training under the National Livestock Program.

A key informant from regional office in Ilocos reported that despite the increase in budget and targets, its human resources have not grown in proportion, leading to staff multitasking. Mobility problem was reported by a key informant from regional office in Central Luzon as they operate with only three vehicles thus, had to resort to vehicle rentals. In the Cordillera Regional Center, the key informant shared they rely heavily on Job Order (JO) personnel due to limited permanent staff. This has adverse implications on operation as relatively high turnover of staff disrupts important activities. Interestingly, the key informant from the Cagayan Valley Regional Center stated they have sufficient human resources as they benefit from strong partnerships with other government agencies, ensuring smooth operations.

In CALABARZON, human resources are well-trained and effectively managed, while MIMAROPA struggles with the growing number of activities—rising from 60 in 2016 to 210 in 2024—without a corresponding increase in regular staff. The center hires Contract of Service (COS) personnel, but their qualifications do not match those of the technical staff, and funding for trainings varies widely depending on the source.

Manpower shortage is also being experienced by regional centers in Bicol and Western Visayas. Similar to other regional centers, they cope with this through outsourcing of technical expertise and reliance on COS personnel. The key informant from the Eastern Visayas Regional Center shared that they are collaborating with learning site cooperators to manage their workloads. Nonetheless, the increasing number of activities continues to strain human resources. Similar constraints on human resources are also reportedly being experienced by the regional centers in Zamboanga, Davao, and CARAGA.

Challenges in Implementing the AFE RBME System

The study found that the main challenges in implementation revolve around the inadequacy of manpower. The strategy of outsourcing the survey activities is being employed already by a number of regional centers, albeit this cannot be relied upon completely as financial resources to fund this are also limited. The hiring of contractual staff to complement the few regular staff somehow works, but the smooth implementation of the program is affected. Owing to high turnover rate of contractual personnel, institutional knowledge is difficult to build and sustained proficiency in the conduct of the various activities cannot be assured.

In a number of regions significant logistical barriers exist due the remoteness of areas where surveys are conducted, such as in the case of Cordilleras and Davao. Survey activities are costly in these areas, especially when interviews have to be conducted face-to-face. The impact of the pandemic also figured prominently among the challenges, although this was limited to the early period of operationalization of the RBME System. With regard to budget, the study found that some regions were able to manage well with the allocated budget. However, some regions, such as in Central Luzon face financial constraints that limit their ability to collect and validate data.

Summary of Results of the AFE RBME System

Table 5 summarizes the RBME results indicators for 2015-2017 while **Table 6** provides the summary for 2018-2022. These were collated from the Annual RBME reports of DA-ATI, which compile the survey results conducted by the regional training centers. The RBME results framework consists of 7 indicators tracked using 28 metrics. The indicators are: (1) increased access to interventions; (2) improvement in attitude, skills and knowledge; (3) improved provision of interventions; (4) increased productivity; (5) increased empowerment; (6) increased resilience; and (7) increased competitiveness.

Based on the metric values, access to interventions appear to be lower in 2018-2022 compared to the earlier period obviously due to the pandemic. Interestingly, the attitude, skills and knowledge of clients are comparable between the two time-periods. Provision of interventions remain strong as clients continue to view the interventions as relevant, timely and consider their absorptive capacity.

The productivity indicators are tracked using three metrics: (1) diversified farming; (2) value adding; and (3) increased income. There were just slight variations in the values of these metrics between the two time-periods indicating consistency in the performance of the DA-ATI interventions with respect to increasing productivity.

The empowerment indicator is gauged against five metrics: (1) agripreneurship-all clients; (2) agripreneurship-marginal clients; (3) promotion; (4) assistance to school; and (5) tourism sites. The study found no prominent differences in the values and trend of these metrics between the two time-periods indicating the consistency and sustainability of efforts on empowerment. The same is true for resiliency which is tracked using 4 metrics: (1) social protection; (2) coping confidence; (3) application of mitigation measures; and (4) alternative competency.

Finally, the competitiveness indicator is tracked against four metrics: (1) farm certification; (2) product certification; (3) production of demand driven products; and (4) engagement in overseas markets. The metric values showed impressive achievement on farm certification with current year value remarkably much higher than the previous years. However, data are not available for the three other markets due to difficulty in getting the data from survey. There is also a need to clarify the term “demand driven products” and seek data sources other than survey to track the indicator of competitiveness.

Table 5. AFE RBME results indicators, 2015-2017

Year of intervention Result Indicator	2015		2016		2017	
	Farmers	AEWs	Farmers	AEWs	Farmers	AEWs
Number of respondents	2,067	760	2,827	240	883	246
Increased access to AFE interventions						
1. # of clients served 1/			100,949			95,647
2. % of marginalized clients trained 1/			5.15			2
3. % of area coverage			88			77
Improved attitude, skills, and knowledge of clients						
4. % of clients saying that they have an increased knowledge 2/	98.92	99.47	99.04	100	99	97
5. % of clients passing the Post-test 2/			81.50		92	
6. # of clients certified with skills competencies			481		972	
7. % of adopters based on action plan 2/	48.14	64.34	52.49	72	53	68
8. % of clients that adopted new AF technologies 2/	91.24	93.55	91.86	95	94	94
9. % of clients satisfied with the intervention they received 2/	98.55	99.47	98.80	99	99	99
Improved provision of interventions						
10. % of clients saying that the intervention is relevant 2/	98.11	99.34	98.44	99	99	99
11. % of accomplished interventions as scheduled 2/			100		91	
12. % absorptive capacity			95.06		93	
Increased productivity of clients						
13. % of clients engaged in diversified farming	59.46	35.13	52.92	43	46	54
14. % of clients engaged in value-adding	19.35	12.24	17.44	19	26	18
15. % of clients with increased income	51.32	60.26	71.88	62	77	59
Increased empowerment of clients						
16. % of clients turned into agripreneurs	27.04	28.68	27.48	21	28	45
17. % of marginalized clients turned into agripreneurs	31.88	19.29	29.86	4	9	30
18. % of clients employed in AF related job or promoted to a higher position		24.61	24.61	27	27	33
19. # Schools for Practical Agriculture assisted			16		20	19
20. # Farm Tourism sites assisted			20		14	14
Increased resiliency of clients						
21. % of clients with social protection 1/	76.92	92.24	81.04	92	78	88
22. % of clients saying that they are confident of coping from unfortunate events	88.05	91.98	89.10	93	92	94
23. % of clients that have coped with unfortunate events by applying adaptation and mitigation measures	46.35	46.32	46.34	55	50	58
24. % of clients with alternative AF-related job competencies	72.18	69.34	71.42	80	71	84
Increased competitiveness of clients						
25. % of farms certified	5.13	1.32	4.10	2	6	5
26. % of products certified by an accreditation body	3.34	1.18	2.76	1	3	3
27. % of clients producing demand-driven products	11.18	11.71	11.32	8	10	16
28. % of clients engaged in the overseas market	0.29		0.21	2		1

1/ based from annual reports 2/ based from RBME reports

Table 6. AFE RBME results indicators, 2018-2022

Year of intervention Result Indicator	2018-2022			Remarks
	Farmers	AEWs	Total	
Increased access to AFE interventions				
1. # of clients served 1/	310,952	87,855	398,807	Total represents total for 5 yrs or 79,761 per year on average
2. % of marginalized clients trained 1/			1.35%	Average for 5 years
3. % of area coverage 1/			67%	Average for 5 years
Improved attitude, skills, and knowledge of clients				
4. % of clients saying that they have an increased knowledge	94.1	99	95.1	
5. % of clients passing the Post-test		93.7	93.7	
6. # of clients certified with skills competencies	26.1	35.7	24.7	The indicator is Number, the reported data from survey is %
7. % of adopters based on action plan				This indicator may be revisited. For AEWs, action plan may not involve adoption of technologies; for farmers, action planning is not actively done or followed through
% clients with action plan	43.1	56.9	45.8	
% adopters based on action plan	86.4	77.3	84.2	
8. % of clients that adopted new AF technologies	51.5	95.1	60	This indicator may be appropriate only for farmers. However, measuring adoption of the "new" technology may prove to be a challenge
9. % of clients satisfied with the intervention they received	93.7	96.8	94.3	
Improved provision of interventions				
10. % of clients saying that the intervention is relevant	89.9	87.0	89.3	
11. % of accomplished interventions as scheduled 1/				Based on work plan of agency. This should be a figure representing the average from all RTCs
12. % absorptive capacity 1/			92.44	This is based on budget
Increased productivity of clients				
13. % of clients engaged in diversified farming	76.1		76.1	These indicators should be for farmers only
14. % of clients engaged in value-adding	14.8		14.8	
15. % of clients with increased income	76.8		76.8	
Increased empowerment of clients				
16. % of clients turned into agripreneurs	62		62	These indicators should be for farmers only
17. % of marginalized clients turned into agripreneurs				
18. % of clients employed in AF related job or promoted to a higher position		29.7	29.7	
19. # Schools for Practical Agriculture assisted 1/			101	
20. # Farm tourism sites assisted 1/				No data from reports
Increased resiliency of clients				
21. % of clients with social protection	79.8	99.0	83.5	
22. % of clients saying that they are confident of coping from unfortunate events	56.5		56.5	These indicators should be for farmers only
23. % of clients that have coped with unfortunate events by applying adaptation and mitigation measures	70.3		70.3	
24. % of clients with alternative AF-related job competencies		21.8	21.8	
Increased competitiveness of clients				
25. % of farms certified	83.1		83.1	Data should not be based on survey
26. % of products certified by an accreditation body	No data			
27. % of clients producing demand-driven products	No data			
28. % of clients engaged in the overseas market	No data			

1/based on ATI reports

Credibility of RBME Results

As in other M&E systems, the most important concern in the AFE RBME system is the credibility of the results generated from this platform. In general, the key informants interviewed as part of the study still believe that the system is robust and the integrity of the data collected remains solid. Especially with the practice of outsourcing the data collection to independent external parties, there is no reason to doubt the credibility of the data collected. However, there are key informants who suggested the need for more validation activities to further guarantee the integrity of the data collection process. The key informant from MIMAROPA suggested that sample size should be increased especially in regions of large geographical coverage and highly diverse beneficiaries. A key informant from CALABARZON suggested the need for iterative data review and the establishment of continuous feedback loops to further strengthen the AFE RBME System.

2. BENEFICIARY FEEDBACK ON RBME INTERVENTIONS: RESULTS FROM FARMERS AND EXTENSION WORKERS INTERVIEW

2.1 Results from Farmers Interview

2.1.1 Profile of Beneficiaries

2.1.1.1 Demographic Profile

Farmer-beneficiaries of ATI programs were 47 years of age on average, with majority falling within the age range of 35 to 54 years. About 18% are relatively young (34 years old and below), but a larger percentage (27%) are of advanced age (55 years old and above) (**Table 7**). There are just as many males as females indicating a good gender balance in beneficiary selection. Majority (78%) of the respondents are married with an average household size of 4. The beneficiaries are of high educational level with 39% reaching bachelor's or undergraduate level, and 13% with master's level degree. About one-third (29.5%) reached secondary education and very few (merely 0.3%) have no formal education. Majority of the respondents are of the Visaya and Tagalog ethnic origins while the rest are Ilocano, Cebuano, Waray, and Bicolano.

2.1.1.2 Farm Characteristics

The beneficiaries typically are small crop farmers while others raise livestock and poultry. Average rice farm size was just about a hectare while that for corn and vegetables were 0.4 and 0.2 hectare respectively (**Table 8**). Perennial crops are mostly scattered in the farm with aggregate average area ranging from 0.1 hectare for fruit trees to 0.4 hectare for coconut. Relatively large farmers, albeit few in number, their farms have an average of 16 hectares of rice, 10 hectares of corn, 10 hectares of vegetables and 15 hectares of coconut, banana, and fruit trees. Those tending livestock have either or a combination of one (1) head of cattle or carabao, two (2) heads of goat, and four (4) heads of swine. There are also relatively large livestock growers with an average herd size of 22 cattle, 30 carabaos and 60 goats. For poultry, the average number of head for chicken and ducks are 28 and 8, respectively, with the largest reaching 3,000 and 700 respectively.

Table 7. Socio-economic profile of farmer-beneficiary respondents

Characteristics	Percent	Characteristics	Percent
Age (years)		Highest Educational Attainment	
18-24	2.4	Early childhood education	0.4
25-34	15.2	Primary Education	7.4
35-44	25.6	Lower secondary education	10.4
45-54	29.8	Upper secondary education	19.1
55-64	17.4	Post-secondary non-tertiary	6.7
65 - 74	8.6	Short-cycle tertiary education	3.2
Above 75	1.0	Bachelor level education or equivalent	38.7
<i>average (years)</i>	<i>46.8</i>	Master level education or equivalent	13.7
		Doctoral level education or equivalent	0.1
Gender		No formal education	0.3
Male	48.7		
Female	51.3	Ethnicity	
		Tagalog	24.4
Civil Status		Bisaya	26.7
Single/Never been married	18.9	Ilocano	14.3
Married	71.2	Cebuano	4.2
Common Law/live-in	2.9	Ilonggo	5.4
Widowed	5.7	Bikol	6.5
Separated	1.2	Waray	4.6
		Kapampangan	0.7
Household Size		Maguindanao	0.6
1 to 3	32.1	Pangasinan	0.6
4 to 6	58.0	Others	12.1
7 and above	9.9		
<i>Average (number)</i>	<i>4.4</i>		

Table 8. Area planted to crops (in hectares) and number of animals raised (head)

Crop	Crops Area		Animal	Number of Animals Raised	
	Average	Highest		Average	Highest
Rice	1.0	16.0	Pigs	4	200
Corn	0.4	10.0	Chicken	28	3,000
Vegetables	0.2	10.0	Duck	8	700
Coconut	0.4	15.0	Carabao	1	30
Banana	0.2	15.0	Goat	2	60
Cacao	0.1	8.0	Cattle	1	22
Fruit trees	0.1	15.0			
Others	0.1	10.0			

2.1.1.3 Farming Experience and Tenure

Majority of the beneficiaries have been farming for more than 10 years (**Table 9**), although a large number (43%) have less than 10 years farming experience. Sixty percent are landowners and majority are members of organizations, 64.8% of which are farmer organizations.

