

Prospects of Conserving Wetlands Along the Mukwe Lagoon at Nungua in the Greater Accra Region of Ghana

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Abstract

The Mukwe lagoon and adjoining wetlands near Nungua in the Greater Accra Region of Ghana is one of the many coastal wetlands in Ghana which are not internationally recognised because of their relatively small sizes and insignificant contribution to the support of migratory birds and biodiversity in general. This study was undertaken in recognition of the current rapid degradation and pollution of the lagoon and wetland, which posed a serious threat to the health of the local community, as well as the ecological integrity and eco-tourist potential of the area. The study, therefore, aimed at assessing the current ecological status of the wetland in relation to human activities, the prospects of any future initiatives, and providing appropriate recommendations. The methodology involved measuring the aquatic production, an investigation of the distribution and population density of a key indicator species (*Uca tangeri*) inhabiting the site, in relation to soil pH differences, a faunal survey of the site and interviews with a cross-section of the local community. The results indicate that various human activities, notably farming, fishing, hunting and livestock rearing impinge directly on the ecological integrity of the wetland in terms of over-exploitation of natural resources (fish, mangrove, wildlife, etc.), pollution (due to inappropriate waste disposal practices), and habitat degradation (setting of bushfires, etc.). It is recommended that steps are taken in the immediate future to stem the tide of siltation, which is gradually threatening the lagoon, through education and conservation awareness campaigns, legislation, provision of appropriate waste disposal facilities, stiffer punishments for law-breakers and ecological research.

Introduction

The Ramsar Convention (Ramsar, Iran, 1971) defines wetlands as "... areas of marsh, fen, peatland or water, whether natural, artificial, permanent or temporal, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres". In recent times, the importance of wetlands to human communities has been increasingly recognised. Apart from their ecological functions and products derived from them worldwide, they are also of great economic importance to the local communities because of their high biological diversity and cultural value (Gordon *et al.*, 1998).

Among the various uses of coastal wetlands to human communities are the

provision of nutrient-rich habitats for fish breeding, food/commercial products such as shells, salt, thatch, and wood that constitute the major sources of livelihood and socio-economic well-being of the local inhabitants (Ntiamoah-Baidu & Gordon, 1991), and the provision of stratified records of past succession and archaeological artifacts buried beneath the surface as a result of slow decomposition in waterlogged soils (Etherington, 1983).

Worldwide, wetlands are threatened by pollution from domestic and industrial solid/liquid waste, over-exploitation and urbanization due to burgeoning human populations. Etherington (1983) and Simpkins & Williams (1989) observed that the pressure on these wetlands has led to concerns being currently expressed by both local and