The Zambezi River rises in the highlands of north-western Zambia, flowing into Angola and entering Western Zambia where it meanders through Liiwa Plains and the Barotse Floodplains and eventually flows in Zimbabwe and Mozambique before draining into the Indian Ocean. With a total catchment area of 1,250,000 km², the Zambezi River Basin is the fourth largest in Africa. While the exact size of the Barotse Floodplain is difficult to estimate, due to its flatness and openness, it is estimated at 550,000ha extending 250km in length, and in places up to 50 km wide. The floodplains are bordered by a belt of numerous pans, some of which are up to 4km in diameter. Some of these are permanently filled with water, while others are fed by springs rising from their margins. Many of the pans are aligned with shallow grassy valleys, known as dambos, which are bordered by densely vegetated areas. This means these dambos act as sponges, structuring much of the Zambezi catchment and providing a much-needed ‘safety-valve’ against climate effects such as droughts and floods for local communities but also for countries downstream. The river system plays a vital role in sustaining the livelihoods of approximately 250,000 people and stimulating economic growth.

Introduction

The Barotse Floodplain Contribution

Local livelihoods and cultural traditions are closely linked to seasonal flooding of the Barotse Floodplain. During the dry season, most local production, economic activity and settlement is in the floodplain area. As the plain becomes inundated, most of the population move to the uplands and plain fringes. This annual relocation of people and cattle includes the movement of the Litunga in a highly-celebrated traditional ceremony - the Kuomboka ceremony. The floodplains are an exceptional example of a culturally evolved landscape based on the construction of homesteads, royal graves and canals for transportation, land drainage, flood control and agricultural activity. Fisheries remains a key economic activity, supplying local households with a source of food and also providing income through sales to local markets on the Copperbelt and Lusaka Provinces as well as markets across the border in Angola and the Democratic Republic of Congo (DRC). In total, local use of wetland resources in the Barotse Floodplain has been estimated to have a net economic value of approximately $8.64 million per year, at 2017 values. At household level, wetlands were calculated to generate an average net financial return of $405 ($586) per year, at 2017 values (the equivalent of 7.3 minimum wages). 83% of this value comprises subsistence and home consumption, and by far the most valuable products were found to be fish (43% of the total, and 73% of household cash income), floodplain grazing (29% of the total) and crop production (22% of the total).
Threats to the Barotse Floodplain

The integrity of the Barotse Floodplains is particularly threatened by large infrastructure development plans. Specifically road building, canalisation of the river for water transport, expansion of mining and the conversion of wetlands for agriculture (both small-scale and potentially large-scale) are looming threats as Zambia seeks to expand its economy and attract Foreign Direct Investments. To power all these developments and export energy to earn foreign exchange, several hydropower plants are projected in the area. The area is seen as a prime investment destination. Moreover, the Barotse floodplain are plagued by overfishing and use of illegal fishing methods (such as mosquito nets). If not controlled quickly, fish stocks will be depleted, and without the protection of the flood plain and its associated river systems, the long-term ecological function of these plains will disappear. Floods and droughts will be more severe, threatening not only biodiversity but also the cultural uses (and the existence) of the people on the floodplains. The World Wide Fund for Nature (WWF) Zambia, through its Netherlands funded DoB Programme, is partnering with the National Heritage Conservation Commission (NHCC) in collaboration with the Barotse Royal Establishment (BRE) to seek the declaration of the Floodplains as a World Heritage Cultural Landscape under the United Nations Educational Scientific and Cultural Organization (UNESCO). The world heritage status is an important tool for the conservation of cultural and natural resources of universal outstanding value and seeking the status contributes to sustainable management and preservation of cultural and natural resources for both present and future generations. Under the National Heritage Conservation Commission (NHCC) Act 173 of 1989 of the laws of Zambia and the Statutory Instrument 84 of 2013 of Zambia, the Barotse Floodplain Cultural Landscape (BPCL) is recognised as a National Monument.

Cultural landscapes

The Convention for the Protection of the World Cultural and Natural Heritage was adopted by the General Conference of the United Nations Scientific and Cultural Organization (UNESCO) in 1972. The purpose of the Convention is to ensure the identification, conservation and management of cultural and natural heritage of outstanding universal value. 20 years later, the World Heritage Convention became the first international legal instrument to recognize the protection of cultural landscapes adopted on the World Heritage List based on agreed criteria for inclusion. According to the United Nations Educational Scientific and Cultural Organization (UNESCO), landscapes are cultural properties that represent the combined works of nature and of man. Essentially, cultural landscapes are illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and successive social, economic and cultural drivers.

BAROTSE FLOODPLAIN AS A CULTURAL LANDSCAPE:

The World Heritage Convention identifies ten (10) criteria on which properties can be considered for inclusion on the World Heritage List. The Barotse Floodplain including Liuwa Plains National Park qualifies as a cultural landscape based on three criteria including:

i. Bears a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared.

