

ENVIRONMENTAL DEGRADATION DUE TO INLAND CORAL MINING IN AKURALA, SOUTHWESTERN COASTAL ZONE

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The Akurala coastal stretch (approx. 87-90 km from Colombo) provides an excellent example of environmental degradation due to human exploitation of coastal resources. Holocene corals are found 2.5 – 3.0 m below the surface in a stretch extending about 1 km inland from the coast. The objectives of the present study were to assess the degree of environmental degradation resulting from inland coral mining in this stretch. It was based on a field survey, air photo interpretation and GIS application.

Although inland coral mining in Akurala records a history of over two hundred years, this activity has intensified over the past fifty years. The remaining pits vary in size (small: 10-465 m², medium: 465-1365 m² and large: 1365-9290m²). Mangrove plants and mangrove associates invade these pits. The commonest are *Acrosticum aureum*, *Bruguiera sexangula* and *Lumnitzera racemosa*. Among the mangrove associates and non-mangrove species are, *Cerbera mangas*, *Hibiscus tiliaceus*, *Pandanus* sp. *Premna servatifolia* and several sedge species (Cyperaceae). There are also such invasive plants as *Annona glabra*, *Salvinia molesta*, and *Panicum maximum* growing in and around the pits.

The buried coral beds are a valuable resource providing employment in mining and associated activities to 45% of the area's population. Yet, coral mining has created many problems. The threats of deep pits to people, land subsidence and damages to houses are the main problems. Proliferation of invasive plants and mosquito breeding destroy the aesthetic value.

Among the recommendations emanating from the study, the closing of abandoned pits is most relevant. Also aquaculture in large pits can be viable. Planting mangroves in some parts too can help restore Sri Lanka's dwindling mangroves.