

There is Wealth in Our Wetlands, a Call for their Conservation

By:

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Introduction

Each year, and every year, the Wetlands Day is commemorated on the 2nd of February. All Parties (nations and states that acceded) to the Wetlands Convention, popularly known as the Ramsar Convention mark the day by staging a number of activities not only to raise awareness but take stock of the values of wetlands in their national economies.

Wetlands perform a whole lot of functions beneficial to mankind and the environment. Most importantly, wetlands are critical for the conservation of biodiversity upon which man's livelihoods depend – the socio-economic functions. Apart from these, other functions include ecological and hydrological, providing such services as water supply (domestic, industrial and agricultural), water purification and flood control. At the worst scenario, wetlands are sometimes used as dumping sites! This is the most undesirable wetland use and Malawi should not afford this.

World Wetlands Day 2005

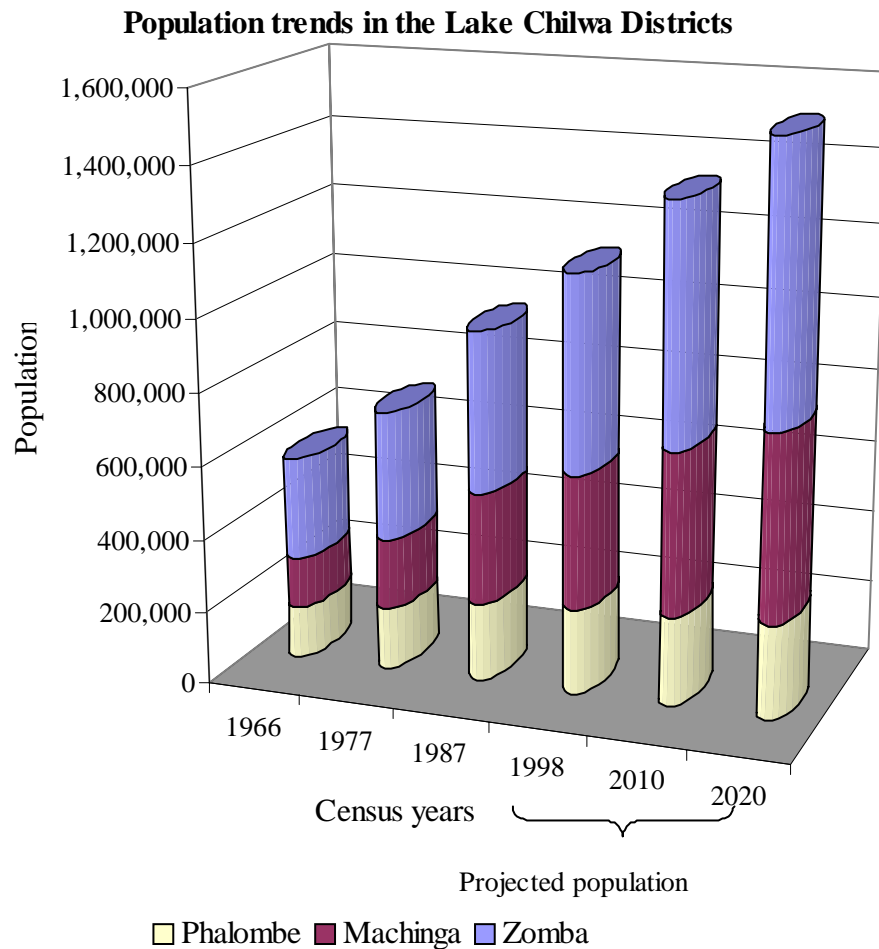
The theme for this year's Wetlands Day is "***There is wealth in wetland diversity, don't lose it***". The theme is well chosen and fitting to describe all those benefits that man derives from wetlands. It does not restrict consideration of the biotic factors alone but includes all the non-life forms of the wetland systems – hence wealth in wetland diversity.

