

Ramsar and World Heritage Conventions: Converging towards success

Case study



Two guides with makoro dugout canoes, Okavango Delta, Botswana (Credit: Pete Niesen / Alamy Stock Photo)

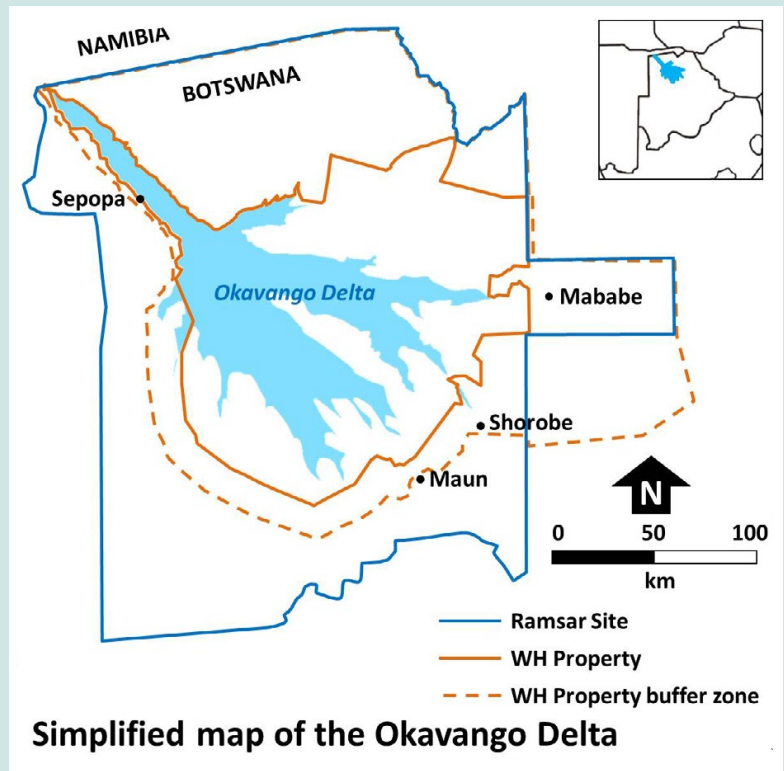
Okavango Delta, Botswana

Summary

The Ramsar Site covers 5,537,400 ha and extends 90km beyond the World Heritage property boundary in the north and south-east. The northern boundary of the Ramsar Site follows the border between Namibia and Botswana and the Kwando River. The World Heritage property covers a smaller area of 2,023,590 ha which is surrounded by a buffer zone of 2,286,630 ha.

The maintenance of the seasonal flood-pulse which drives the ecology of the Delta supports a vast diversity of species, maintains a vital tourist resource and secures a traditional way of life and the livelihoods of the indigenous peoples of the area. The traditional tribal land ownership and indigenous low-level subsistence use through hunting, fishing and gathering have helped to protect the ecological character of the site.

The dual designations under the Ramsar and World Heritage Conventions have contributed to the protection and management of the natural environment, especially with regard to invasive species, water resources and extractive industries. Whilst these designations and the associated management planning embrace traditional land uses, areas of cultural significance and indigenous communities, further work is required to ensure that cultural values are more fully embedded in the protection and management of the site.



Site Description

The Okavango River occupies a basin with no outlet to the sea that extends over parts of Angola, Namibia and Botswana. Approximately 95% of the basin's run-off is generated in the headwaters in Angola before flowing to the south along the Cubango and Cuito Rivers. Below their confluence the Okavango River extends along the border between Namibia and Angola before flowing to the south east into the Delta.

The Delta is a dynamic mosaic of permanent and seasonal swamps and lakes, channels and floodplains. The site is an outstanding example of the interplay between climatic, geomorphological, hydrological, and biological processes that drive and shape an ecosystem where the biota is adapted to the annual cycle of rains and flooding. The site was designated as a Wetland of International Importance on 12 September 1996 and inscribed as a World Heritage property in 2014 at the 38th session of the UNESCO World Heritage Committee.

World Heritage and Ramsar designations

The Okavango Delta was inscribed on the World Heritage List as a 'natural site' on the basis of three criteria. The permanently clear waters and abundant nutrients transform the dry Kalahari Desert into a landscape of exceptional beauty and sustain a remarkable diversity of habitats and species. Annual flooding revitalizes the wetlands following the peak of the dry season resulting in an extraordinary juxtaposition of wetland in an otherwise arid landscape (Criterion vii²).

