Aquaculture: Problems and Prospects B. Problems of Aquaculture (E-Contents prepared by Prof. S.P. Trivedi, Department of Zoology, University of Lucknow, Lucknow-226007)

Like other sectors of agriculture, aquaculture is also not without constraints. Despite being one of the sunrise sectors of Indian economy, aquaculture is facing a lot many problems, e.g., ecological constraints on account of aquatic pollution, production cost, dangers of invasive species, safe application of after use water from aquaculture activities, etc (Figures below).





Major areas of problems in Aquaculture

Aquaculture which provides employment to around 15 million people in India is striving hard for its improvement. Some of the notable areas which immediately needs attention of policy makers and those who are sitting at the helm of affairs of Aquaculture Industry are:

- Management of stocks in reservoirs
- Stocking and selection of right species
- Maintaining proper harvesting schedules
- Resources specific harvesting techniques
- Management models for culture based fisheries
- Increasing water area under aquaculture practices
- Increasing productivity of existing water bodies

- Diversification of candidate species
- Research support for sustainable, eco-friendly and techno-economically viable hatchery & culture systems
- Fish health management and disease diagnostics
- Fish nutrition and alternate feed formulation
- Fish genetics and selective breeding
- Utilization of inland saline/usar soils for aquaculture
- Increase in the coverage of areas of ponds and tanks for aquaculture practices
- Increasing productivity of existing water bodies
- Diversification and Intensification of culture practices
- Improvement in Harvest and Post-harvest sectors
- Fuel-efficient and resources specific craft and gears
- Promotion for Biomedical, pharmaceutical and industrial products from aquatic organisms
- Cost effective treatment of aquaculture waste water.
- Expansion of domestic and international marketing network.
- Guarantee of reasonable price of produce to farmers.
- Genuine marketing system.

Suggested Readings

- The State of World Fisheries and Aquaculture (SOFIA) 2016
- Huet, M and J.A. Timmermans, 1972. Textbook of fish culture. Breeding and cultivation of fish. London Fishing News(Books) Ltd. 436p
- Liao, I.C,1988. East meets West: An Eastern perspective of Aquaculture. Presented at the 19th Annual Meeting of the world Aquaculture Society, Honolulu, Hawaii, 4-8 January 1988.
- <u>http://nfdb.gov.in/about-indian-fisheries.htm</u>
- <u>https://www.daf.qld.gov.au/fisheries/aquaculture/overview/types/hatcheries</u>