The Ramsar Convention identifies all river basins or river catchments (the land area between the source and the mouth of a river including all of the lands that drain into the river) as important geographical units for comprising a wetland. In Malawi, the highlands bordering the Lake Chilwa basin and hence wetland, for instance, can thus be considered as such and therefore all the ecosystem components must be managed and used in a manner that they are not depleted, the 'wise use concept' as enshrined under the convention.

Human Population and Pressures on the Natural Environment

The Wetland State of Environment report (SOER, 2000) indicates Lake Chilwa catchment has one of the highest population densities in Malawi. The figure below is a representation of population trends from 1966 and projected to 2020. At the current density of 162 people per km², and considering the projected population levels by 2020 severe pressures on the diversity contained in our wetlands will reach proportions beyond the capacities of the natural ecosystem's regeneration and therefore serious environmental problems are sure to be experienced. Besides the high population density,

other demographic indicators are generally unfavorable in our wetlands, taking the Lake Chilwa catchment as a case in point. Globally the trend is worrisome. It is estimated that over two billion people live around rivers where there are frequent water shortages and over 70% of them living in areas where water is scarce, undermining the capacity for local communities for food production and economic development. The consequent result of these factors is the unsustainable utilization of the wetland diversity, if no immediate actions are taken to arrest the undesirable situations.



Source: National Statistical Office 1998, in

Biological Life Support Systems

Man depends almost exclusively on biological resources deriving his livelihoods and aspirations. The Lake Chilwa Wetland and catchment population, just like any other wetland populations in Malawi and elsewhere, rely on a wide range of biological resources and their diversity to provide for essential goods and services, wealth if you like.

The Lake Chilwa catchment is endowed with rich biological diversity. These include trees and shrubs for timber and herbal medicines (including a host of other derivatives of organic compounds) grass for thatch and general housing, fodder for livestock, fish, and birds which supplement the people's protein diet and cash. Many more livelihood sources too numerous to mention are derived from the wetland biological resources.

Apart from these, the wetland is also supportive of a wide range of agricultural activities which include rice cultivation, livestock production, dimba gardening and many others.

What are we trying to communicate?

For purposes of this article, we focus our attention to the bird wealth of the Lake Chilwa wetland and catchment. The catchment comprises the Mulanje Mountain and its forest reserve, the Zomba Mountains and Chikala hills and Machinga plains whose drainage flow into Lake Chilwa. Particularly, our intention is to present a synoptic view of the importance of the bird fauna, from the sociological, economic and ecological viewpoint in respect of the 'theme' and the Conservation and Wise Use concept under which the Wetlands Convention is enshrined.

The Wise Use Concept

'The wise use of wetlands is their sustainable utilization for the benefit of humankind in a way compatible with the maintenance of the natural properties of the ecosystem' while as 'sustainable utilization is defined as human use of a wetland so that it may yield the greatest continuous benefit to present generations while maintaining its potential to meet the needs and aspirations of future generations'. It is considered therefore that the term "wise use" is synonymous with "sustainable use" (Wise use of wetlands Handbook, 2000).

The birds of the Lake Chilwa Wetland and Catchment

The Wetland Management Plan (2001) identified up to 164 species of birds as having been recorded in and around Lake Chilwa wetland. Out of these, forty-one species are Palearctic migrant species and fourteen species are intra-African migrants. It further stated there are an estimated 1.5 million resident and migratory waterfowl.

The Lake Chilwa Wetland is both a breeding ground and a resting and feeding station along an important migratory bird flyway in Southern Africa. Some birds are exclusively migrating into the wetland and breeding elsewhere.

