1993

Seafarming of tilapia in cages

Aquaculture Department, Southeast Asian Fisheries Development Center

Southeast Asian Fisheries Development Center, Aquaculture Department (1993). Seafarming of tilapia in cages. Aqua Farm News, 11(3), 9.

http://hdl.handle.net/10862/2562

Seafarming of tilapia in cages

A desirable species for seafarming is one with readily available seeds, is fast growing, economical to culture, and marketable. Among the fishes that meet these requirements are the tilapias.

Suitable areas for cage farming are open waters that are protected from strong waves and currents, have stable salinities (32-36 ppt), free from pollution, and accessible. A minimum depth of one meter at neap tide is required.

Tilapia is best cultured in areas where fish supply is seasonal and market demand for fish is good. It is recommended in overfished waters and where there are no land-based livelihood opportunities for small-scale fishermen.

The Mozambique tilapia and its hybrid by Nile tilapia are recommended for seafarming. All male fingerlings should be used. Fingerlings should be gradually acclimated to the salinity of the culture site.

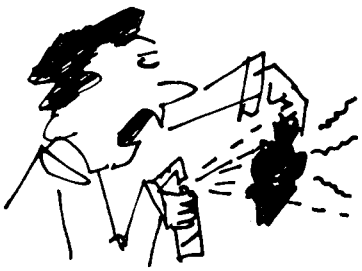
Cages are constructed of bamboo frames and floats, and polyethylene net enclosures. Instead of bamboo floats, empty plastic containers or styrofoam floats can be used. A cage is 3 x 3 x 1.5 m and its net mesh, 1.5 cm.

Stocking density varies from 100 to 200 fingerlings/m^2. The fish are fed commercial pellets at 3-5% of biomass per day in 2-4 feedings. If pellets are not available, a moist feed consisting of 70% fine rice bran and 30% local fish meal can be given. Feeding trays may be used to minimize waste. Depending on the size of the fish desired for market (100-200 g), tilapia in cages are cultured for 3-5 months.

The common problems in cage culture are the fouling of nets, damage caused by typhoons and predators, and poaching. Nets should be cleaned as often as necessary to ensure efficient water exchange. Double-netting of cages can prevent loss of fish. Guarding the cages at night should discourage poachers.

Tilapias are usually marketed fresh in the Philippines. The fish are harvested early in the morning and usually chilled in ice water before transport to market. For long distance travel, the fish are packed in containers with crushed ice at a ratio of 1 kg ice to 4 kg fish. Wholesale prices for tilapia depend on size, locality, and freshness.

Source: PCAMRD. 1991. ***Seacage farming of tilapia in the Philippines.*** Fisheries Technology Manual Series No. 9. Los Baños, Laguna, Phil.: DOST/Phil. Council for Aquatic and Marine Research and Development.



Getting rid of tilapia's muddy smell

Tilapia often develops a strong taste or smell of mud or algae. To rid newly harvested tilapia of its off-flavor, the following steps may be taken:

- Confine the newly harvested tilapia in a holding cage for six hours to let the fish empty their stomachs.
- Transfer the fish to a large tank with clean water from the tap or well. The fish may be stocked at 200/m^3. The water must be supplied with aeration.
- Check the gills of the fish after three days. If the off-flavor still persists, change the water completely.
- After another three days, check again. Better still, cook a few to determine if the foul taste or smell is still there. If so, repeat the process. It takes 7-14 days to completely remove the off-flavor taste or smell.

- Technology Dispatch, undated