



Fisheries Administrative Order
Order No. 243
Series of 2012

SUBJECT: Guideline on the Environmentally Sound Culture of Pangasius in the Philippines

Pursuant to Section 47 of RA 8550 and Sections 13, 27 and 28 of RA 9147 and in adherence to FAO No. 214 series of 2001 on the Code of Practice for Aquaculture, this policy guideline for environmentally sound design and operation of Pangasius culture in the Philippines, in order to promote the sustainable development of the industry, is hereby promulgated for information and guidance of all concerned.

Section 1. **Definition of Terms.** - The following terms for purposes of this Order shall be construed as follows:

- a. **CERTIFICATION** - the process of providing document of recognition to fisheries production facilities as evidence of the status of qualification attesting compliance to the commonly accepted standard of quality or excellence;
- b. **CONTAINMENT POND** - an enclosed facility which receives and retains effluent waters including fish eggs and fry from the hatchery or pond system;
- c. **EFFLUENT** - a general term denoting any waste water, partially or completely treated, or in its natural state flowing out of a manufacturing plant, industrial plant, or treatment plant and from ponds and hatcheries;
- d. **EGG** - is an organic vessel in which an embryo first begins to develop;
- e. **FISHERIES ENHANCEMENT** - the increase of yield from capture fisheries through direct human intervention in the production processes of aquatic environments;
- f. **FISHPOND** - a land-based facility enclosed with earthen or stone material to impound water for the growing of fish;
- g. **FRESHWATER AQUACULTURE** - the breeding and culture of freshwater organisms in inland water, as ponds, lakes or streams that is not salty for food and economic purposes;
- h. **HATCHERY** - Land-based structure designed to grow and culture fish for breeding and fish seed production;



- i. **LAND-BASED AQUACULTURE** – includes the natural and man-made environmental features within which infrastructure is developed for the breeding and culture of freshwater organisms for food and economic purposes;
- j. **NATURAL INLAND WATERS** – are bodies of running or stagnant water including but not limited to lakes, rivers and swamps, occupying depressions on land formed by natural geologic/seismic processes where water from the rain and underground seepage accumulate;
- k. **OPEN WATER STOCKING** – the artificial release of aquatic organisms in a communal body of water with its aim of increasing fish production at acceptable levels;
- l. **PANGASIUS** – is a freshwater riverine catfish belonging to the family Pangasidae;
- m. **PHYSIOLOGICAL TOLERANCE** – capacity of an organisms to build up resistance to the effects of a substance after repeated exposure;
- n. **REPRODUCTIVE GUILD** – a group of fish with similar strategies to raise their young (parental care), such as egg scatterers, brood hiders, nesters, or live bearers;
- o. **RESILIENCE** – is the positive capacity of an organism to cope with stress and adversity;
- p. **RISK ASSESSMENT** – the identification, evaluation, and estimation of the levels of risks involved in a situation, their comparison benchmarks or standards, and determination of an acceptable level of risk;
- q. **SMALL FARM RESERVOIR (SFR)** – earth dams with areas ranging from 300 to 5000 sq.m. and a maximum embankment height of 3 m. above ground level for harvesting and storing rainwater for irrigation purposes;
- r. **SMALL WATER IMPOUNDMENT (SWIP)** – an artificial lake with an average size of 50 hectares used to collect and store rainfall and runoff water for soil and water conservation, flood control, supplemental irrigation, inland fishery and recreation;
- s. **TROPHIC STRUCTURE** – organization of the community based on feeding relationships of populations.

Section 2. **Risk Assessment.** – The assessment conducted by the Technical Working Group in BFAR of the biological characteristics of Pangasius as to resilience, trophic structure, reproductive guild and physiological tolerance finds Pangasius as a low risk species and a suitable alternative species for freshwater aquaculture. As a safety measure, grow out culture of Pangasius shall only be allowed within the confines of land-based aquaculture such as fishponds in areas, which are not prone to flooding.

Section 3. **Guidelines.** – Site selection, farm design and construction intended for the breeding and culture of Pangasius shall strictly follow the provisions of FAO No. 214 series of 2001 on the Code of Practice for Aquaculture with particular emphasis on the following practices:

- a. Water source in the area shall be evaluated as to its quality and quantity;
- b. Long term climatological records for the last 5 years shall be acquired to determine the occurrence of floods, storms and calamities in the areas; and,
- c. Alternative to mitigate potential negative environmental and social impacts shall be considered.

Section 4. **Additional requirements.** – The following practices shall assure increased production of good quality and healthy stocks:

- a. Optimum stocking density of 3- 5 pcs/m³ in ponds and 5- 10 pcs/m³ in cages shall be employed; and
- b. Stock only healthy fry and fingerlings from BFAR certified hatchery.

