

2.4 “Who” – the variable governance of protected areas

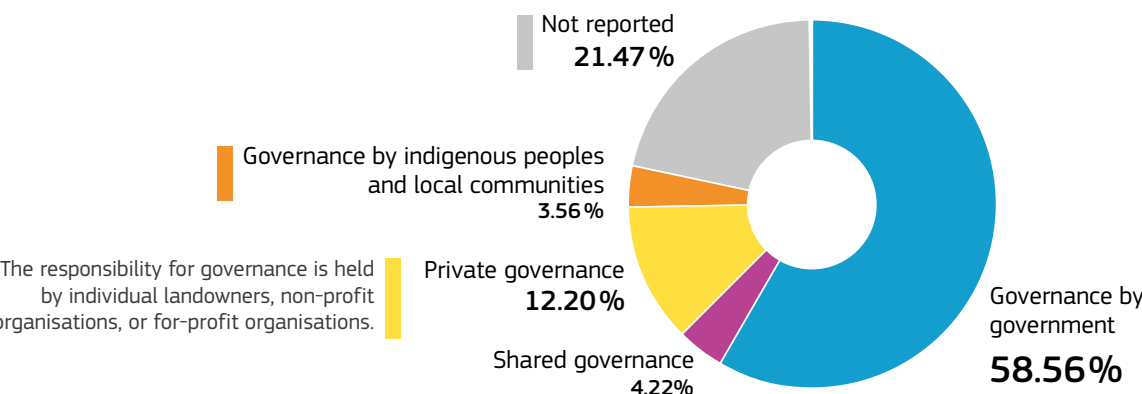
2.4.1 Protected areas by governance type

Governance is a critical determinant of the effectiveness, equity, and sustainability of protected and conserved areas. In Africa, protected area governance has changed with time. According to the World Database on Protected Areas, governments are currently responsible for 58.6 % of protected areas in Africa. Private actors govern 12.2 %, and indigenous peoples and local communities 3.6 %, of protected areas. Multiple different stakeholders share the governance of 4.2 % of protected areas. However, governance remains unreported for one out of five African protected areas (21.5 %), highlighting a significant knowledge gap.

Although there is a strong connection between the management of a protected area and its governance, these remain distinct concepts. The former is about what needs to be done while running a protected area, whereas the latter concerns the power, authority, responsibility, and accountability for decisions¹.

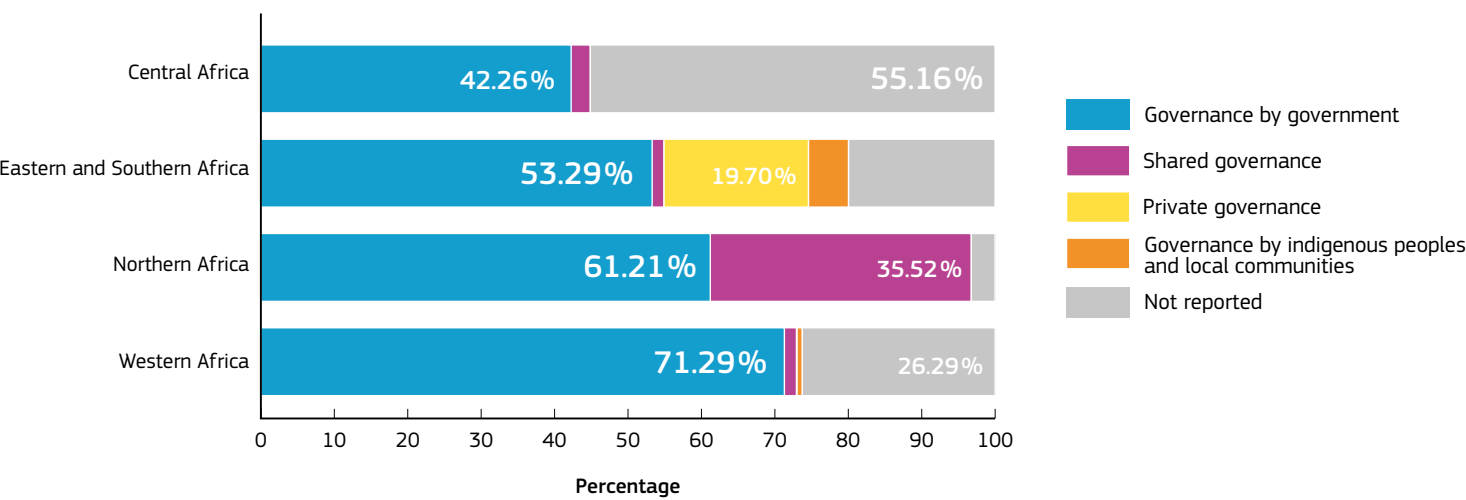
‘Quality’ and ‘diversity’ are two important dimensions of governance. The quality of governance depends on decisions being made using equitable, effective, and participatory processes. These processes should also be open, transparent, inclusive, and accountable. Guided by the United Nations Development Programme’s guidance on quality governance², governance must be accepted (i.e. legitimacy) and appreciated by society (i.e. voice). Decision-making should follow a consistent strategic vision (i.e. direction), and objectives should be achieved as planned (i.e. performance). Actors responsible for governance should be accountable for upholding the integrity and commitment of the strategic vision, and the costs and benefits of decisions should be shared fairly.

