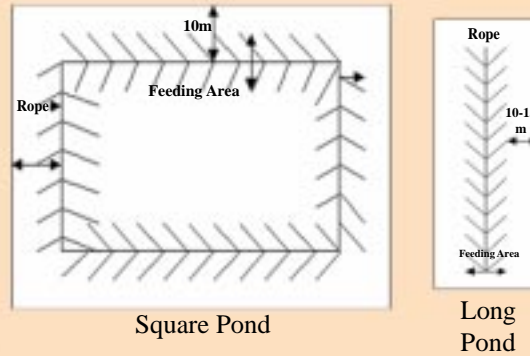


8. After 30 days, start middle feeding (see picture below). Feeding area should be changed at least once in 7 to 10 days depending on the bottom condition along feeding area. This allows shrimps to feed in a clean area.



9. Avoid feeding in trench or channel along the bottom of the pond wall or in the centre of the pond. Feeding in pond corners and areas where it is dirty (black) must be avoided. Feed should be supplied to clean areas in the pond.

10. In the ponds with the aerators, feed in the areas cleaned by the water movement. It is preferable to switch off the aerators just before feeding until the feed trays are checked (1-3 hrs).



11. Do regular sampling of shrimps once a week after 60 days to determine growth rate and to calculate FCR.



12. Reduce feeding during periods of low DO, plankton crash, rain fall, extremes of temperature and during disease outbreaks.

13. Never over feed. Slightly under feeding is better than over feeding, which saves money and reduce disease risks. Weigh and record the feed quantity to be given accurately.



14. Store feed in clean, cool and ventilated area. Stack the feed bags on wooden planks 10 cm away from the walls.

15. No need to mix any additives to the feed as long as feed is fresh and of good quality.



## SHRIMP HEALTH MANAGEMENT

REDUCING SHRIMP DISEASE RISKS THROUGH ADOPTION OF BETTER MANAGEMENT PRACTICES



### 4. GOOD FEED MANAGEMENT



#### THE MARINE PRODUCTS EXPORT DEVELOPMENT AUTHORITY

(Ministry of Commerce, Government of India)

MPEDA House, Panampilly Avenue

P.B. No. 4272, Cochin - 682 036, India

Phone : +91 484 2311979, 2316984

e-mail : [mpeda@mpeda.nic.in](mailto:mpeda@mpeda.nic.in) website : [www.mpeda.com](http://www.mpeda.com)

#### NETWORK OF AQUACULTURE CENTRES IN ASIA-PACIFIC

Suraswadi Building, Department of Fisheries

Kasetsart University Campus, Ladyao, Jatujak

Bankok 10900, Thailand

Tel : 66-2-561-1728

e-mail : [naca@enaca.org](mailto:naca@enaca.org) website : [www.enaca.org](http://www.enaca.org)

May '2006



## BACKGROUND

“As a part of the technical collaboration between MPEDA and NACA on shrimp disease control in India, village demonstration programmes were conducted between 2002 to 2005. These demonstration programmes involved organizing small scale farmers into self-help groups known as “Aquaclubs” for adoption of “Better Management Practices (BMPs)” towards capacity building among the farmers.



Feed management is one of the most important aspects of successful shrimp production. Poor feed management is also responsible for increased production cost and shrimp health problems. Cost of feed accounts for about 40% to 50% of the total production cost. Therefore the objective of good feed management should be to produce healthy and good quality shrimp in a sustainable manner with better profit margin.



## IMPORTANT STEPS :

1. During the first 30 days of culture, feed should be spread within 2 to 4 meter area from the edge of the pond.



2. The starter feed (<1mm size) should be mixed with little water to distribute easily and to ensure that it sinks rapidly



Feed in the right hand is mixed with the water

3. To reduce size variations, feed size should be changed according to the actual size of the shrimp. A mix of two feed pellet sizes should be used for at least 7-10 days if there is any size variation during the regular check-up.



4. Active swimming of shrimp around the edge of the pond during daylight hours ( but not at the water surface) could indicate a lack of food in the pond. If you observe this consistently, increase the feeding rate.
5. In normal conditions (no sick shrimp), 2 hours after feeding, collect some shrimp and check if they have full gut. If not increase the feeding rate.



Top-Shrimp with full gut, Bottom-Shrimp with empty gut.

6. Use at least 4 feed trays (80 cm x 80 cm) per pond. Feed trays should be placed on the pond bottom away from the slope of the pond bund.



7. Feed schedule depends on the body weight of the shrimp and the feed tray result during previous meal. From 30 DOC onwards, feeding results from the feed trays should be used to decide the daily meal quantity.