Section 5. **Feed Management.** – The following practices shall be adopted to improve efficiency of supplemental feeds and feed management and reduce the amount of waste entering the ponds:

- a. Feeds shall be selected as to their high utilization rates to reduce nutrient pollution from uneaten feeds and excretory products;
- b. Feed characteristics shall include balanced levels of amino acid and other nutrients appropriate for the age of the fish, high palatability to stimulate rapid consumption, and high stability to prevent rapid nutrient release;
- c. The use of extruded feed is recommended;
- d. Records of daily feed application rates shall be kept to assess feed conversion ratio (FCR); and,
- e. The used of indigenous feed ingredients and organic feeds shall be encouraged.

Section 6. **Bio-security Standards for Controlled Hatchery Facility.** – Hatchery and nursery facilities for Pangasius should comply with the minimum bio-security standards by providing physical safeguards in the form of containment ponds for effluent/discharge waters and ensure that all mitigating measures are in place, to prevent accidental release of eggs/fry to the natural inland waterways specifically lakes, bays and river systems.

Section 7. **Hatchery Certification.** –

- a. The Bureau of Fisheries and Aquatic Resources-National Inland Fisheries Technology Center shall devise a scheme for the Certification of Pangasius hatcheries. The Center in coordination with the BFAR-Regional Offices and the local government units shall conduct inspection and monitoring of certified government and private Pangasius hatcheries to ensure compliance to the biosecurity standards.
- b. To keep the integrity and quality of fry/fingerlings for commercial production in different farming systems, only recognized broodstock facilities and stock from certified Pangasius hatcheries shall be the source of fry/fingerlings.

Section 8. **Prohibition.** – Cage culture of Pangasius is prohibited in lakes and natural inland waters. The use of Pangasius as open water stocking materials for fisheries enhancement in lakes and natural inland waters is likewise prohibited.

Section 9. **Penalty.** – Violation of Section 8 of this Order shall subject the offender to imprisonment of one (1) month to eight (8) years, and/or a fine of five thousand pesos (P5,000) to five million pesos (P5,000,000) upon the discretion of the court, provided that all stocks, derivatives or by-products and all paraphernalia, tools and conveyances used in connection with violation of Section 8 hereof, shall be *ipso facto* forfeited in favor of the government: Provided, that where the ownership of the aforesaid conveyances belong to third persons who has no participation in or knowledge of the illegal act, the same may be released to said owner; Provided, further, that the fine herein prescribed shall be increased by at least ten percent (10)% every three years pursuant to Section 28 of RA 9147.

Violation of any other provisions of this Order shall subject the offender to a fine of not less than five hundred (P500.00) pesos to not more than five thousand (P5,000) pesos or imprisonment from six (6) months to four (4) years, or both such fine and imprisonment depending on the discretion of the court: Provided, That the Director of Fisheries and Aquatic Resources is hereby empowered to impose upon the offender an administrative fine not more than five thousand (P5,000.00) pesos and to confiscate the Pangasius for proper disposition/documentation of the government.

Section 10. **Pangasius Research and Development Program.** – The BFAR-National Inland Fisheries Technology Center shall coordinate with the Bureau of Agricultural Research (BAR) and the National Fisheries Research and Development Institute to develop a national research and development program in support of the Pangasius Industry. It shall also establish a

comprehensive data base and and shall continuously monitor and evaluate the status of the industry for technical, economic, ecological and planning concerns.

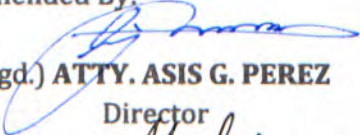
Section 11. **Repeal.** – All rules and regulations or part thereof inconsistent with this Order are hereby revoked or modified accordingly.

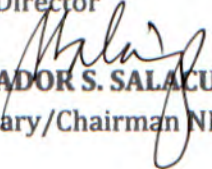
Section 12. **Effectivity** – This Order shall take effect fifteen (15) days after its publication in a newspaper of general circulation and upon acknowledgement by the Office of the National Administrative Registry (ONAR).

Issued this 2nd of May 2012 at Quezon City, Metropolitan Manila, Philippines.


(Sgd.) PROCESO J. ALCALA
Secretary

Recommended By:


(Sgd.) ATTY. ASIS G. PEREZ
Director


(Sgd.) SALVADOR S. SALACUP
Assistant Secretary/Chairman NFARMC

DEPARTMENT OF AGRICULTURE

in replying pls cite this code
For Signature: S-04-12-0127
Received 04/12/2012 11 26 AM