



MEMORANDUM ORDER

NO. 13

Series of 2023

SUBJECT : GUIDELINES IN THE PREPARATION OF PLAN AND BUDGET PROPOSAL FOR AGRICULTURAL MACHINERY, EQUIPMENT AND FACILITIES SUPPORT SERVICES FOR FY 2024 AND ONWARDS

Agricultural and fishery machinery, equipment, and facilities support services (AFMEFSS) which include the provision of agricultural equipment and facilities (PAEF) and Irrigation Network Services (INS) are among the major interventions proposed in FY 2024 under the DA Banner Programs (rice, corn, livestock, organic agriculture, urban agriculture, and HVCC) as well as Locally Funded Projects (LFP).

In order to ensure the smooth implementation of agri-fisheries mechanization interventions and infrastructure projects and pursuant to 'DA Guidelines for the Preparation of the Department of Agriculture's FY 2024 Plan and Budget Proposals (PBPs)' and 'DA Memorandum Order No. 8, Series of 2022', the plan and budget proposals for AFMEFSS under Tier1 and Tier 2 for FY 2024 and onwards shall be consistent with the following guidelines:

1. All proposals under the Agricultural Machinery, Equipment, Facilities and Other Infrastructure Program of the Banner Programs must be submitted to BAFE for review. The BAFE and BSWM shall jointly review the irrigation proposals. Only those projects that passed the review of BAFE and BSWM (for irrigation) shall be included in Tier 1. The BAFE (for PAEF) and BSWM (for INS) shall submit the list of INS and PAEF approved projects to the National Banner Programs.
2. Proposals for mechanization should be aligned with the National Agricultural and Fisheries Mechanization Plan. Priority shall be given to provinces that have already formulated its Local Agricultural and Fisheries Mechanization Plan to ensure that the request for machinery forms part of the LGU's priority investments for agricultural development.

Similarly, the proposed irrigation projects should be aligned with the Small Scale Irrigation Master Plan.

3. Proposals under AFMEFSS shall address the mechanization and infrastructure challenges in the commodity value chain. The specifications and technical designs shall likewise integrate climate change resiliency.
4. The type and size of machinery in each location should be based on the physical attributes of the area (e.g. slope, soil type, area and volume of production, etc.), mechanization gaps and demand as well as science-based decision tool (i.e. Appropriate Technology Map). The ergonomic specification of the proposed

machinery should also be referred to DA Memorandum Order No. 79, Series of 2022, "Reference Manual of Agricultural and Fisheries Machinery and Equipment", and should likewise be gender sensitive.

5. The proposals must be implementation ready and shall be supported by the following documents, as applicable: (a) Approved Feasibility Studies (FS), (b) Detailed Engineering Designs (DED), (c) Program of Works (POW), (d) secured regulatory clearances, and (e) Right-of-Way acquisitions/ agreements for civil works where applicable. The DA RFO and concerned implementing offices (BPI, BAI, BSWM) shall ensure the uploading of these documents into the ABEMIS prior to the DA Internal Budget Hearing.
6. The preparation and evaluation of FS shall be in accordance with DA Memorandum Order No. 61, Series of 2020, "Guidelines in the Preparation and Evaluation of Feasibility Study for Agricultural and Fisheries Facilities, Agri-Fisheries Machinery and Equipment Service Centers, and Other Agri-Fisheries Mechanization Projects". For FY 2024, the required feasibility study for biosecure swine housing facility under the National Livestock Program as well as facilities under NOAP, HVCDP and NUPAP costing Php 10 Million and below, is suspended.
7. Proposals for agricultural machinery, equipment, facilities and other infrastructure should be consistent with the standard nomenclature and indicators agreed upon by the Planning and Programming Division (PPD) and the Bureau of Agricultural and Fisheries Engineering (BAFE). The nomenclature shall be based on existing standards, reference manual for agricultural and fisheries machinery and equipment, and commonly accepted terminologies (Annex A and B);
8. The proposed agricultural and fishery machinery and equipment should have Agricultural Machinery Testing and Evaluation Center (AMTEC) or Accredited Testing Center (ATC) tested unit available in the market.
9. The agricultural machinery to be proposed must provide wide access to farmers and fisherfolk through their organization (cooperative or association) and likewise support and complement farm consolidation and clustering thrusts. Thus, the banner programs shall include the promotion and establishment of Agricultural Machinery and Equipment Service Centers (AFMESC) pursuant to Section 9 of RA No. 10601 also known as AFMech Law and DA Administrative Order No. 15, Series of 2020;
10. The Engineering and Administrative Overhead Expenses (EAO) shall be included in the project costs of proposals for agricultural infrastructure/facilities and small-scale irrigation projects pursuant to DA Memorandum Circular No. 2, series of 2023 and DA-DBM Joint Memorandum Circular (JMC) No. 4, dated May 27, 2021 and its subsequent updated Circulars;
11. In order to ensure proper operation, maintenance, and management of the proposed agri-fishery machinery and facilities projects, the Banner and Locally

Funded Programs, ATI, BAR, PhilMech, PCA, SRA, PhilFIDA and BFAR shall include the following activities under Extension Support, Education and Training Services (ESETS):

- a) Training and assessment of farmers, agri-fishery machinery operators and technicians on the priority AFMech TVET training regulations as well as the capacity development of the agricultural and biosystems engineers (ABEs) of DA and LGUs as trainers and competency assessors that will produce an adequate number of TESDA-certified agricultural machinery operators and technicians as per DA MC No. 01, Series of 2020 and DA-TESDA-DOLE JMC No. 2, Series of 2021;
 - b) Capacity development of LGU ABEs to perform their devolved functions as part of the Mandanas Garcia Ruling as well as their incentives to support the implementation of DA agri-fishery machinery and facilities projects. This includes among others the formulation of local AFMech plans and registration of agricultural and fishery machinery and equipment; and
 - c) The traveling expenses of GIP-ABE Youth as per DA-DOLE MOA which will be deployed to LGUs.
12. The continuing capacity building of the RAED and other DA engineering offices shall be supplemented under the proposed extension activities of BAFE, BSWM, ATI, PhilMech, NIA, BFAR, PRDP and Banner Programs.
 13. The BAFE and RAED shall ensure a robust pipeline of implementation-ready agri-fishery mechanization and infrastructure projects for funding in FY 2024 and onwards. If possible, the pipeline of projects should cover the next three years.
 14. To facilitate the development and pilot testing of mechanization technologies, all DA RFO-Research Division in coordination with the RAED shall propose at least one mechanization, irrigation or infrastructure related research project to the banner programs for FY 2024 and onwards. This may include the completion of the national inventory of farm machinery and postharvest facilities.
 15. The BAFE and RAED shall ensure that the projects to be funded by FY 2024 are adequately supervised and monitored for the success of its implementation. The BAFE shall likewise conduct an assessment/evaluation of DA-funded agricultural and fishery mechanization and infrastructure projects. As such, the Banner Programs shall include the MOOE requirement of BAFE and RAEDs to effectively perform these tasks. At the Regional Level, the Regional Executive Directors (RED) shall rationalize the allocations under Tier I, FOD-FPMA vs RAED AFESA to ensure project supervision and monitoring by RAEDs.
 16. The BAFE, National Rice Program, RAED and PHilMech shall ensure that the PAEF proposals under the National Rice Program shall complement and do not duplicate the mechanization projects proposed under Rice Competitiveness Enhancement Fund (RCEF).

