

## **PROCUREMENT OF INPUTS**

Seed, feed and fertilizers are the three major inputs of undrainable pond culture systems. Paucity of quality fish seed is even now considered as one of the major constraints in the development of freshwater carp farming. This is mainly due to the large-scale development of this farming system creating ever-increasing pressure on carp seed industry. However, construction of large- and small-scale carp hatcheries has provided enough support to this industry during recent years. Ideally, a farm should be self-sufficient with nursery and rearing ponds so that after meeting their own demand the surplus seed can be sold for additional farm income. Small, seasonal, undrainable village ponds are most suitable for this purpose. Procurement of feed is not a problem as most of the feed materials are village-based agro-industrial products and by-products and are readily available in villages and local markets. Only some feed additives are needed to be procured from towns. Animal manures are incidental to village-based allied agricultural and animal husbandry activities while fertilizers are readily available in the local markets throughout the year.

### **Procurement of seed**

Except common carp, all the other five Indian and Chinese major carps, viz. catla, rohu, mrigal, silver carp and grass carp, cultivated under composite fish culture do not breed in pond conditions although they attain full gonadal maturity. However, they breed in bundh type tanks. The successful development of the technique of induced breeding through hypophysation ensures breeding of both Indian and Chinese major carps in captivity. Therefore the stocking materials are procured from three different sources, viz. collection by traditional methods from rivers, by induced breeding of carps and by breeding in bundh-type tanks.

### **Collection of spawn from riverine sources**

The technique of spawn collection from rivers essentially consists of operating fixed filtration nets in marginal areas of flooded rivers during monsoon months, when the Indian major carps

normally breed. Success of operations mainly depends on proper sites, suitable nets, monsoon flooding patterns, availability of sufficient brood stock and the success of spawning.

### **Spawn net and its operations**

These are funnel-shaped nets made of fine mesh (1.5 to 3.0 mm) handloom nettings (Figs. 25a and 25b). The posterior end has a small round opening fixed on a bamboo ring. A small trough-like receptacle (gamcha) is tied to the ring where live spawn is collected. The net is fixed in marginal waters where depth of water is negotiable without any aid. River margins with gradual slopes are the most suitable sites. Water flow in the range of 20 to 60 cm/sec is desirable.

#### **Reference:**

1. <http://www.fao.org/docrep/003/T0555E/T0555E08.htm>

#### **Suggested Readings:**

- A. Aquaculture: Principles and Practices By: TVR Pillay and MN Kutty