Table 9. Farming experience and tenure of beneficiaries

Characteristics	Percent	Characteristics	Percent
Number of years in farming		Tenurial Status	
0 to 10	42.7	Owner	60.5
11 to 20	30.4	Tenant	28.3
21 to 30	15.5	Leasehold/Rentee	3.1
31 to 40	9.9	Others	8.1
More than 51	1.4		
<i>Average (years)</i>	<i>16.5</i>		
Member of an organization			
Farmer Organizations	64.8		
Non-farm organizations	19.4		

2.1.2 Access to Agriculture and Fisheries Intervention

2.1.2.1 Intervention Accessibility

Farmers received interventions from multiple extension service providers, namely DA-ATI, other government agencies as well as the private sector. Most of these were on rice (58%), corn (22%), vegetables (29%), perennial crops (less than 10%), swine and chicken (less than 10%), and aquaculture (2%) (**Table 10**). A significant percentage (almost 38%) of ATI beneficiaries reported they also received extension assistance from other government agencies as well as from the private sector, mostly agro-chemical companies (**Table 11**). Other government agencies providing extension assistance were the Provincial and Municipal Agricultural Offices and DA agencies other than ATI (**Table 12**). Training was the main form of intervention while others provided equipment support, production inputs, and even cash grants (**Table 13**).

Table 10. Commodity focus of interventions received from ATI, other government agencies and private organizations

Commodity	Percent
Rice	58.1
Corn	22.5
Vegetables	28.6
Coconut	5.9
Banana	7.2
Fruit trees	8.0
Chicken	9.8
Swine	7.3
Aquaculture	2.0
Others	19.0

Table 11. Percent of farmer beneficiaries receiving interventions from private companies and government agencies other than DA-ATI

Receiving interventions	Percent
Yes	37.7
No	62.3

Table 12. Percent of farmers receiving interventions, by agency

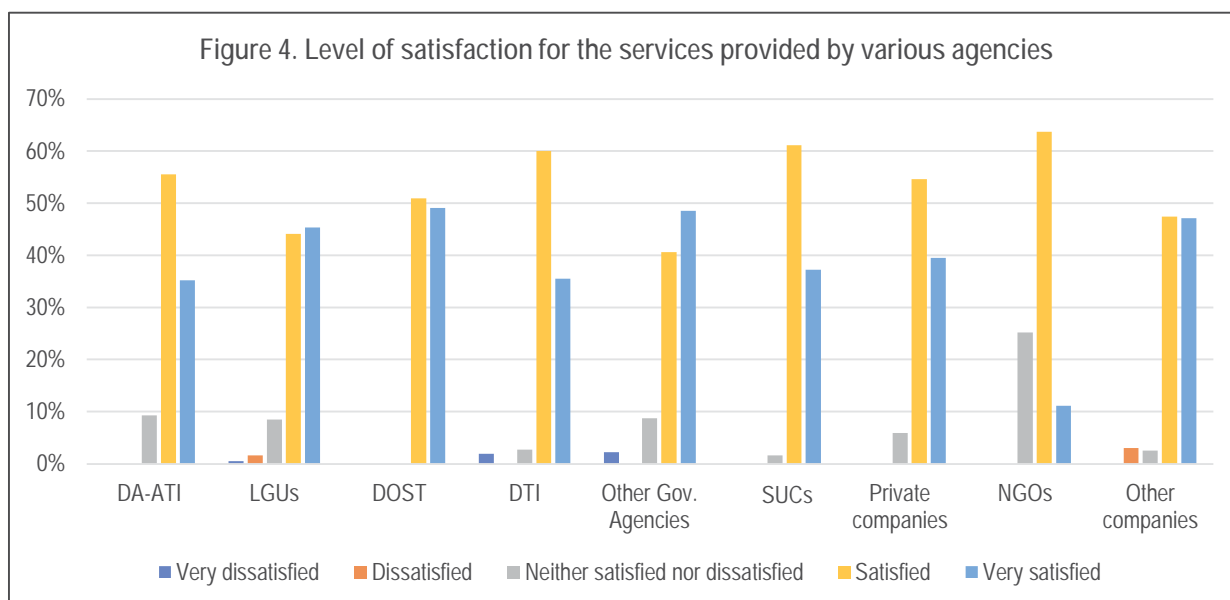
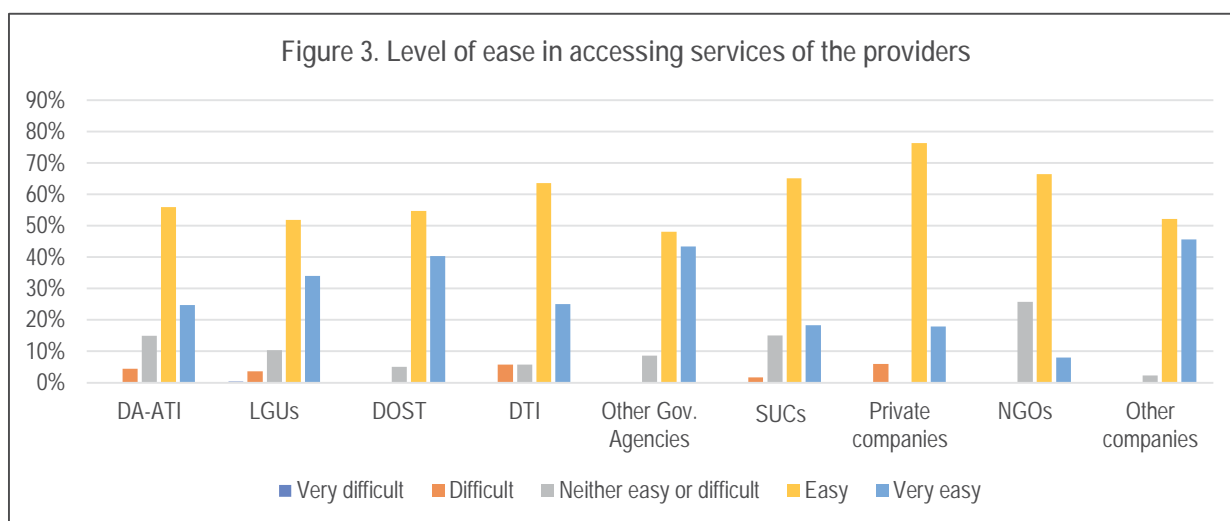
Agency	Percent
Other DA Agencies	42.3
DOST	11.1
DTI	20.9
LGU (MAO/PAO)	79.1
SUC	16.6
Private companies	13.7
NGOs	7.3
Cooperatives/POs	18.2
Others	10.1

Table 13. Beneficiaries receiving interventions from various agencies (percent reporting)

Interventions	DA-ATI	DOST	DTI	LGU (MAO/PAO)	SUC	Private Companies	NGOs/ POS	Other Government Agencies	Other Companies/ Agencies
Training	43.2	58.0	59.7	36.6	52.7	36.8	54.8	40.6	36.6
School on the Air	2.7	10.2	3.1	2.5	11.0	1.4		1.1	3.3
E-extension program/e-learning	3.5		3.1	1.9		4.3	5.2		2.2
Advisory services	3.1		2.9	5.1	4.4	8.0		1.7	3.7
IEC Materials	8.5	2.4	5.5	7.2	8.0	4.7	8.7	2.5	3.7
Machineries/equipment		4.6	1.8	9.1	4.2	1.1		9.1	13/3
Production inputs		18.3	9.0	21.7	8.3	26.3	14.6	15.1	22.5
Cash grants/loans		1.5	1.8	4.3		2.5	5.5	18.5	5.8
Market linkage	3.1	5.1	6.4	4.1		3.9	3.4	3.7	
Others	5.5		6.7	7.4	11.5	11.1	7.8	7.8	8.8

2.1.2.2 Satisfaction Feedback

The ATI beneficiaries are just as satisfied with the service they received from ATI as those received from other government agencies (Figures 3 and 4). They reported ease in accessing the extension services. In fact, DA-ATI fares better than DOST and LGUs as fewer respondents reported having difficulty in accessing the services provided. As could be expected however, the private sector extension service providers (agro-chemical companies) enjoy the highest client satisfaction when pitted against government agencies, including DA-ATI. These private players are more operationally agile unlike government agencies, which have to comply with government prescribed regulations on their operation.



2.1.2.3 Beneficiary Feedback on ATI Interventions

The DA-ATI implements a number of programs nationwide. For this survey, the specific interventions received by the beneficiaries are shown in **Table 14**. An overwhelming majority (93%) reported being beneficiaries of trainings from the Institute. Other services or interventions were also reported, albeit by small number of beneficiaries. The following sections report the beneficiary feedback on the effectiveness, timeliness, impact, empowerment, and resiliency achieved by beneficiaries, as a result of these interventions.

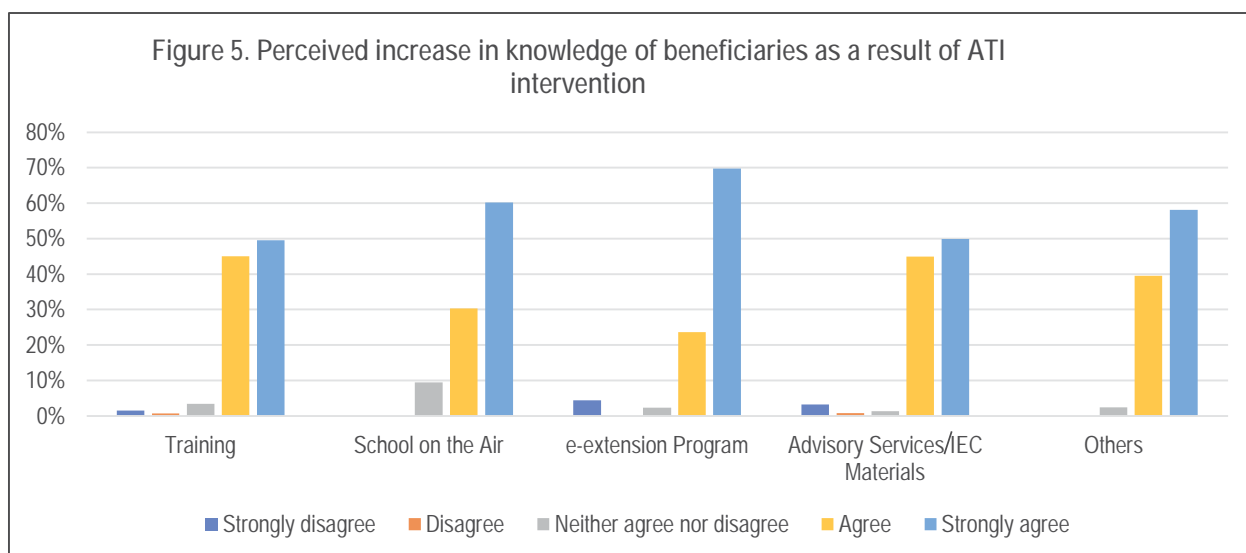
Table 14. Specific intervention received by farmers from ATI

Intervention	Percent
Training	93.0
School on the Air	7.5
E-extension program	5.0
Advisory services	9.0
Others	2.8

2.1.2.3.1 Effectiveness of DA-ATI Interventions

Effectiveness was gauged in terms of improvement in knowledge and adoption of technologies/practices promoted by DA-ATI. As a perception survey, the 5-point Likert Scale was employed which entailed determining the level of the respondent’s agreement/disagreement to positive statements designed to capture certain evaluation parameters.

The study found that majority of beneficiaries highly agree that the various interventions of DA-ATI improved their knowledge on the various areas covered by the interventions (**Figure 5**). Regardless of the type of interventions, the Likert response distribution was skewed to the right indicating that majority of the responses were towards the higher values (i.e., high agreement).



Some of the ATI trainings were intended to help the beneficiaries acquire accreditation, including the National Competency Certificate. Survey results show that about 26% of beneficiaries reported to have gained accreditation with the help of these trainings (**Table 15**). A little over half of these beneficiaries attained Level II, while about a third attained Level I, a tenth attained Level III and about 5% attained Level IV.

