Harvesting shall be done when: 80-85% golden yellow paddy rice grains shattering varieties; and up to 90% for non-shattering varieties. Arrange harvested paddy rice in criss-cross manner or bundled. Harvesting equipment shall be properly maintained. Sort-out paddy rice with visible signs of insect/microbial damage. Thresh paddy rice right after or a day after harvest.

-Post-harvesting practices

Hauling facilities to be used shall be clean and dry. Reduce paddy rice moisture content (MC) to 14% or below. Use prescribed methods of drying to minimize grain damage and pest infestation. Drying of paddy rice in highways/roads is prohibited. Use clean and appropriate containers for the dried paddy rice.

-Transport and Storage

Paddy rice shall be moved to a suitable storage. Paddy rice to be transported shall be covered with protective material and properly stacked inside the vehicle. Warehouse/storage areas shall be designed to prevent re-wetting of paddy grains, entry of birds and pests, well ventilated and maintain recommended MC. Follow FIFO (Fisrt-In, First-Out).

5. Workers' Health and Safety

Farm workers shall wear appropriate clothing and protective gadgets.

Farm workers shall be trained on recommended personal hygienic and sanitary practices.

Employers shall follow regulatory requirements for payment of wages and employment of children set by DOLE and Wage Board.

6. Farm Management/Farm Records

Updated records must be kept for up to 2 years New farm applicants must have records of at least 1 cropping season.

Keep copies of laboratory analyses and other certificates that may help establish compliance with good agricultural practices. Records of produce leaving the farm must be maintained and traceable to farm/sources.

Farm owner shall maintain a complete personnel and health records of farm workers.

Staff training records must be maintained and available.

Source of Technology:

BUREAU OF PRODUCT STANDARDS*

Member to the International Organization for Standardization (ISO)

Standards and Conformance Portal: www.bps.dti.gov.ph

*BUREAU OF PHILIPPINE STANDARDS

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Bureau of Agriculture and Fisheries Product Standards

CODE OF

GOOD AGRICULTURAL PRACTICES (GAP) ON RICE





Scope

The Code of Good Agricultural Practices for Rice (GAP for Rice) is a set of consolidated safety and quality standards formulated by the Department of Agriculture (DA) and covering the production, harvesting and on-farm post-harvest handling and storage of paddy rice. This code of practice takes into account the Philippine GAP for Fruits and Vegetables and the Philippine GAP for Corn which are based on the concept of Hazard Analysis of Critical Control Points (HACCP) and quality management principles from farm to table continuum with emphasis on the following six (6) key areas:

- 1. Farm location;
- Farm environment;
- 3. Farm structure and facility maintenance;
- 4. Farming practices;
- 5. Workers' health and safety; and
- 6. Farm management

1. Farm location

The production area and adjoining sites or farms shall be evaluated for their suitability for agricultural land use.

- -History of land use -Adjoining sites
- -Potential hazards -Choose another site
- -Provide corresponding preventive/mitigating measures

Production sites situated near highly urbanized areas may not be eligible for certification subject to the assessment

2. Farm Environment

The production, post-harvest, and storage areas shall be kept clean and tidy at all times. Field sanitation practices shall always be ensured.

-Soil and soil nutrients

Prior to land preparation, soil samples shall be analyzed for pH, organic matter (OM) content, and relevant nutrients (e.g. N, P, K, Zn, and S) for appropriate fertilizer recommendation.

-Water

Water quality analysis shall be carried-out based on perceived hazards

3. Farm structure and facility maintenance

Farm structures and facilities such as irrigation pumps, warehouse for the paddy rice, storage room for fertilizer, pesticide, and other farm supplies and materials including protection shed of farm machineries shall be appropriately designed for their intended purposes.

- -Farm structures and facilities shall be constructed in a manner that it minimize the risk of contamination.
- -Farm equipment shall be attuned and well-maintained for optimal operating conditions.
- -Sewerage/drainage systems as appropriate shall be constructed to minimize the risk of contamination.
- -Irrigation water ways shall be maintained to provide effective delivery of water.
- -Animals shall not be allowed in all cultivated areas.
- -Toilet facilities must be provided for farm workers and must be properly cleaned and maintained.

4. Farm practices

-Land Preparation

Appropriate to the contour, soil type and rainfall pattern for different rice ecosystems.

-Irrigated Rice Ecosystem

No visible mounds of soil above water surface (2-5cm depth) after final land levelling. Weeds and stubbles plowed under 10-15cm at 3-4 weeks before planting. Harrowing of fields may be done at least twice at 1 week interval. For DWSR, small canals may be constructed.

-Upland Rice Ecosystem

Field cleaning at the end of dry season. Plow once at the onset of rainy season or depending on weed population and soil type. Harrowing may be done once or depending on the status of the soil.

-Steep (>18% slope) Rice Ecosystem

Existing permanently tilled areas must weed- and trash-free. Generally no tillage; employ dibbling method of seeding. Contour plowing, if applicable.

-Planting and seed materials

Use quality seed varieties adapted in the locality and/or NSIC approved. Record sources of seed materials. Follow recommended seed rate, seedbed area, planting distance.

-Pesticides and other Agrochemicals

Pesticides and other agricultural chemicals usage shall comply with FPA regulations. Farmers shall be trained/supervised by certified applicators. Use FPA Registered pesticides. Pesticide shall be labeled and stored in original containers and kept under lock. Warning signs shall be displayed at the storage area.

Disposal shall be done according to label and/or with FPA regulations. Keep purchase and application record. Equipment shall be regularly cleaned and maintained. Wear prescribe clothing and gear during application.

-Integrated Nutrient Management

Pesticides and other agricultural chemicals usage shall comply with FPA regulations. Farmers shall be trained/supervised by certified applicators. Use FPA Registered pesticides. Pesticide shall be labeled and stored in original containers and kept under lock. Warning signs shall be displayed at the storage area.

-Integrated Pest Management

Pest management program shall take into account historical data, trends and current conditions

- -Use varieties resistant to insect pests and diseases
- -Follow synchronous planting scheme
- -Conserve natural enemies of pests
- -Practice varietal and/or crop rotation. Use pesticides judiciously and as last resort.

-Weed Management

Practice appropriate weed control measures such as proper land preparation, water management, use of healthy seedlings, manual weeding, etc.

-Water Management

Maintain water requirement at the different rice growth stages

- -Maintain 3-5cm water depth every irrigation time
- -Drain water 1-2 weeks before harvest
- -For rainfed areas, check and coordinate with local agricultural officers for proper water management.

-Other agricultural management practices

Follow recommended row and plant spacing Recommended seeding rate: 20-40kg/ha Registered/Certified Seeds Inbred varieties and 15-20kg/ha for hybrid varieties. Seedbed area of at least 400m2 for the required seeding rate/ha. Replanting of missing hills within 5-7 days At least 25 hills/m2 at 10 DAT. At least 150 plants/m2 for 40 kg/ha rate at 15 DAS.