The Delta is an outstanding example of the complexity, inter-dependence and interplay of climatic, hydro-geomorphological and biological processes. The continuous transformation of features such as islands, channels, floodplains and lakes influences the dynamics of the Delta including adjacent dryland grassland and woodland habitats (Criterion ix). The result is that the property sustains robust populations of endangered large mammals including cheetah, white and black rhinoceros, wild dog and lion. The Delta is also the core area for world's largest population of elephants, numbering around 200,000. The Delta's habitats are species-rich with 1,061 plant species, 89 fish, 64 reptiles, 482 bird and 130 mammal species. The Delta is further recognized as an Important Bird Area, harbouring 24 species of globally threatened birds, including six species of vulture, the southern ground-hornbill, wattled crane and slaty egret. Thirty-three species of water birds occur in numbers that exceed 0.5% of their global or regional population (Criterion x). The Delta has been inhabited for centuries by small numbers of indigenous hunter-gatherers who have had no significant impact on the ecological integrity of the area. Maintenance of the site's Outstanding Universal Value is contingent on reinforcing the recognition of the cultural heritage of the indigenous inhabitants of the Delta and integrating the traditional subsistence uses and access rights into management planning for ecosystem conservation.

The Okavango Delta was designated as a Wetland of International Importance under the Ramsar Convention on the basis of six criteria. The Delta is a unique inland wetland complex (Criterion 1) which supports 20 IUCN Red-Listed plant species of which seven are at very high to extremely high risk of extinction. More than 50% of its plant species are endemic, and it maintains terrestrial species that are absent from the surrounding savannah habitat as they require the prevailing conditions of humidity or soil moisture (Criterion 3). In addition, the Site hosts numerous critically endangered species such as those listed under Criterion x above as well as red lechwe, hippopotamus, leopard and sitatunga (Criterion 2). During the migration cycle the site is an important refuge for several species, including elephant, zebra and wildebeest, and it forms the most important breeding site for the slaty egret (Criterion 4). The Delta routinely attracts more than 20,000 waterbirds (Criterion 5) and supports more than 1% of the biogeographic population of 13 bird species including the great white pelican, squacco heron, saddle-billed stork, fulvous whistling duck, African pygmy goose and the black-winged pratincole.

The description of the site's ecological character reflects the importance of the social and cultural values of the Delta. The diverse livelihood activities, such as *molapo* (flood recession) farming, arable farming and hunting, gathering and fishing, are strongly associated with the ethnicity of the various indigenous communities, including the WaYei, Hambukushu and San. Whilst most of the communities depend on the tourist industry for cash income, the timing of the peak tourist season between harvest and ploughing season does not interrupt the traditional subsistence farming, but allows households to remain economically active throughout the year.

The role of cultural values, practices and traditions in wetland conservation

The Delta comprises a mosaic of protected lands. A significant part of the Delta is protected within the Moremi Game Reserve, and the remainder is composed of Wildlife Management Areas and Controlled Hunting Areas managed by community trusts or private tourism concession holders. Legal protection is afforded through Botswana's Wildlife Conservation and National Parks Act of 1992 and an associated Wildlife Conservation Policy. Some 95% of the Ramsar Site is communally-owned, falling under the Tribal Land tenure system and significant areas are cultural landscapes which embrace sacred sites and traditional land uses. A management plan for the Ramsar Site (the Okavango Delta Management Plan or ODMP) was published in 2008, prior to World Heritage designation, and aims "to integrate resource management for the Okavango Delta that will ensure its long-term conservation and that will provide benefits for the present and future well-being of the people, through sustainable use of its natural resources". However, the development of the ODMP was a 'top-down' process and its scope and utility could benefit from further integration of cultural values and indigenous knowledge. The wider

² The World Heritage Convention's Outstanding Universal Value criteria are indicated by Roman numerals. Ramsar Site designation criteria are indicated by Hindu-Arabic numerals throughout.



Mbukushu women carrying fishing baskets, Okavango Delta, Botswana (Credit: Frans Lanting Studio / Alamy Stock Photo)

water resources across the Okavango River Basin are jointly managed through a tri-partite agreement between Botswana, Namibia and Angola known as the Permanent Okavango River Basin Commission (OKACOM).

Continued attention is required to reinforce the traditional land uses and cultural heritage. There is a clear premise for such work through national recognition of the property's cultural context (Satau & Crawhall, 2017). Attempts are being made to address these issues and others including the demands placed on the Delta through tourism. A report in 2009 by the Department of Wildlife and National Parks suggests that more than 40,000 people visit the Delta each year. Therefore the enforcement of appropriate land use planning, that considers tribal lands and wider ecological integrity, is necessary to maintain the positive impacts that sustainable tourism has on rural livelihoods. The ODMP, through the overall description of the site, emphasizes the diversity and importance of cultural and ethnic groups, their differing resource uses and livelihoods and the importance of specific sacred, ceremonial and artistic sites. Furthermore, the ODMP states that degradation of the wetland and its resources might ultimately lead to cultural degradation. The role of community-based organizations (CBOs) and indigenous stakeholder groups is highlighted in the delivery of objectives, which consider aspects of the cultural heritage, and are delivered through a programme of community-based natural resource management (CBNRM) which provides a framework for CBOs and community trusts to manage land for both consumptive and non-consumptive tourism. Limits of acceptable change (LAC) are proposed to monitor tourism activities and to deliver responsive management actions. Different LAC categories are defined in the management plan, with significant historical and cultural sites such as graves, rock-art and ceremonial sites listed under the 'pristine' category. The impacts of tourism on specific cultural receptors are considered further under the strategic objectives defined in the ODMP.