Table 15. DA-ATI training resulted to NCC certification as reported by beneficiaries

Resulted to NCC	Percent
Yes	26.1
No	73.9
Level of Certification	
Level I	32.1
Level II	51.0
Level III	11.3
Level IV	5.6

An innovative approach of DA-ATI especially involving trainings was to require the participants to formulate action plans to gauge how the participants intend to apply the knowledge gained. The study found that almost half of the participants (43%) complied with this requirement (**Table 16**). Moreover, almost 86% of the participants claimed to have actually implemented their respective action plans. These action plans resulted to increase yield and improved crop and animal health as reported by 40% of the respondents. About 15% also reported improved efficiency in input use.

Table 16. Number of farmer-beneficiaries formulating and implementing action plans and their results, and reasons for non-implementation

Item	Percent	Item	Percent
Formulated action plan		Reasons for not implementing the action plan	
Yes	43.1	costly inputs	20
No	56.9	unavailable inputs	11
		difficult to use	4
Implemented action plan		did not understand how to use	8
Yes	86.4	not applicable/not relevant in the farm	10
No	13.6	others	47
Result of implementation of the action plan			
increased yield	40		
healthy plants/animals	21		
less pests and diseases	16		
less use of inputs	15		
others	8		

Table 17 provides the types of technologies or improved practices promoted by DA-ATI. The study found that more than half of the beneficiaries were recipients of trainings on the production of rice, corn, vegetables, backyard gardening, organic farming, and good agricultural practices. A little less than 30% were recipients of trainings on postharvest such as product cleaning, sorting, and grading. Entrepreneurship trainings, which covered farm business school, climate smart business school, and financial literacy were also reported by 43%, 21%, and 23%, respectively.

Table 17. Technology or improved practice intervention by ATI received by farmers

Technology or improved practice	Percent
Rice production technologies	72.4
Corn production technologies	52.6
Vegetable farming	63.6
Diversified farming	48.5
Backyard gardening	50.3
Organic farming	56.9
Pest management	57.4
Good Agriculture Practice	54.8
Climate smart technologies	36.7
Mulching/Vermicomposting	42.5
Sloping Agricultural Land Technology	30.4
Modern livestock technology	32.6
Animal husbandry	34.5
Animal waste management	36.6
Product processing	30.7
By-product utilization	24.1
Farm machinery operation	40.8
Other commodity-based production technology (specify)	19.1
Product cleaning	23.6
Product sorting	23.8
Product grading	28.5
Entrepreneurship training	
<i>Farm business school</i>	43.5
<i>Climate smart business school</i>	21.4
<i>Farmer business development and farm record keeping</i>	32.6
<i>Financial literacy</i>	23.6
<i>Kapatid Mentor ME</i>	10.2

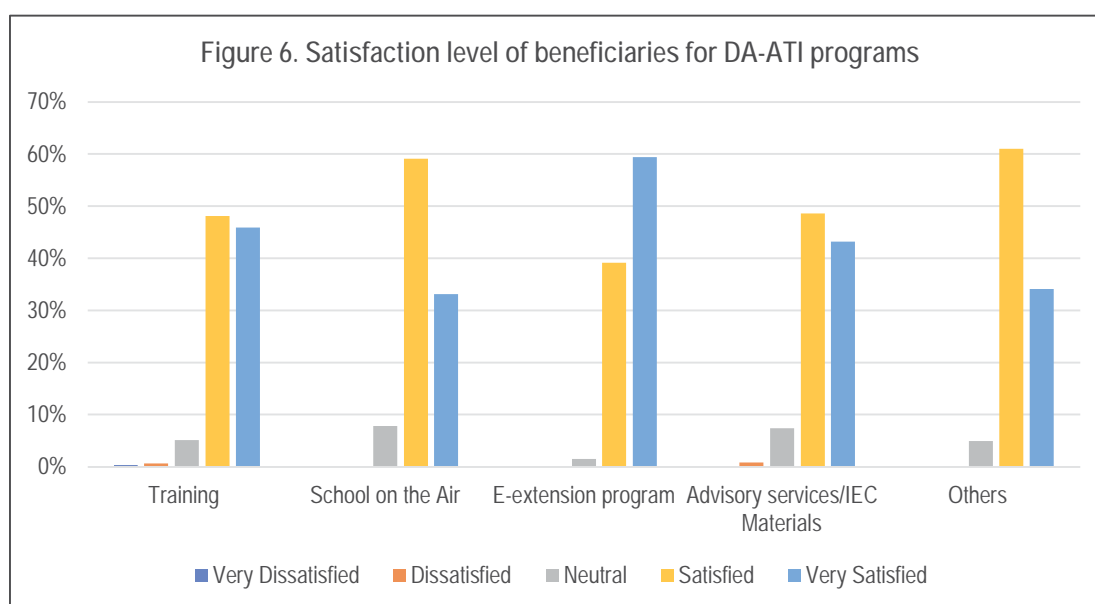
A significant number of respondents (40%) reported to have adopted the technologies/improved practices they learned from the various trainings (**Table 18**). Such adoption resulted to increased yield as reported by almost 35 % of beneficiaries, improved quality of plants and animals (23%), less pests and diseases (20%) and lower input use (15%). Those who did not adopt the technologies reported they were constrained by high input prices (21%), non-availability of inputs (15%), difficulty in application (7%), and irrelevance of the technology or improved practice in particular circumstances of their farms (32%).

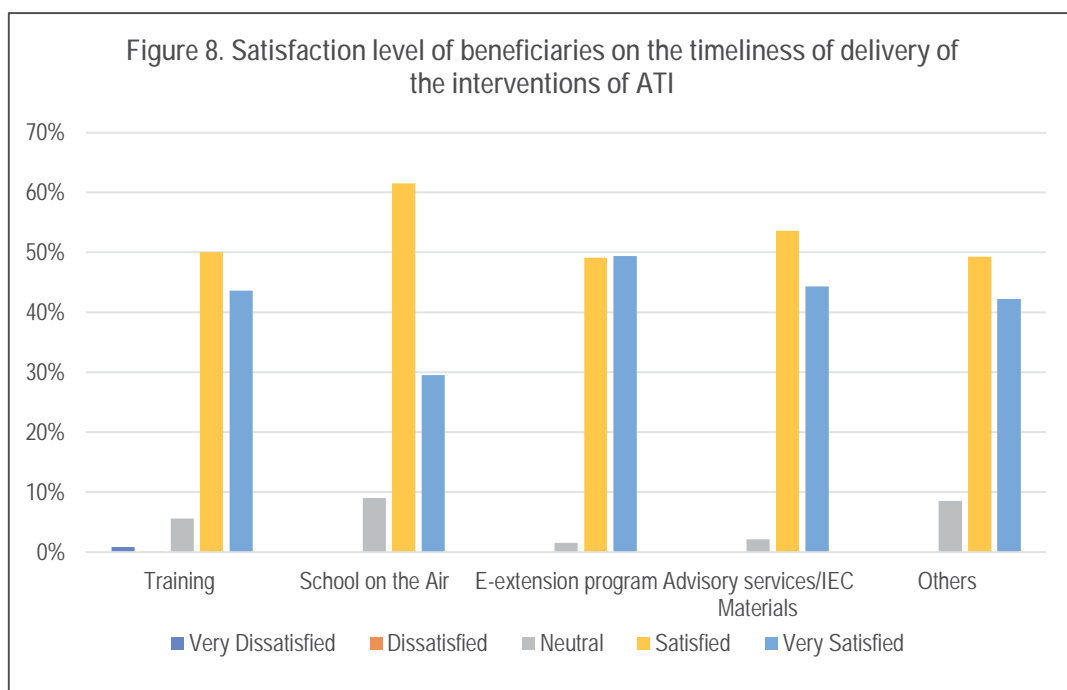
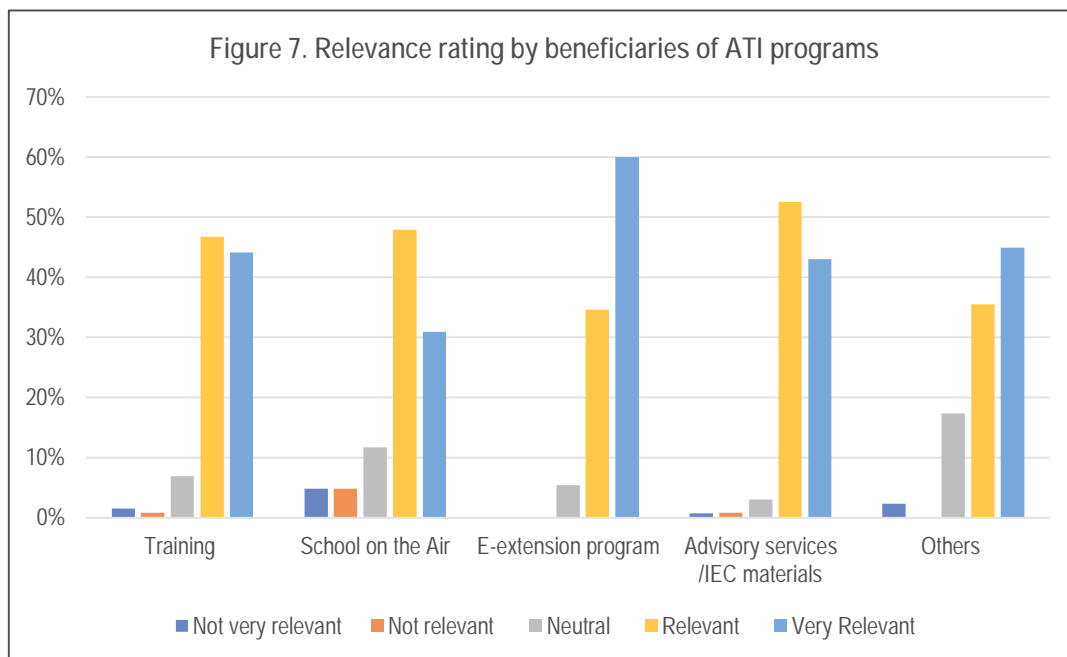
Table 18. Farmers reporting adopting the technology or improved practice

Item	Percent
Yes	40
No	60
Results from adopting technology or practice	
Increased yield	34.8
healthy plants/animals	23.1
less pests and diseases	20.2
less use of inputs	15.2
others	6.8
Reasons for not adopting	
costly inputs	21.7
unavailable inputs	15.4
difficult to use	7.2
did not understand how to use	3.5
not applicable/not relevant in the farm	32.6
others	19.5

2.1.2.3.2 Relevance of DA-ATI Interventions

The beneficiaries of DA-ATI programs were generally satisfied with the assistance provided with 90% of respondents expressing they were satisfied or very satisfied (**Figure 6**). They reported that the programs were relevant to their needs (**Figure 7**). In particular, the e-extension program was rated very relevant among the programs, while the school on the air was also rated favorably. The programs also received favorable rating on timeliness with more than 90% of respondents reporting the interventions were carried out in a timely manner (**Figure 8**).





2.1.2.3.3 Changes in Yield, Price, Quality, and Income

Qualitative and quantitative approaches were used to determine the changes in yield, price, and quality resulting from the DA-ATI interventions. The former involved directly asking the beneficiaries whether improvements in these variables were experienced and whether these can be attributed to the subject interventions. The latter involved the use of statistical test (t-test) to determine whether significant differences exist between the baseline and current (i.e., with intervention) values of the variables. It should be noted that the survey responses were based on recall especially of the baseline conditions (actual baseline data are not available). The results should therefore be viewed as indicative rather than conclusive.

As part of quantitative approach, a technology adoption function was also specified and estimated as detailed in an earlier section of this report. Since changes in yield, quality or prices (due to quality premium) attributable to DA-ATI can only actually be realized if the technologies were adopted, the results of the technology adoption function could provide greater empirical indication on whether the changes claimed by the beneficiaries could be attributed to the DA-ATI programs.

The study found that majority of the respondents involved in crop production reported increase in yield (**Tables 19 and 20**). In contrast, yield improvement has not been reported by those engaged in livestock and poultry. This could be due to the backyard nature of livestock production where very few heads especially of large ruminants are raised. In the case of those engaged in swine production, the problem brought about by the African Swine Fever (ASF) probably constrained the beneficiaries from realizing yield improvement from the DA-ATI interventions.

Improvement in prices were also reported by the crop beneficiaries of DA-ATI program, except those engaged in fruit production. All of the respondents engaged in livestock and poultry reported increase in prices. Regardless of commodities, majority of respondents also reported improvement in the quality of their produce. The improvement in quality may have partly caused the improvement in price received, albeit this should be viewed with caution as the respondents did not specifically mention whether or not they received price premium for the improvement in quality. There are myriads of factors determining price changes not to mention that prices inherently exhibit an upward trend over time. Interestingly, the large majority of beneficiaries also reported improvement in income.