17. The RAED and FOD shall jointly prioritize AFMEFSS proposals and prepare the consolidated list for endorsement by the RED to the Office of the Secretary copy furnished BAFE and Program Directors.

SPECIFIC GUIDELINES

1. The DA RFOs shall include in its FY 2024 proposal the upgrading of DA-funded Rice Processing Centers that are operational but nonetheless need upgrading to be more competitive and be able to produce the demands of the market. The upgrading may include construction of a new warehouse and provision of additional machinery. Repair works are to be excluded.
2. The DA RFOs are encouraged to prioritize crop care machinery to reduce crop losses. Moreover, considering the inefficiencies of lever operated knapsack sprayers, the DA-RFOs shall begin to shift to battery operated, power and boom sprayers.
3. Procurement of plastic crates, palettes, laminated sack, garden net, plastic drum, UV plastic sheet, garden tools, plastic mulch, seedling tray, egg trays, water hose and the like that are not classified as machinery and equipment, shall be included in the Production Support Services (PSS).
4. Secondary processing, construction, household, industrial, laboratory, and transport machinery and equipment and garden tools and equipment that will be used in agriculture may not require AMTEC or ATC testing. (See list attached as Annex C)
5. To support the identified Agricultural and Fishery Machinery and Equipment Service Centers (AFMESC) in the regions, the DA-RFO shall include in the mechanization proposal its machinery requirement to complete its line of custom servicing from production to postharvest operations.
6. The RAED and Implementing Offices should give priority to different renewable energy technologies and systems as the primary power source used for various agricultural and fisheries productions and postharvest operations such as irrigation, aeration and pump mechanism for fisheries production systems, drying, curing, cooking among others.
7. Drones to be procured under PAEF shall be used for spraying, fertilizer application, and seed sowing. The DA-RFOs and concerned implementing offices shall ensure that (a) the cost of drones are inclusive of the registration cost, and (b) the recipients of drones shall have a registered operator trained on the operation, maintenance and troubleshooting of drones, and possesses the necessary document required by the Civil Aviation Authority of the

Philippines (CAAP), Civil Aeronautics Board (CAB), and/or DA FPA Memorandum Circular No. 28 Series of 2018.

Drones to be used for topographic surveys, mapping, structural safety inspections, crop health monitoring, and agricultural surveys shall be included under the Production Support Services (PSS). The DA-RFO and Attached Agencies shall ensure that its registered drone operator complies with the certification requirement of the Civil Aviation Authority of the Philippines (i.e. Remotely Piloted Aircraft (RPAS) Controller Certificate, the RPAS Operator Certificate, and the RPAS Certificate of Registration).

8. The DA-RFOs are encouraged to implement Laser Land Levelling (LLL) technology as part of precision/smart farming and to facilitate clustering and consolidation. As such, the DA RFOs shall include the provision of Laser Land Levelling (LLL) machinery and equipment (tractor and LLL attachment) to qualified FCAs or AFMESC along with the provision of corresponding capacity building and technology demonstration activity under the Rice Program.

This Order shall take effect immediately.

Done this 7th day of February 2023.

DOMINGO F. PANGANIBAN
Senior Undersecretary



DA-CO-OSEC-MO20230207-00005

BY: [Signature] 7/1/23
[Signature]
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ANNEX A

List of Agricultural and Fisheries Infrastructures

- I. Commodity Transport Infrastructure
 - A. Farm-to-Market Road
 - B. Farm-to-Mill Road
 - C. Agricultural Tramline System
- II. Irrigation Facilities
 - A. Check Dam
 - B. Cistern
 - C. Diversion Dam (DD)
 - D. Drip Irrigation System
 - E. Hydraulic Ram Pump System
 - F. Hydroponics System
 - G. Irrigation Canal
 - H. Pump Irrigation System for Open Source (PISOS)
 - I. Pivot Center Irrigation System
 - J. Rock Fill Dam
 - K. Shallow Tube Well (STW)
 - L. Small Farm Reservoir (SFR)
 - M. Small Water Impounding Project (SWIP)
 - N. Solar-Powered Irrigation System (SPIS)
 - O. Solar-Powered Fertigation System (SPFS)
 - P. Spring Development (SD)
 - Q. Sprinkler Irrigation System
 - R. Wind-Powered Irrigation System
- III. Soil Erosion Control Structures
 - A. Terraces
 - B. Riprap
- IV. Production Facilities
 - A. Crops
 - 1. Greenhouse
 - i. Screenhouse
 - ii. Rain Shelter
 - iii. Nethouse
 - 2. Nursery
 - 3. Seed Storage
 - 4. Mushroom Production Center
 - 5. Indoor Cultivation System
 - 6. Urban Aquaponics System
 - B. Livestock
 - 1. Poultry Housing
 - i. Broiler
 - ii. Layer
 - iii. Quail/Duck
 - 2. Cattle Housing
 - i. Dairy
 - ii. Cattle Ranch

ANNEX A

3. Goat and Sheep Housing
4. Milking Parlor
5. Multiplier Farm
6. Swine Housing
7. Rabbit Housing
- C. Fisheries
 1. Community Fish Landing Center
 2. Hatchery
 - i. Brackishwater Fishpond and Hatchery
 - ii. Freshwater Fishpond and Hatchery
 3. Fishpen
 4. Fish Cage Tank
 5. Ice Making Center
 6. Port Complex
- D. Support Facilities
 1. Farm Workshop
 2. Machinery Shed
 3. Farm Service Center
 4. Farm House
- V. Processing Facilities (Drying, Processing, and Storage)
 - A. Crops
 1. Processing Facility
 - i. Abaca Processing Facility
 - ii. Banana Chips Processing Center
 - iii. Cacao Fermentation Facility
 - iv. Cacao Processing Center
 - v. Calamansi Juice Processing Center
 - vi. Cashew Nuts Processing Center
 - vii. Coffee Processing Center
 - viii. Coconut Processing Center
 - ix. Durian Pastries Processing Center
 - x. Fiber Processing Center
 - xi. Guyabano Juice Processing Center
 - xii. Mango Processing Center
 - xiii. Mango Juice Processing Center
 - xiv. Mangosteen Jam Processing Center
 - xv. Passionfruit Processing Center
 - xvi. Pili nut Processing Center
 - xvii. Pineapple Processing Center
 - xviii. Pineapple Juice Processing Center
 - xix. Rambutan Wine Processing Center
 - xx. Rice Processing Facilities (RPC)
 - xxi. Root Crop Chips Processing Center
 - xxii. Root Crop Flour Processing Center
 - xxiii. Rubber Crumb Processing Center
 - xxiv. Rubber Sheet Processing Center
 - xxv. Strawberry Jam/Wine Processing Center
 - xxvi. Sugar Mill
 - xxvii. Ube Processing Center
 - xxviii. Vegetable Chips Processing Center
 - xxix. Vegetable Flour Processing Center
 - xxx. Vegetable Juice Processing Center