3 whc.unesco.org/en/soc/3453

The communal ownership of tribal land ensures that the majority of the land of the Delta is held in trust for local communities by the Tawana Land Board (TLB). Some land is leased as concession areas to safari operators for hunting or photographic purposes. The Moremi Game Reserve is wholly utilized for non-consumptive tourism and is unique insofar as it was founded by the indigenous tribe and still supports traditional resource use such as grass and reed cutting. The Bayei, the Tawana, the Hambukushu, the Herero and the Banoka ethnic groups are of notable significance as their lifestyles depend upon wetlands. They are ethnically distinct from other communities in Botswana, having different languages, social structures and relationships. The hunter-gatherer activities of these indigenous people have been practiced at a sustainable subsistence level for centuries and form a distinct element of the area. However, it has been noted that the shift from a traditional economy to a cash economy as a result of tourism represents a cultural change and a shift towards modernity and western market-based values (Mbaiwa, 2011).

Future outlook

Notwithstanding the dual designations and the protection under national legal instruments, the Delta still faces several challenges. Water is a precious resource and close liaison with OKACOM is critical to ensure that any future developments in the Okavango watershed do not adversely affect the site. The Reactive Monitoring of the World Heritage Convention has noted concerns over potential impacts arising from Namibia's water augmentation plans, Angola's possible irrigation scheme, and mineral prospecting and mining operations outside the World Heritage property's buffer zone³. Concerns have also been raised regarding the fluctuating populations of large animals, even though the exact picture remains unclear. However, both poaching (for bush meat) and livestock fencing (to prevent the spread of disease) have

been implicated. As with many wetlands, there is also the threat of invasive species, especially the floating aquatic fern *Salvinia molesta*. Both local communities and tour guides in the safari camps have been successfully trained in monitoring and control of invasive species. Where *Salvinia* infestations have been observed, biological control through the use of a host-specific weevil and physical removal have been successful.

Through sustainable practices and monitoring activities, the traditional organisational structures and land management of the local communities contribute positively to the conservation of the Delta. The delivery of sustainable tourism is dependent on the tribal land tenure system and the inclusion of all indigenous communities. A major consideration for the future is to ensure that tourism does not compromise the traditional cultural identity and livelihoods of the Delta. The robust weaving tradition of the tribes in the Ngamiland district serves as an example of how traditional practices can be maintained in parallel with local economic prosperity through sales to tourists.

Work is still needed to better align the dual interests under both Ramsar and World Heritage designations. This is acknowledged in the State Parties State of Conservation report to the World Heritage Committee and actions are planned through the support of the World Heritage Fund, including updating the ODMP, to address this. Similarly, the possibility of re-nominating the site as a mixed World Heritage property in order to recognise its cultural heritage values within the World Heritage Convention is subject to ongoing research, but progress is contingent on resources and capacity. Overall, it has been recognised that further work is required to ensure that cultural values are more fully embedded in the protection and management of the site:

“Recognition of outstanding natural values by the Convention is enhanced by the national recognition of the cultural context, cultural values and human cultural diversity within the site – each of which contribute to the long term sustainability of this exceptional site. For millennia, the Okavango Delta has played a major role in nurturing both human cultural diversity and knowledge systems, as well as the unique biological diversity and inland water ecosystems.”

(Satau & Crawhall, 2017)

Lessons learned

The Okavango Delta is an example of an ecosystem that has both influenced and that is being managed through adherence to traditional land uses and tribal structures whilst also benefiting from present-day management practices. The key lessons learned include:

- The community-based approach to tourism and protected area management has made a positive contribution to rural livelihoods, maintained traditional indigenous cultures, benefited national income and underpinned the monitoring and management of the area.
- Although they are not fully aligned geographically, the two designations are mutually supporting and reinforcing, insofar as they are both seeking to maintain the Delta as an internationally important wetland system for wildlife through the consideration of differing ecological elements of the site.
- The reports developed by the State Party on the State of Conservation of World Heritage properties and submitted to the World Heritage Committee provide a sound reporting mechanism which identifies and allows for the tracking of conservation actions and outcomes.
- The implementation of the ODMP, and subsequent National Commitments to the World Heritage Commission, are guided by the site-based multi-sector committee responsible for generating the State of Conservation Report.
- The future development of the ODMP provides a further opportunity to pursue both synergies and complementarities in the specific designation criteria and to ensure that the cultural heritage as well as the natural significance is secured and that the local traditional knowledge systems of the Delta are more fully integrated in its governance.