Table 19. Farmers reporting changes in price, yield, quality of harvest, and income of farmer-beneficiaries after ATI intervention (percent reporting)

Commodity	Price ¹			Yield ²			Quality			Income		
	Improve/ Increase	No Change	Decrease	Improve/ Increase	No Change	Decrease	Improve/ Increase	No Change	Decrease	Improve/ Increase	No Change	Decrease
rice	81.6	18.4	92.3	91.2	2.4	8.8	81.4	8.8	81.4	6.1	12.5	
corn	100		85.8	80.4	14.2	12.1	85.8	12.1	85.8	14.2		
vegetables	59.8	40.2	70.7	78.4	29.3	8.3	77.1	13.3	77.1			
fruits		100	100	100			25.7		25.7			74.3
pigs	100		28.4	28.4	71.6		28.4	71.6	28.4			71.6
chicken	100			100	100		100		100			
goats	100			100	100		100	50.3	100			50.3
Others	72.7	27.3	63.9	72.7	36.1	27.3	72.7		72.7			27.3

¹ Price of commodity per kg

² Yield per cropping per hectare, or per head per season for animals

Table 20. Estimated price, yield, and income of farmer-beneficiaries before and after ATI intervention, by commodity (average values)

Source of change in productivity	Price ¹		Yield ²		Income ³	
	Before	After	Before	After	Before	After
rice	13.9	41.8	11,343	49,618	11,150	87,926
corn	9.4	28.2	62.6	425	58	440
vegetables	21.0	55.5	18,898	49,684	16,313	52,277
fruits	161.5	242.2	77.3	500	29,062	100,000
pigs	17,912	25,000				

¹ Price/kg or head

² Yield (estimate per cropping per hectare, or per head per season for animals)

³ Income (estimate per cropping per hectare)

2.1.2.3.4 Empowerment and Resiliency

2.1.2.3.4.1 Coping with Crisis Situations

Empowerment and resiliency are two of the higher order outcomes being targeted by ATI through their various programs. Majority of the beneficiaries (62%) claimed the ATI interventions provided them the skills and opportunities to become entrepreneurs (**Table 21**). These include skills on business management, workforce management record keeping; communication and negotiation as well as mindset improvement. The interventions also covered market development and expansion, social media or online selling and technical skills on value adding (e.g., meat and fruit processing), farm management, product development, certifications, new technical skills such as artificial insemination and organic agriculture, among others.

Table 21. DA-ATI intervention provided skills and opportunities for beneficiaries to become entrepreneurs

Item	Percent
Yes	62.0
No	38.0

The farmers' vulnerability to risks are exacerbated by their inability to access protection for themselves and their livelihoods. For farmers, the common forms of social protection include social security (SSS), housing (Pag-IBIG), health (PhilHealth), crop insurance, as well as life and medical insurance (**Table 22**). Beneficiaries already have some forms of protection before they received interventions from ATI. About 57% have PhilHealth coverage, 43% have SSS insurance and 30% have crop insurance. After the intervention, those with no existing protection, especially for SSS, Pag-IBIG, and PhilHealth were able to avail them. To some extent, ATI was able to provide assistance in availing this social protection, particularly for crop insurance, as reported by about 61% of the beneficiaries.

Table 22. Respondents with social protection before and after ATI intervention (percent reporting)

Social Protection	Before	After	ATI helped in availing social protection
SSS	42.9	25.5	16.1
Pag-IBIG	25.7	14.1	7.5
PhilHealth	57.2	36.6	6.2
Crop insurance	29.7	29.5	60.8
Other forms of social protection	34.8	27.4	9.4

Agriculture-based livelihoods are inherently prone to crisis or unfortunate events such as those listed in **Table 23**. About 47% experienced typhoon, drought (46%), pests and diseases (28%), flooding (26%), among others. Interestingly, majority of the beneficiaries expressed having greater confidence in coping with crisis situations due to the trainings provided by the DA-ATI (**Table 24**). School on the air figured prominently as influential in improving crisis resiliency by majority (75%) of the beneficiaries. This was followed by e-extension program (58%) and trainings (57%). School on the air are more structured and has longer duration than trainings thus, farmers would understandably have more knowledge gained on how to deal with crisis in

their farms from this program compared to other interventions. Among the important knowledge they have gained were on water management and use of deep wells during drought, the importance of savings for emergencies, availing crop insurance, how to manage pests and disease outbreaks, reporting of calamities to authorities such as the DA and LGUs for help and early harvesting of crops in case of typhoons.

Table 23. Causes of crisis situations

Event/Crisis	Percent
Typhoon	46.8
Flooding	26.3
Drought	36.3
Pests and diseases	28.8
Decrease in output prices	9.0
Increase in input prices	7.3
Family emergencies	3.7
Others (specify)	3.2
None	18

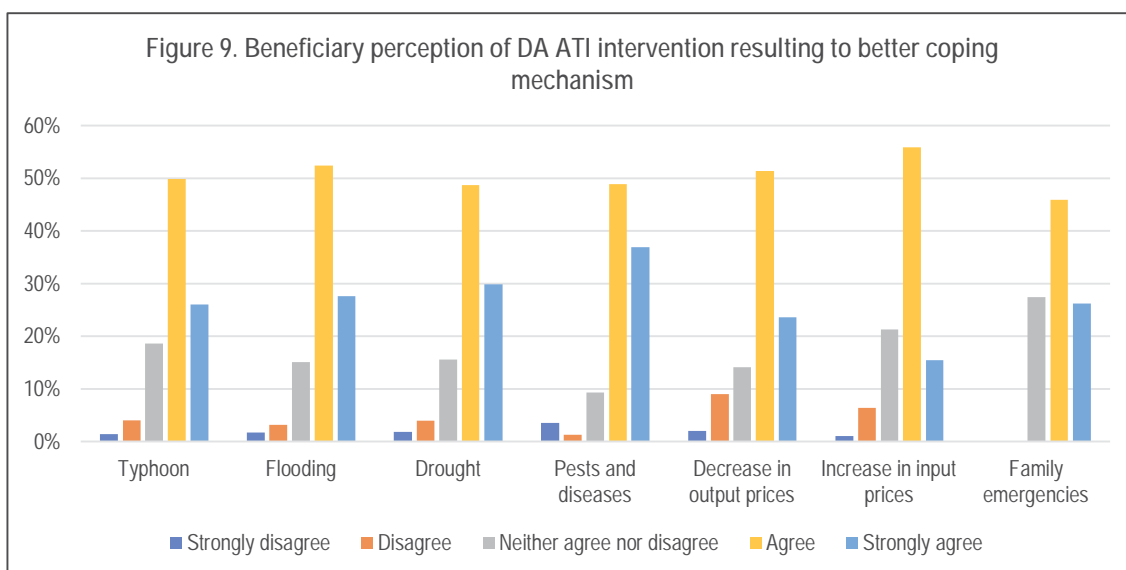
Table 24. Improvement in coping with crisis situations

Type of intervention	Percent
Total yes response	56.5
Training	57.1
School on the Air	74.6
E-extension program	57.8
Advisory services/IEC materials	34.9

The coping mechanisms of beneficiaries before and after receiving ATI interventions were compared to see if these interventions have effects on farmers behavior. **Table 25** shows that more beneficiaries were availing crop insurance as well as requesting assistance from government agencies including LGUs after the interventions to deal with typhoons, and flooding. During drought, more beneficiaries were into adjusting their planting calendars, used drought tolerant varieties, mulching, drip irrigation, and practiced hand watering. More beneficiaries also practiced spraying and use of IPM to deal with pests and disease outbreaks. For increases in prices and family emergencies, more beneficiaries resorted to loans as a coping mechanism. Overall, the beneficiaries believe that the interventions from ATI resulted to better coping mechanisms in crisis situations (**Figure 9**).

Table 25. Coping mechanisms of farmer beneficiaries in dealing with crises before and after ATI intervention (percent reporting)

Crisis/Coping Mechanism	Before ATI Intervention	After ATI intervention
Typhoon		
early harvest of crops	39.0	35.5
avail crop insurance	19.3	26.9
ask for assistance from LGUs/government agencies	15.8	19.8
no action	26.0	17.8
Flooding		
early harvest of crops	41.1	38.3
avail crop insurance	18.0	26.7
ask for assistance from LGUs/government agencies	20.8	24.0
No action	20.1	11.0
Drought		
delayed planting	33.7	22.2
adjustment of planting calendar	16.2	21.1
use drought tolerant varieties	7.6	9.1
practice mulching	3.3	4.1
use drip irrigation	11.5	15.8
hand watering	13.2	14.7
ask for assistance from LGUs/government agencies	6.9	6.8
others	7.6	6.3
Pests and Diseases		
spraying	71.8	71.4
IPM	5.1	13.0
others	9.4	10.8
no action	13.8	4.8
Decrease in output prices		
look for other markets	42.7	46.0
did not sell	27.9	24.6
sell in the usual market	29.4	29.4
Increases in input prices		
look for other sources	75.0	70.8
loans	25.0	29.2
Family emergencies		
use social protection (PhilHealth, etc)	34.7	33.6
loans	24.9	31.8
request assistance from government agencies	32.0	27.1
others	8.5	7.4



2.1.2.3.4.2 Farm Certifications

Having duly certified farms (e.g., GAP) contribute to empowerment in various ways. Foremost of these are through better access to market and improved bargaining power. The DA-ATI provides trainings with topics related to certifications of farms, including Good Agricultural Practice (GAP), Organic Agriculture (OA), Good Animal Husbandry Practice (GAHP) and others. In regional training centers, ATI also provides technical assistance for farmer and walk in clients and aspiring certifiers for Participatory Guarantee System for GAP.

Before receiving ATI interventions, about 30% of beneficiaries applied for GAP, 32% applied for OA certification, and 13% for GAHP (Table 26). While the DA-ATI interventions did not increase the number of farmers applying for these certifications, majority of the beneficiaries reported that the interventions helped increase their chances of approval (Table 27). The success rate was 81% for GAP, 78% for OA and 86% for GAHP. According to these beneficiaries, ATI introduced the concept of certification, importance, benefits, and the application process through orientations, seminars, discussions, and provision of materials. In some areas, the ATI followed up on with the farmers on the status of their application.

Table 26. Farmer-beneficiaries applying for farm certifications before and after DA ATI Intervention (percent reporting)

Certification	Before	After	ATI intervention helped in getting the certification
Good Agriculture Practice (GAP)	29.6	33.4	73.7
Organic Agriculture (OA)	32.4	31.2	59.5
Good Animal Husbandry Practice (GAHP)	13.4	14.6	71.4
Others	24.6	20.8	67.8

Table 27. Percent of farmer-beneficiaries able to get farm certification

Certification	Percent
Good Agriculture Practice (GAP)	81.0
Organic Agriculture (OA)	78.0
Good Animal Husbandry Practice (GAHP)	86.3

2.1.3 Technology Adoption

The study placed special emphasis on the assessment of technology adoption as this is considered by the DA-ATI to play a pivotal role in the AFE RBME ToC. Indeed, the link between the provision of interventions and the higher order outcomes and impact would be severed if the technologies and improved practices would not be adopted by the target clients.

In the current context of the DA-ATI programs, technology adoption can be influenced by a number of factors including the inherent nature of the technology being promoted, the different characteristics of the target farmers, and the effectiveness of the delivery system, among others. The study therefore formulated and estimated a model that would capture these varied influences (see section on methodology).

The study determined the level of adoption for the various types of technologies promoted by the DA-ATI through trainings and other platforms. The levels of adoption were categorized into three: high, partial and non-adoption. Results show that there is an almost equal percentage of beneficiaries reporting full and partial adoption, with minor percentages reporting non-adoption (**Table 28**).

Table 28. Level of adoption of technologies/interventions/practice received from DA-ATI

Technology/Intervention/Practice	Did not receive/ NA	Level of adoption			Adoption index*
		High/ Full (2)	Partial/ Not full (1)	None (0)	
Rice production technologies	2.5	57.1	38.4	2.1	0.78
Corn production technologies	3.8	43.9	50.6	1.7	0.72
Vegetable farming	3.5	42.6	52.3	1.5	0.71
Diversified farming	2.5	41.6	55.9		0.71
Backyard gardening	1.4	43.3	53.5	1.8	0.71
Organic farming		48.9	48.7	2.4	0.73
Pest management		53.4	44.2	2.4	0.76
Good Agriculture Practice	1.5	48.9	48.6	1.0	0.74
Climate smart technologies		52.5	45.6	1.9	0.75
Mulching/Vermicomposting		52.7	47.3		0.76
Sloping Agricultural Land Technology		46.8	53.2		0.73
Modern livestock technology		41.9	55.3	2.7	0.70
Animal husbandry		58.8	41.2		0.79
Animal waste management		52.7	47.3		0.76
Product processing		49.8	50.2		0.75
By-product utilization	6.0	43.2	50.8		0.73
Farm machinery operation	4.2	44.1	49.9	1.7	0.72
Other commodity-based production technology		41.5	58.5		0.71
Product cleaning		34.4	61.0	4.6	0.65
Product sorting		37.1	62.9	4.6	0.66
Product grading		46.1	53.9		0.73
Entrepreneurship trainings					
<i>Farm business schools</i>		46.1	50.9	3.0	0.72
<i>Climate smart business school</i>		45.4	54.6		0.73
<i>Farmer business development and farm record keeping</i>		41.4	53.4	5.2	0.68
<i>Financial literacy</i>		47.5	52.5		0.74
<i>Kapatid Mentor ME</i>	7.7	55.5	36.7		0.80
Others	4.9	34.1	56.8	4.2	0.66

*adoption index = (obtained adoption score/maximum obtainable score) X 100

The responses were further used to calculate the adoption index for each type of technology or practice. The adoption index is computed by obtaining the score for each type of technology against the maximum obtainable score. Responses for full adoption were assigned a score of 2, partial adoption a score of 1, and non-adoption a score of 0. The index is obtained by dividing the score obtained from these ratings, with the maximum score. The maximum score is the highest possible score had all recipients of the ATI program for the subject technology fully adopted said technology. The study found very high adoption index (0.65 to 0.80) regardless of commodity indicating the effectiveness of the DA-ATI interventions in influencing farmers to shift to technologies and practices that can improve farm performance.

