

Coupling Science and Management for the Sustainability of the Coastal and Marine Environment in Nigeria

Ukwe, C. N., Alo B. I., Yumkella, K. K.

Department of Chemistry, Faculty of Science, University of Lagos, Lagos, Nigeria

Nigeria has a coastline of 853 Km, a maritime area of 6,500 Km² (0-200m) and a 210,900 Km² Exclusive Economic Zone in the Gulf of Guinea. Nigeria's economy is almost entirely ocean dependent with 90 percent of earnings coming from production of inshore and offshore crude oil and petroleum exports. With about 65 percent of the Industries situated in the coastal areas, approximately 30 percent of the population of Nigeria live in the coastal areas and are dependent on the lagoons, estuaries, creeks and inshore waters surrounding them for their subsistence and well being. The population in the coastal areas is ever increasing as a result of rapid urbanization. The consequence is that pollution from land based activities has resulted in habitat degradation including critical wetlands, loss of biodiversity and productivity, coastal erosion and degenerating human health leading to loss of spawning and breeding grounds for most living resources and displacement of structures, people and economies of coastal communities and urban centres. Continuous scientific monitoring and assessment has provided technical underpinnings on which to base suitable management options. Scientific assessments provided the basis for the adoption of effluent standards and regulations, large scale community-based mangrove restoration and integrated coastal areas management by the Government of Nigeria for the judicious regulation of anthropogenic inputs into the coastal and marine environment.