

Title: **Impact of Population Stress on the Coastal Resources in Kerala, India**

Authors: Ramachandran Alappat, COCHIN UNIVERSITY of SCIENCE and TECHNOLOGY (India)
Bert Enserink, School of Systems Engineering, Policy Analysis and Management, Delft University of Technology (Netherlands)

Abstract: The human interference and its impact on coastal zones have been recognized worldwide. Kerala, the Southern State of India with 560-km. coastline, has a population of 3,18,38,619 and the total area available is only 38238 Sq. km. About 2/3rd of the population of the Kerala state is settled in the coastal districts. Consequently coastal villages have a very high population density, ranging between 677 and 2159 persons per Sq. Km. This population pressure and accompanying changing land use patterns have resulted in accelerated destruction of the coastal resources in this region and increased multi-user conflicts. Over exploitation of the inshore fishery resources have drastically affected the stock of various fish and prawn species. Destruction of the Mangrove forest for various anthropological activities has also affected the biodiversity of the region.

The paper analyses the various interacting activities, which have a long lasting effect on the coastal environment and its sustainability. Coastal Zone in Kerala is overexploited beyond its carrying capacity. The introduction of the Coastal Regulation Zone Notification in 1991 and its strict enforcement with a Supreme Court verdict in 1994 has helped to reduce the pace of destruction in the restricted zones. It has led to more conscious planning and generated more awareness to protect natural resources. It also led to a drastic change in the property rights regime in the coastal zone, which has caused social unrest and economic slowdown.

Key words: Human stress, coastal natural resources, environmental protection