The results of the binary logistic regression analysis (**Table 29**) indicate that several factors, including sex, commodity type, type of ATI intervention, and specific ATI regional centers (Ilocos Region, Western Visayas, Davao, and SOCCSKSARGEN), significantly influence technology and practice adoption.

Table 29. Results of binary logistic regression

	Estimate	Odds	Std. Error	t-value	p-value
Intercept	-0.1603	0.8519	0.7251	-0.2211	0.8251 ^{ns}
Age	0.0084	1.0084	0.0092	0.9104	0.3629 ^{ns}
Sex: Female	-0.4753	0.6217	0.1752	-2.7126	0.0068 *
Household size	-0.0124	0.9877	0.0523	-0.2368	0.8128 ^{ns}
Highest educational attainment (<i>reference: no formal education/ elementary education</i>)					
High school education	0.6283	1.8744	0.3313	1.8961	0.0583 ^{ns}
Vocational/ Associate degree	0.2609	1.2981	0.3925	0.6646	0.5065 ^{ns}
At least college degree	0.4344	1.5441	0.3373	1.2880	0.1981 ^{ns}
Years in farming	-0.0025	0.9975	0.0096	-0.2573	0.7970 ^{ns}
Farm ownership: Farm owner	-0.3052	0.7370	0.1906	-1.6013	0.1097 ^{ns}
Commodity type: Non-crops	-0.7821	0.4575	0.2391	-3.2710	0.0011 *
Type of ATI intervention: Training plus other intervention	0.7366	2.0888	0.2636	2.7947	0.0053 *
Cordilleras	-0.9131	0.4013	0.5360	-1.7036	0.0888 ^{ns}
Ilocos Region	1.1915	3.2921	0.5863	2.0323	0.0424 *
Cagayan Valley	-0.4363	0.6465	0.5962	-0.7318	0.4645 ^{ns}
Central Luzon	1.2442	3.4702	0.6925	1.7968	0.0727 ^{ns}
CALABARZON	0.1199	1.1274	0.6024	0.1991	0.8422 ^{ns}
MIMAROPA	0.6859	1.9856	0.5620	1.2204	0.2226 ^{ns}
Bicol	-0.7131	0.4901	0.6069	-1.1750	0.2403 ^{ns}
Western Visayas	1.2123	3.3612	0.5759	2.1049	0.0356 *
Central Visayas	0.2264	1.2541	0.5495	0.4121	0.6804 ^{ns}
Eastern Visayas	-0.1870	0.8294	0.5327	-0.3510	0.7257 ^{ns}
Zamboanga Peninsula	-0.4488	0.6384	0.6010	-0.7468	0.4554 ^{ns}
Northern Mindanao	1.2662	3.5474	0.7865	1.6100	0.1078 ^{ns}
Davao	-1.2937	0.2743	0.5435	-2.3804	0.0175 *
SOCCSKSARGEN	-2.9371	0.0530	0.7852	-3.7405	0.0002 *
Caraga	-0.2914	0.7472	0.5169	-0.5638	0.5730 ^{ns}

ns – not significant at 5% level of significance, * – significant at 5% level of significance

Specifically, female farmers are 38.73% less likely to adopt the technology or practice compared to male farmers. Additionally, those who received interventions focused on non-crop commodities from ATI are 54.25% less likely to adopt the technology or practice than their counterparts who received crop-focused interventions.

Moreover, farmers who participated in both training and other interventions from ATI are 2.0888 times more likely to adopt the technology or practice than those who attended training only. Farmers trained in the ATI-Ilocos Region show a 3.2921 times higher likelihood of adoption compared to those trained in ATI-ITCPH. Similarly, those trained in ATI-Western Visayas are 3.3612 times more likely to adopt the technology or practice than those from ATI-ITCPH.

Conversely, farmers trained in ATI-Davao are 72.57% less likely to adopt the technology or practice compared to those trained in ATI-ITCPH, and farmers trained in ATI-SOCCSKSARGEN are 94.70% less likely to adopt compared to those trained in ATI-ITCPH.

2.2 Results from AEWs Interview

2.2.1 Socio-Demographic Profile of Agricultural Extension Workers

The study surveyed 658 AEWs who participated in the DA-ATI trainings designed to enhance the knowledge and skills of these change agents. The respondents were on average 41.5 years old, majority (almost 53%) were female and mostly (71.4%) married. About 55% have bachelor's degree while one-third have master level education, and a few had doctoral degrees. Only a small percentage are high school and vocational education graduates. Almost a third (33.8%) were of Tagalog origin followed by Bisaya/Binisaya (24.3%), Ilocano (15.2%) and Bikol (6.7%). More than one-third are members of farmers organization while one-fifth are members of non-farm organizations (**Table 30**).

The major source of income among AEWs is government employment but apart from this, there are others who are engaged in farming and non-farm businesses. The monthly gross income from government employment is P22,982 on average. Earnings from non-farm businesses is P20,316 monthly. Other family members employed in government reported an average income of less than P10,000, while P1,669 for those engaged in farming and P3,785 from non-farm activities.

The AEWs have been in service for an average of 10.9 years. The third, which comprised the majority, have been working between 6 to 10 years, and one to five years for 26.4% of the AEWs. A few (5.2%) have been in the service for more than 30 years. The majority have permanent positions (72.3%), while all others are under contract (14.7%) and job contract (13%) arrangements.

Table 30. Socio-economic profile of agricultural extension workers

Item	Number	Percentage Reporting
Number of respondents	658	
Age		
Average (in years)	41.5	
Youngest	24	
Oldest	75	
Mode	42	
Range (percent reporting)		
18 to 24		0.20
25 to 34		32.00
35 to 44		32.10
45 to 54		18.50
55 to 64		14.10

Item	Number	Percentage Reporting
65 to 74		3.00
75 +		0.10
Sex Distribution		
Male		47.00
Female		52.70
Marital Status		
Single/ Never Married		24.30
Married		71.40
Common law/Live In		0.60
Widowed		2.70
Separated		1.10
Ethnicity		
Tagalog		33.80
Bisaya/ Binisaya		24.30
Ilocano		15.20
Cebuano		1.30
Ilonggo		4.30
Bikol/ Bicol		6.70
Waray		4.30
Kapampangan		1.40
Maguindanao		0.10
Pangasinan		0.20
Others		8.30
Membership to		
Farmer organization		36.9
Non-farm organization		21.5
Highest Educational Attainment		
Early Childhood Education (Preschool, Kindergarten)		0.00
Primary Education (Elementary School)		0.10
Lower Secondary Education (Middle School, Junior High School)		0.90
Upper Secondary Education (High School, Senior High School)		3.70
Post-secondary Non-tertiary Education (Vocational Training)		2.80
Short-cycle Tertiary Education (Associate Degree)		2.50
Bachelor Level Education or Equivalent (Undergraduate Education)		55.00
Master Level Education or Equivalent (Graduate Education, Master's Degree)		33.60
Doctoral Level Education or Equivalent Education		1.50
No Formal Education		0.00
Household size		
Average (in years)	4.4	
Maximum	13	
Minimum	1	
Mode	4	
Range (percent reporting)		
1 to 3		31.70
4 to 6		55.80
7 and above		12.50
Number of working family member		
One		35.90
Two		44.80
Three		12.10
Four and above		7.20
Sources of income (percent)		
Government employment		94.20
Farming		28.40

Item	Number	Percentage Reporting
Non-farm business		9.90
Average monthly gross income (pesos)		
<i>Respondent</i>		
Government	22,982.00	
Farming	19,903.40	
Non-farm Business	20,316.20	
<i>Working family member</i>		
Government	9,922.90	
Farming	1,669.40	
Non-farm Business	3,784.70	
Number of years as extension workers		
Less than 1 year		2.60
1 to 5		26.40
6 to 10		37.50
11 to 15		12.60
16 to 20		7.30
21 to 25		4.30
26 to 30		4.10
More than 30		5.20
Average years	10.90	
Median	8.00	
Minimum	0.00	
Maximum	42.00	
Mode	5.00	
Status of appointment		
Permanent		72.30
Contractual		14.70
On job contract		13.00

2.2.2 Access to Agriculture and Fisheries Extension Services

The succeeding discussions describe what typify the extension services available to AEWs. DA-ATI, in particular, is tasked to fill the extension services gap since the devolution of these services to LGUs. Other agencies like DOST, DENR and SUCs are also providing extension services, along with farmer organizations.

Agricultural extension workers have been filling the extension and training gap since the devolution of agricultural services to the LGUs. Filling the knowledge gap on the extension services available in national agencies and private sources requires conscious effort on the part of AEWs. Awareness of information sources, extension and advisory services, and ease of access to these services are crucial for the AEWs, given their role in delivering agricultural and fisheries extension services to their local communities.

Awareness of extension service providers. There are several extension service providers, and this includes government agencies like DA-ATI, DOST, DENR, state universities and colleges and private firms. The prominent among them, however, are the DA-ATI and the LGUs (MAO and PAO) as shown in **Table 31**. There was low level of awareness on the extension services provided by DOST, DENR, SUCs, and the private sector. The AEWs are either “not aware” or “slightly aware” of the extension services provided by these agencies. Similarly, only a few are aware of the services provided by other farmers and farmers’ organization within their community.

Table 31. Awareness about the services provided by various service providers

Service Provider	Not aware	Slightly aware	Moderately aware	Very aware	Extremely aware	Average rating a/
	percentage of respondents reporting					
DA-ATI	0.9	1.9	10.0	46.0	41.1	4.2
DENR	39.6	10.9	18.7	19.3	11.5	2.5
DOST	44.4	9.2	18.8	18.2	9.5	2.4
SUC	49.8	7.9	12.5	20.5	9.3	2.3
Private firm	71.3	5.1	9.1	10.1	4.3	1.7
PAO	19.0	3.4	10.1	33.7	33.8	3.6
MAO	16.9	1.9	7.1	32.0	42.1	3.8
Other farmers	64.1	3.2	8.0	15.1	9.7	2
Farmer Organizations	57.7	2.9	6.5	21.4	11.6	2.3
Other service providers	78.9	1.7	4.9	7.1	7.5	1.6

a/ rating:

1-not aware; 2-slightly aware; 3-moderately aware; 4-very aware; 5-extremely aware

Extension and other services accessed. DA-ATI has several extension service programs, and these are commonly accessed by the AEWs, most especially training, IEC materials, and school on the air (**Table 32**). The AEWs also accessed the extension services of municipal and provincial agricultural offices, especially training and advisory services. DOST, DENR, other farmers and farmer organization have low access rating for their extension services.

Table 32. Extension intervention and advisory services accessed from service providers (in percentage of respondents reporting)

Extension Services	DA-ATI	DENR	DOST	SUC	Private firm	PAO	MAO	Other farmers	Farmer organizations	Other service providers
School on the air	27.6	5.1	4.8	4.1	0.9	14.7	15.1	2.2	2.3	0.4
e-Learning - free online courses	18.7	5.3	4.3	3.1	1.5	6.4	8.9	0.5	2.9	0.4
e-Farming - Farm Business Advisory Services via the Farmers' Contact	18.8	4.3	2.8	1.4	1.4	10.6	10.6	2.4	3.3	
Webinars on various agricultural technologies	22.8	3.5	4.4	2	1.5	9.4	10.6	0.4	2.2	0.3
Rice Crop Manager Advisory Service (RCMAS)	23.4	2.7	1.7	1.2	0.9	13.3	15.6	2.0	3.9	0.8
IEC materials	32.7	5.6	6.3	4.9	3	20.7	20.2	0.9	3.7	2.5
Advisory services	23.0	5.0	5.6	3.2	3	16.6	20.3	3	5.6	2.4
Training	82.0	15.6	16.1	24.9	9.4	58	59.1	11.8	18.3	8.4
e-Farming - Farm Business Advisory Services via the Farmers' Contact	-	-	-	-	-	-	-	-	-	0.8
Others	2.1	1.9	4.4	4.1	2.4	3.3	3.4	2.0	2.0	2.2
None	5.1	30.6	25.5	16.3	13.3	13.5	12.2	18.2	16	8.7

Apart from training, IEC materials, school on the air and other services, AEWs accessed agricultural-related services like cash grant, farm inputs, farm machinery, farm animals and livelihood projects mostly from the DA-ATI, MAO, and PAO (**Table 33**). Farm inputs, livelihood projects, farm animals, and farm machinery/equipment were the most sought after. A high percentage of AEWs, however, did not access any of these services.

Table 33. Other services accessed from service providers (in percentage of respondents reporting)

Other services accessed	DA-ATI	DENR	DOST	SUC	Private firm	PAO	MAO	Other farmers	Farmer organizations	Other service providers
Livelihood projects	25.9	7.8	7.7	4.9	3.0	20.9	27.4	5.7	7.7	2.6
Cash grant	15.0	2.1	5.1	1.4	1.7	11.1	14.2	3.2	4.7	2.3
Farm inputs	38.8	10.3	5.3	5.2	8.2	37.4	45.7	8.2	11.1	6.1
Farm animals	24.7	6.4	3.9	2.1	1.1	21	28.7	4.3	4.2	1.7
Machinery/ equipment	21.0	4.5	8.9	1.5	1.2	23.9	23.2	2.9	8.9	3.0
Market linkage	10.9	1.0	3.1	1.4	2.3	9.6	13.4	1.8	3.1	0.8
Did not access any	41.2	38.8	35.1	36.8	15.2	25.5	21.3	21.7	18.8	9.7

Ease of access to service providers. This is rated from 1 (very difficult) to 5 (very easy). MAO is the easiest to access with a rating of 4.4, followed by DA-ATI and PAO both of which have a rating of 4.3 (Table 34). In fact, about one half of the respondents find it “easy” to “very easy” to access the services. A satisfactory access rating of 4.1 is also reported for the SUCs, other farmers and farmer organizations with half of the respondents finding it “easy” to access these providers. Other organizations may be “somewhat easy” to access.

