



Republic of the Philippines
Department of Agriculture
OFFICE OF THE SECRETARY
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ADMINISTRATIVE ORDER

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TO : ALL DA UNDERSECRETARIES, ASSISTANT SECRETARIES AND HEADS OF DA-OSEC SERVICES, BUREAUS, ATTACHED AGENCIES/CORPORATIONS AND REGIONAL FIELD OFFICES

SUBJECT : HARMONIZATION AND STRENGTHENING THE TRAINING AND DEVELOPMENT ACTIVITIES ON AGRI-FISHERIES MECHANIZATION

In order to ensure collective, harmonized and focused efforts and to address the gaps towards the provision of adequate and appropriate training and development programs and activities on agri-fisheries mechanization at the national and local levels, the following policy guidelines are hereby issued:

SECTION 1. *Scope and Coverage*- This guidelines shall cover all training and development activities of concerned DA bureaus, attached agencies/corporations and regional field offices which are currently funded, and to be planned and implemented from 2020 and onward.

SECTION 2. *Unified Goals and Objectives*- All training and development programs and activities of all concerned DA bureaus, attached agencies/corporations and regional field offices on agri-fisheries mechanization must :

- 1) Support the implementation of the Human Resource Development Component of the National Agri-Fisheries Mechanization Program 2017-2022 and the DA Priority Programs specifically on agri-fisheries mechanization, small scale irrigation projects which include solar powered irrigation, soil and water conservation, farm-to-market roads, post harvest facilities/agro-processing development; and
- 2) Complement and harmonize the training and development of DAR, DENR, DOLE, other concerned government agencies and the private sector partners.

SECTION 3. *Training and Development Areas*- All training and development programs and activities to be planned and implemented by all concerned DA bureaus, attached agencies/corporations and regional field offices on agri-fisheries mechanization must support and be within the following twelve training and development areas:

- 1) Capacity Development of Agricultural and Biosystems Engineers
- 2) Trainings of Agricultural and Fishery Machinery Operators
- 3) Training of Agricultural and Fishery Machinery Technicians/Mechanics
- 4) Trainings of Agricultural Machinery Manufacturing Workers
- 5) Trainings of Research and Development Workers and Program Implementors

- 6) Trainings on the Establishment, Operation and Management of Agri-Fishery Machinery Service Centers
- 7) Provision of scholarships for Agri-Fishery Mechanization Workforce
- 8) Modernization of Agri-Fishery Engineering and Mechanization Schools and Training Centers
- 9) Rolling out of Existing Training Regulations (TRs) and Development of New TRs
- 10) Career Guidance and Advocacy
- 11) Mainstreaming/Integration of agri-fisheries mechanization and engineering education in K-12
- 12) International Trainings/ Exchange Program

SECTION 4. *Capacity Development of Agricultural and Biosystems Engineers* - The training and development activities are expected to capacitate and deploy Agricultural and Biosystems Engineers (ABEs) as: 1) Trainers and Competency Assessors for AFMech Technical and Vocational Training (TVET) and other training programs; 2) Test Engineers; 3) Design/Project Engineers of DA Priority Programs on agri-fisheries mechanization, farm-to-market roads, irrigation, etc; 4) Agri-Fisheries Machinery Service Center Managers/FS Preparers; 5) Agricultural Mechanization Specialists; 6) Safety Officers; 7) CPES Evaluators and 8) Pollution Control Officers. This shall form part and support the Continuing Professional Development and Career Progression and Specialization of ABEs. Along this, all concerned DA bureaus, attached agencies/corporations and regional field offices shall coordinate and partner with the Philippine Society of Agricultural and Biosystems Engineers (PSABE) and Professional Regulatory Board of Agricultural and Biosystems Engineering for this endeavor.

SECTION 5. *Trainings of Agricultural and Fishery Machinery Operators* - Existing agri-fishery machinery operators as well as farmers or farmworkers in DA priority commodities such as rice, corn, coconut, sugarcane, abaca, high value commercial crops, livestock and fisheries, and recipients of the DA agricultural and fishery machineries shall be trained to acquire or upgrade their knowledge and skills on the operation and maintenance of agri-fisheries machineries. These shall complement and harmonize with TESDA's training program, and aimed towards the skills certification of these agri-fishery machinery operators as NCs on appropriate training regulations.

