



RICE MECHANIZATION



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The Rice Program of the Department of Agriculture provides one of its key intervention to support the farmers and make rice farming easier through farm mechanization.

Rice mechanization is the efficient application of modern rice farm technologies to increase, produce and preserve the quality of produce and to reduce postharvest losses. It maximizes land and labor productivity thereby increasing the economic returns to rice farmers. In general, mechanization allows easier and timely production and postharvest operations. It reduces drudgery of field work and lowers production and postharvest costs.



HAND TRACTOR

FEATURES

- Walking agricultural tractor for wet/dry land tillage.
- Designed primarily to pull and propel trailed or mounted agricultural implements and machinery.
- Used for plowing and harrowing.
- Minimum of 1.5-2 has./ day capacity.

Php 130,000.00
estimated cost

30 hectares
(minimum area requirement)



SPECIFICATIONS

1. Prime mover
 - a. Engine: diesel, minimum 5.22 kW (7 Hp)
 - c. Cooling system: water cooled
2. Transmission system: minimum, chain and sprocket #50
3. Hexagonal axle
4. With cage wheel and brand new pneumatic tire
5. With basic tools and accessories as indicated in PAES.
6. Menu of Implement/Attachment
 - a. Moldboard plow
 - b. Comb harrow
 - d. Trailer
 - i. Riding type attachment
7. With One (1) year warranty
8. With AMTEC test result
9. Includes Testing & Training/Orientation of the Operator
(all expenses to be incurred during testing shall be shouldered by the supplier)

4WD TRACTOR



FEATURES

- Self-propelled, designed to carry, pull or propel agricultural implements and machines
- Good for dry land tillage
- Minimum of 4 has./day capacity

P 1,000,000.00
estimated cost

50 ha (minimum
area requirement)



SPECIFICATIONS

1. Engine: diesel, minimum, 3 cylinder
2. Rated power: minimum, 26 kW (35 hp)
 - With basic tools and accessories as indicated in PAES.
 - Attachment: compatible with the power and size of tractor
 - Menu of Implement/Attachment
3. Disc harrow
4. Disc plow
5. Rotary tiller
6. One (1) MT heavy duty trailer capacity
 - With AMTEC test result and with one (1) year warranty
 - Must conform to PAES
 - Includes Testing & Training/Orientation of the Operator (all expenses to be incurred during testing shall be shouldered by the supplier)
 - With DA logo (painted)
 - Delivery on site

FLOATING TILLER



FEATURES

a special type of walking-type agricultural tractor with a front-mounted tilling wheel and equip with a flotation structure commonly used in waterlogged fields

- used for wet land tillage
- minimum of 2 has/day capacity

P 100,000.00
estimated cost

30 ha (minimum
area)



SPECIFICATIONS

1. Prime mover:
 - a. Rated power: minimum, 6.71 kW, (9 hp)
 - b. Diesel engine (air cooled)
2. Engine: single cylinder, weighing not more than 50 kg
3. Forward speed range: 2.5 kph to 4 kph
4. With basic tools and accessories as indicated in PAES
 - a. three (3) pieces open wrenches
 - b. one (1) piece each of Philips and flat screw driver
 - c. one (1) piece adjustable wrench.
8. With AMTEC test result
9. Must conform to PAES
PAES 124:2002, Walking-type Agricultural Tractor Specifications
Part 3: Special Type (Float-Assist Tiller)
10. Includes Testing & Training/Orientation of the Operator
(all expenses to be incurred during testing shall be shouldered by the supplier)

RICE TRANSPLANTER (Walk-Behind)

FEATURES

- A specialized machine for transplanting rice seedlings in the field
- 1.5-2 ha/day (minimum capacity)



P 370,000.00
estimated cost

30 ha (minimum
area requirement)



SPECIFICATIONS

1. Prime mover
 - a. Minimum, 2,611 kW (3.5 hp)
 - b. Engine: gasoline, 4 stroke cycle
2. Number of planting rows: minimum, 4 rows
3. Adjustable hill spacing
4. Row distance: 30 cm, minimum
5. Seedling tray: minimum, 300 pcs
6. With manual seeder for seedling preparation
7. With basic tools and accessories as indicated in PAES.
8. With Original Equipment Manufacturer Manual (OEM)
9. With AMTEC test result
10. Must conform to PAES
 - a. PAES 151:2015, Mechanical Rice Transplanter
 - Includes Testing & Training/Orientation of the Operator (all expenses to be incurred during testing shall be shouldered by the supplier)