Table 34. Level of easiness or difficulty in accessing the service providers (in percent of respondents reporting)

Service provider	Very difficult	Difficult	Neither easy or difficult	Easy	Very easy	Average Rating a/
DA-ATI	0.00	1.30	7.20	50.80	40.80	4.3
DENR	0.00	0.30	29.30	56.10	14.30	3.8
DOST	0.00	1.50	26.40	55.70	16.40	3.9
SUCs	0.00	0.60	16.90	57.50	25.10	4.1
Private firm	0.00	3.40	26.90	44.30	25.40	3.9
PAO	0.10	0.50	7.90	47.20	44.20	4.3
MAO	0.00	0.20	7.30	43.70	48.80	4.4
Other farmers	0.00	0.00	16.20	57.30	26.50	4.1
Farmer Organizations	0.50	0.00	12.60	55.30	31.60	4.2
Other service providers	0.00	0.00	18.80	47.50	33.70	4.1

a/ rating

1- very difficult; 2- difficult; 3- neither easy nor difficult; 4- easy; 5- very easy

Level of accommodation. Rated from 1 (not accommodating) to 5 (extremely accommodating), DA-ATI, MAO and PAO obtained the highest rate of 4.4 as the majority of AEWs interviewed indicated that these agencies are either “very accommodating” or “extremely accommodating”. This means that these agencies are sympathetic enough to address the needs of the AEWs (Table 35). Other agencies like SUCs and farmer organizations are likewise “very accommodating” to AEWs.

Table 35. Level of accommodation of service providers in meeting respondent's needs

Service provider	Not accommodating	Slightly accommodating	Moderately accommodating	Very accommodating	Extremely accommodating	Average rating a/
	percentage of respondents reporting					
DA-ATI	0.00	0.90	4.30	48.10	46.70	4.4
DENR	0.80	3.60	24.90	49.50	21.10	3.9
DOST	0.00	2.50	28.40	45.60	23.50	3.9
SUCs	0.00	1.70	15.20	54.80	28.20	4.1
Private firm	0.00	1.70	28.30	43.70	26.30	3.9
PAO	0.00	0.90	7.70	45.00	46.40	4.4
MAO	0.10	0.90	7.30	44.50	47.20	4.4
Other farmers	0.00	3.10	24.10	48.80	24.00	3.9
Farmer Organizations	0.00	1.80	14.90	56.60	26.70	4.1
Other service providers	0.00	2.30	20.40	46.80	30.50	4.1

a/ rating

1- not accommodating; 2 - slightly accommodating; 3 - moderately accommodating; 4 - very accommodating; 5 - extremely accommodating

Level of comfort. The level of comfort of AEWs in interacting with service providers is rated 1 (very uncomfortable) to 5 (very comfortable). Most AEWs find it “very comfortable” to interact with DA-ATI, MAO and PAO as reflected in rating of 4.5 (Table 36). AEWs also feel comfortable interacting with SUCs, DOST, farmer organizations, and other service providers. This may mean that the service providers are providing an environment of comfort and ease for better interaction with the AEWs.

Table 36. Level of comfort in interacting with the service provider

Service provider	Very uncomfortable	Uncomfortable	Neutral	Comfortable	Very comfortable	Average rating a/
	percentage of respondents reporting					
DA-ATI	0.00	0.10	2.20	43.90	53.80	4.5
DENR	0.30	0.40	26.00	54.30	19.00	3.9
DOST	0.00	0.00	20.90	52.20	26.90	4.1
SUCs	0.00	0.70	11.70	53.10	34.60	4.2
Private firm	0.00	0.00	22.60	53.10	24.30	4.0
PAO	0.20	0.00	3.60	43.90	52.30	4.5
MAO	0.10	0.40	6.30	40.60	52.60	4.5
Other farmers	0.00	0.00	13.40	58.60	28.00	4.1
Farmer Organizations	0.00	0.00	8.40	56.20	35.40	4.3
Other service providers	0.00	0.00	18.90	46.60	34.50	4.2

a/ rating

1-very uncomfortable; 2-uncomfortable; 3-neutral; 4-comfortable; 5-very comfortable

Level of satisfaction with extension services accessed. This is rated from 1 (very dissatisfied) to 5 (very satisfied). The AEWs were generally either “satisfied” or “very satisfied” with the extension services they accessed from the service providers (Table 37). Almost all service providers received satisfaction ratings ranging from 4.0 (DOST) to 4.5 (DA-ATI). For DA-ATI, the majority (56.4%) were “very satisfied” while 40.3% were “satisfied” with the services of the agency. Other entities like DOST and SUCs may have to improve their extension service delivery to further increase the level of satisfaction of AEWs. In particular, the respondents’ source of dissatisfaction is the lack of information or awareness about the services being provided and their inaccessibility.

Table 37. Level of satisfaction with the extension services accessed from service provider

Service provider	Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	Average rating a/
	percentage of respondents reporting					
DA-ATI	0.00	0.10	3.10	40.30	56.40	4.5
DENR	0.00	0.00	27.10	54.40	18.50	3.9
DOST	0.00	0.00	24.00	49.30	26.70	4.0
SUCs	0.00	0.70	9.80	59.20	30.40	4.2
Private firm	0.00	0.00	25.50	49.70	24.80	4.0
PAO	0.00	0.20	3.70	49.60	46.50	4.4
MAO	0.00	0.40	6.50	42.80	50.40	4.4
Other farmers	0.00	0.00	18.40	55.70	26.00	4.1
Farmer Organizations	0.00	0.00	12.90	56.90	30.20	4.2
Other service providers	0.00	0.00	16.10	53.00	31.00	4.1

a/ rating

1-very dissatisfied; 2-dissatisfied; 3-neutral; 4-satisfied; 5-very satisfied

Rating on DA-ATI extension services. These are rated by the respondents in terms of importance, quality, and relevance (Table 38). In terms of **importance**, the majority (76.2%) rated the DA-ATI extension services as “very important”, and “important” to 17.3%. In particular, the ATI-sponsored training introduced them to new technologies and improved production practices thereby enhancing their knowledge. Since they served as link to the farmers in information dissemination of improved or new technologies, the services of ATI through practical and hands-on training enabled AEWs to provide significant assistance to farmers that include improving their problem-solving capability. It enhances the effectiveness of farming practices and promotes interest among farmers.

Table 38. Rating of DA-ATI extension services provided to AF extension workers

Item	Percentage reporting
In terms of importance	
Very important	76.2
Important	17.3
Moderately important	2.5
Slightly important	3.1
Not important	0.8
In terms of quality	
Very good	71.7
Good	25.0
Acceptable	2.7
Poor	0.2
Very poor	0.4
In terms of relevance	
Very relevant	82.1
Fairly relevant	15.1
Somewhat relevant	2.7
Not relevant	0.2

An AEW also appreciates that ATI can bridge research results to practical application. The training is updated with modern technologies that meet their needs.

Those who rated “slightly” or “not important” stated that some training is less practical, have limited participation, less interesting and that improvements are needed in handling and logistics.

“extension workers are better equipped to support farmers leading to improved agricultural outcomes and rural developments”

“they offer advice and information to help solve the farmers agricultural problems”

“nakatulong sa pagdagdag kaalaman sa bagong teknolohiya lalo na bilang technician. Importante upang maging effective sa pagbahagi rin ng kaalaman sa iba »

« they address the needs of the agricultural sector and that research results are communicated to the farmers”

In terms of the **quality of service**, the majority of respondents (71.7%) rated it as “very good” and 25% as “good”. Respondents rated this in terms of effectiveness of the resource speakers, quality of training materials, and accommodation. First, they find the trainers experts in their field and are effective speakers who can simplify complex topics and hands-on experience.

The extension services, especially training, are helpful and useful to both AEWs and farmers as they provide useful ideas and knowledge. The focus is on learning by doing or the practical approach such as demonstrations as this applies to grassroots level. The training modules are well reviewed and prepared, the training program is well structured, the training staff are respectful, very accommodating, very supportive and approachable, act fast on requests and provides what the AEWs need during the conduct of the training. The services provided meet their expectations and needs. The quality of training meets their standards. The quality is high, commendable, consistent and effective and improves over time. The training program is well-organized.

“ ensures that the trainings address the needs of the farmers”

“effective resource speaker, actual demonstration, with prizes”

“ the resource speaker is knowledgeable about the topic”

“...visual aids are compelling”

“ training materials, food and accommodation are of quality”

“ they are very good in all aspects of discussions and implementation”

On relevance, the majority of respondents (82.1%) reported that the services provided to them are “very relevant” while 15.1% indicated that the services are “fairly relevant. Responding to the TNA or Training Needs Assessment, the training contents are reported relevant and up to date. One respondent reported that the training provides direct application and relevance as an AEW by applying and sharing new knowledge to the farmers. It improves the respondent’s performance and confidence as an AEW.

The extension services address the challenges and real needs of the agriculture sector and are useful in everyday farming activities. The trainings also support gender inclusion by encouraging them to form groups to increase their access to improved farming technologies. The trainings are relevant to improving agricultural production and techniques by helping farmers improve their level of awareness on agriculture and fisheries. ATI extension services also enhance business ventures as both AEWs and farmers gain more ideas and lifelong skills needed on how to manage business, for instance, on livestock farming.

“The trainings received are needed by the AEWs and the farmers”
“very timely and help farmers to become confident to their field”
“dahil napapanahon yung mga tinuturo at binigay na idea or kaalaman”
“ATI provides exactly what is needed”
“relevant because there training address the real needs of the agriculture sector”

In general, the extension services provided by the DA-ATI may be viewed to be very important, of very good quality, and very relevant to the needs of AEWs.

2.2.3 Improved Knowledge, Attitude and Skills from Training/Intervention

It is never easy to provide extension services to farmers when the AEWs themselves are not technically competent and not adequately provided with training and intervention. Filling the knowledge gap and improving their attitude and skills through training will serve them well and the farming and fishing community they serve. Discussed below are the changes which AEWs admitted having gained as a result of the training they attended.

Changes in knowledge. The training received from ATI by the respondents indicated that the majority of them (89.3%) have gained substantial knowledge (**Table 39**). Less than ten percent perceived a moderate increase. In terms of retention, the majority (82.1%) consistently retain and effectively apply the knowledge gained. These imply the effectiveness of the DA-ATI training/interventions in imparting new knowledge with most respondents able to retain and apply them.

Table 39. Changes in knowledge from trainings/interventions received

Item	Percent
Knowledge gained	
I believe that I have gained substantial knowledge, facts, and concepts from the trainings	89.3
I perceive a moderate increase in knowledge, facts, and concepts from the training	9.7
I'm unsure whether my knowledge has changed	1.0
My knowledge has not significantly improved	0.0
I have not gained any knowledge from the training	0.0
Retain and apply knowledge	
I consistently retain and effectively apply the knowledge	82.1
I retain some knowledge but inconsistently apply it	16.6
I struggle to retain and apply the knowledge	0.7
I forget most of the knowledge gained	0.6

For others, the training courses are refresher courses that aim to also update them with modern technologies. It is a continuous learning and self-improvement to them, and of sharing and applying this new knowledge gained in the farm business.

A few have certain challenges in applying the knowledge gained and forgotten about it. Among the reasons are the inadequate resources of farmers, the training attended is not in line with their current job, and it is just mere knowledge with limited use or application in their job as AEWs. A few were not able to absorb and retain information they received. They find the process of absorbing and retaining information difficult. Retaining information would be better for others if they are also actively engaged in farming.

Changes in attitude and beliefs related to the training. For the majority of respondents (81.3%), their attitude, values, and beliefs have changed for the better towards the concepts and topics discussed during the training (**Table 40**). Likewise, the majority (85.7%) are highly motivated and committed to applying what they learned while almost all are willing to embrace new ideas and approaches learned. All these imply that the training provided by DA-ATI are successful in effecting change in the attitude and beliefs of the AEWs.

Table 40. Changes in attitude and beliefs related to the training

Item	Percent
Change in attitude, values and beliefs	
I believe that my attitude and beliefs have changed for the better toward the concepts and the topics discussed	81.3
I perceive moderate change in attitude and belief related to the training	12.3
I'm not sure if my attitude and beliefs have changed	2.7
My attitude and beliefs have not changed	3.6
Impact	
I am highly motivated and committed to applying in my work what I learned from the training	85.7
I am somewhat motivated and committed to applying in my work what I learned from the training	13.8
I am not motivated and committed to applying in my work what I learned from the training	0.5
Openness to change	
I am willing to embrace new ideas and approaches	99.0
I am not open much to new ideas and approaches	1.0

In particular, the intervention changed their perspective and approach to work, as they learned new knowledge and skills. They became humble. It boosted/developed their confidence and self-efficacy, and they became responsible and enthusiastic about their work. It changed them for the better.