ANNEX A

- xxxi. Vegetable Processing Center
- xxxii. Vegetable Semi-processed Processing Center
- xxxiii. Village Type Corn Postharvest Processing Center (VTCPPC) or Corn Processing Center
- xxxiv. Wood Vinegar Facilities
- xxxv. Corn Grit Processing Center
- xxxvi. Muscovado Processing Facility
- xxxvii. Cotton Processing Center
- xxxviii. Silk Weaving and Processing Center
- xxxix. Cocoon Processing Center
- xl. Buntal Processing Center
- xli. Pineapple Fiber Processing Center
- xlii. Sisal Processing Center
- xliii. Maguey Processing Center
- xliv. Weaving and Dyeing Center
- xlvi. Water Lily Processing Center
- xlvi. Banana Fiber Processing Center
- xlvi. Fiber Stripping Center
- xlvi. Fiber Grading and Baling Establishment (GBE)
- xlix. Moringa Processing Facility
- l. Turmeric Processing Center
- 2. Drying and Thermal Processing Facility
 - i. Cassava Granule Drying Center (CGDC)
 - ii. Coffee Roasting Center
 - iii. Coffee Drying Shed
 - iv. Multi-Crop Drying Pavement (MCDP)
 - v. Multi-Commodity Drying Shed
- 3. Storage Facility
 - i. Cold Storage
 - ii. Grain Silo
 - iii. Warehouse
 - iv. Palay Shed
 - v. Hay Barn
 - vi. Monolithic Dome Warehouse
 - vii. Onion Hanger Storage
 - viii. Banana Packinghouse
 - ix. Mango Packinghouse
 - x. Coffee Storage Center
 - xi. Cacao Storage Center
 - xii. Abaca Storage Center
- B. Livestock and Dairy
 - 1. Cold Storage
 - 2. Dairy Processing Center
 - 3. Feed Mill Center
 - 4. Hay Barn
 - 5. Lairage
 - 6. Poultry Dressing Plant
 - 7. Slaughterhouse
 - 8. Tannery Center
- C. Fisheries
 - 1. Canning Center
 - 2. Cold Storage and Refrigeration

ANNEX A

3. Drying and Smoking Center
 4. Processing Center
 5. Feed Plant
 6. Regional Fishport
 7. Municipal/ City Fishport
 8. Ice Making Center
- VI. Renewable Energy Facilities
- A. Biogas Reactor Plant
 - B. Biomass Plant
 - C. Solar Energy Farm
 - D. Wind Energy Farm
- VII. Organic Agriculture Facilities
- A. Botanical Concoction Center
 - B. Fertilizer Processing Center
 - C. Vermi-Composting Shed
- VIII. Waste Management Structure
- A. Liquid Waste Treatment Plant
 - B. Solid Waste Treatment Plant
- IX. Marketing Facilities
- A. Buying Station
 - B. Livestock Auction Market
 - C. Public Market
 - D. Agricultural Trading Center
 - E. Trading Post
- X. Laboratory and Research Centers
- A. Animal Disease Diagnostic Laboratory
 - B. Crop Protection Center
 - C. Feed Chemical Analysis Laboratory
 - D. Fisheries Laboratory
 - E. Plant Tissue Culture Laboratory
 - F. Plant Disease Diagnostic Laboratory
 - G. Soil Laboratory
 - H. Abaca Tissue Culture Laboratory
- XI. Quarantine and Checkpoint Areas
- A. Crop and Crop Products Quarantine Zone
 - B. Livestock and Livestock Products Quarantine Zone
- XII. Other Facilities/Projects
- A. Farm Workshop and Machinery Shed
 - B. Regional Field Office
 - C. Research and Experimental Station
 - D. Training Center
 - E. Water Treatment System Facility

ANNEX B

List of Agricultural and Fisheries Machinery and Equipment

- I. Land Preparation and Earth-Moving Machinery, Attachments, and Implements
 - A. Land Preparation Machinery
 - 1. Walking-type Agricultural Tractor
 - i. Float-Assist type
 - ii. Pull type
 - iii. Rotary-Tilling type
 - 2. Four-wheel Tractor
 - 3. Crawler-wheel Tractor
 - B. Earth-Moving Machinery
 - 1. Bulldozer
 - 2. Backhoe Loader
 - 3. Excavator
 - 4. Front Loader
 - 5. Drilling Rig
 - 6. Soil Auger
- II. Production Machinery and its Accessories
 - A. Planting Machinery
 - 1. Transplanter
 - i. Walk-behind Type
 - ii. Ride-on Type
 - 2. Planter
 - B. Seeding Machinery
 - 1. Drum Seeder
 - 2. Precision Seeder
 - 3. Knapsack Broadcast Spreader
 - 4. Drone Seeder
 - 5. Seedbed Seeder
 - 6. Seedling Rack
 - C. Production Equipment
 - 1. Pressure Cooker
 - 2. Steaming Cabinet
 - 3. Autoclave
 - 4. Mushroom Bagger
- III. Harvesting and Processing Machinery
 - A. Crops
 - 1. Harvesting Machinery
 - i. Combine Harvester
 - a. Rice Combine Harvester
 - b. Corn Combine Harvester
 - ii. Harvester
 - a. Cotton Harvester
 - iii. Picker
 - a. Corn Picker
 - b. Cotton Picker

ANNEX B

- iv. Reaper
 - a. Rice Reaper
- v. Gruber
- 2. Preliminary Processing Machinery
 - i. Destoner
 - ii. Fiber Decorticator/ Stripper
 - a. Abaca Stripper
 - iii. Ginning Machine
 - a. Cotton Ginning Machine
 - iv. Grain Collector
 - v. Grain/ Seed Cleaner
 - vi. Husker-Sheller
 - a. Corn Husker-Sheller
 - vii. Paddy Separator
 - viii. Pulper/Huller
 - a. Coffee Pulper
 - ix. Sheller
 - a. Corn Sheller
 - b. Peanut Sheller
 - x. Thresher
 - a. Rice Thresher
 - b. Mungbean Thresher
 - c. Multi-commodity Thresher
 - d. Soybean Thresher
 - xi. Washer-Peeler
 - xii. Pod Splitter
 - a. Cacao Pod Splitter
 - xiii. Cracker
 - a. Cacao Cracker and Winnower
- 3. Size Reduction and Mechanical Moisture Removal Machinery
 - i. Chipper
 - a. Banana Chipper
 - b. Cassava Chipper
 - ii. Chopper
 - iii. Creper
 - a. Rubber Creper
 - iv. Expeller
 - v. Granulator
 - a. Cassava Granulator
 - vi. Grater
 - a. Cassava Grater
 - b. Multi-commodity Grater
 - vii. Grinder
 - a. Coffee Grinder
 - b. Cacao Grinder
 - c. Soybean Grinder