SECTION 6. *Trainings of Agricultural and Fishery Machinery Technicians/Mechanics* - Existing agri-fishery machinery technicians/mechanics as well as well as qualified farmers or farmworkers shall be trained to acquire or upgrade their knowledge and skills on the repair and servicing of agri-fisheries machineries. These shall complement and support the DA's Magsasakang Mekaniko Program and TESDA's training program and towards their skills certification as NCs on appropriate training regulations such as the Tractor Servicing NC III, Drying and Milling Processing Plant Servicing (NC3).

SECTION 7. *Trainings of Agricultural Machinery Manufacturing Workers* - Workers of local agricultural machinery manufacturers shall be trained to acquire or upgrade their knowledge and skills on the basic trainings for agri-fisheries machinery manufacturers and their workers covering the areas of : 1) dimensional metrology; 2) materials selection and identification of metals; 3) heat treatment; 4) welding (GMAW,GTAW, SMAW). These shall complement and support the TESDA's training program and towards their skills certification as NCs on appropriate training regulations, and in collaboration with AMMDA, MAMIA, etc.

SECTION 8. *Trainings of Research and Development Workers and Program Implementors*- This include trainings on the preparation and packaging of research proposals for agri-fishery mechanization and engineering, and training program for program implementors of concerned DA bureaus, attached agencies/corporation and regional field offices on program/project development, monitoring and evaluation of agri-fishery mechanization projects.

SECTION 9. *Trainings on the Establishment, Operation and Management of Agri-Fishery Machinery Service Centers* – Recipients of existing and prospective agri-fishery machinery service centers under DA programs shall be trained on the establishment, operation and management of agri-fishery machinery service centers specifically on : 1) Custom Farm Mechanization Services - Land Development/Preparation, Plant Establishment, Irrigation, Crop Harvesting, Off-farm Hauling and Drying, Rice Milling , etc.); 2) Water Management; 3) Business Planning and Operation.

SECTION 10. *Provision of scholarships for Agri-Fishery Mechanization Workforce*- This include scholarships for Technical Vocational Education and higher education degree (BS, MS and PhD), as well as study tour abroad. The scholarships program under DA-ACEF, Sugarcane Industry Development Act, PCA, ATI, BFAR and other concerned DA bureaus, attached agencies and corporations shall prioritize scholarship grants for agricultural and biosystems engineers and other agri-fishery mechanization workforce and shall complement with the scholarship programs of TESDA, CHED and other concerned government and private institutions.

SECTION 11. *Modernization of Agri-Fishery Engineering and Mechanization Schools and Training Centers*- These schools and training centers include Higher Education Institutions that offers degree program or training program on agricultural and biosystems engineering and agricultural and fishery mechanization, as well as farm schools on agri-fishery mechanization. All concerned DA bureaus, attached agencies/corporations and regional field units shall include these schools and training centers as priority recipients or include in the allocation/programming for the provision of agricultural and fisheries machineries.

SECTION 12. *Rolling out of Existing Training Regulations (TRs) and Development of New TRs*- The Training Regulations to be rolled out shall include the following: 1) Rice Machinery Operation NC II; 2) Rubber Processing NC II; 3) Agricultural Machinery Operation NC II (Non-Rice); 4) Drying and Milling Processing Plant Servicing NC III; 5) Milking Operation NC II; 6) Farm Machinery Servicing (Tractor)- NC III; 6) 7) Irrigation System Installation and Maintenance (NC III); 8) Biogas Systems Installation and Maintenance NC II (For TESDA Board Approval); 9) Hatchery Operation NC II (For TESDA Board Approval). Training support and other interventions shall include the training of trainers and competency assessors, establishment and accreditation of Training and Competency Assessment Centers for these TRs. Other TRs shall likewise be identified and developed in coordination and collaboration with TESDA.

SECTION 13. *Career Guidance and Advocacy*- This include development and distribution of information materials and the conduct of career guidance education and public info caravan among the youth, farmers and parents on agri-fishery mechanization and engineering coordination and collaboration with SUCs, Career Counselors, LGUs, PSABE and other concerned government and private institutions.

SECTION 14. *Mainstreaming/Integration of agri-fisheries mechanization and Engineering education in K-12*- In line with the 10 Priority Program of DA, the Re-introduction of basic agriculture in the primary and elementary grades of the Philippine schools system, coordination and collaboration with DepEd shall be undertaken to mainstream AFMech Training Regulations as options of the Agri-Fishery Arts of the Technology and Livelihood Education (TLE) of Grade 1-10 subjects, and Technical-Vocational Livelihood Track of the Senior High School Specialized Tracks under the K-12 implementation for both private and public schools nationwide.