For others, the training deepened and widened their appreciation about the training concepts and enhanced their commitment to community development as they learned the importance of community engagement and building rapport with the farmers.

The integration of new values is forceful enough to spark new enthusiasm in their line of work. It changed their attitude. They become motivated and inspired to continue learning and be an inspiration to others. It motivated them to apply new knowledge at the farm.

“dati kasi talagang wala akong pakialam tapos narealize mo as a worker, everytime we work mas maganda ang binibigay at it helps a lot on farmers”

“it has positively influenced my perspective and approach to my work as an extension worker”

“kasi dati walang alam pero ngayon marami ang napulot na learning in farming”

“before may stage freight ako, ngayon naka gain na ako ng self-confidence”

Changes in skills. The DA-ATI training appeared to be effective since majority of the respondents (88.5%) indicated that they developed practical skills, techniques, and competencies as a result of the training and that they applied these learnings in their work and daily activities (**Table 41**). They even shared these with others, most especially to farmers.

A few have limited or no opportunity to apply the skills because of their busy schedule. Others think that the skills learned are not related or applicable in their line of work. It is just mere knowledge and limited application on their part.

Table 41. Changes in skills

Item	Percent
Skills acquisition	
I have developed practical skills, techniques, and competencies during training	88.50
I have somewhat developed practical skills, techniques, and competencies	10.70
I have not acquired the skill	0.80
Skills application and transfer	
I applied the skills I learned from the training in work and daily life	95.10
I have not applied the skills learned	4.90

Passing the post-test and gaining competencies. Most of the respondents (93.7%) passed the post-test on the training they attended (**Table 42**). This spells the success of the training as they were able to apply their learnings in a real-world situation. However, while they passed the post-test, only a third were given a TESDA National Competency (NC) Certification. Those who obtained certification were mostly certified at Level II (73%), and 17.3% at Level III.

Table 42. Passing the post-test and gaining competencies

Item	Percent
Pass the post-test on training attended	
Yes	93.7
No	6.3
Given a TESDA National Competency Certification	
Yes	35.7
No	64.3
Level of certification obtained	
Level I	7.7
Level II	73.0
Level III	17.3
Level IV	2.0

Preparation and implementation of an action plan. This is a major goal of the DA-ATI training. Over half of the participants (56.9%) prepared an action plan after the training and of this, 77.3% implemented the plan (Table 43).

Table 43. Preparation and implementation of action plan

Item	Percent
Prepared an action plan	
Yes	56.9
No	43.1
Implemented action plan	
Yes	77.3
No	22.7
Number of barangays covered by the plan	
21 to 30	22.6
31 to 40	30.4
41 to 50	23.9
50 and above	23.2
Resources provided by the LGU	
Budget	21.7
Supplies and materials	21.8
Transportation/Vehicle	20.1
Additional personnel	12.0
Farm inputs	9.3
Others	7.9
Sufficient resources provided by LGU	
Yes	73.2
No	26.8
Sufficiency of resources by item for yes response	
Budget	49.9
Supplies and materials	54.9
Transportation/Vehicle	50.5
Additional personnel	28.8
Farm inputs	22.0
Others	12.2
Extent of help to the farmers in implementing the plan	
Not at all helpful	0.7
Slightly helpful	2.0
Somewhat helpful	8.0
Very helpful	48.3
Extremely helpful	41.0
Rating on the action plan in terms of	
Relevance	87.0
Effectiveness	91.0
Efficiency	88.5
Sustainability	86.1

The plan covered several barangays and this ranged from 21 to over 50. Resources from the LGUs included budget as reported by 21.7%, supplies and materials (21.8%), transportation/vehicle, additional personnel, farm inputs and other resources. The resources provided were generally sufficient as reported by 73.2%. For instance, supplies and materials, transportation/vehicle and budget were reported as sufficient by one-half of the respondents. Addition personnel and farm inputs were reported by 28.8% and 22%, respectively.

Implementation of the action plan is helpful to the farmers with 48.3% indicating that it is “very helpful” and 41% reporting that it is “extremely helpful”. A few (2%) reported that it is slightly helpful.

In terms of relevance of the action plan for those who implemented it, 87% reported that the interventions it contains are consistent with the LGU development plans and priorities. On the effectiveness of the plan, 91% indicated that it is successful in addressing the needs of the farmers. In terms of efficiency, 88.5% noted that the interventions were carried out at the time they were needed at the least possible cost. On sustainability, 86.1% reported that the interventions introduced are still being practiced long after they have been introduced.

Those who did not implement indicated budget constraint (lack of funds), no time for it since they are busy with their work as AEWs, the LGU has other activities to prioritize and is focused other programs, lack of staff, not in their line of work and external factors like pandemic, weather, and accidents. One respondent was recently promoted to a higher post and the implementation of the action plan is no longer in the AEW’s scope of work.

Organizational or administrative issues were also reported. This included the assignment of a new coordinator, the plan is not finished yet, conflict of different projects, and they were not required to implement the plan way back in 2018.

For others, there were memory or motivation issues. They forgot if they have to implement the action plan or not and forgot the details as well.

2.2.4 Empowerment Through Employment to AF-Related Job

Only one-fifth of the respondents were promoted to a position (**Table 44**). Those who were not promoted reported lack of vacancy, seniority or length of service, and no civil service eligibility.

Table 44. Empowerment of clients and social protection

Item	Percent
Promoted to a higher position	
Yes	20.9
No	79.1
Employed in AF-related job	
Yes	29.7
No	70.3
Have other AF job competencies	
Yes	21.8
No	78.2
Provided with social protection	
SSS	48.9
GSIS	85.3
Pag-Ibig	90.4
PhilHealth	24.8
Other social protection	98.7

Majority (70.3%) were not able to obtain other AF-related employment. In terms of job competencies, only 21.8% possess other skills while the majority do not have.

All these reflect the lack of employment opportunity among the AEWs in terms of promotion to higher positions as well as job stability in the AF sector.

On social protection, about one half and 85.3% have SSS and GSIS coverage, respectively. The majority (90.4%) are enrolled in Pag-Ibig while 24.8% have PhilHealth coverage. Majority have other forms of social protection. Most of the respondents obtained social protection starting in the year 2010 (**Table 45**). Enrolment to PhilHealth coverage also increased in recent years.

Table 45. Social protection: Year obtained

Year obtained	SSS	GSIS	Pag-IBIG	PhilHealth	Other social protection
	Percentage reporting				
Before 1990s	2.1	3.4	4.0		2.7
1990 to 1999	7.0	8.5	7.3	0.9	5.7
2000 to 2009	16.6	16.3	17.1	7.0	10.5
2010 to 2019	59.9	55.1	56.8	47.3	47.3
2020 to 2024	14.4	16.7	14.9	44.8	33.9

E. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

1. SUMMARY

The study was conducted to evaluate the AFE RBME System. The System consists of a theory of change and results framework of 28 indicators designed to measure whether the DA-ATI interventions in terms of PAPs translate to higher order outcomes and impact. The evaluation specifically aimed at reviewing and enhancing the results framework; identifying issues and challenges encountered during implementation; and recommending policy options to further improve the DA-ATI programs.

The study employed concurrent mixed method approach which involved parallel collection of both quantitative and qualitative data and convergent analysis to provide equal weights on the quantitative and qualitative aspects of project performance and impact. Both primary and secondary data were used. Primary data were collected through a survey of DA-ATI beneficiaries (farmers and AEWs) using online/telephone and face-to-face CAPI based on pre-tested structured questionnaires. The sample size for the survey was determined using Slovin's formula at 95% confidence level and 8 percent margin of error. Key informant interviews (KIIs) of representatives from the DA-ATI central and regional offices were also carried out to gather information related to the development and operation of the AFE RBME System. Secondary data were obtained from the AFE RBME data base and from available reports.

To determine the results of DA-ATI's PAPs, the study validated the RBME results in the field by reviewing outputs based on OECD-DAC criteria of relevance, effectiveness, efficiency, sustainability, and impact. The validation was done with LGU extension workers and farmers trained by ATI, using the indicators identified in the AFE results framework.

Descriptive analysis was employed to summarize and describe the main features of the dataset such as central tendency, dispersion and distribution. Inferential analysis was used to determine whether significant differences exist between the variable means in two time periods (paired t-test for before and after) and binary logistic regression to determine the factors affecting the adoption of the technologies and practices promoted by DA-ATI. Thematic analysis was employed as a qualitative method to identify, analyze and build narratives on themes emerging from the data.

The study found limited uniformity in the conceptual understanding and operationalization of the AFE RBME across regions, especially its ToC and Results Framework. While some staff particularly those involved in the earlier workshops were familiar with the System, a number of regional staff particularly those who were newly hired lack formal orientation and understanding of the System. The implementation across regions followed a structured yet diverse approach based on central guidelines but adapted to each region's specific needs. However, all regional centers appreciate the importance of RBME especially in evaluating the effectiveness of DA-ATI interventions, determination of technology adoption rates and the achievement of higher order outcomes and impact. It is also an important tool in determining stakeholder's perception and feedback about the various programs being implemented.

The various regions employed different approaches to RBME implementation depending on the logistical challenges and available resources. Regional centers varied widely in terms of capacity to manage the System. Some regional centers faced manpower shortages and a lack of expertise, indicating a need for more staff and training to support the growing demands of RBME. Other regional centers have addressed capacity issues by outsourcing data collection to academic institutions to cope with the limited capacity of the Center and also to avoid bias. In regions where data collection was done by the Center's M&E officers, assistance was sought from agricultural extension workers to serve as enumerators.

A review of the RBME reports from 2016-2017 and 2018-2022 showed that the values for the set of indicators on increase access declined in the latter period largely due to the pandemic restrictions, while indicators measuring improved attitudes, skills, and knowledge of clients remained stable with 90% of clients reporting improvement in knowledge and high satisfaction level with the interventions provided. Indicators on client productivity including farm diversification, value adding and increased income remained consistent in both periods. As in other M&E systems, the most important concern in the AFE RBME system is the credibility of the results generated from this platform. In general, the key informants interviewed as part of the study still believe that the system is robust and the integrity of the data collected remains solid.

The study found that the main challenges in implementation revolve around the inadequacy of manpower. The strategy of outsourcing the survey activities is being employed already by a number of regional centers, albeit this cannot be relied upon completely as financial resources to fund this are also limited. The hiring of contractual staff to complement the few regular staff somehow works, but the smooth implementation of the program is affected as it is difficult to build institutional knowledge of the System due to high turnover rate of contractual personnel. The survey revealed that more than half of the DA-ATI beneficiaries were recipients of trainings on the production of rice, corn, vegetables; backyard gardening, organic farming, and good agricultural practices. A little less than 30% were recipients of trainings on postharvest such as product cleaning sorting and grading. Entrepreneurship trainings, which covered farm

business school, climate smart business school, and financial literacy were also reported by 43%, 21%, and 23%, respectively.

The study also found that the DA-ATI beneficiaries are just as satisfied with the service they received as those received from other government agencies. They reported ease in accessing the extension services. In fact, DA-ATI fares better than other NGAs and LGUs as fewer respondents reported having difficulty in accessing the services provided. As could be expected however, the private sector extension service providers (agro-chemical companies) enjoy the highest client satisfaction when pitted against government agencies, including DA-ATI. These private players are more operationally agile unlike government agencies which have to comply with government prescribed regulations in their operation.

A significant number of respondents (40%) reported to have adopted the technologies/improved practices they learned from the various trainings. Such adoption resulted to increased yield as reported by almost 35 % of beneficiaries, improved quality of plants and animals (23 %), less pests and diseases (20%) and lower input use (15%). Those who did not adopt the technologies reported they were constrained by high input prices (21%), non-availability of inputs (15%), difficulty in application (7%), and irrelevance of the technology in the particular circumstances of their farms (32%).

Empowerment and resiliency are two of the higher order outcomes being targeted by ATI through their various programs. These are important considering that agriculture-based livelihoods are inherently prone to crisis or unfortunate events. Majority of the beneficiaries claimed the ATI interventions helped them develop skills that are empowering and make them more resilient. These include skills on business management, workforce management and record keeping; communication and negotiation as well as mindset improvement. The interventions also covered market development and expansion, social media or online selling and technical skills on value adding (e.g., meat and fruit processing), farm management, product development, certifications, as well as new technical skills such as artificial insemination and organic agriculture, among others.

About 47% of the beneficiaries experienced typhoon, drought (46%), pests and diseases (28%) and flooding (26%) during the 2017 to 2022 period. Interestingly, majority of the beneficiaries expressed having greater confidence in coping with crisis situation due to the trainings provided by the DA-ATI. School on the air figured prominently as influential in improving crisis resiliency by majority (74%) of the beneficiaries. This was followed by e-extension program (58%) and trainings (57%).

Having duly certified farms (e.g., GAP) contribute to empowerment in various ways. Foremost of these are through better access to market and improved bargaining power. The DA-ATI provides trainings with topics related to certifications of farms, including Good Agricultural Practice (GAP), Organic Agriculture (OA), Good Animal Husbandry Practice (GAHP) and others. In regional training centers, ATI also provides technical assistance for farmer and walk in clients and aspiring certifiers for Participatory Guarantee System for GAP.