ANNEX B

- d. Ube Grinder
 - viii. Extractor
 - a. Soya Oil Extractor
 - b. Sugarcane Presser
 - c. Cacao Butter Extractor
 - ix. Mill
 - a. Adlay Mill
 - b. Corn Mill
 - i. Compact Corn Mill
 - x. Pulverizer
 - a. Rice Pulverizer
 - b. Cassava Pulverizer
 - c. Multi-commodity Pulverizer
 - xi. Shredder
 - a. Vegetable Shredder
 - b. Multi-Commodity Shredder
 - xii. Splitter
 - a. Bamboo Splitter
 - xiii. Huller
 - a. Brown Rice Huller
 - b. Rice Huller
 - i. Impeller type
 - ii. Rubber-roll type
 - xiv. Whitener
 - xv. Mist Polisher
4. Thermal Processing, Moisture Reduction, and Storage Machinery
- i. Mechanical Dryer
 - a. Batch Type
 - i. Flatbed Type Dryer
 - ii. Tunnel-Type Dryer
 - iii. Tray/Cabinet Type Dryer
 - iv. Recirculating Type
 - 1. Stationary
 - 2. Mobile
 - b. Continuous Flow
 - i. Concurrent Flow Type
 - ii. Counter Flow Type
 - iii. Cross Flow Type
 - iv. Mixing Type
 - v. Non-Mixing Type
 - ii. Non-Mechanical Dryer
 - a. Microwave type
 - b. Infrared type
 - c. Oven type
 - d. Dehydrator type
 - e. Spotlight type

ANNEX B

- f. Natural Convection Type
 - iii. Cold Storage
 - iv. Crystallizer
 - v. Furnace
 - vi. Horizontal Silo
 - vii. Roaster
 - a. Coffee Roaster
 - b. Cacao Roaster
 - c. Peanut Roaster
 - d. Soybean Roaster
 - e. Rice Roaster
 - viii. Storage Bin
 - ix. Vacuum Packing Machine
 - x. Quick Freezer
 - xi. Chest Freezer
 - xii. Tempering Machine
 - xiii. Tofu Maker
 - xiv. Bagging Bin
- 5. Quality Control and Assurance Equipment and Devices
 - i. Color/ Blemish Sorter
 - ii. Conveyor and Elevator
 - iii. Density Sorter
 - iv. Hot Water Treatment Tank
 - v. Shape/ Diameter Sorter
 - a. Green Coffee Bean Sorter
 - vi. Stabilizer
 - vii. Weight Sorter
 - viii. Baler
- B. Livestock, Dairy, and Poultry
 - 1. Feed Processing Machinery and Equipment
 - i. Feed Mixer
 - ii. Feed Pellet Mill
 - iii. Feed Pelletizer
 - iv. Hammer Mill
 - 2. Harvesting and Processing Equipment and Devices
 - i. Milking Machine
 - ii. Bulk Tank
 - iii. Milk Pasteurizer
 - 3. Slaughtering Equipment and Devices
 - i. Chilling Tank
 - ii. Defeathering Machine
 - iii. Dehairing Machine
 - iv. Dehider
 - v. Overhead Rail System
 - vi. Restrainer
 - vii. Scalding

ANNEX B

- viii. Splitting Saw
 - ix. Stunner
 - x. Stunning Box/ Knocking Pen
 - 4. Thermal Processing and Quality Control
 - i. Color/Blemish Sorter
 - ii. Conveyor and Elevator
 - iii. Density Sorter
 - iv. Egg Incubator
 - v. Shape/Diameter Sorter
 - vi. Vacuum Pack Sealer
 - vii. Bagger
 - viii. Weight Sorter
 - ix. Mobile Veterinary Clinic
 - 5. Size Reduction Machinery
 - i. Meat Grinder
 - ii. Meat Slicer
 - iii. Hydraulic Sausage Stuffer
- C. Fisheries
 - 1. Fish Conditioning and Management Equipment and Devices
 - i. Aerator
 - ii. Feed Mixer
 - iii. Feed Pellet Mill
 - iv. Feeder
 - 2. Capture Equipment and Devices
 - i. Engine
 - ii. Fish Aggregating Device
 - iii. Fishing Boat
 - iv. Fishing Net and Trap
 - v. Harpoon
 - vi. Hook and Line
 - vii. Motorized Banca
 - viii. Trawl and Dredge
 - 3. Thermal Processing Machinery and Equipment
 - i. Air-Blast Freezer
 - ii. Dryer
 - iii. Furnace
 - iv. Smokehouse
- IV. Crop Care Machinery and Equipment
 - A. Irrigation Machinery, Equipment, and Components
 - 1. Pump
 - i. Piston or Plunger Pump
 - ii. Diaphragm Pump
 - iii. Rotary Pump
 - iv. Centrifugal Pump
 - v. Jet Pump
 - vi. Gas Lift Pump

ANNEX B

- vii. Reversible Centrifugal Pump
 - viii. Electromagnetic Pump
 - ix. Hydraulic Ram Pump
 - 2. Auxiliary Components
 - i. Sprinkler Head
 - 3. System
 - i. Solar-Powered Irrigation System
 - ii. Hydroponics System
- B. Spraying Machinery, Equipment, and Components
 - 1. Airplane Sprayer
 - 2. Drone Sprayer
 - 3. Fogging Machine
 - 4. Four-wheel Sprayer
 - 5. Helicopter Sprayer
 - 6. Knapsack Sprayer
 - i. Electric-motor Driven Knapsack Sprayer
 - ii. Engine-driven Knapsack Sprayer
 - iii. Dual Knapsack Sprayer
 - 7. Mist Blower
 - 8. Orchard Sprayer
 - 9. Power Sprayer
 - 10. Boom Sprayer
 - 11. Fogging Machine
- C. Granule Application Machinery, Equipment, and Components
 - 1. Granule Applicator
- D. Weed and Crop Management Machinery, Equipment, and Components
 - 1. Hedge Trimmer
 - 2. Chainsaw
 - 3. Grass Cutter
 - 4. Weeder
 - 5. Pole Pruner
 - 6. Pole Chainsaw
 - 7. Flame Thrower
- V. Commodity Transport Vehicles and Machinery
 - A. Farm Carrier
 - B. Forklift
 - 1. Warehouse Forklift
 - 2. Side Loader
 - 3. Counterbalance Forklift
 - 4. Telehandler
 - 5. Heavy-Duty Forklift
 - 6. Rough Terrain Forklift
 - 7. Pallet Jack
 - 8. Walkie Stacker
 - 9. Order Picker
 - 10. Reach Fork Truck

ANNEX B

- C. Four-wheel Truck
- D. Refrigerated Van
- E. Six-wheel Truck
- F. Ten-wheel Truck
- G. Wing Van
- H. Three-wheel Cargo Motorcycle
- VI. Power Source
 - A. Engine
 - 1. Diesel Engine
 - 2. Gasoline Engine
 - B. Electric Motor
 - C. Generator
- VII. Waste and Biomass Management Machinery and Equipment
 - A. Baler
 - B. Briquetting Machine
 - C. Carbonizer
 - D. Chipper
 - 1. Wood Chipper
 - E. Chopper
 - 1. Forage Chopper
 - F. Compost Mixer
 - G. Fermentation Box
 - H. Vermicast Sifter
 - I. Vermi Tea Brewer
 - J. Biomass Gasifier
 - K. Biomass Mixer
- VIII. Tractor Attachments and Implements
 - A. Land Preparation and Earth-Moving Implement
 - 1. Land Preparation Implement
 - i. Bed Former
 - ii. Disc/Moldboard Plow
 - iii. Disc/Power Harrow
 - iv. Field Cultivator
 - v. Leveler
 - vi. Levee Former
 - vii. Mulcher
 - viii. Rake
 - ix. Roller
 - x. Rotary Tiller
 - xi. Rotary Ditcher
 - xii. Soil Puddler
 - xiii. Soil Pulverizer
 - xiv. Stone Picker
 - xv. Subsoiler
 - 2. Earth-Moving Implement
 - i. Backhoe