Governance diversity for protected areas refers to the key actors holding authority and responsibility for the main decisions affecting it. This includes recognition of different actors, their identities, knowledge systems, values and institutions. The International Union for Conservation of Nature and the Convention



Multiple actors share responsibility for governing the protected area. This includes collaborative management (where one agency has authority and responsibility, but is obligated to consult other stakeholders); joint governance (where various actors serve on a board or body with decision-making authority); and transboundary governance (shared responsibility by across multiple political jurisdictions).

A federal, national, or sub-national government ministry or agency is responsible for a governing the protected area by determining conservation objectives, and developing and implementing the management plan. Alternatively, government delegates management responsibility to another party, but retains the authority, responsibility, and accountability for managing the protected area.



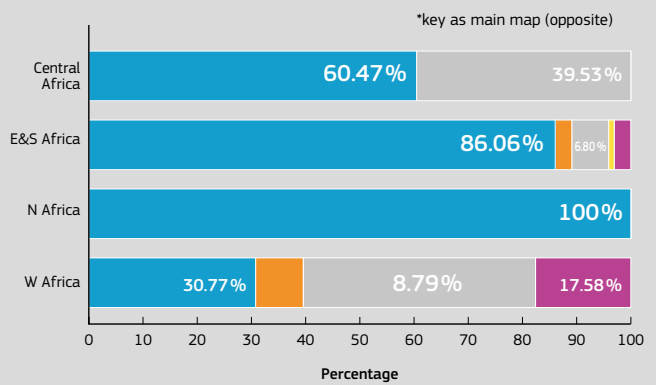
Mangrove forest protection under different governance

A systematic review of mangrove governance, conservation and restoration revealed that protecting these habitats effectively depends on stakeholder engagement, shared responsibility, and the distribution of rights⁴. In this context, the Global Mangrove Alliance produced guidelines on how to include local stakeholders and their indigenous ecological knowledge in the governance, conservation, and restoration of mangroves⁵.

More than 430 protected areas in Africa contain mangroves and the majority are under state governance. However, different forms of governance have gradually increased in the last fifteen years.



📍 Mangroves in Casamance, Senegal. The estuary of the Casamance River is habitat to mangroves forests and the villages who rely on these ecosystems from storm protection, agriculture, and fishing. Source: Vince Gx on Unsplash, Free use under Unsplash License.



📍 Mangrove protection coverage under different governance. African governments predominantly govern protected areas covering mangrove forests, but in the last fifteen years, other types of governance have become more prevalent. Source: UNEP- WCMC and IUCN (2024) Protected Planet: The World Database on Protected Areas (WDPA). [Online], [February/2024], Cambridge, UK: UNEP-WCMC and IUCN. Available at: www.protectedplanet.net

The relative prevalence of different governance types in African protected areas.

