1999

The practice of carp hatchery technology around Laguna de Bay

Dagoon, N. J.

Aquaculture Department, Southeast Asian Fisheries Development Center


http://hdl.handle.net/10862/2845

Downloaded from http://repository.seafdec.org.ph, SEAFDEC/AQD's Institutional Repository
The practice of carp hatchery technology around Laguna de Bay

By NJ Dagoon

Bighead carp (*Aristichthys nobilis*) was introduced in the Philippines by Chinese experts commissioned by the Philippine Fisheries Commission (NIFRC, undated). In 1966-67, culture trials were successful and in 1968, importation began to launch the Philippines’ Freedom from Hunger campaign involving carp farming and polyculture of freshwater fishes.

times abort operations, as stocks die or escape from the pens. Affected farmers often have to build again. To replenish their broodstock, they sometimes resort to capturing “escapees” from open waters.

The hatchery caretaker left us with these parting words: “Industry, perseverance and good dealings with people are the secrets to our success.”

The second visit was at the Aquafresh Bighead Carp Hatchery co-owned and managed by Mr. Raul Aralar. Raul shares ownership with his brother Emil, a sister and his mother.

Established in 1995 with a capital of P700,000, the hatchery is reputed to be the biggest of four in Kalinawan. It does three runs a month. Each run composed of about 7 large breeders produce an average of two million fry, with hatching rate reported at 80%. In about two weeks, all larvae are sold, at about 15 centavos apiece. Of the hatchery’s gross earnings per run, around 30% is the total deductible expense.

Buyers who most of the time pick up their fry (packed at about 11,000 per bag) report a mortality rate of about 10%. Buyers come from around Laguna Lake and even as far as General Santos City.

When asked how good the profit was, he said it is very good these days. But the boom in the carp hatchery business only started this year, he claimed. Perhaps because carp was not popular before. Now, some bangus breeders are now shifting to grouper. Bighead carp, according to him, has become more popular than tilapia within the Laguna de Bay area. He himself practices carp-tilapia polyculture in a one hectare cage. Currently, he has 5,000 bigheads, while stocking tilapia at 25 per m².

He cited the following advantages of carp over other fish: fast growth (in eight months, it can reach 2.5 kg); being a no-fuss feeder (may not require any feeding at all as most of its life is spent in the lake foraging for natural food); and acceptance by people.

For first-time carp aquaculturists interested in hatchery operations, Aralar recommended the following practices. Look for good staff who know about the fish and can be trusted around them. The hatchery should be situated in a good site—e.g. near the lake so that stripped fish can be easily brought back to their pens to recover. Feed fish with supplementary food pellets when feasible; feed the newly hatched larvae with mashed egg yolk, Artemia and Moina. Make it a family business so that everyone cares or sacrifices for it. He estimated that 300 broodstock would allow a hatchery to break-even in its first year.

He added that it was his brother Emil who taught him carp hatchery technology. Since then, he has improved on the method. An example of a significant modification
too many might saturate the market for grow-out.

The BFAR Center produces only around 20,000 to 50,000 fingerlings per production schedule. It sells these one-month-old hatchlings at a price much lower than the private sector does (P1 thereabouts), for 30 cents apiece. Spawning runs are done at the Center 5 to 6 times a year.

Existing market conditions suggest not much demand for common carp in Manila. In Lucban, Quezon and the Bicol region, however, carp prices range from P90 to P120 a kg.

Bighead carp is usually sold disguised as a marine fish (e.g., maya-maya) in big city markets. Its sections are priced differently: the head region, P45-50; head to belly, P70; and the tail portion, P45.

The Center does acknowledge the need to promote the acceptability of carp as a foodfish, in markets dominated by marine fish produce. This goal may be realized with NIFTC's proposal to integrate value-added carp-based production development in collaboration with the postharvest technology division of BFAR. Carp is very good for surimi products, Ms. Palma noted.

Carp is 12% of the national freshwater fish production as reported by the Bureau of Agricultural Statistics (BAS), the NIFTIC Chief noted. But this figure could be misleading, she said. "Twenty per cent would be nearer the actual production." She added that the discrepancy must be because different areas have different local names for carp—bighead. Imelda and mamalig are carp. She has asked BAS to review its recorded data and reconcile its statistics with current production.

Carp fisheries development that NIFTC looks forward to in the future is land-based: polyculture and integrated farming. The first-ever NIFTC nationally conducted training on carp-based integrated farming is slated this October. "The integrated approach would be a very sound development," she said, noting that it is the Center's next step after carp hatchery and culture technology transfer; and that it meets the government's goals of food sufficiency and sustainable aquaculture development.

When asked for her concluding remarks, Chief Palma said: "Considering the low production of carp and high production turn-out for culture, and if we're trying to develop an alternative species geared towards attaining food sufficiency at the same time preserving the environment, I think we can always look up to carp as an alternative species—*Carpa para sa Masa. Carp for the Masses.*"

###

**SEAFDEC tech ... from page 29**

What kind of carp culture developments would you like to see in the future?

**Engr. Aralar:** Increase in the survival rate of larvae. It is very low right now. We consider 60% already very high. Hatching rate depends on water quality management, it varies from about 60 to 80%.

**Dr. Santiago:** I'd like to see people work/further developments on the broodstocks' consistent reproductive performance.

What direction will the future take?

**Dr. Santiago:** Broodstock development rather than hatchery operations.

Has carp hatchery technology reached its fullest potential?

**Dr. Santiago:** There's still much room for growth, especially in landlocked areas—those areas which cannot be supplied by marine fish, like some areas in Mindanao.

Any parting words for our readers?

**Dr. Santiago:** I would just like to reiterate that if you go into carp culture, you will be supporting the country's food security program. I'd like to assure you that there is money in carp culture.

###

**REFERENCES**

