

# **Integrated Coast Zone Management of a part of East Coast, South of Chilka Lake, India- Based on Remote Sensing Data**

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Based on visual interpretation of IRS-IC, LISS-II, FCC data an integrated coast zone management of a part of east coast, south of Chilka lagoon, Orissa, India is presented. Owing to its position, the area is subjected to heavy storms/ cyclones. The area is gaining importance for salt pan, chemical factories, Gopalpur port, proposed port based steel plant, besides the site for habitat/ mating of the Olive Ridley turtles. Unproductive waste lands such as the water logged areas, swamps, degraded slopes, stony exposures, riverine sandy fills, coastal dunes, unused community land occupy around 10% of the area. These have potential for production of fuel, fodder, fiber, fruits, small timbers, mangroves like casurina and pandanus species (used for extraction of aromatic compounds). The interplay between the dynamic human society and the static land resource has resulted in environmental problems. Deforestation, soil erosion, coastal erosion, floods, storms/ cyclones, excessive grazing and human interference have affected the ecological balance adversely here.

Hence an integrated and environmentally sustainable strategies like soil conservation, afforestation, grassland management, waste land reclamation, water harvesting structures, surface and ground water budgeting, adoption of suitable horticultural patterns, coast zone management strategies, are suggested for economic growth and maintenance of ecological balance. The conceptual model may also be applicable to such coastal areas.