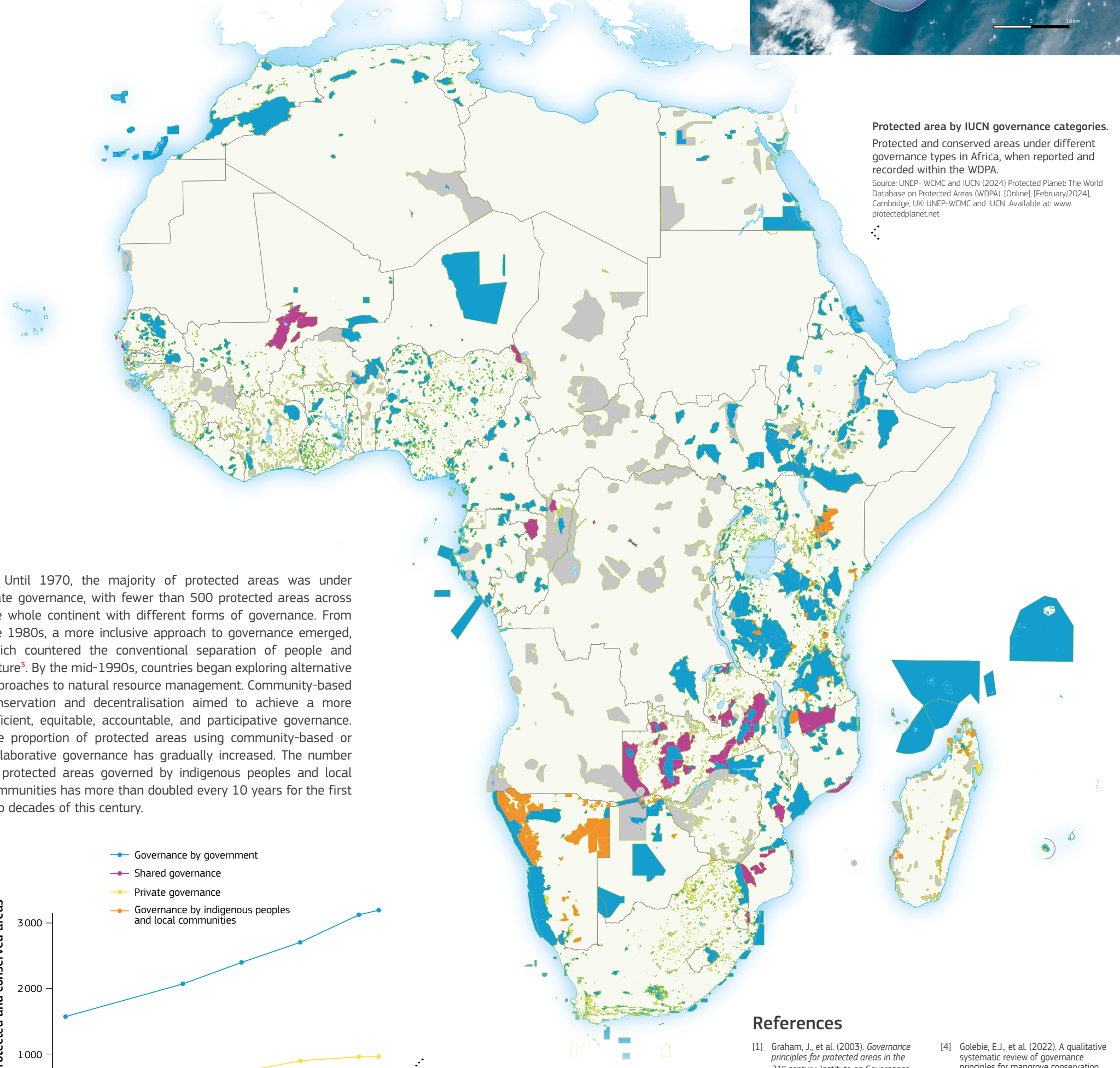
While governments are responsible for governing the majority of African protected and conserved areas, other actors govern one out of every five protected areas. Source: UNEP- WCMC and IUCN (2024) Protected Planet: The World Database on Protected Areas (WDPA). [Online], [February/2024], Cambridge, UK: UNEP-WCMC and IUCN. Available at: www.protectedplanet.net

Percentage of protected area governance types grouped by African region.