Before receiving ATI interventions, about 30% of beneficiaries applied for GAP, 32% applied for OA certification, and 13% for GAHP. While the DA-ATI interventions did not increase the number of farmers applying for these certifications, majority of the beneficiaries reported that the interventions helped increase their chances of approval. The success rate was 81% for GAP, 78% for OA and 86% for GAHP. According to these beneficiaries, ATI introduced the

concept of certification, importance, benefits, and the application process through orientations, seminars, discussions, and provision of materials.

The study placed special emphasis on the assessment of technology adoption as this is considered by the DA-ATI to play a pivotal role in the AFE RBME theory of change. Indeed, the link between the provision of interventions and the higher order outcomes and impact would be severed if the technologies and improved practices would not be adopted by the target clients.

The study determined the level of adoption for the various types of technologies promoted by DA-ATI through trainings and other platforms. The levels of adoption were categorized into three: high, partial and non-adoption. Results show that there is an almost equal percentage of beneficiaries reporting full and partial adoption, with minor percentages reporting non-adoption. The study found very high adoption index (0.65 to 0.80) regardless of commodity indicating the effectiveness of the DA-ATI interventions in influencing farmers to shift to technologies and practices that can improve farm performance.

The results of the binary logistic regression analysis indicate that several factors, including sex, commodity type, type of ATI intervention, and specific ATI regional centers (Ilocos Region, Western Visayas, Davao, and SOCCSKSARGEN), significantly influence technology adoption.

Specifically, female farmers are 38.73% less likely to adopt the technology or practice compared to male farmers. Additionally, those who received interventions focused on non-crop commodities from ATI are 54.25% less likely to adopt the technology or practice than their counterparts who received crop-focused interventions.

Moreover, farmers who participated in both training and other interventions from ATI are 2.0888 times more likely to adopt the technology or practice than those who attended training only. Farmers trained in the ATI-Ilocos Region show a 3.2921 times higher likelihood of adoption compared to those trained in ATI-ITCPH. Similarly, those trained in ATI-Western Visayas are 3.3612 times more likely to adopt the technology or practice than those from ATI-ITCPH.

Conversely, farmers trained in ATI-Davao are 72.57% less likely to adopt the technology or practice compared to those trained in ATI-ITCPH, and farmers trained in ATI-SOCCSKSARGEN are 94.70% less likely to adopt compared to those trained in ATI-ITCPH.

2. CONCLUSIONS AND RECOMMENDATIONS

The study concludes that the AFE RBME System has generally been relevant and effective as evidenced by the favorable feedback from its beneficiaries, the high rate of adoption of technologies/practices promoted and enhanced empowerment and resilience of its clients. The System continues to be perceived as robust and the integrity of the data collection process remains solid. However, the system is beset with operational issues which could undermine efficiency and sustainability. Among others, these include the lack of uniformity in the conceptual understanding of the System and its elements, primarily the theory of change and results framework; limited technical capacity to manage the System; and the persistent manpower shortages being experienced in most regional offices. The disparity in regional capacities to effect technology adoption as empirically validated by the binary logistic

regression model, probably reflects already the regional disparity in the capacity to manage the AFE RBME System.

Capacity issues, particularly related to manpower and limited expertise, figured prominently as among the significant barriers to more effective operationalization of the AFE-RBME System. Some regional centers addressed this by outsourcing data collection to academic institutions, while others utilized agricultural extension workers as enumerators. However, reliance on outsourcing is limited by financial constraints, and the high turnover of contractual staff undermines institutional knowledge of the system.

The study recommends the following measures:

1. Conduct an in-depth organizational capacity assessment (OCA) to determine capacity gaps and disparity across regional centers in the management and implementation of the AFE-RBME System. In addition to gauging organizational and technical capacity, the assessment should consider geographical coverage in terms of size and accessibility as these are important determinants of the cost of data collection.
2. Strengthen staff capacity and training. A comprehensive orientation and training program should be developed and implemented for all ATI staff especially the new ones including contractual staff. A periodic (e.g., annual or biennial) ATI wide conference involving the regional staff handling the RBME System should be held for the review of the System and sharing of lessons learned and best practices.
3. Continual improvement should be pursued by regularly examining the ToC, results framework and basic assumptions of the RBME System. While the study found these elements as still logical and feasible, constant assessment will enable updating the various elements to keep up with the challenges emerging in the course of implementation.
4. Employ more gender responsive approaches in the delivery of DA-ATI interventions. The study found that female beneficiaries are 39% less likely to apply the technologies promoted compared to male beneficiaries. Such disparity highlights the need for designing and implementing interventions more relevant to female farmers.
5. Strengthen the role of DA-ATI in the provision of input support. The study found that technology adoption is constrained by high input cost and accessibility. While DA-ATI is primarily focused on knowledge dissemination through trainings and other extension service modalities, the Institute may consider closely collaborating with other government agencies and private partners for the provision of input support and enhancing the accessibility of inputs especially for small farmers.
6. Expand and sustain interventions designed to enhance empowerment and resilience. The study found that the DA-ATI interventions have considerable positive impact on empowerment and resilience of farmers. As agriculture-based livelihoods are inherently vulnerable to various shocks, the interventions proven to improve empowerment and resilience should be expanded and sustained. These include interventions to improve market access, certification and value adding, among others.

ANNEX 1: THE AFE RESULTS INDICATORS

Result Indicator	Description
<i>Increased access to AFE interventions</i>	
<i>1. # of clients served</i>	total number of clients provided with AFE interventions
<i>2. % of marginalized clients trained</i>	proportion of marginalized client such as out-of-school youths, rural women, indigenous people, senior citizen, and persons with disabilities trained
<i>3. % of area coverage</i>	proportion of clients' area coverage reached by AFE interventions
<i>Improved attitude, skills, and knowledge of clients</i>	
<i>4. % of clients saying that they have an increased knowledge</i>	proportion of clients that perceived an increase in knowledge based on the provided intervention
<i>5. % of clients passing the Post-test</i>	proportion of clients scoring at least 60% in the Post-test
<i>6. # of clients certified with skills competencies</i>	total number of clients gaining TESDA national competency certification (NC I, II, III, IV) on AF related subjects
<i>7. % of adopters based on action plan</i>	proportion of AEWs trained that complied to/implemented their action plan
<i>8. % of clients that adopted new AF technologies</i>	proportion of clients (small farmers) that adopted new AF technologies or practices
<i>9. % of clients satisfied with the intervention they received</i>	proportion of clients that gave at least a satisfactory rating after being provided with the intervention
<i>Improved provision of interventions</i>	
<i>10. % of clients saying that the intervention is relevant</i>	proportion of clients that gave at least a somewhat relevant rating on the intervention given in terms of the current situation and needs
<i>11. % of accomplished interventions as scheduled</i>	proportion of timely delivery of interventions based on its targeted schedule of implementation
<i>12. % absorptive capacity</i>	proportion of institutional extent by which the fund allocated for AFE intervention was spent by all AFE institutions
<i>Increased productivity of clients</i>	
<i>13. % of clients engaged in diversified farming</i>	proportion of clients using diversified farming methods/techniques
<i>14. % of clients engaged in value-adding</i>	proportion of clients that ventured into value addition of products
<i>15. % of clients with increased income</i>	proportion of clients that showcased improved AF practices resulting in an increased income
<i>Increased empowerment of clients</i>	
<i>16. % of clients turned into agripreneurs</i>	proportion of clients transformed into agripreneurs
<i>17. % of marginalized clients turned into agripreneurs</i>	proportion of marginalized clients transformed into agripreneurs
<i>18. % of clients employed in AF related job or promoted to a higher position</i>	proportion of clients (including scholars) that have been employed to AF-related job or have been promoted to higher positions

Result Indicator	Description
<i>19. # Schools for Practical Agriculture assisted</i>	total number of learning sites elevated into Schools for Practical Agriculture with the assistance of ATI
<i>20. # Farm Tourism sites assisted</i>	total number of Schools for Practical Agriculture elevated into Farm Tourism sites with the assistance of ATI
<i>Increased resiliency of clients</i>	
<i>21. % of clients with social protection</i>	proportion of clients with crop or livestock insurance, SSS, PhilHealth, among others
<i>22. % of clients saying that they are confident of coping from unfortunate events</i>	proportion of clients that perceived confidence in coping from unfortunate events/total # of clients served
<i>23. % of clients that have coped with unfortunate events by applying adaptation and mitigation measures</i>	proportion of clients that have adopted adaptation and mitigation measures and have coped with unfortunate events
<i>24. % of clients with alternative AF-related job competencies</i>	proportion of clients that are considered to be more adaptive because they have other AF-related job competencies
<i>Increased competitiveness of clients</i>	
<i>25. % of farms certified</i>	proportion of client farms certified as GAP, OA, GAHP, among others
<i>26. % of products certified by an accreditation body</i>	proportion of clients that produced products certified as organic, Halal, GMP, HACCP, among others
<i>27. % of clients producing demand-driven products</i>	proportion of clients providing produce to institutional or commercial buyers
<i>28. % of clients engaged in the overseas market</i>	proportion of clients exporting products to overseas markets

ANNEX 2: LIST OF RBME REFERENCE MATERIALS REVIEWED

1. Post Training Evaluation of Action Plan Implementation: A Monitoring Report for the Activity Entitled “From Outputs to Outcomes Leveling Up to a Results-Based Monitoring and Evaluation Practice”, 2018.
2. The Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) System Report, 2019.
3. The Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) System Report, 2020.
4. The Agriculture and Fisheries Extension (AFE) Results-Based Monitoring and Evaluation (RBME) System Report, 2021.
5. Excellence and Accountability in Extension: Technical Guidance Notes in the Monitoring and Evaluation of Agriculture and Fisheries Extension Program Performance, 2017.
6. Excel sheets containing names of AFE workers and farmers per region and ITCPH from 2018-2022.
7. Agriculture and Fisheries Extension Results-Based Monitoring and Evaluation System: Survey Questionnaire for Farmer.
8. Agriculture and Fisheries Extension Results-Based Monitoring and Evaluation System: Survey Questionnaire for LGU Extension Worker.
9. ATI Annual Reports, 2010-2023.
10. ATI Programs

ANNEX 3: LIST OF KII RESPONDENTS FROM ATI CENTRAL AND REGIONAL OFFICES

ATI Office/Region	Key Informants Interviewed		Date of Interview	Interviewer
	Name	Position/Designation		
ATI - Main Office	Bernard James Tandang	Chief of Policy Standards and Development Section	May 16	Dr. Decena and Ms. Tidon
	Cindy C. Alfonso	Project Evaluation Officer II		
	Mark Alforque	Project Evaluation Officer II		
ATI - Cordilleras	Khareen B. Tigui-ing	Development Management Officer I	May 21	Ms. Tidon
ATI - Ilocos Region	Jayvee Bryan G. Carillo, PhD	OIC, Center Director	May 27	Ms. Tidon
	Jomar Palsimon	Project Evaluation Officer I		
ATI - CALABARZON	Angelo Hernandez	Project Evaluation Officer I	May 28	Ms. Tidon
ATI - Cagayan Valley	Claris M. Alaska, DPA	OIC, Center Director, Training Superintendent I	May 29	Ms. Tidon
	Jhim Salvador	Chief, Career Development and Management Section		
	Vladimir Caliguiran	Chief, Information Services Section		
ATI - MIMAROPA	Manilyn M. Tejada, MPA, LPT	Project Evaluation Officer I	June 7	Dr. Decena
ATI - Western Visayas	Mary Ann A. Ramos, MPM	Training Center Superintendent II Center Director	June 7	Dr. Decena
	Dianne Rivera	Planning Officer/Focal person of RBME		
	Mary Jean Yupano	Designated Monitoring and Evaluation Officer		
ATI - Eastern Visayas	Hazel Grace T. Taganas	Training Superintendent II Center Director	June 10	Ms. Tidon
ATI - Central Luzon	Marciano C. Santos	Unit Head, PMEU Planning Officer II	June 13	Dr. Decena
	Joan P. Su-Ay	Project Evaluation Officer I CFIDP Point Person/ HR Designate		
ATI - Central Visayas	Lhea Araña	Development Management Officer I/ M & E Designate	June 13	Ms. Tidon
ATI - Davao Region	Chonna Vae Cañete	PMEU Representative	June 14	Dr. Decena
ATI - Bicol	Roberto Santos Jr.	Project Evaluation Officer Focal Person, Monitoring and Evaluation, Data Privacy Officer	June 21	Ms. Tidon

ATI Office/Region	Key Informants Interviewed		Date of Interview	Interviewer
	Name	Position/Designation		
ATI - Northern Mindanao	Cheaster Magat	PMEU Technical Support Staff	June 26	Dr. Decena
ATI - International Training Center on Pig Husbandry	Jackielyn B. Garlet	OIC Chief, PMES / Admin Officer IV	June 27	Dr. Decena and Ms. Tidon
ATI - Zamboanga Peninsula	Agustin Wagas	Planning Officer	July 3	Dr. Decena
	Decelyn Cabang	Monitoring and Evaluation Officer		
ATI - SOCCSKSARGEN	Alvin Palma	PMEU Officer	July 15	Dr. Brown
ATI - CARAGA	Teovelita Rodriguez	PMEU Officer	July 15	Mr. Agbisit and Mr. Macuha