

STATUS OF FISHING CONDITIONS IN THE PHILIPPINES IN RELATION TO RESPONSIBLE FISHING

by

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1. INTRODUCTION

The Philippines being an archipelagic in nature is endowed with a considerable marine water area with a total territorial area of 2.2 million km². However, much of the production comes from the shallow continental shelf area which is only about 8% of the total territory. There are more than 2,000 species of fish inhabiting its marine waters but only about 100 are caught in commercial quantities notably the roundscad, tuna, sardines and mackerel species.

The average growth rate achieved by the fisheries sector from 1990-1995 was 1.5% in quantity. Aquaculture and commercial fisheries achieved a positive growth of 3.5% and 4.8% respectively while the municipal fisheries has been declining at -2.2%. Of the total fish production of 2.7 million metric tons in 1995, municipal or small scale sector contributed 36%, commercial 34% and aquaculture 30%.

The majority of the Filipino fishermen also depends on the marine capture fisheries as a source of living with almost a quarter million of fishermen, most of them municipal or artisanal.

The problems of the marine capture sector is rooted on the open-access policy in fisheries. Increasing requirements for food and sources of livelihood resulted into excessive fishing effort in the traditional fishing grounds. Fishermen seeking to increase production in the easier fashion often resort to destructive dynamite and cyanide fishing. In addition, efficient gears in both commercial and small scale fisheries are contributing to the declining catch and overexploitation in most of the fishing grounds.

To address this situation, the focus of the Gintong Ani for Fisheries Program, the country's current blue print in fisheries administration, has been the regulation of fishing effort within sustainable yield levels. Local regulations and programs in capture fisheries are thus directed towards regulation of fishing efforts in specific areas and specific types of fishery.

2. MAJOR TECHNOLOGIES AND PRACTICES

The marine capture fisheries is administratively divided into two sectors: municipal and commercial. Municipal includes fishing with or without the use of boats

of 3 gross tons or less and commercial embraces all fishing using more than 3-gross ton boats and usually referred to as deep-sea or offshore fishing.

2.1. Municipal or Small Scale

Municipal fishermen are generally associated with fishing using simple gears. About 22 types of gears are classified as municipal with gillnets and hook and line as the most productive. The other common municipal fishing gears include troll line, beach seine, bagnet, ringnet, barrier net and pots.

Most of the small scale gears are species specific with insignificant by-catch and that construction and operations are effected by the type and occurrence of the target species. Baby trawl and modified Danish seine are still considered the most indiscriminate methods.

At present, the set net (otoshi-ami) is visibly one of the preferred projects especially fishermen's cooperative and associations. It has been effective in catching migrating species near the coasts like jacks, tunas and mackerels. It has proliferated in the some parts of the country and regulation is being looked into.

2.2 Commercial

The more common commercial fishing gears are purse seine, ringnet, bagnet, modified Danish seine, trawl and push net.

Purse seine nets for sardines, scads and mackerels heavily rely on light attraction using high wattage bulbs (superlight, magic lights) as high as 30-40 KW. Mesh size used are prevalently 2.5 cm. Fishing is confined in the shallow continental shelf areas notably in Jolo, Balabac, Palawan and Visayan Sea.

Tuna purse seines extensively use payaw where one or several payaws are combined and enclosed in one operation. Presently mesh size of 2-3 inches at the bunt is common. The more popular fishing grounds are the northern South China Sea (Luzon Sea), Celebes Sea, Moro Gulf, Sulu Sea, international waters and EEZ territories of other Western Pacific and Asian Regions.

Due to local and national regulations demersal fishing (i.e. trawl, modified Danish seine and push net) have slowed down. Fish trawls are the high opening-German type with mesh sizes at the wing of 3-4 meters and taper down to the body to less than half meter with 3 cm mesh size or even less at the bunt. In general, boats range from 5 GT to 50 GT. The shrimp trawls are relatively of smaller size than fish trawls, nevertheless, 3 cm and smaller mesh sizes are still used.

3. LOCAL REGULATIONS

The following are some of the laws and regulations with importance to responsible fishing.