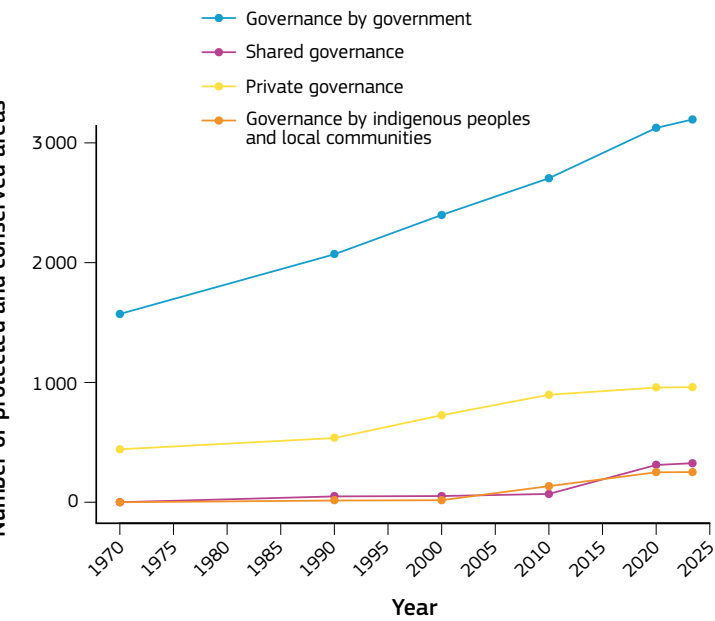
Governance by state is the most common governance type in all regions. Private governance is relatively more common in Eastern and Southern Africa compared to other regions, while shared governance is relatively more common in Northern Africa. Governance is reported for less than half of Central African protected areas. Source: UNEP- WCMC and IUCN (2024) Protected Planet: The World Database on Protected Areas (WDPA). [Online], [February/2024], Cambridge, UK: UNEP-WCMC and IUCN. Available at: www.protectedplanet.net

Governance type

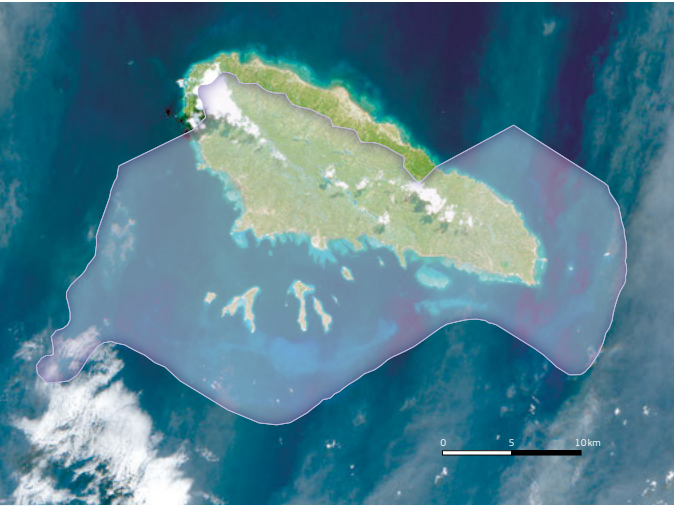
- Governance by government
- Shared governance
- Private governance
- Governance by indigenous peoples and local communities
- Not reported



Until 1970, the majority of protected areas was under state governance, with fewer than 500 protected areas across the whole continent with different forms of governance. From the 1980s, a more inclusive approach to governance emerged, which countered the conventional separation of people and nature³. By the mid-1990s, countries began exploring alternative approaches to natural resource management. Community-based conservation and decentralisation aimed to achieve a more efficient, equitable, accountable, and participative governance. The proportion of protected areas using community-based or collaborative governance has gradually increased. The number of protected areas governed by indigenous peoples and local communities has more than doubled every 10 years for the first two decades of this century.



Mohéli National Park, Comoros. Comoros is an archipelagic nation in the Western Indian Ocean. Of the ten protected areas in the country, eight are under collaborative governance. Comoros’ first protected area, Mohéli National Park, is a success story for co-management because it incorporates ten community-management marine reserves, including important nesting areas for green turtle (*Chelonia mydas*), and feeding sites for Hawksbill turtles (*Eretmochelys imbricata*) an Dugong (*Dugong dugon*). Source: Modified Copernicus Sentinel data 30 June 2023 processed in Copernicus Browser (https://browser.dataspace.copernicus.eu/).



Protected area by IUCN governance categories. Protected and conserved areas under different governance types in Africa, when reported and recorded within the WDPA. Source: UNEP- WCMC and IUCN (2024) Protected Planet: The World Database on Protected Areas (WDPA). [Online], [February/2024], Cambridge, UK: UNEP-WCMC and IUCN. Available at: www.protectedplanet.net

