



GROW - OUT CULTURE OF MAGUR, *Clarias batrachus*

Pond construction and preparation:

- For effective management, the grow-out culture ponds should be of 0.02 – 0.1 ha.
- Pond bund should have a suitable slope of 1:2-1:3. The water depth may be maintained at 0.75-1 m. Height of the dyke from the water level should be at least 100cm.
- Water holding capacity of the soil should be checked out.
- During rainy season magur used to crawl out of the pond. So that during construction of pond the dyke should be made in such a way that they can't escape out.
- Unwanted weeds should be removed from the newly excavated pond.
- Perineal pond should be cleared from predatory fishes and unwanted aquatic plants.
- Mahua oil cake can be applied @ 2500 kg/ha/m depth or bleaching powder @ 350 kg/ha for killing of predatory fishes and their eggs. Liming depends on the pH of soil and water, where 200-250 kg/ha of agricultural lime is applied when the soil pH is above 6.0.

Grow-out culture phase:

- The small (0.02-0.1 ha) and shallow (0.75-1.0 m-water depth) earthen ponds/stone pitched ponds/cemented tanks are suitable for grow-out culture of magur.
- Generally high density of 50,000-70,000/ha is recommended for culture of magur but further reduction of stocking density can be adopted for higher growth of fish.
- Stocking of bigger sized seed (3-5 g) shows good survival and growth during grow-out culture.
- Magur is an air breather, they normally come up to the water surface for atmospheric oxygen. This behaviour attracts birds for predation. Therefore, it is required to cover the ponds with net to protect the fishes from bird predation.

Feed management:

- Artificial feed costs around 60-70% for magur culture. So the income of the culture fully depends upon the balanced diet provided with proper manner.
- Pelleted feed are required for the culture purpose. The feeding rate is adjusted based on the monthly sampling and feed consumption rate to avoid feed loss.
- Fish meal based compound feed (30-32% protein) provides optimum nutrition for magur growth.
- Magur fingerlings are fed twice a day at the rate of 3-5% of body weight in the feeding basket placed in different places of the pond to avoid intraspecific competition during feeding.
- Feeds like Starter-M, CIFA-Ma were developed at ICAR-CIFA for different life stages of magur.
- The fish meal based commercial feeds are also available in market and that can also be used for grow-out culture of magur.

Health management:

- Bacteria are among the most important pathogens of magur, which may cause extensive losses to the cultured magur
- Mortality due to bacterial pathogens and fungal are often associated with environmental stresses.
- CIFAX, Potassium permanganate, Oxy-tetracycline etc are used during grow out culture.

Harvesting

- Magur attain a marketable size of 100-150 g during the culture period of 10-12 months.
- Harvesting is done by complete dewatering and picking them manually from the culture ponds.
- Productions up to 2-3 tonnes/ha can be achieved in 10-12 months of culture period.