3.1 By Area of Operation

The welfare of the the small fishermen has been a focal point in local regulations. Presidential Decree (PD) No. 704 otherwise known as the Fisheries Decree of 1975 allows commercial fishing to operate only at depths of 7 fathoms or more. PD 1015 dated September 22, 1976 amended the first paragraph of Section 17 and 35 of PD 704 which ban the operation of commercial and other fishing gears within a distance of 7 km (3.78 nautical miles) from the shoreline. Accordingly Letter of Instruction (LOI) No. 1328 and implemented by Fisheries Administrative Order (FAO) No. 156 was issued on May 25, 1983 prohibiting the operation of commercial trawl and purse seine within 7 km of all the provinces of the country. LOI 480 was also issued in specific areas of Visayan island and Sorsogon prohibiting commercial trawl and purse seine within 7 km. In addition, with the promulgation of Republic Act (RA) No. 7160, otherwise known as the Local Government Code of 1991, municipal or small scale fishermen are granted the exclusive use of waters within 15 km from the shoreline.

Furthermore, for the past 10 years 7 areas were declared closed season (1 still subsists) while another 7 areas have been declared fish sanctuaries and marine reserves.

3.2 By gear and type of fishing

Regulations on gear type were promulgated primarily to lessen their impact on the resource and promote equitable utilization among resource users.

- a) Fisheries Administrative Order (FAO)190 - regulations governing the “pa-aling” fishing operation in Philippine waters.
- b) FAO 188 - regulations governing the operation of commercial fishing boats in Philippine waters using tuna purse seine nets.
- c) FAO 170 - prohibiting the operation of *sudsod* (scissor or pushnet) in Panguil Bay.
- d) FAO 164 - rules and regulations governing the operation of hulbot-hulbot (modified Danish seine) in Philippine waters.
- e) FAO 163 - prohibiting the operation of muro-ami and kayakas in Philippine waters.
- f) Joint DA-DILS Adm.Order 4 - regulating the utilization of superlights for fishing purposes.

3.3 Mesh size regulations

- a) FAO 190 prescribes *pa-aling* mesh size to not less than 3.38 cm

- b) FAO 188 sets tuna purse seine net to not less than 3.5 inches.
- c) FAO 155 prohibits the use of fine meshed nets (less than 3 cm).
- d) FAO 155-1 amending FAO 155 to allow purse seine, ringnet and bagnet to use less mesh size of not less than 1.9 cm.

Also awaiting approval at the Philippine Senate is the Philippine Fisheries Code, an Act intended to strengthen fisheries and aquatic resources management and conservation. It is proposed that the Department of Fisheries renamed to Department of Agriculture and Fisheries.

Among the policies under this Act is fish production based on maximum sustainable yield (MSY) or total allowable catch (TAC) and in consonance to responsible fishing, the use of ecologically sound fishing practices is asserted. Regulations of fishing operations embracing the use of active, passive, small scale/municipal and commercial gears are proposed. Restrictions on the methods like trawl, modified Danish seine, push net, muro-ami (drive-in net) and superlight are also included.

4. SELECTIVITY AND RELATED STUDIES

Incorporating selectivity is essential in fisheries management. Restriction, closed season and mesh size regulation should be based on selectivity. Several devices and techniques are being promoted and local experiments are being undertaken to forward regulation on the use of these devices.

4.1 Separator Devices

4.1.1 Selective shrimp trawl

Test was made on a separator device based from the Devismes System of Ets Le Drezen in France. The objectives were to determine its efficiency to dissociate shrimps from other bycatch species in shrimp trawl fishing, determine and compare the catches of the traditional shrimp trawl and the shrimp trawl with separator

4.1.2 TED

Three types of TEDs are being tested in Manila to evaluate which type should be adopted. The conduct of the test fishing has been documented for television and demonstration to fishermen is planned later this year

4.2 Square-meshed codend

4.2.1 Small Trawl and modified Danish seine-

This study was made to determine differences between the square mesh and the traditional diamond shaped mesh in the rate of retention and escapement of catches.

4.2.2 Modified Danish Seine

5. PROBLEMS

- a) Appreciation and awareness among fisherfolk on the merit of using selectivity devices.
- b) Insufficient alternative livelihood of fishermen affected by regulations
- c) Strict law enforcement.
- d) Inadequate local scientific and related studies as basis for regulations.

Municipal Fishing Gears

Baby trawl
Bagnet
Beach seine
Cast net
Crab liftnet
Danish seine
Drive-in-net
Filter net
Fish corral
Fish pot
Fyke net
Gillnet
Hook and line
Jigger
Ligtnet
Longline
Pole and line
Purse seine
Push net
Round haul seine
Spear
Trolline

Commercial Fishing Gears

Bagnet
Beach seine
Drift filter net
Gillnet
Hook and line
Longline
Pa-aling
Purse seine
Push net
Ringnet
Round haul seine
Trawl