ANNEX B

- ii. Dozer
 - iii. Drilling Rig
 - iv. Front Loader
 - v. Trencher
 - vi. Soil Auger/ Post-hole Digger
- B. Planting Implement
 - 1. Planter
 - 2. Seeder
 - i. Corn Seeder
 - a. Pneumatic
 - b. Mechanical
 - 3. Broadcast Spreader
- C. Crop Care Implement
 - 1. Sprayer
 - 2. Weeder
 - 3. Granule Applicator
 - 4. Rotary Cutter
 - 5. Grooming Mower
- D. Harvesting Implement
 - 1. Harvester
 - 2. Digger
- E. Hauling Implement
 - 1. Trailer
 - 2. Pallet Fork
- F. Waste and Biomass Management Implement
 - 1. Baler
 - 2. Bale Wrapper
- IX. Operation and Repair Equipment and Devices
 - A. Transformer
 - B. Lathe Machine
 - C. Filamenting Machine
 - D. Welding Machine
 - E. Air compressor
- X. Accessories and Other Components
 - A. Handling and Storage
 - 1. Plastic Crates
 - 2. Hermetic Cocoon
 - 3. Collapsible Dryer
 - 4. Vacuum Sealer
 - 5. Sack Sewing Machine
 - 6. Hermetic Bag
 - 7. Poly Bag Sealer
 - 8. Pallet
 - 9. Mushroom Rack
 - 10. Solar Bubble Dryer
 - B. Crop Management

ANNEX B

1. Seedling Tray
2. Sprinkler
3. Seed/Grain Cleaner
- C. Technical and Scientific Instrument
 1. Moisture Meter
 2. Weighing Scale
- D. Production and Processing Components
 1. Pressure Canner

ANNEX C

CLASSIFICATION OF MACHINERY AND EQUIPMENT USED IN AGRICULTURE

All machinery being used in agriculture shall be classified in the table below. Other machinery with the same intended purpose and description will have the same threshold level and classification.

A. GENERAL PURPOSE

ACTIVITY	NAME OF MACHINERY	THRESHOLD		CLASSIFICATION
		Minimum	Maximum	
Tractor/Power Units	Four-Wheel Tractor	none	none	- Agricultural
	Walking-Type Agricultural Tractor – Pull Type	none	none	- Agricultural
	Walking-Type Agricultural Tractor – Rotary-tilling Type	none	none	- Agricultural
	Walking-Type Agricultural Tractor – Float-assist Type	none	none	- Agricultural
Power Source & Prime movers	Solar Panel	none	none	- Industrial
	Generator Set	none	none	- Industrial
	Electric Motor	none	none	- Industrial
	Small Engine	none	20 kW	- Agricultural - Industrial (>20kW)
	Biomass Furnace	none	none	- Agricultural
Land Preparation	Disc Harrow	none	none	- Agricultural
	Disc Plow	none	none	- Agricultural
	Moldboard Plow	none	none	- Agricultural
	Spring-tooth Harrow	none	none	- Agricultural
	Trailing Harrow	none	none	- Agricultural
	Power Harrow	none	none	- Agricultural
	Furrower	none	none	- Agricultural
	Field Cultivator	none	none	- Agricultural
	Inter-row Cultivator	none	none	- Agricultural
	Subsoiler	none	none	- Agricultural
	Ripper	none	none	- Agricultural

ANNEX C

	Rotavator	none	none	- Agricultural
	Soil Puddler	none	none	- Agricultural
	Mulcher	none	none	- Agricultural
	Earth Auger	none	none	- Agricultural
	Front End Loader	none	none	- Industrial
	Backhoe Loader	none	none	- Industrial
	Land Leveler	none	none	- Agricultural
	Ditcher	none	none	- Agricultural

	Dike Former	none	none	- Agricultural
	Drilling Rig	none	none	- Agricultural
Crop Establishment	Drone Seeder	none	none	- Agricultural
	Hole Digger	none	none	- Garden Tools/Equipment
	Mechanical Soil Auger	none	none	- Agricultural
	Manual Soil Auger	none	none	- Garden Tools/Equipment
Crop Care	Lever-Operated Knapsack Sprayer	none	none	- Agricultural
	Power Sprayer for crops	none	none	- Agricultural - Industrial (Non-crops)
	Granular Fertilizer Applicator	none	none	- Agricultural
	Fertilizer Applicator	none	none	- Agricultural
	Boom Sprayer	none	none	- Agricultural
	Mower	none	none	- Agricultural
	Brush Cutter	none	none	- Garden Tools/Equipment
	Bolo/Machete Knife	none	none	- Garden Tools/Equipment
	Hand Sprayer	none	none	- Garden Tools/Equipment
	Drone sprayer	none	none	- Agricultural
	Chain / Power Saw	none	none	- Industrial
	Pole Pruner	none	none	- Garden Tools/Equipment

ANNEX C

	Manual rotary weeder	none	none	- Garden tools/equipment
Transport	Hauling Truck	none	none	- Transport
	Agricultural Trailer	none	Capacity: 10 metric tons	- Agricultural - Industrial (>10 metric tons)
	Paddy Hauler	none	none	- Agricultural
	Refrigerated Van	none	none	- Agricultural
	Mobile Elevated Platform	none	none	- Agricultural
	Hauling Truck	none	none	- Transport
	Lifting Machine	none	none	- Industrial
	Manual Hand Pallet	none	none	- Industrial
	Forklift	none	none	- Transport / Industrial
Irrigation	Centrifugal Pump	none	6"	- Agricultural
	Pump & Engine Set	none	6"	- Agricultural
	Pump Set	none	6"	- Agricultural
	Drip Irrigation	none	none	- Agricultural
	Sprinkler Head	none	none	- Agricultural
Drying	Multi-crop Cabinet Type Dryer	none	none	- Agricultural
	Spray Dryer	none	none	- Industrial

Other processing activities	Jacketed Kettle	none	none	- Household / Industrial
	Bowl Cutter	none	none	- Industrial
	Spin Water Remover Machine	none	none	- Industrial
	Compost Mixer	none	none	- Agricultural
	Feed Pellet Mill	none	none	- Agricultural
Packaging	Bag Sewing Machine	none	none	- Industrial
	Weighing Scale	none	none	- Industrial
	Vacuum Pack Sealer	none	none	- Industrial
	Band Sealer	none	none	- Industrial

ANNEX C

	Mushroom Bag Machinery		none	- Industrial
Conveying	Bucket Elevator	none	none	- Industrial
Storing	Chest Freezer	none	none	- Industrial
	Quick Freezer	none	none	- Industrial
	Hermetic Bag/Cocoon	none	none	- Industrial
Laboratory Test	Testing Husker	none	none	- Testing Equipment
	Testing Mill	none	none	- Testing Equipment
	Moisture Meter	none	none	- Testing Equipment
	Milling Meter	none	none	- Testing Equipment
	Grain Scanner	none	none	- Testing Equipment

