

EXPERIENCES OF A FISHPOND OPERATOR

by

Concordia P. de Goco*

Sometime in May 1964 a semi-abandoned fishpond covering 124 ha was offered to me for ₱20,000 payable in four installments plus the assumption of the balance of a DBP loan. I knew nothing about fish farming then. All I knew was how to cook and eat bangos. But being a pharmacist by profession, with adequate knowledge of biology, I was confident I would be able to learn and earn by operating the fishpond. I accepted the offer.

Job priorities were programmed, a caretaker was chosen, and the progress of the work was periodically reported. Instructions were given on how to grow lumot (green algae) which serves as food to the bangos in the traditional method.

The operating parcel had a porous sandy clay soil which gets drained during extremely low tides and flooded during high tide. It would have been a waste of time, effort and money to insist on lab-lab (blue-green algae) feeding with such soil and climatic conditions (low salinity, minimal sunshine, etc.). With lumot feeding, however, it was possible to make marginal production at less expense. Moreover, being a neophyte in the business, I was given an opportunity to observe and compare this method with improved techniques. Since it was expensive to undertake immediate pond bottom reconditioning and peripheral dike repair during rainy months, expansion had to be undertaken in a parcellary manner as soon as the dry season sets in. This gave ample time to train the antiquated ideas of the caretaker on scientific techniques about pond rearing and in turn further train other pond helpers.

Gradually, I was able to differentiate between lumot and lab-lab and get informed about the sizes and layout of the various compartments, as well as the purposes and operations of each pond.

In a seminar held in Bataan, Dr. Yun An Tang, UNDP Fisheries Biologist who was then technical consultant to the Philippine Fisheries Commission indicated that lab-lab is preferable to lumot as food for bangos if increase in stocking rate is desired. Dr. Tang pointed out, that a maximum stocking rate of 6,000 fingerlings per hectare, can be achieved if the lab-lab feeding method was adopted. He prepared a development plan for our area with the help of the Bureau of Fisheries, the Weather Bureau, and the Bureau of Soils. Under the plan, the pond divisions were recom-

*Member, Philippine Federation of Fishfarm Producers Incorporated.

mended to be set up proportional to the size of the connecting water supply canals, emphasizing the size and height of each dike. The perimeter dikes were designed to prevent overflow and the pond bottoms were to be of different levels so that water pumps need not be used (gate manipulations sufficed for this operation). Each nursery division must have an extra compartment, to minimize the use of supplementary feeding. Adopting this procedure, we were able to obtain a survival rate of 80% from our fry stock.

It is to be noted that each rearing pond had two formation ponds. Dr. Tang's system, better known as the modular system, required the construction of a one-hectare first formation pond, two-hectare second formation pond, and four-hectare rearing pond. This system enabled us to harvest six times a year per rearing pond--allowing 14 days for drying and 45 days for stocking.

Consequently during the First PCAR-Fisheries Council held in Legaspi, I suggested that pond engineering be included in the priorities for research. I am sure proper fishpond construction is one of the most important factors to consider for the success of our enterprise. Yet despite Dr. Tang's valuable assistance particularly in the growing of lab-lab, we just managed to "break-even" in the business.

In a seminar organized by Dean Rogelio Juliano of the College of Fisheries, Dr. Rudy Schmittou and Dr. Grover provided us new insights about the plankton feeding system. No renovations were required in our pond layout except the construction of platforms for our fertilizers. So far this is the best method because it enabled us to grow large bangos even during the cold months (January and February) when the bangos in the market are usually small and expensive. Harvesting bangos weighing 500-700 grams during this period is a fishpond operator's dream. By using the plankton feeding system we were able to program the size of fish we liked to grow and the length of time we wanted it to stay in the rearing ponds. Thus in January and February 1974, we had our first "Golden Harvest" - golden because during this period bangos made a good price in the market.

In a span of 8 years, I have thus tried three feeding methods for bangos culture: (1) Lumot culture, (2) Lab-lab culture, and (3) Plankton culture. This indicates the progress we have so far attained in the development of feeding methods for bangos culture in ponds. Other fishpond operators may have tried such techniques as they may have found suitable for their particular projects. For example, the combination of the lab-lab and plankton feeding. Let me add, however, that this depends mainly on the operator's know-how and the suitability of his area.

Like other fishpond operators, I have encountered difficulties and reverses during my past 8 years of operation, among which are accidental loss of stock, dike washout, gate destruction and pond siltation during

typhoons and floods.

In my experience as a fishpond operator, I have found the following factors essential to a successful fishpond operation and I believe these factors could serve as subjects for future research and study:

- 1) Soil type and topography, including tidal characteristics and climatic conditions of the area;
- 2) Pond engineering, proper planning and development of ponds;
- 3) Pond management including soil and water fertilization, feeding methods, and stock manipulation;
- 4) Fish handling and processing prior to marketing; and
- 5) Financing.