RICE TRANSPLANTER (Riding-type)

FEATURES

- A specialized machine for transplanting rice seedlings in the field
- Riding type
- 3.60 ha/day (minimum capacity)



P 1,400,000.00
estimated cost

200 ha (minimum
area requirement)

Requirements for Manufacturing; Safety, Workmanship and Finish; Warranty for Fabrication and Durability; Maintenance and Operation; and Marking shall conform with PAES

SPECIFICATIONS

1. Prime mover:
 - a. minimum, 13.06 kW (17.5 hp)
 - b. Engine: diesel/gasoline
 - c. Starting system: Electric starter
 - d. Four wheel drive
 - e. Steering system: power steering
2. Number of planting rows: minimum, 6 rows
3. Row distance: 30 cm
4. With manual seeder for seedling preparation
5. Seedling tray: minimum, 300 pcs
6. With basic tools and accessories as indicated in PAES
7. With AMTEC test result
8. Must conform to PAES
 - a. PAES 151:2015, Mechanical Rice Transplanter
9. Includes Testing & Training/Orientation of the Operator (all expenses to be incurred during testing shall be shouldered by the supplier)
 - With DA logo (painted)

DRUM SEEDER

FEATURES

- A planting equipment for depositing seeds in the soil
- 1.0-1.5 ha/day (minimum capacity)
- 1.0-1.5 ha/day (minimum capacity)

P 8,000.00
estimated cost

**3-5 ha (minimum
rice area
requirement)**



SPECIFICATIONS

1. Seed capacity: 2kg/drum
2. Seeding output: minimum, 0.033 (ha/h) per row
3. Seeding rate: 20 – 60 kg/ha
4. Number of rows: 8 – 12
5. Spaced at 20 cm between rows
6. Drum made of plastic or its equivalent
7. With AMTEC test result
8. Must conform to PAES
 - a. PAES 143:2005, Rice Drum Seeder
9. With basic tools and accessories as indicated in PAES

RICE COMBINE HARVESTER



FEATURES

- A self-propelled, combines harvesting, threshing, cleaning and bagging in one operation
- 3 ha/day (minimum capacity)

P 2,000,000.00
estimated cost

100 ha (minimum area)



SPECIFICATIONS

1. Prime mover
 - a. Rated power: minimum, 44.76 kW (60 hp)
2. Drive system: rubber crawler track
3. With brand new transport- trailer
4. With basic tools and accessories as indicated in PAES
5. Sacked or auto unloading
6. Total machine loss: maximum, 3%
7. Mechanically damaged (broken) grain: maximum, 2%
8. With basic tools and accessories as indicated in PAES
9. With AMTEC test result
10. Must Conform to PAES
 - a. PAES 204:2015, Rice Mechanical Thresher
11. Includes Testing & Training/Orientation of the Operator (all expenses to be incurred during testing shall be shouldered by the supplier)

RICE THRESHER

FEATURES

- Machine used to detach and separate the paly from the panicles
- 2-3 tons/hr. minimum capacity
- Can be trailer mounted, towed by a carabao or hitched to power tiller



P 130,000.00
estimated cost

50 ha (minimum area)



SPECIFICATIONS

- a. Engine: Diesel: 7.46 kW, (10 hp), minimum
 - b. Cooling system: aircooled
 - c. Weighing not more than 60 kg
1. **Threshing cylinder**
 - a. type: open cylinder
 - b. peg tooth round/knife bar mild steel
 2. **Threshing Recovery, minimum 97.0%**
 3. **Threshing efficiency: minimum, 99.8%**
 4. **Total machine loss: maximum, 3%**
 5. **Purity: minimum, 97%**
 6. **With basic tools and accessories as indicated in PAES**
 7. **With Original Equipment Manufacturer Manual (OEM)**
 8. **With AMTEC test result**
 9. **Must Conform to PAES**
 - a. PAES 204:2015, Rice Mechanical Thresher
 10. **Includes Testing & Training/Orientation of the Operator (all expenses to be incurred during testing shall be shouldered by the supplier)**

PUMP & ENGINE SETS

with complete accessories



FEATURES

- Device used to lift or transfer water from one source to another
- Provided with suction hose and duct hose