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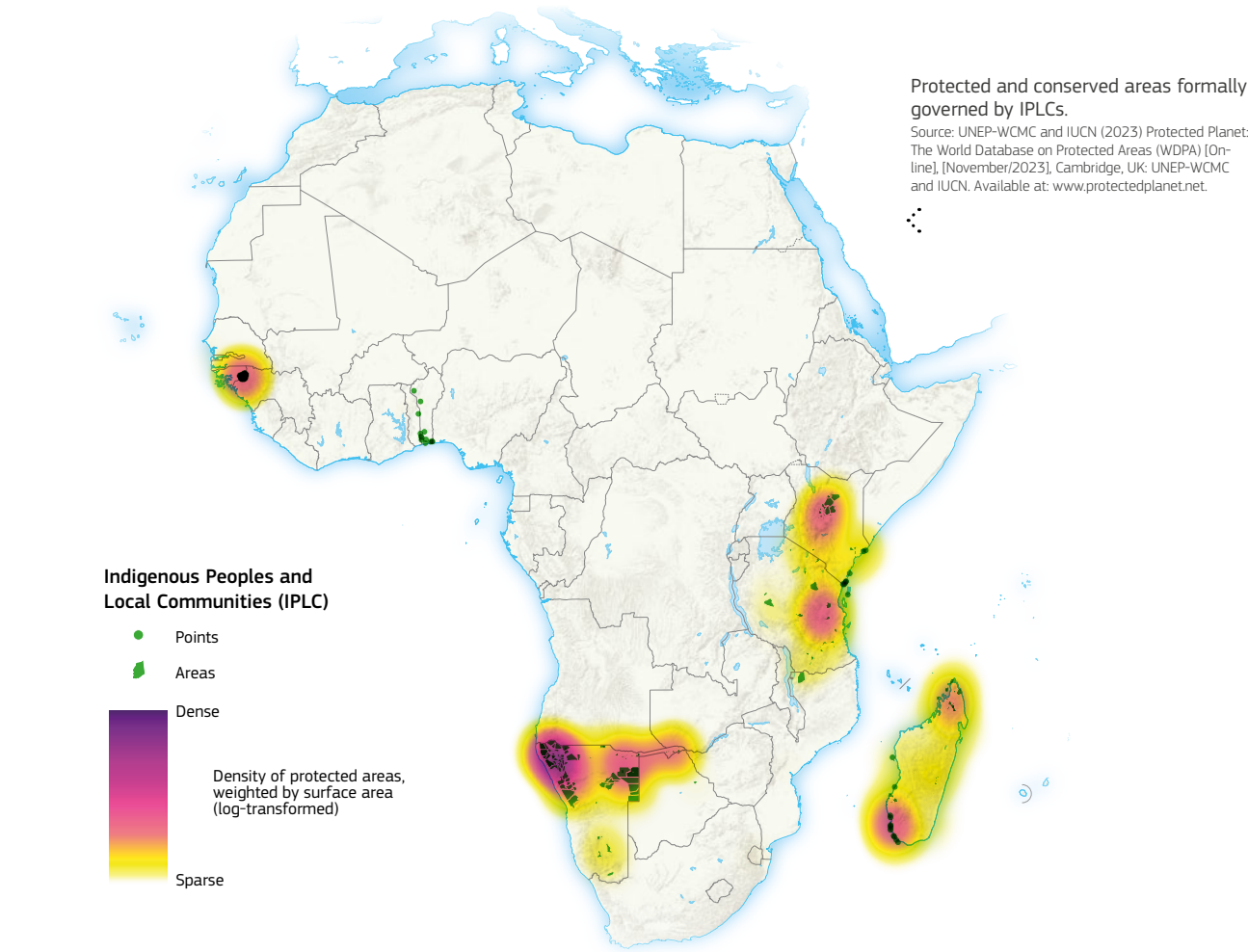
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2.4.2 Protected areas and Indigenous Peoples and Local Communities (IPLC)

The contribution of Indigenous Peoples and Local Communities (IPLCs) to effective conservation strategies has gained recognition over the last few decades. An equitable approach to conservation – considering cultural diversity, traditional ecological knowledge and engagement by local people – is important for delivering social and ecological benefits and contributing to effective long-term strategies.

Protected areas are the cornerstone for conserving natural and cultural heritage, and it is essential that efforts to pursue positive outcomes for biodiversity do not come at the expense of indigenous peoples and local communities who rely on natural resources. One pathway is considering the contributions of the IPLC in the management and governance of protected areas.

Large tracts of Africa are home to Indigenous Peoples and Local Communities (IPLC) whose livelihoods depend on natural resources. Protected areas often coincide with IPLC lands, so the effective conservation of nature cannot be achieved without also considering people's needs and contributions.



The International Union for Conservation of Nature (IUCN) recognises four types of governance in protected areas based on who formally holds decision-making and management authority and responsibility: Governance by government, Shared governance, Private governance, and Governance by Indigenous Peoples and Local Communities.

