Aquaculture simply means underwater agriculture. It is the process of rearing or producing aquatic species in water or managed water systems. Apart from supplying cheap protein, aquaculture sector is contributing significantly in poverty alleviation, food security and income generation for the rural population. The demand from aquaculture sector is increasing because production from capture fisheries has almost come to a point of stagnation. The State of Kerala is gifted with immense water resources, offering great potential for the development of aquaculture. It may be considered as an economically viable activity for income generation among the people of the State. The present study is an analytical one, which gives a comprehensive picture of the aquaculture sector in Kerala. It also analyses the problems in production and marketing of aquaculture products in the State.

The study is based on data collected from 300 sample farmers statistically selected using multi-stage stratified random sampling technique. The farmers represent three culture environment, viz., freshwater aquaculture, brackishwater polyculture, and brackishwater monoculture selected from Palakkad, Ernakulam and Kollam districts. The data are analysed based on farming details, production practices, production problems, marketing problems and evaluation of opinions of farmers regarding the functioning of agencies in providing production and marketing support to them. The tools used for data analysis include Loglinear Multinomial Model, Chi-square test, Friedman’s test for several related samples, Factor Analysis, Multi-variate analysis of variance (MANOVA), and Multiple Discriminant function analysis.
The study reveals that farming details like nature of farming and land ownership are associated with the culture environments. The study also describes the production practices in aquaculture and locates the major problems incidental to such practices. The study identifies eight major problems in production and six major problems in marketing. Again, these problems vary across the three districts selected. The multiple discriminant function analysis helped to locate the most important problem in each district by taking two districts at a time. As per the opinions of farmers, the agencies are doing well in providing production support to them, while the agencies fail in providing marketing support for their products.