Mussel harvest from CMFRI Demonstration cum Research farm in Chaliyar Estuary, Kozhikode

An experiment to compare the growth and production of vertically and horizontally seeded mussel ropes was conducted at the CMFRI demonstration cum Research Farm in Chaliyar Estuary, Karuvanthiruthy, Kozhikode. A total harvest of 588 kg shell-on mussels were obtained from 37.5 mt of seeded rope (249 kg from vertical and 339 kg from horizontal) in about 4 months period. The vertically grown mussels registered better for growth and production compared to the horizontally grown mussels. The production per meter rope in case vertical was 18.41 kg and 14.12 kg in case of horizontal. The average production per meter of rope was 15.7 kg at the rate of 38 nos./kg and fetched revenue of Rs. 4050/-. The meat constituted 34% of the total weight.

Backwaters turn the watery graveyard for oil sardine

The Indian oil sardine, *Sardinella longiceps*, in small schools, has been found to enter the Ashtamudi and Cochin backwaters by mid December 2004. The species was found to sustain a minor fishery in the area and was exploited by cast nets, Chinese dip nets, gillnets, etc. even upto 30km south in Muhamma. However, mass mortality of sardine was observed at Panangad, Cheppanam, Marad, Kundannoor, Poonithura and Champakkara canals. Interestingly, mortality of non other resident fishes/crustaceans like *Etroplus* spp., *Gerres* spp., *Leiognathus* spp. mullets, carangids, *Tilapia*, *Metapenaeus dobsoni*, *Fenneropenaeus indicus*, *Scylla serrata*, etc. was noticed.

A team of Scientists from CMFRI visited different spots where the mass mortality occurred and monitored various environmental parameters for a week. The salinity in the area ranged from 2.6-3.5 ppt and dissolved oxygen content got gradually reduced from an initial value of 5 to 1.62 ml/l. Among the nutrients, the phosphate (6-15µg at⁻¹) and silicate (40-74 µg at⁻¹) showed higher values.

Drastic reduction in salinity in the backwaters during rainy months would have been the main cause for mass mortality. A rough estimate based on the number per square meter put the quantity of dead sardine at 25-30 t, worth Rs.3 lakhs, at Cheppanam itself. It was a health hazard to the residents in many areas. The fishing activity in the area was also suspended. Many of the resident fishes had moved to safer grounds.

Heavy landings of Tuna at Chennai after Tsunami

At Chennai there was an increasing trend in landings of pelagic fishes following tsunami. Tuna accounted for 80% of the total gillnet catch at the Chennai Fisheries Harbour landing centre during 6–28th June 2005. In June 2005 an estimated 198 t of tuna were landed with *Katsuwonus pelamis* being the dominant species forming 58.6%. Compared to previous year during the same period there was an increase of 20% in the catch.

Captive spawning of *Portunus pelagicus*

Spawning of the swimming crab *Portunus pelagicus* was achieved on 29-06-2005 at Kovalam Field Laboratory. The crabs were grown from immature stage to maturity under captive conditions by feeding pellet feeds.

GIS mapping

A National Mussel Seed Calendar has been prepared using GIS under the NATP project on Mussel Mari-culture. Red markers represent non-availability of mussel seed and the green represent availability. The physico-chemical parameters of the seeding sites are included in the individual state maps.

Onshore image-pearl produced at Vizhinjam

Good quality image pearls were produced under laboratory conditions at Vizhinjam Research Centre. Recirculation system was used with partial replacement at fortnightly interval. A system consisting of a rearing tank, water treatment