

### **Department of Aquaculture**

Department of Aquaculture was established way back in 1979 as a constituent Department of College of Fisheries, Panangad and was brought under the Faculty of Fisheries of Kerala University of Fisheries and Ocean Studies in 2011. Aquaculture is one of the major Departments under the faculty with maximum number of courses and credits. Three academic programmes remain offered under the Department of Aquaculture including Bachelor of Fisheries Science (B.F.Sc.) which is the flagship course of the University. The two Master of Fisheries Science programmes ((M.F.Sc.) offered by the Department are M.F.Sc in Aquaculture and M.F.Sc. in Fish Nutrition and Feed Technology. The Department of Aquaculture also offers Doctoral programmes leading to Ph.D. through one year course work and two years of research.

For the B.F.Sc. programme, altogether there are 12 courses with 29 (18+11) credits split into 18 theory credits and 11 practical credits. During the seventh semester, students are exposed to rigorous training of four weeks for empowering the students in aquaculture hatcheries and farms with the credit load of 10 (0+10). During the final semester (8<sup>th</sup>), full weightage is given to student READY (Rural Entrepreneurship Awareness Development Yojana) programme in Experiential Learning module with a total credit of 20 (0+20).

The mandates of the Department are:

1. To develop qualified human power in aquaculture and allied sectors.
2. To carryout need based quality research towards empowering the aquaculture sector
3. To impart practical knowledge and entrepreneurial skills to the students, farmers and the public facilitating improved aquaculture productivity and total production.
4. To create more employment in the sector and improve the farmers' income leading to augmented contribution to the National GDP

Department of Aquaculture has sufficient number of hatcheries attached to it for imparting training. These include a Freshwater prawn hatchery, Ornamental fish hatchery, Carp hatchery with Jar and Chinese hatchery facilities. The Department also has extensive farm land with fields and ponds. Of the total land available, about 12.5 ha. (30 ponds) of water spread area is used as instructional farm. The brackish water farming area is 2.5 ha. comprising of 20 ponds of different sizes. About an area of 5 ha. is presently utilized for traditional prawn filtration which is a conventional aquaculture practice in vogue for many centuries. An organic shrimp culture project in association with COOP, Switzerland, MPEDA, Government of India and Baby Marine Group

of Industries remains launched with an official MoU with all the stakeholders. The brackish water area available in the western side of the campus will be utilized for this project. The project will have a major impact on the organic seafood supply from the country and will help the farmers to earn more income from aquaculture.

The Department has successfully completed the first consultancy project of the University funded by M/S. Kemin Industries South Asia Ltd., Chennai for testing a mineral product of their company. Under the light of the severe floods faced by the State in 2018 August, the Department has mooted a project under KUFOS Aided Research Project to assess the loss of aquaculture farmers and analyze the situation towards formulating a climate smart aquaculture strategy for the State.

The thrust area of research in the Department include farming of commercially important finfish and shellfish, seed production, brood stock development, genetics and breeding, fish nutrition and feed technology, ornamental fish breeding and culture, aquaculture biotechnology, organic aquaculture, environment impact assessment, endemic fin fish culture, re-circulating aquaculture, aquaponics, recreational fisheries, transgenomics, nutrigenomics etc.

### **Faculty**

Dr K Dinesh Associate Professor and Head

Dr S Shyama, Professor

Dr Binu Verghese, Assistant Professor

Dr Chiranjiv Pradhan, Assistant Professor

Dr Linoy Libini, Assistant Professor

Dr V J Rejish Kumar, Assistant Professor

Dr Rachel Fernadez, Assistant Professor (Guest Faculty)