

POLYCULTURE OF MUDCRABS AND ASIAN SEABASS BY IRULAR TRIBAL PEOPLE IN A COMMUNITY POND



1. Irular's and Irular pond' at Kulathumedu Village, Pulicat, Tiruvallur dt.



2. Interaction and doubts clearing by project team members



3. Stocking of seabass fingerlings in the pond by dignitaries



4. Weighing the crabs before stocking



5. Stocking of crabs in the pond by the beneficiaries



6. Processing of low cost fish by beneficiaries



7. Weighing the low cost fish before feeding



8. Feeding the crabs in the pond by men and women



9. Monitoring the feed intake and checking for mortality of crabs and seabass



10. Collecting seabass fingerlings for sampling



11. Collecting the crabs for sampling



12. Sampling by project team and beneficiaries



13. Harvesting seabass



14. Collection of seabass for marketing



15. Harvesting of crabs



16. Transporting of crabs to the shore



17. Tying the crabs



18. Packing of harvested crabs



19. Marketing of crab & seabass



20. Transporting crab & seabass to market

- A polyculture demonstration of the brackishwater species the mud crab (*Scylla serrata*) and Asian seabass (*Lates calcarifer*) was conducted in a community pond at irular tribal village, Kulathumedu village, Tiruvallur district of Tamil Nadu. This was supported by CIBA under the Tribal Sub Plan (CIBA-TSP).
- The objective of this demonstration was to utilize the available brackishwater resources in the village for mud crab and seabass farming as an additional livelihood and income to irular tribals.
- A total of 147 irular tribal people both men (82 nos.) and women (65 nos.) participated in this programme.
- The size of the community pond is 2.0 ha. and the water depth varied from 0.5 to 1.2 meter. The temperature and salinity of the pond water were 28-32°C and 30 - 45 ppt respectively. The entire pond was fenced by the nylon net to prevent escape of crabs from the pond.
- Regular cleaning and monitoring of the pond was done by the beneficiaries to remove any debris/filaments and algae present in the pond. Beneficiaries also guarded the stock in the pond during night hours to prevent poaching as a precautionary measure.
- Hide-outs made of bamboo baskets were kept at different places in the pond for the protection of water crabs during molting. Moderate sized thorny bushes and water plants were planted as hide outs for seabass fingerlings.
- A total of 2000 nos. of seabass fingerlings at a cost of Rs. 15/- per fingerling with 6-9 cm total length and 4-6 g body weight and a total of 1048 nos. of crabs (249.2 kg) ranging from 100 - 450 g of size at a cost of Rs.450/kg were procured and stocked in this pond.
- Locally available low value fish (like *sardines*, *terapon* spp, *Tilapia*, *Eel* etc.,) procured from the local market were cut into small pieces and fed to crab and seabass.
- Feeding was adjusted based on the standing biomass and fed @ 8-10% of the body weight of the stock.
- Feeding was carried out by both men and women using a boat and from shore by broadcasting at different feeding points in the pond.
- Regular sampling of the seabass fish and crab was carried out once in 15 days to assess the growth and to check the health of the stock. All the records including work schedules, sampling data, feeding and pond management were maintained by the beneficiaries.
- After three months of culture period, the seabass has attained the total length from 13.5 cm to 24.5 cm (average 19.0 cm) and total weight varied from 40 g to 180 g (average- 110 g). A total of 217 seabass juvenile fishes have been collected through partial harvesting and marketed. An amount of Rs. 6,510/- was realized out of seabass sale. A total weight of 159.5 kg of crab was harvested and an amount of Rs.1,27,398/- was realized out of crab sales. The total amount of Rs. 1,33,908/- was realized out of crab and seabass sales from this trial.
- Periodical interaction meetings were conducted with the beneficiaries by CIBA scientist team to discuss the technological and management problems.
- Bank accounts were opened for the beneficiaries to manage the investment, profit etc.,
- This intervention proves to be a good model of supplementary revenue generation portraying the community participation in adoption of common water bodies for fish farming.

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