Effects of Urban Growth on Coastal Wetlands: A Case Study of the Densu Delta Ramsar

Site

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Abstract

Wetlands are one of the most productive ecosystems in the world and provide socio-economic

services to majority of people who are vulnerable to poverty. These services, however, are

reducing due to population pressure, urban growth and over exploitation. The study determined

the extent of encroachment in to the wetland through built areas and the extent of vegetation

degradation around the Densu Delta wetland. The study also determined the water quality of the

Densu Delta wetland and residents' knowledge on the importance of wetlands. The study also

focused on the effect of urban growth and encroachment on farmers and fishers around the

wetland. Satellite images were used to analyse land change detections and statistically generate

amount of vegetation loss around the wetlands. Surface water was collected to determine physic-

chemical and bacteriological quality for comparisons to international standards. Social survey

was also conducted to assess people's awareness and knowledge on wetland importance. The

study showed that the Densu Delta is moderately polluted and with the current rate of population

and urban growth, the Delta risks being highly polluted. The education and awareness level of

residents on the use of the wetland is very low. The study recommends that alternative

employment opportunities be made available for residents to reduce over exploitation of wetland

resources. Improvement in sanitation facilities, traditional institution empowerment and

enforcement of regulations were also recommended to preserve this important resource.

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