

Preliminary studies on mangroves vegetation in three coastal villages in Batticaloa district, Sri Lanka

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Villages of Pillayardi, Sathurukkonadan and Tannamunai are located in lagoon associated coastal areas in Batticaloa district, Sri Lanka. Mangroves and its associated species have been dominated for years in the villages. Mangrove vegetation is divided by a main road A15 thus forming thin and stretched land near the shore with vast vegetation in the inland areas. A preliminary study was carried out to determine the distribution, status of mangroves and associated species and its ecosystem in the three villages. There are six true mangroves and seventeen mangroves associated species which were identified between December 2005 and May 2006. Most of the mangrove and its associated species are reported near the shore site. A few *Sonneratia caseolaris* trees are found to grow taller than other species and are found only along the lagoon shoreline. Dominant species is *Excoecaria agallocha* and found in both shoreline and inland areas. A few *Rhizophora apiculata* were observed either along the coastal site or in between *Excoecaria agallocha* patches near the shore. *Avicennia marina* was found within the inland site, but found to be away from coastal water points and trunk road. More *Lumnitzera racemosa* were recorded in an inland site compared with the shoreline site. *Suaeda maritima* was found only in the inland site along with grasses. Such species zonation in between sites suggests the ability of the species to stand and tolerate the salinity during their life span. Most of the mangrove associated species such as *Acanthus ilicifolius*, *Acrostichum aureum* and *Typha angustifolia* were found in the shoreline area. A major part of the inland area is being cultivated with paddy.

Species recorded on either side of the road are more vulnerable to deforestation due to the present situations. However, a gradual regeneration is evident from the pruned mangrove and thus could sustain the mangrove ecosystem. Aforestation with *Rhizophora* sp. and *Terminalia arjuna* along either sides of road. Bird migration begins in August and ends by May. But, noise caused by vehicular movement along the trunk road possibly affects bird's occupation of this wetland.

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