

PRESENT STATUS AND PROBLEMS OF
PRAWN CULTURE IN THE PHILIPPINES

by

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AREA AND SCOPE. The total area suitable for prawn culture development in the Philippines is about 176,032.10 hectares (bangos fishpond convertible to shrimp farm). About 400,890 hectares of brackishwater tidal coves, sheltered bays, and mangrove swamps await possible (BFAR Statistics 1973) development.

Some of the known species of shrimp found in bangos fishponds are: Penaeus merguensis (hipon puti), P. monodon (sugpo), P. semisulcatus and Metapenaeus monoceros (hipon suahi).

MANPOWER. Per information and statistics of the Bureau of Fisheries and Aquatic Resources, the number of fishpond operators, pond caretakers and other persons involved in fishpond operation is about 176,000 people (based on 1 man/ha). The average rate of annual increase of persons engaged in fishpond corresponds to the increase of fishponds being developed.

FIELD AND PRODUCTION. The estimated total yield of ponds from the natural production of shrimp is about 50 kg/ha/yr. However, enterprising bangos fishpond operators have been producing about 500 kg/ha/yr of sugpo and other species of shrimps.

SOURCES OF SEEDS AND CULTURE METHODS. The seed stock comes from the natural estuarine areas. These are carried by tidal currents into the brackishwater and tidal rivers, streams and creeks. Fry concessioners and catchers gather different sizes of fry and juvenile stages of sugpo and shrimps. These are transported in plastic bag containers with oxygen and brought to fishpond centers.

The known sugpo fry fishing grounds are: Dasol Bay in Pangasinan, Ternate in Cavite, Balayan and Calatagan in Batangas, Calauag and Aloneros, Tagkawayan in Quezon Province, Iloilo City, Panguil Bay in Lanao del Norte, Sibuguey Bay in Zamboanga del Sur, and Zamboanga City.

The traditional method of rearing prawn in ponds is to gather the juvenile and fry stage from the estuarine areas. These are usually grown with Bangos, Samaral (Teuthis sp.) and/or Kitang (Scatophagus sp.). The stocking rate of sugpo ranges from 5,000 to 10,000 fry per hectare. They grow to marketable size (15-30 pcs/kg) in about 5 to 7 months in the rearing pond with lumot and/or lablab as food. Mortality rate ranges from 30 to 50% during the growing period. However, some fishpond operators claim 70-80% survival if ponds are properly managed while others may lose entirely their stock or ^{with} negligible survival during the rainy season (nalolosao).

In a recent field test on the rate of growth of sugpo in brackishwater pond, thirty thousand (30,000) fry were stocked in a hectare compartment with fair growth of lab-lab and lumot. In addition 40,000 bangos fingerlings (30 mm-35 mm) were also reared in the same pond. After a month of rearing in the 1 hectare compartment a cut along the dike of an adjoining compartment (3 hectares) was undertaken. This increased the area of rearing to 4 hectares. In about 3 months growing period, 10 samples were measured (see Table 1). The maximum and minimum length and weight were 213 mm & 117 mm and 81.2 grams & 12.5 grams respectively and with an average weight of 41.84 gm. This preliminary field test was made to determine possible detailed study on the culture of sugpo in brackishwater pond.

The cost of sugpo fry ranges from ₱0.08 to ₱0.15 depending on the source and abundance of supply.

Marketable size sugpo costs ₱25.00 to ₱35.00/kg in the Manila markets and suburbs while hipon puti and hipon suahi cost ₱12-₱15/kg and ₱16-₱20/kg, respectively.

PROBLEMS. The problems confronting prawn culture development in the Philippines are similar to those of the countries developing shrimp culture, particularly in Southeast Asia as follows:

- a) Meager information and expertise
- b) dearth of trained technical men (shrimp culturist) and
- c) timid flow and/or lack of financial resources.

It is sad to note that inspite of the favorable climate and environmental conditions mother nature has endowed to our country, no real shrimp culture project has been developed as yet. The SEAFDEC Shrimp Research Project at Tigbauan, Iloilo and the MSU Shrimp Laboratory (with financial aid from NSDB) at Naawan, Misamis Oriental are the two institutions pioneering in the mass production of prawn fry. In addition, some private institutions are now engaged in research and field test on the commercial production of cultivable species of shrimp.

Table 1. Measuremet of Sugpo (*P. monodon*) Reared in a Brackish-water Pond Near Ragay Gulf from August to November 10, 1974

Sample Number	Length mm	Depth mm	Weight gm	Sex
1	213	30	81.2	M
2	210	29	76.2	F
3	182	25	48.5	M
4	190	26	54.9	F
5	181	26	50.0	F
6	150	20	26.9	M
7	140	19	22.0	M
8	140	20	22.5	F
9	145	19	23.7	M
10	117	15	12.5	F
Total	1669	229	418.49	
Average	166.8	22.9	41.849	