



7. Demand feeding using check trays and feeding across the pond using boat/floating device.

8. Water exchanges only when necessary and during critical periods. Should be restricted to 10% at a time.



9. Shrimps should be sampled once in a week by cast netting and should be checked for their general health condition.

10. Removal and safe disposal of sick or dead shrimp to prevent spread of diseases.



11. The pond bottom soil should be checked on weekly basis, especially at the feeding area or trench for black soil, benthic algae and bad smell.



12. No draining or abandoning of disease affected stocks. Emergency harvesting if increasing mortality. Farmer groups are encouraged to discuss common actions that can be taken during disease outbreaks on a priority basis, to avoid spreading of disease from one farm to another.

13. Maintenance of hatchery/pond management record book by hatcheries and farms records are necessary to identify problems in the tank/pond environment and shrimp health and to rectify these problems at the earliest during the production cycle.



14. Proper harvesting method. Avoid harvesting by cast netting. Drain out pond water quickly within 4 to 5 hours using more pumps if necessary and harvest only through bag net.

15. Mangroves are necessary not only to protect ecosystem, it also helps in preventing pond damage during flood.



SHRIMP HEALTH MANAGEMENT

Adoption of Better Management practices (BMP's) through organization of Aquaclubs



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BACKGROUND

As a part of the technical collaboration between MPEDA and NACA on shrimp disease control in India, village demonstration programmes were conducted during the year of 2003, 2004 and 2005. These demonstration programme were successful in organizing small-scale farmers into self-help groups (Aquaclubs) for adoption of "Better Management Practices" formulated in course of the MPEDA-NACA technical assistance programme conducted during 2000-2002 period.

AQUACLUBS



Mogaltur, Andhra Pradesh



Astarang, Orissa

OBJECTIVE

1. To reduce the risk of disease outbreaks and improve the production in shrimp farms.
2. To organize the farmers under "Self Help Groups"/ Aquaclubs" for sustainable production and to quickly meet the growing market demands.
3. To produce better quality of shrimps in socially acceptable, environmentally sound and economically viable manner.

EXTENSION METHODOLOGY

1. Farmers were organized under Aquaclubs for Cluster management. Group of less than 100 ponds (<50 ha) 20-30 farmers One Leader for one Aqua Club.
2. BMPs were implemented at village/cluster level by training the farmers and on-farm technical and moral support to farmers.
3. Aquaclubs were linked to farm input suppliers with Contracts Systems for various benefits, mainly quality assurance.
4. Farm management and crop outcome information was collected from study and non-study ponds using questionnaires, recording sheets, pond books etc.

SOME FUTURE TRENDS

Consumer and importing country awareness on chemical residues will increase. Testing is becoming more sensitive implementation of "Better management practice" as an alternative will be essential to control product quality and residues.

VISION

Widespread adoption of better management practices in the shrimp farming sector, leading to improved yield, and a safe, quality and environmentally sound shrimp product for domestic and international shrimp markets.



BETTER MANAGEMENT PRACTICES

1. Cleaning the pond bottom is a very important pond preparation activity. The soil should be checked for the presence of black layer and it could be removed from the pond.



2. Water should be filtered using twin bags of 10 holes/cm mesh at the water inlet point to avoid entry of virus carrying fish and crustaceans which may be predator or competitor for shrimp. Water depth of at least 80 cm.



3. Two-step PCR screened PLs for White Spot Syndrome Virus.

4. On-farm nursery (avoiding commercial nurseries). The nursery area is usually 5 to 10% of the total pond area.



5. One-time stocking ("All in-All out" system) during 1st week of Feb to 2nd week of March.

6. No use of any harmful/ banned chemicals like pesticides and antibiotics.