B. RICE MACHINERY

ACTIVITY	NAME OF MACHINERY	THRESHOLD		CLASSIFICATION
		Minimum	Maximum	
Crop Establishment	Grain Seeder	none	none	- Agricultural
	Rice Drum Seeder	none	none	- Agricultural
	Mechanical Rice Transplanter	none	none	- Agricultural
	Rice Precision Seeder	none	none	- Agricultural
Harvesting	Mechanical Rice Thresher	none	none	- Agricultural
	Rice Reaper	none	none	- Agricultural
	Rice Combine Harvester	none	none	- Agricultural
Postharvest	Paddy Seed Cleaner	None	None	- Agricultural
	Brown Rice Stabilizer	None	None	- Agricultural
	Heated Air Mechanical Grain Dryer (Mobile)	none	Capacity: 12 tons/batch	- Agricultural - Industrial (> 12T/batch)

	Heated Air Mechanical Grain Dryer (Recirculating)	none	Capacity: 12 tons/batch	- Agricultural - Industrial (> 12T/batch)
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ANNEX C

	Heated Air Mechanical Grain Dryer (Flatbed)	none	Bin Capacity: 12 tons/batch	- Agricultural - Industrial (> 12T/batch)
	Rice Husk Fed Heating System	none	none	- Agricultural
	Fluidized Bed Dryer	none	none	- Agricultural
	Collapsible Dryer	none	none	- Agricultural
	Grain Collector	none	none	- Agricultural
Milling	Rice Mill	none	Input capacity: 3 metric tons/hr	- Agricultural - Industrial - Input capacity > 3 metric tons/hr
	Micromill	none	none	- Agricultural
	Sifter	none	none	- Industrial
	Rice Whitening Machine	none	none	- Agricultural
	Rice Flour Milling Machine		625 kg/hr	- Household (<50kg/hr) - Agricultural (w/in the range) - Industrial (>625kg/hr)
Grading	Mist Polisher	none	none -	Industrial
	Grain Sorter	none	none	- Industrial
	rice thickness grader	none	none	- Industrial
	rice length grader	none	none	- Industrial
	loss in weight scale	none	none	- Industrial
	Color Sorter	none	none	- Industrial
Processing	Rice Hull Carbonizer	none	none -	Industrial

C. CORN MACHINERY

ACTIVITY	NAME OF MACHINERY	THRESHOLD		CLASSIFICATION
		Minimum	Maximum	
Crop Establishment	Grain Seeder	none	none	- Agricultural
Harvesting	Corn Picker	none	none	- Agricultural
	Corn Combine	none	none	- Agricultural

ANNEX C

	Harvester			
	Corn Husker-Sheller	none	none	- Agricultural
Postharvest	Corn-on-Cob Dryer	None	None	- Agricultural

	Heated Air Mechanical Grain Dryer (Mobile)	none	Vol Capacity: 12 tons/batch	- Agricultural - Industrial (> 12T/batch)
	Heated Air Mechanical Grain Dryer (Recirculating)	none	Vol. Capacity: 12 tons/batch	- Agricultural - Industrial (> 12T/batch)
	Heated Air Mechanical Grain Dryer (Flatbed)	none	Bin Capacity: 12 tons/batch	- Agricultural - Industrial (> 12T/batch)
	Rice Husk Fed Heating System	none	none	- Agricultural
	Fluidized Bed Dryer	none	none	- Agricultural
Milling/Shellin g	Power-operated Corn Sheller	none	none ⁻	Agricultural
	Degerming Machine	none	none	- Agricultural
	Corn Mill	none	none	- Agricultural
	Hammer Mill	none	none	- Agricultural

D. SUGARCANE MACHINERY

ACTIVITY	NAME OF MACHINERY	THRESHOLD		CLASSIFICATION
		Minimum	Maximum	
Preparation of Planting Materials	One-eye bud cutter	none	none	- Agricultural
	Whole-stalk cutter	none	none	- Agricultural
Planting	Sugarcane mechanical planter	none	none	- Agricultural
Harvesting	Sugarcane whole-stalk cutter	none	none	- Agricultural
	Mechanical cane (combine) harvester	none	none	- Agricultural
	Sugarcane Grabber	none	none	- Agricultural

ANNEX C

Ratooning	Biomass Shredder (Trash shredder-mulcher)	none	none	- Agricultural
Transporting	Agricultural Trailer	none	Capacity: 10 metric tons	- Agricultural - Industrial (>10 metric tons)
Processing	Sugarcane Peeler	none	Production Capacity: 300 kg/h	- Agricultural
	Sugarcane Crusher / Sugarcane Juicer	Crushing Capacity: 1000 kg/day	Crushing Capacity: 50,000 kg/day	- Agricultural
	Sugar Mill	none	none	- Agricultural
	Sugarcane Juice Clarifying Machine	none	none	- Industrial
	Crystallizer	none	none	- Industrial

Packaging	Small Sachet Sugar Packaging Machine	none	none	- Industrial
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E. HIGH VALUE CROPS MACHINERY

ACTIVITY	NAME OF MACHINERY	THRESHOLD		CLASSIFICATION
		Minimum	Maximum	
Crop Establishment	Vegetable Seeder	none	none	- Agricultural
Harvester	Onion/Garlic Harvester	none	none	- Agricultural
Processing	Mungbean Sheller	none	none	- Agricultural
	Cashew Sheller	none	none	- Agricultural
	Pili Nut Sheller	none	none	- Agricultural
	Peanut Grinder	none	none	- Agricultural
	Soybean Grinder	none	none	- Agricultural
	Soybean Roaster	none	none	- Agricultural
	Soybean Cleaner/Sorter/Grader	none	none	- Industrial

ANNEX C

F. COFFEE MACHINERY

ACTIVITY	NAME OF MACHINERY	THRESHOLD		CLASSIFICATION
		Minimum	Maximum	
Harvesting	Coffee picking machine	none	none	- Agricultural
Processing	Coffee Dehydrator	none	none	- Agricultural
	Coffee Huller	Power: 1 hp	none	- Agricultural
	Coffee Pulper	Capacity: 30kg/h	Capacity: 300kg/h	- Agricultural - Household: Capacity <30 kg/hr - Industrial: Capacity >300 kg/h
	Manually operated coffee pulper	none	none	- Household
	Coffee Grinder	Capacity: 1 kg/load	Capacity 200kg/h	- Agricultural
	Coffee Roaster	Capacity: 2kg/load	Capacity: 50kg/load	- Agricultural
	Coffee destoner	none	none	- Agricultural
	Coffee Cherry Color Sorter	none	none	- Industrial
	Coffee cherry grading machine	none	none	- Industrial
	Vacuum coffee bean packing machine	none	none	- Industrial
	Coffee Percolator	none	none	- Household