The transhumance system of the Barotse people is an exceptional testimony to a living cultural tradition involving the annual seasonal movements of people, their properties and other creatures from the floodplains to higher grounds (and vice versa) associated with royal
rituals as well as the complex of royal graves, mounds and lagoons. This tradition is largely influenced by floods and is sustained by the elaborate and robust traditional management system. A much clearer understanding of the many complex cultural and social traditions that make up the transhumance system that is practiced by the Lozi and how these have shaped the landscape over time and continue to shape the landscape in an exceptional way has been a subject of different scholarly investigations.

ii. Is an outstanding example of a technological ensemble or landscape which illustrates (a) significant stage(s) in human history

With over 400 years old outstanding array of interlinked canals of multipurpose use, the Barotse Floodplains is the only inland flood plain in Africa that has canals mainly used for transportation, in addition to agriculture and water supply. These elaborate canals traversing the landscape and intermingling with settlement mounds create a landscape which illustrates two main waves of significant stages in their history and development. This network of canals represents the largest public works within a floodplain area in Africa. The canals were constructed by digging the earth using rudimentary tools shaped like oars. For over 400 years, the canals have been used to facilitate transhumance, transportation of goods as well as general movement of people within the landscape including land drainage for agricultural purposes and water supply.

iii. Directly and tangibly associated with events or living traditions, with ideas or with beliefs, with artistic and literary works of outstanding universal significance.

The Barotse Floodplain is renowned for its elaborate and strong traditional governance system which is sustained by an idea of the flood and various beliefs, myths and taboos, mainly related to the cult system within the kingship; and is associated with transhumance, a network of canals and royal burial sites.

**WHY SEEK THE WORLD HERITAGE STATUS?**

There are a number of advantages associated with world heritage status. Some of these include:

1. Properties that are listed on the World Heritage List attract a status and identity that denotes cultural and heritage values of outstanding universal significance. These values form a distinct identify for the Barotse Floodplain and its people and reinforces the pride of the people of Barotseland and Zambia as a whole. In Southern Africa, only three cultural landscapes including Matopo Hills, Mapungubwe in Zimbabwe and the Richtersveld area in South Africa are designated as cultural landscapes. The declaration of the Barotse Floodplain as a World Heritage Cultural Landscape would reinforce the source of pride and recognition of the Barotse as a fascinating, vibrant, scenic area that is a unique example of a living tradition.
2. Tourism is one of the main socio-economic activities in Western Province. The Kuomboka Ceremony of the Barotse people attracts local and international tourists. This traditional ceremony is closely linked with the seasonal flooding of the Barotse plain, and most of the local people move from the floodplain to the uplands and plain fringes during the flood period. This colorful and highly celebrated ceremony attracts tourists and contributes to local enterprises such as in the hospitality industry, public transport, traditional foods and handicrafts (i.e. chitenge materials Mashushu/Lichali, Misisi/Liziba). The declaration of the Barotse Floodplain as a World Heritage Cultural Landscape could potentially contribute towards raising the tourism potential of the property and will open up a window for other international visitors such as cultural tourists, heritage researchers, film makers, adventure tourists.

3. All nominated properties require the development of management plan that articulates the vision and aspirations of stakeholders regarding how the cultural landscape will be managed and utilized. For large spatial areas such as cultural landscape, the management plan integrates various sectoral management plans such as fisheries, forests, water and land. The development of the management plan for the Barotse Floodplain is meant to provide a holistic approach to the management of cultural and natural resources at several levels such as community, district and provincial.

4. Properties on the World Heritage list, form part of a network of internationally recognized values of outstanding universal value. This network provides opportunities for knowledge sharing, capacity building and research regarding the management and socio-economic development.

MANAGEMENT OF A WORLD HERITAGE CULTURAL LANDSCAPE:

The Barotse people have lived and managed cultural and natural resources for over 100 hundred years through an elaborate system of traditional practices. Examples of such practices and rules include the use of fishing gears such as reed baskets (Lishano), hand spear (Muhaway) and fish weirs (Muhumbu) that can only be used in certain water bodies. Other examples include annual group fishing in lagoons known as Masas at certain times of the year officially opened by senior Indunas of the Barotse Royal Establishment (BRE). As such, the management plan aims to reinforce existing sustainable management practices rather impose new management regimes for the landscape.

The management plan will ensure that there is strict adherence to conservation rules and guidelines for all human activities within the Barotse Plains Cultural Lanscape. Since the Barotse Plains Cultural Lanscape is a living landscape, the inhabitants of Barotseland will continue practicing their economic livelihoods. The only precaution will be to sustainably practice these activities such as fishing, bird hunting, harvesting of reeds and farming. These practices are enforced by an institutional systems at regional level by traditional ministers and at the silalo, or village group, and village level by the Silalo Indunas and Indunas respectively. Over the years, this system of practices has weakened due to limited capacity to enforce, lack of resources and ambiguity regarding the roles and responsibilities of BRE and Government Departments. The formulation of the Management Plan for the Barotse Floodplain potentially provides an opportunity for a shared understanding of the issues and challenges regarding traditional practices, roles and responsibilities of BRE and Government Departments at several institutional levels.

UNESCO requires the formulation of the institutional structure that integrates traditional and government institutional structures through a co-management approach. In addition, the nomination requires stakeholders to develop an implementation plan of activities that promote socio-economic development and retain the cultural values of the landscape. Therefore, the declaration does not mean that there will be no development within the Barotse Plains Cultural Lanscape. but rather that any developments or projects within the Barotse Plains Cultural Lanscape should be in line with the shared vision of the cultural landscape.