

D-31: Some problems of man-made wetlands in the SW coast of Sri Lanka

S L J Fernando, Upali Weerakkody
(*Dept of Geography, Univ of Ruhuna, Matara*)

Mining activities carried out during the last 3 centuries to gather buried coral debris, have resulted in the formation of man-made wetlands in an extensive area of the south-western coastal plain. Problems associated with these anthropogenic wetlands can be divided into 2 aspects: physical and socio-economic.

The physical problems were identified by using a check-list method. The extent and depth of mine holes, land consolidation, destruction of vegetation were measured. In addition, data on the hydrological condition (density, salinity, of water), the soil qualities (pH, colour, texture) were collected.

Consolidation of the land was measured using each plot of the wetland area. Analysis of the data showed that the loss of land consolidation was the main problem which effected the entire community. High density of the water restricted the use of water in the area. High degree of alkalinity of the soil did not allow cultivation. Mining activities practiced in the last 3 centuries had removed the vegetation cover. New plant species had encroached the entire area in and around the man-made wetlands.

A separate questionnaire survey was carried out on the socio-economic aspects. Health hazards induced by water logged environment, insufficient supply of land and misuse of child labour were the common socio-economic problems of the area.

Reclamation of degraded land should follow a scientific method, since many water logged areas were connected with the adjacent lagoons and streams

which were used for many commercial and domestic activities. The abandoned mine holes can be used for fish cultivation if suitable varieties were introduced.