P 100,000.00
estimated cost

**3-5 ha (minimum
rice area
requirement)**



SPECIFICATIONS

1. Engine: Water-cooled diesel engine, 7 Hp minimum
2. Pump: 4x4 self-priming centrifugal pump with hose adaptor at the suction/inlet & direct elbow with hose adaptor at the discharge/outlet
3. Accessories:
 - 20 ft plastic corrugated suction hose with plastic strainer and hose clamps/clips and 100 m duct hose
 - complete set of pulleys and v-belts and manual
4. AMTEC Tested on pump and engine sets
5. Mounted on common base plate
6. With 1 year warranty
 - Includes Testing & Training/Orientation of the Operator (all expenses to be incurred during testing shall be shouldered by the supplier)
7. With basic tools and accessories as indicated in PAES
 - Two (2) pieces open wrenches
 - One (1) piece adjustable wrench
 - One (1) piece each of Philips and flat screw-driver

Memorandum Order No. 50 series of 2020 provide revised guidelines in the provision of Agricultural Production, Postharvest and Processing Machinery, Equipment, and Facilities

ELIGIBILITY OF RECIPIENTS

1. Registered Farmers' Organization (FO), Farmers' Association (FA), Farmers' Cooperative (FC), Irrigators' Association (IA), Agrarian Reform Beneficiaries Organization (ARBO), and other rural-based organizations; and
2. Agricultural schools, universities, and colleges.

QUALIFIED RECIPIENT

The following shall be the qualifications of the candidate recipient:

- 1) Must have a concrete plan for the use of the requested machinery, equipment, and facilities for the benefit of its members
- 2) Must have a service area or volume of production at least equivalent to the capacity of the requested machinery, equipment, and facilities
- 3) Must be currently engaged in, but not limited to, production, processing, and marketing of palay/ rice, corn, high-value crops, livestock, and poultry, or any combination thereof;
- 4) Must have an existing shed or willing to provide a shed with a design appropriate for the safe storage of the machinery and/or equipment being requested;
- 5) Must have the technical, financial, and institutional capacity to operate and maintain the machinery, equipment, and facilities to be received;
- 6) Must have an operator capable of operating and maintaining the requested machinery, equipment, and facilities. The operator must be willing to undergo the appropriate National Certificate training course(s); and
- 7) Must be willing to undergo further training course(s).

Minimum Requirements to be Submitted

The candidate recipient shall submit the following documents:

- 1) Letter of Intent and Board Resolution signed by majority of the Board members, stating the following:
 - a. List of machinery/equipment/facilities to be requested;
 - b. Justification or explanation for the need and appropriateness of the machinery/equipment/facilities;
 - c. Commitment to shoulder the cost of operation and maintenance of the requested machinery/equipment/facilities;
 - d. Authorized representative to sign any legal documents/documentary requirements with the Department of Agriculture on the project;
 - e. Name and technical qualifications of the designated operator

- 2) Endorsement from Municipal Agriculture Office (MAO)/ City Agricultural Office (CAO), and/or Provincial Agricultural Office (PAO), stating the consistency of the request to local development plans such as local Agricultural and Fisheries Mechanization Program, Agriculture and fisheries Modernization Plan (AFMP), Local Commodity Investment Plan, among others
- 3) Photos of the existing shed or proof of availability of land for the shed and service area;
- 4) Proof of conditional deed of donation or sale for the land/lot in favor of the government for private property intended as site for the requested facility;
- 5) Map of the service area, showing the existing and potential production area (Annex A: Sample Map Format); and
- 6) Utilization Proposal that indicates the production area and volume, the general specification (including type and capacity) of the requested machinery, equipment, and facilities, the period of the operation, access scheme of members and non-members, a business plan describing its marketing and sustainability strategies, among others. (Annex B: Utilization Proposal Template).

Additional documents for Rural Based Organizations:

- 1) DA Accreditation Certificate or Certified True Copy/ Authenticated Certificate of Registration or any equivalent certificate from Cooperative Development Authority (CDA)/ Security and Exchange Commission (SEC)/ Department of Labor and Employment (DOLE)/ Department of Social Welfare and Development (DSWD)/ Department of Agrarian Reform (DAR)/ National Commission on Indigenous Peoples (NCIP); and
- 2) Profile of the organization and its members (List of officers and members with corresponding farm address and areas).

Additional document for Agricultural schools, universities, and colleges:

- 1) Organizational structure and manpower complement of the concerned office that will manage the request.



*“A food-secure and resilient Philippines
with empowered and prosperous farmers and fisherfolk”*

Gihimo ug Giapud-apud sa:





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In Support to:
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