SECTION 15. *International Trainings/ Exchange Program*- This include observation tours, technical internship trainings and the Philippine's hosting or organization of ASEAN and international trainings on agri-fisheries mechanization and engineering and which shall support and linked to the implementation of ASEAN Cooperation on Agricultural and Biosystems Engineering (ACABE), ASEAN University Consortium on Food and Agro-Based Engineering (AUCFA), and other international cooperation/agreements.

SECTION 16. *Formulation of National Agri-Fisheries Mechanization Training and Development Master Plan-* The ATI in collaboration with BAFE and the TWG on Training and Extension of PCAF-AFMeC shall formulate a National Agri-Fisheries Mechanization Training and Development Master Plan for 2019-2022 six (6) months after the approval of this AO. The master plan shall contain plans and targets on the 12 training and development areas. This masterplan shall serve as basis in the planning and programming of AFMech trainings to be proposed in the Annual General Appropriations Act by all concerned DA bureaus, attached agencies/corporations and regional field offices.

Correspondingly, the following DA bureaus and attached agencies shall formulate the following commodity AFMech Training and Development Plan as component of the Master Plan: Rice- PhilMech and PhilRice; Corn- BAFE; Coconut-PCA; Abaca and other Fiber crops/Fiber-FIDA; High Value Commercial Crops- BPI; Livestock- BAI in collaboration with all livestock agencies; Fisheries- BFAR. All other concerned DA Bureaus, Attached Agencies and Regional Offices shall likewise prepare their training masterplans and submit to ATI.

Moreover, the ATI in collaboration with RAEDs and regional offices of concerned DA bureaus and attached agencies/corporation shall prepare a Regional AFMech Training and Development Plans in consultation with LGUs and AFCs after three (3) months after the adoption of the National AFMech Training and Development Master Plan.

The PCAF shall likewise conduct consultation meetings for these National and Regional AFMech Training and Development Master Plans.

SECTION 17. *Roles and Responsibilities-* The Agricultural Training Institute shall serve as the over-all DA Coordinator and Integrator of all agri-fisheries mechanization trainings and development. The Lead/Focal Agency of the 12 (twelve) AFMech Training and Development Areas are hereby assigned as follows:

AFMECH TRAINING AND DEVELOPMENT AREAS		LEAD/FOCAL AGENCY
1	Capacity Development of Agricultural and Biosystems Engineers	ATI
2	Trainings of Agricultural and Fishery Machinery Operators	ATI
3	Training of Agricultural and Fishery Machinery Technicians/Mechanics	PhilMech
4	Trainings of Agricultural Machinery Manufacturing Workers	PhilMech
5	Trainings of Research and Development Workers and Program Implementors	BAR
6	Trainings on the Establishment, Operation and Management of Agri-Fishery Machinery Service Centers	PhilMech
7	Provision of scholarships for Agri-Fishery Mechanization Workforce	ATI
8	Modernization of Agri-Fishery Engineering and Mechanization Schools and Training Centers	BAFE
9	Rolling out of Existing Training Regulations (TRs) and Development of New TRs	ATI
10	Career Guidance and Advocacy	ATI
11	Mainstreaming/Integration of agri-fisheries mechanization and engineering education in K-12	ATI
12	International Trainings/ Exchange Program	PCAF

SECTION 18. *Inter-Agency Collaboration and Private Sector Support*- The PCAF through the AFMeC TWG on Training and Extension shall coordinate and conduct consultation meetings to ensure inter-agency collaboration and private sector support. Specifically, this include the following agencies, but not limited to DAR, DOLE, DENR, DSWD, NCIP, TESDA, CHED, DepEd, DTI and DILG and private sector partners such as PSABE, AMMDA, MAMIA, NCIA and other farmers and fishermen organization. In line with this, a MOA or Joint Circular shall be developed and issued with DA.

SECTION 19. *Funding* - The funding requirements for the implementation of this AO shall be borne by the concerned DA bureaus, attached agencies and regional offices, and shall be proposed for the Annual Budgeting process for 2020 and onwards.

SECTION 20. *Effectivity* - This AO shall take effect immediately upon its approval.



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DEPARTMENT OF AGRICULTURE
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