

Brackish water shrimp farming in Sri Lanka: Sustainability and future prospects

U. P. A. Epa

Shrimp farming is one of the rapidly developing industries in the world. High profitability and generation of foreign exchange have been the major driving force in the expansion of Asian shrimp farming. The present paper explores sustainability of Sri Lankan shrimp farming industry mainly focusing on the environmental factors.

Shrimp exports have become one of the non-traditional foreign exchange earners of Sri Lanka and account for nearly 90% of the total aquaculture exports. Sri Lankan cultured shrimp has a high demand in the international market due to high quality of the product. For semi-intensively cultured shrimp, Sri Lanka had the highest advantage at the Japanese and US markets according to the resource cost ratio (RCR) compared to the other Asian countries. Therefore, from an economic viewpoint, shrimp culture industry in Sri Lanka has good prospects.

Unplanned development of culture sites without giving due consideration to the carrying capacity of the natural environment has created many issues regarding the sustainability of the Sri Lankan shrimp farming industry. Further growth of the industry is restricted by site availability, high production costs, disease outbreaks and socio-economic limitations, which are often intervened with environmental factors. The solution to environmental problems must deal with site selection, design and sustainable farm management. Industry practices and regulatory processes should be scientifically evaluated in order to adopt more environmentally friendly and economically viable shrimp culture operations. The research findings of universities and research institutions need to be effectively transferred to the farmers. A sound master plan for sustainable shrimp farming development in Sri Lanka must be determined based on scientific principles. Shrimp farming in Sri Lanka is still a relatively new activity and it is distributed only in few areas. As a result, there is much room for proper planning and development of the industry in Sri Lanka.