# **CMABVAC02** Aquaculture

## Unit I

Overview importance's of coastal and freshwater aquaculture, global scenario, present status in India - prospects and scope.

### Unit II

Selection of site: topography, water availability, soil conditions, design and layout, structure and construction. Preparation of ponds – different methods for the eradication of weed fishes, predators, aquatic insects and aquatic weeds.

## **Unit III**

Selection of cultivable Species- Finfishes, Shellfishes and Seaweeds. Seed selection protocol and seed availability – wild source, hatchery source. Live feed culture – artemia, rotifer and microalgae. Water Quality Management.

### **Unit IV**

Stocking of seed and culture techniques - traditional, extensive, semiintensive and intensive; mono sexculture, monoculture, polyculture - pond, raceway, cages, pens, raft and rope culture. Feed management – selection of feed, types of feed, feeding schedule and nutritional value. FCR.

### Unit V

Diseases diagnosis and treatment. Probiotics and immunostimulants. Harvesting and cost benefit analysis. Coastal zone management – legal issues – Government policies – role of Coastal Aquaculture Authority of India (CAA).

#### **Text Books**

Bardach, John.E. 1997 Sustainable Aquaculture. John Wiley and Sons.

Chapman, V.J., 1980. Seaweeds and theirs uses Chapman and Hall London.

Joachim W., Hertrampft and F.P Pascal, 2000 Handbook on Ingredients for Aquaculture feeds. Kluwer Academic Publishers, London.

- Pillay, T.V.R .1990. Aquaculture Principles & Practices. Fishing News (Books) Limited, London.
- Santhanam R. N. Ramanathan and G. Jegatheesan 1990. Coastal Aquaculture in India, CBS publishers and Distributors.
- Stickney, 1995. Principles of Aquaculture, John Wiley & Sons.
- Wheaton, F.W. 1977. Aquaculture Engineering. John Wiley and Sons, New York.