



## FOREWORD

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The last decade has witnessed an acceleration in the development of shrimp aquaculture in our coastal and brackish waters. Besides production from traditional tidal fed impoundments in Kerala and West Bengal the new shrimp farming facilities have produced more than 50% of the overall production of 60,000 tonnes harvested in 1993. Simultaneously there has also been a parallel development in shrimp hatcheries, to meet part of the seed requirements. Institutional financing has also played a pivotal role in triggering the expansion of shrimp aquaculture. Thus, the nineties has dawned as an exciting decade promising a quantum leap in the development of coastal aquaculture in India.

A matter of great concern lies in the areas we need to catch up most in—Research and Development, viz., in feed technology based on the nutritional requirements of the farmed shrimp ; the prevention and control of diseases, predators and parasites ; and the maintenance of good water quality and environmental conditions for attaining sustainable production at a semi-intensive level of culture. An equally important lacuna is the management of systems and trained manpower for the same.

The importance of this “Aquatech Seminar on Shrimp/Prawn Aquaculture - A Management Perspective” has to be viewed in this context. It deals with the management needs of hatchery and nursery systems, for the production of seed with good growth quality and high survival rates ; management of growout systems with semi-intensive levels of sustainable production ; management of nutritional needs and feeds for desired growth and quality of the product; management of the environment and water quality to prevent diseases, parasites and predators ; preventing pollution of the operational systems ; and managing harvesting, processing, product development and marketing. The stress is on proper management at all stages and the need for trained manpower.

Integration of management into the system should also take into account constant innovations, research advances and proven technologies. For instance, culture techniques are well known for the production of **Macrobrachium** in monoculture or polyculture. However, new techniques such as mono-sex culture to produce only males to increase biomass production by 60% to 70%, needs dissemination. The need for bridging gaps in information technology is rightly highlighted.

Policy makers, planners, teachers, subject specialists, researchers, extension workers and more than all, the shrimp farmers and those involved with ancillary support systems will welcome the proceedings of this seminar, as a useful compendium. Development is not static. The Aquatech Seminars should serve as catalysts for the growth of the industry. Let us consider this as the “starter feed” for what is to come.

The three-day deliberations at the seminar enabled the participants to enunciate a number of valuable recommendations which need speedy implementation. The Government has been addressed on some very important issues which includes also urgent regulatory quarantine rules to prevent disease outbreaks and the introduction of a “Single Window” clearance system for the clearance of projects. A very significant and important recommendation which should find all round support is the proposal for the establishment of “The Aquaculture Foundation of India” which should play a pivotal link role between R & D, industry, fish farmers and the Government.

I wish to congratulate the organisers of this seminar for their foresight and for all the effort they have put in to help the growth of aquaculture per-se in the country.