ANNEX C

G. CACAO MACHINERY

ACTIVITY	NAME OF MACHINERY	THRESHOLD		CLASSIFICATION
		Minimum	Maximum	
Processing	Cacao pod breaker	none	none	- Agricultural
	Cacao Dryer	none	none	- Agricultural
	Cacao Bean Color Sorting Machine	none	none	- Industrial
	Cacao Huller	Capacity: 2 kg/load	Capacity 200kg/h	- Agricultural
	Cacao Grinder	Capacity: 1kg/load	Capacity: 50kg/load	- Agricultural
	Cacao Roaster	2kg/load	50kg/load	- Agricultural
	Cacao Pulverizing Machine	Capacity: 2kg/load	Capacity: 50kg/load	- Household: Capacity <2kg/load - Agricultural - Industrial" Capacity > 50kg/load
	Oil Press Machine	Capacity of Pressing Barrel: 30 kg/hr	Capacity of Pressing Barrel: 100 kg/hr	- Household (<30 kg/hr) - Agricultural - Industrial (>100 kg/hr)
	Cacao Fermentation Box	none	none	- Agricultural
	Cocoa Melanger	none	none	- Household/Industrial
	Tablea Maker / Molder	none	none	- Household/Industrial
	Chocolate refiner	none	none	- Household/Industrial

H. FIBER MACHINERY

ACTIVITY	NAME OF MACHINERY	THRESHOLD		CLASSIFICATION
		Minimum	Maximum	
Fiber Extraction	Decorticating Machine	none	none	- Agricultural
	Spindle Stripping Machine	none	none	- Agricultural
	Modified Abaca Stripping Knife (MASK)	none	none	- Household
Cotton	Ginning machine	none	Capacity:	- Agricultural

ANNEX C

Fiber Processing			300 kg/hr	
	Combine blow-room and carding machine	none	none	- Industrial
	Draw Frame Machine	none	none	- Industrial
	Flyer Frame Machine	none	none	- Industrial
	Ring Frame	none	none	- Industrial
	Cone Winder Machine	none	none	- Industrial
Bailing	Bailing Machine	none	none	- Industrial

I. COCONUT MACHINERY

ACTIVITY	MACHINERY	Threshold of the Machinery		CLASSIFICATION
		Minimum	Maximum	
Harvesting	Climbing Machine	none	none	- Household
	Mechanized coconut climbing machine	none	none	- Agricultural
Postharvest (matured coconut)	Coconut manual Husker	none	none	- Household
	Mechanized Coconut Husker	None	Capacity: 1500 Nuts	- Agricultural
	Dehusked Coconut Cutting Machine	None	Capacity: 2400 Nuts/hr	- Agricultural
Postharvest (young coconut)	Semi-Automatic Peeling Machine	None	Output capacity: 120 nuts/hr	- Agricultural
	Hydraulic Tender Cutting Machine	none	none	- Agricultural
	Buko Trimmer-Puncher	none	none	- Agricultural
	Spiral Juice Extractor	none	none	- Agricultural
Endocarp breaking/removal	Coconut Splitter	none	none	- Agricultural
	Paring machine	none	none	- Agricultural
Coconut Oil Processing	Coconut Grinding machine	none	none	- Agricultural
	Coconut grater	none	none	- Agricultural

ANNEX C

(VCO Production): Cold process	Heavy Duty Coconut Presser	none	none	- Agricultural
	Coconut Milk Extracting machine	none	none	- Agricultural
	Spinner	none	none	- Household/Industrial
	Centrifuge	none	none	- Household/Industrial
	VCO Settling Cabinet	none	none	- Household/Industrial
	Vacuum filter	none	none	- Industrial
Copra-based coconut oil extraction	Copra Dryer	none	none	- Agricultural
	Desheller	none	none	- Agricultural
	Copra Grinding machine	none	none	- Agricultural
	Mini copra hammer mill	none	none	- Agricultural
	Copra Oil Extraction machine		none	- Household/Industrial
	Mini oil extruder	none	none	- Household/Industrial
Coconut meat processing	Paring machine	none	none	- Agricultural
	Coconut meat grindier	none	none	- Agricultural
	Coconut Milk Extracting machine	none	none	- Household/Industrial
	Heavy duty Coconut Presser	none	none	- Household/Industrial
	Vacuum dryer	none	none	- Household/Industrial
	Rotary dryer	none	none	- Household/Industrial
	Flour grinder/pulverizer	none	none	- Agricultural

Biomass Processing	Biomass shredder	none	none	- Agricultural
Coconut Coir Processing (Primary)	Coir Decorticator	none	none	- Agricultural
	Husk Defibering Machine	none	none	- Agricultural
	Coir Baling press	none	none	- Industrial
	Cocopeat block machine	none	none	- Industrial

ANNEX C

Coconut Coir Processing (Secondary)	Carding Machine	none	none	- Household/Industrial
	Twining Machine	none	none	- Household/Industrial
	Looming Machine	none	none	- Industrial
	Cocopeat Mixer	none	none	- Industrial
Coconut Charcoal Briquetting	Brick Charcoal Kiln with Smoke Trap	none	none	- Household/Industrial
	Charcoal grinder	none	none	- Household/Industrial
	Charcoal mixer	none	none	- Household/Industrial
	Charcoal Briquetting Machine		none	- Household/Industrial
	Briquette dryer	none	none	- Household/Industrial
Coconut Sap Processing (Vinegar production)	Pasteurizer	none	none	- Household/Industrial
	Acetator	none	none	- Household/Industrial
Coconut Sugar Processing	Vacuum evaporator	none	none	- Household/Industrial
	Cocosugar pulverizer	none	none	- Household/Industrial
	High vacuum coconut oil filter machine	none	none	- Household/Industrial

J. MULTI-CROP MACHINERY

ACTIVITY	NAME OF MACHINERY	THRESHOLD		CLASSIFICATION
		Minimum	Maximum	
Harvesting	Multi-crop Harvester	none	none	- Agricultural
Postharvest	Grain Collector-Bagger	none	none	- Agricultural
Drying	Fruit Dryer (Banana)	none	none	- Agricultural
	Copra Dryer (Coconut)	none	none	- Agricultural
	Fruit Dryer (Jackfruit)	none	none	- Agricultural
	Fruit Dryer (Mango)	none	none	- Agricultural
	Fruit Dryer (Pineapple)	none	none	- Agricultural

ANNEX C

	Fruit Dryer (Papaya)	none	none	- Agricultural
Chipping	Chipping Machine	none	none	- Agricultural
Decorticating	Fiber Decorticator (Banana)	none	none	- Agricultural
	Fiber Decorticator (Pineapple)	none	none	- Agricultural
	Cashew decorticator	none	none	- Agricultural
	Manually Operated Cashew Decorticator	none	none	- Household
Processing	Multi-crop Thresher	none	none	- Agricultural

	Juice Extractor	none	none	- Household/Industrial
	Vermitea Brewer	none	none	- Agricultural

K. ROOTCROPS MACHINERY

ACTIVITY	NAME OF MACHINERY	THRESHOLD		CLASSIFICATION
		Minimum	Maximum	
Processing	Grinder	none	none	- Household/Industrial
	Crystallizer (Ginger)	none	none	- Industrial
	Peanut Sheller (Peanut)	none	none	- Agricultural
	Chipping Machine (Root crops)	none	none	- Agricultural
	Multicrop Washer-Peeler (Ginger)	none	none	- Agricultural
	Multicrop Washer-Peeler (Sweet Potato)	none	none	- Agricultural
	Multicrop Washer-Peeler (Potato)	none	none	- Agricultural
	Multicrop Washer-Peeler (Radish)	none	none	- Agricultural