Importance

Sociological (intangible and tangible)

Perhaps the most important starting point is to look at the sociological wealth aspects of the bird fauna – to the people of the area. The three districts of Phalombe, Machinga and Zomba are predominantly Lomwe and Yao with a bit of hybrid ethnicities coupled with intercultural marriages and migrations. The bird fauna has had tremendous contribution

and significance to the social constructions of the inhabitants of the area. This is more evident in traditional or cultural events and rituals where particular birds are evidently useful. First, the social construct and significance of LANGUAGE is manifested in such statements as “*nkhanganga zinapangana kusanache* (meaning guinea fowls made plans before it was dawn), “*wataya nkhwali kuthamangira nkhanganga maanga*”, “*timba sachepa ndi mazira ache*” etc. Although there is no tangible benefit out of these statements, their social connotations carry important messages and help build society but in certain cases contribute to disintegration of the same, for instance, the owl is usually associated with witchcraft and bad omen in many Lomwe and Yao cultures. In this regard, the owl is seen as an enemy and therefore has implication on its conservation status.

Amongst the Yao and Lomwe, use of products from birds is common, particularly in rituals and medicine. Particular bird feathers are used as costume in traditional dances (head gear) and also in traditional medicine to shower off evil spirits from possessed people. These constitute just a few examples of social/cultural tangible wealth and uses of birds.

A major social (but also economic) contribution the birds of Lake Chilwa have made is a Global one. The international community, through the Wetlands Convention, calls for countries (Parties) to identify at least a site for listing under the Ramsar Convention. Certain criteria have got to be fulfilled. In this regard, “a wetland is identified as being of international importance if it meets at least one of the following criteria based specifically on waterfowl:

- a) if it regularly supports 20,000 waterfowl
- b) if it regularly supports substantial numbers of individuals from particular groups of waterfowl, indicative of wetland values, productivity or diversity
- c) where data on populations are available, if it regularly supports 1% of the individuals in a population of one species or subspecies of waterfowl.”

The Lake Chilwa wetland supports an estimated waterfowl population of 1.5 million which by far exceeds the 20,000 Ramsar criteria. Malawi is thus recognized internationally as a result, while at the same time winning support for the conservation and protection of the ecosystem through international donor support. Most recently, renewed effort is coming to specifically protect the Wetland birds and this translates into creation of jobs and promotion of people’s welfare.

Economical

Studies conducted in preparation of the Wetland Management Plan revealed that the waterfowl are heavily utilized for human consumption where bird trappers in the area catch approximately 1.2 million birds every year. It was estimated that the economic value of bird trapping was at 17.2 million Kwacha (US\$215,000). Being internationally recognized, the wetland itself with the bird species diversity currently known is a potential site for the tourism industry although statistics are currently unavailable to support this claim.

Ecological

Birds are an important component of the wetland ecosystem. Because of their differing breeding, migratory and eating habits, as well as their population numbers, they display an array of ecological roles which help ameliorate the ecosystem balance. They all contribute in the food chain and nutrient recycling, some are biological pest control agents such as the bats and the Egret (*Kakowa*), see picture while yet others are an indicator of habitat or ecosystem health status. Some birds are quite a pest as evidenced by the loss of



Picture 1. Egret with cattle in the background, some picking ticks from the animals
Source: WSOER, 2001

rice crop in the rice schemes and paddy fields from where the history of bird shooting is traced in the Domasi and Likangala rice schemes.

There is therefore wealth in wetland diversity, don't lose it!

There is thus much wealth in wetland diversity, much more beyond the bird fauna. Under article 4 of the Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat each Contracting Party is mandated to promote the conservation of wetlands and waterfowl by establishing nature reserves on wetlands and provide adequately for their wardening.

The Convention also provides for provision of appropriate protection measures, including legislation and enforcement, designation of core areas with stricter regulations and a surrounding buffer/border zone where regulations are less strict. In addition, item 4 of Criteria 4 calls on the contracting Parties to make effort through management to increase waterfowl populations on appropriate wetlands.

In pursuance of these requirements, Parties to the Convention not only provide the required protection to the waterfowl alone but also to the biological resources associated with the habitats within which the birds are found. This is an ecological contribution provided by the birds so to speak.

Malawi and Malawians are therefore under obligation to consider very seriously implementing mechanisms and institutional arrangements to protect our wetlands and get all stakeholders seriously committed towards regulating activities relating to wetland management and utilization. Just so we don't lose the wealth in our wetland diversity!