

# Mangrove afforestation Programmes



**In association with**  
**FISHERIES STATION, PUDUVEYPU**  
**Kerala University of Fisheries and Ocean studies**  
Cochin- 682508

# OBJECTIVES

- ❖ To conserve the most important Mangrove varieties in the Centre maintaining mono- species grow out in plots of 25 cents each.
- ❖ To establish a Germplasm centre of mangroves and mangrove associates.
- ❖ Conduct awareness programmes on mangroves and Fisheries.
- ❖ To take up research programmes on mangroves especially in the line of bio active compounds present in these plants.

# ACTIVITIES JULY 2016 – JANUARY 2017

- Trial culture of Pokkali Farming
- Maintenance of mangrove nursery
- Conducted awareness programmes on mangroves
- Conservation of Germplasm
- Experiment
- Afforestation
- Other activities

# Pokkali Farming

- On 12<sup>th</sup> July 2016 at 9.00 am paddy shoots planted in the fifteen cents of land in Fisheries Station, Puduveyypu.
- Applied fertilizers according to the soil test reports and pumped sufficient water to the field due to the lack of precipitation.
- after two weeks of formation of panicle, it shows mass destruction of paddy due to the lack of water.

# MANGROVES AND MANGROVE ASSOCIATES IN FISHERIES STATION PUDUVEYPU

## NATIVE MANGROVES SPECIES

- *Avicennia officinalis*
- *Avicennia marina*
- *Bruguiera cylindrica*
- *Bruguiera gymnorhyza*
- *Excoecaria agallocha*
- *Rhizophora mucronata*
- *Sonneratia alba*
- *Sonneratia caseolaris*

## MANGROVE ASSOCIATES

- *Acrostichum aureum*
- *Acanthus ilicifolius*
- *Calophyllum inophyllum*
- *Clerodendron inerme*
- *Crinum defixum*
- *Derris trifoliata*
- *Ipomoea pes-caprae*
- *Premna latifolia*
- *Terminalia catappa*
- *Thespesia populnea*

# MANGROVE NURSERY

- Six variety of mangrove saplings were conserve in the nursery.
  1. *Avicennia officinalis*
  2. *Avicennia marina*
  3. *Bruguiera cylindrica*
  4. *Bruguiera gymnorrhiza*
  5. *Excoecaria agallocha*
  6. *Rhizophora mucronata*
- Nursery management including watering and cleaning of the nursery area.
- Monitored and watered the newly planted mangroves.

# MANGROVE NURSERY



# WATERING AND CLEANING OF NURSERY





# AWARENESS PROGRAMMES

- Mangrove Festival
- Given awareness lectures to public and students
- Survey is conducted in puduveypu area to evaluate the knowledge of local people about importance of mangrove

# MANGROVE FESTIVAL

- Prepared posters and learning materials.
- Created an artificial mangrove ecosystem.
- Conducted an exhibition related to traditional fishing gears.
- Given lectures to public and students.
- Conducted competitions for students from different institutions as part of the festival
- Other entertainment programmes.

# MANGROVE FESTIVAL PROGRAMMES

## ARTIFICIAL MANGROVE ECOSYSTEM



## SEMINAR ON MANGROVE ECOSYSTEM



# AWARENESS PROGRAMMES AT GOVT.VHSS, KADAMAKKUDY



- Team comprises of six members went to kadamakkudy.
- Observed different mangrove species in an around kadamakkudy GVHSS.

# GERMPLASM CONSERVATION

- Saplings of *R. mucronata*, *B. cylindrica* and *B. gymnorhiza* were collected from Thirur and *B. sexangula* from Kumbalangi.
- Planted *xylocarpus granatum* brought from Andaman and a special care was given to the mangrove.
- Conserving *Rhizophora apiculata*, *Kandelia candal* and *Aegiceras corniculata* that were brought from Kannur and Malappuram.

*Rhizophora apiculata*,  
*Kadelia candal*



*Bruguiera sexangula*



*Xylocarpus granatum*



*Aegiceras corniculata*



## AFFORESTATION

- 400 *Brugiera cylindrica* and 200 *Rhizophora mucronata* were planted on the banks of feeder canal of Fisheries Station, Puduveypu.
- Visited the 2.5 acres of Cochin Shipyard for implementing mangrove afforestation.



# MANGROVE AFFORESTATION

## COLLECTION OF MANGROVE SAPPLINGS



## PLANTING OF MANGROVE SAPPLINGS