ANNEX C

	Multicrop Washer-Peeler (Carrot)	none	none	- Agricultural
	Multicrop Grater (Sweet Potato)	none	none	- Agricultural

L. CASSAVA MACHINERY

ACTIVITY	NAME OF MACHINERY	THRESHOLD		CLASSIFICATION
		Minimum	Maximum	
Planting	Fully Mechanized Cassava Planter	none	none	- Agricultural
Weeding	Cassava weeder	Prime mover: 2-stroke cycle engine	none	- Agricultural
Harvesting	Cassava Digger (Tractor mounted)	none	none	- Agricultural
Drying	Cassava Mechanical Dryer	none	none	- Agricultural
Processing	Cassava Washer	Capacity: 500 kg/hr	Capacity: 4000 kg/hr	- Household (<500 kg/hr) - Agricultural - Industrial (>4000 kg/hr)
	Mechanical Cassava Peeler Machine	Capacity: 500 kg/hr	Capacity: 4000 kg/hr	- Household (<500 kg/hr) - Agricultural - Industrial (> 4000 kg/hr)
	Cassava Granulator	none	none	- Agricultural
	Cassava Grater	none	none	- Agricultural

	Cassava Chipper	Capacity: 100 kg/hr	Capacity: 8000 kg/hr	- Household (<1 00 kg/hr) - Agricultural - Industrial (>8 000 kg/hr)
	Garri Frying Machine	none	none	- Household/industrial
	Cassava presser (powered pressers)	Capacity: 300 kg/hr	Capacity: 58000 kg	- Household (<300 kg/hr) - Agricultural - Industrial (>58000 kg)
Oil Extraction	Oil Expeller	none	none	- Household/Industrial

ANNEX C

M. SLAUGHTERHOUSE

COMMODITY	NAME OF MACHINERY	THRESHOLD		CLASSIFICATION
		Minimum	Maximum	
Hog	Hog Restrainer	none	none	- Agricultural
	Hog Electric Stunner	none	none	- Agricultural
	Hog Scalder	none	none	- Household/Industrial
	Dehairing Machine	none	none	- Household/Industrial
	Splitting Saw for Hog Carcass	none	none	- Household/Industrial
	Overhead Rail System for Hog		none	- Household/Industrial
	Stunning Box Knocking Pen	none	none	- Household/Industrial
	Captive Bolt	none	none	- Household/Industrial
Large Ruminants	Overhead Rail System for Large Ruminants	none	none	- Household/Industrial
	Dehider	none	none	- Household/Industrial
	Splitting Saw for Large Ruminants	none	none	- Household/Industrial
Poultry	Stunner	none	none	- Household/Industrial
	Scalder	none	none	- Household/Industrial
	Defeathering Machine	none	none	- Household/Industrial

N. DAIRY

ACTIVITY	NAME OF MACHINERY	THRESHOLD		CLASSIFICATION
		Minimum	Maximum	
Rearing	Chaff cutter	Capacity: 1ton/hr	Capacity: 15 tons/hr	- Household (<1 ton/hr) - Agricultural - Industrial (>15 tons/hr)
	Feed mixer	Capacity: 100 kg	Capacity: 5 cubic meter	- Household (<100 kg) - Agricultural - Industrial (>5 cubic meter)
	Blower/ fans	0.5kW hanging fans	Power: 1.5kw	- Household (<0.5kW) -

ANNEX C

			Type: centrifugal	Agricultural - Industrial (>1.5kW)
	Forage Chopper	none	136 hp	- Agricultural
	Corn Chopper	none	136 hp	- Agricultural

	Manure Spreader	none	Volume: 10 cubic meter	- Agricultural - Industrial (>10 cubic meter)
	Cow lifter	none	none	- Agricultural
	Silage cart	none	none	- Agricultural
	Forage Baler	none	Bale Weight: 30 kgs. (Hay)	- Agricultural - Industrial (>30kgs)
	Silage Bagger	none	none	- Agricultural
Milking	Milk Pump	none	Capacity: 3 cubic meter	- Agricultural - Industrial (>3 cubic meter)
	Milking Machine	none	Capacity: 25kgs	- Agricultural - Industrial (>25kgs)
	Milking Parlor	none	none	- Agricultural
	Platform Scale	none	none	- Industrial
	Livestock Scale (Cage Type)	none	Capacity: 1000 kg	- Agricultural - Industrial (> 1000 kg)
Secondary Processing	Digital Balance	none	none	- Industrial
	Raw Milk Receiving Vat	none	none	- Household/Industrial
	Plate Cooler	none	none	- Household/Industrial
	Raw Milk Cooling Tank	none	none	- Household/Industrial
	Pre-Mixing Tank	none	none	- Household/Industrial
	Mixing Tank	none	none	- Household/Industrial
	Homogenizer	none	none	- Household/Industrial
	Continuous Pasteurizer	none	none	- Household/Industrial
	Storage Tank	none	none	- Household/Industrial
	Volumetric Bottle Filling Machine	none	none	- Household/Industrial

ANNEX C

O. LIVESTOCK AND POULTRY

ACTIVITY	NAME OF MACHINERY	THRESHOLD		CLASSIFICATION
		Minimum	Maximum	
Feed Transport System	Chain and Disc Feeding System	none	none	- Industrial
	Auger Feeding System	none	none	- Industrial
	Control Panels	none	none	- Industrial
	Feed Silo and weighing	none	none	- Industrial
Ventilation System	Exhaust Fan	none	none	- Industrial
	Blower fans	none	none	- Industrial
	Air Inlets	none	none	- Industrial
	Cooling pumps	none	none	- Industrial
	Control Panels and Climate Controller	none	none	- Industrial
Heating	Heat Plate	none	none	- Industrial

	Piglet Cover w/ warm lamp	none	none	- Industrial
	Box Heaters	none	none	- Industrial
Egg and Manure Conveyor	Egg conveyor	none	none	- Industrial
	Manure conveyor	none	none	- Industrial
Milking	Milking Machine	none	none	- Household / Industrial
Processing	Manual meat grinder	none	none	- Household
	Meat Grinder (Power operated)	none	none	- Industrial
	Feed Mixer	none	1 MT per load	- Agricultural - Industrial (> 1MT per load)
	Manure Mechanical Sifter	none	none	- Industrial
	Feeds mechanical sifter	none	none	- Industrial

ANNEX C

	Mechanical Compost Sieve	none	none	- Industrial
	Manure Mixer	none	none	- Industrial
Egg Incubating	Egg incubator	300 eggs capacity	2000 eggs capacity	- Agricultural - Industrial (> 2000 eggs capacity)

P. FISHERIES

ACTIVITY	NAME OF MACHINERY	THRESHOLD		CLASSIFICATION
		Minimum	Maximum	
Fisheries	Drone Feeder	none	none	- Agricultural
	Aerator	none	none	- Agricultural
	Motorized Boat	none	Capacity: 3 tons	- Agricultural - Industrial (> 3 tons)
	Marine Engine	none	20 kw	- Agricultural - Industrial (>20 kw)
	Fish Stalls	none	none	- Industrial
	Freezing Equipment	none	none	- Industrial
	SmokeHouse	none	none	- Agricultural
	Dryers	none	none	- Agricultural
	Sorters	none	none	- Industrial