Farming of shing/magur in homestead pond

Dr. Md. Akhtar Hossain Professor, Dept. of Fisheries, RU

Background

- Gained popularity as a food fish to Bangladeshi people from the time immemorial
- Can survive out of aquatic ecosystem for a long time
- Hardy species ability to survive in an adverse environmental condition
- High medicinal value- often recommended for sick people
- Naturally abundant in past, population declining at present
- Breeding protocol developed- seeds are available
- Potential for aquaculture

Benefit of the technology:

- a) Shorter culture period;
- b) Culture at high density in low space;
- c) Marketing at live condition;
- d) High market price;
- e) Increased income through women participation;
- f) Supply of nutrient rich food to the family members;
- g) Effective utilization of the homestead ponds;
- h) High profit margin; and
- i) Easy culture technology

Description of the technology

a) Pond selection

- Comparatively smaller pond
- Suitable water depth of around 3 to 4 feet
- Entrance of sufficient sunlight into the pond
- b) Pond management
 - Remodeling of the embankment for keeping the pond flood free
 - Staffing to protect soil erosion
 - Removal of the aquatic weeds

- Removal of unwanted fishes and other animals through repeated netting

- Liming (1kg/decimal) for disinfecting the pond and water quality improvement; in addition to liming (2-3 kg/decimal), ash treatment (15 kg/decimal) is required in obtaining good result from ponds under *barind* area

- Enhancing natural feed production through inorganic fertilizer like urea and triple super phosphate (each @150g/decimal) after 5-7 days of liming

c) Fish stocking

Comparatively larger size carps are stocked with the seeds of magur for maintaining good water quality and overall fish production in homestead ponds as follows:

Fish species	Stocking density	Stocking weight (g)
	(Individuals/decimal)	
Magur/Shing	300-600 or more	2-3
Catla	1	200
Silver carp	2	200
Rui	1	100

d) Post stocking management

- Fortnightly liming (200-250g/decimal);

- In addition to liming, ash treatment (10 kg/decimal/month) for ponds under *barind* area

- Supplementary feeding (35% protein content) @ 2-10% of fish body weight (twice daily, 50% at morning and 50% at afternoon)

- Use of both commercial (70%) and home- made (30%) feed under restricted feeding regime (feed restriction for 4 days per month) to reduce the feed wastage and thereby the feed cost

e) Harvesting and production

- Fishes can reach the harvestable size (shing of 80-90g; magur of 100-110g; catla of 800-1000g; silver carp of 1000-1300g; and rui of 600-800g) within 5-6 months
- Fish production can be obtained as 7000-9000 kg/ha/6 months (shing/magur as 6500-8500 kg and carp as around 500 kg) while stocking shing/magur @ 300-500 fishes/decimal

f) Important considerations

- Fencing the pond embankment with net (minimum height of 3 feet) to protect the fish escape during flood
- Avoid the excess use of lime, fertilizer and feed
- More emphasis on home-made feed application than that of commercial feed
- Since complete harvesting is often found difficult through repeated netting, drain out
- of water from the pond may be required
- Complete the harvesting before winter