According to the World Database on Protected Areas, around 500 protected areas in Africa are governed by Indigenous people and local communities (roughly one-third of such protected areas worldwide). IPLC governed protected areas occur in multiple countries, but are concentrated in Kenya, Namibia, Madagascar, Senegal, and Tanzania. But these are only protected areas where local governance is formally acknowledged. They do not include protected areas where the governance contributions of IPLCs are unreported in the database or where these contributions are made through informal governance structures. As a consequence, a comprehensive map of the contributions of IPLCs to the governance of protected and conserved areas is still missing. The significant roles of IPLCs to the governance of protected areas is likely underestimated in Africa and is underreported in the World Database on Protected Areas.

Evidence suggests that indigenous land may be more effective at conserving nature than other land. One study compared the loss of intact forest landscapes between 2000 and 2016 on indigenous land to other lands and found that at least 35% of the world's remaining intact forest landscapes are managed or owned by indigenous people³. In Africa, the rates of loss of intact forest landscape were generally lower in indigenous land, but this was not the case in Cameroon, Ethiopia, and the Republic of the Congo. In other countries – like Angola, Côte d'Ivoire, and Uganda – there were no intact forest landscapes on indigenous land in 2000. These results demonstrate the potential of indigenous land for preserving intact forests, while also highlighting that these benefits should not be taken for granted in all countries. The authors of the study³ provide examples of collaborative partnerships that incorporate Indigenous knowledge systems, practices and institutions as a way to enhance the effectiveness of conservation on IPLC land.

Loss of intact forest on IPLC land vs. other land (2000 – 2016).

The loss of Intact Forest Landscapes in IPLCs compared to other lands (countries marked as * did not have intact forest on IPLC land prior to 2000).

Source: Fa, J.E., et al. (2020). Importance of Indigenous Peoples' lands for the conservation of Intact Forest Landscapes. Frontiers in Ecology and the Environment, 18, 135-140.

In a foundational research study², the global extent of indigenous lands was estimated as at least 37.9 million km² (about 28.5% of total land area). Of this area, around 20.7% is within protected areas. In Africa, more than a third of the total area is indigenous lands (roughly 9.8 million km², or 34%) and 15.9% of these lands are within protected areas.

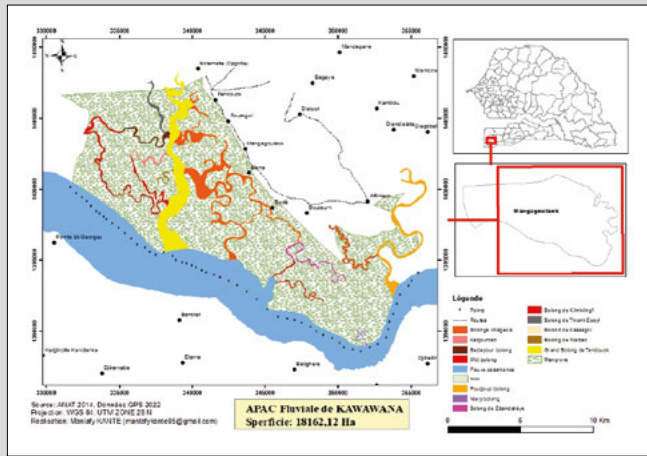
In order to reach a better understanding of the spatial distribution of IPLC conserved areas, the Protected Planet Initiative and the ICCA Registry (<https://www.iccaregistry.org/>) web platforms support IPLCs in documenting their territories within a global database.

IPLCs in international agreements

The Kunming-Montreal Global Biodiversity Framework recognises the rights of IPLCs and their roles in maintaining biodiversity. The Framework includes multiple targets that advocate justice and equity issues in conservation, stressing the recognition of IPLC rights. The Framework also recognises the role of human-rights-based approaches for the effective and equitable participation of stakeholders when taking decisions around natural resources.

Kawawana Community Conserved Area, Senegal

Kawawana (Kapooeye Wafolal Wata Nanang) means "our local heritage to be preserved by us all". This is an estuarine conserved area managed and governed by Jola communities of the Mangagoulack commune in Senegal. Because of habitat degradation, mangrove deforestation and overfishing, local fishermen decided to form a local community association to improve fish stocks. The association joined the ICCA Consortium, and after several years of negotiations, succeeded in getting Kawawana recognised by their Rural Municipality, the Regional Council and the Governor of Casamance. The area is now divided into three differently managed zones, with restricted fishing access and regulations, including a no-entry zone, and an area where only residents can use natural resources.



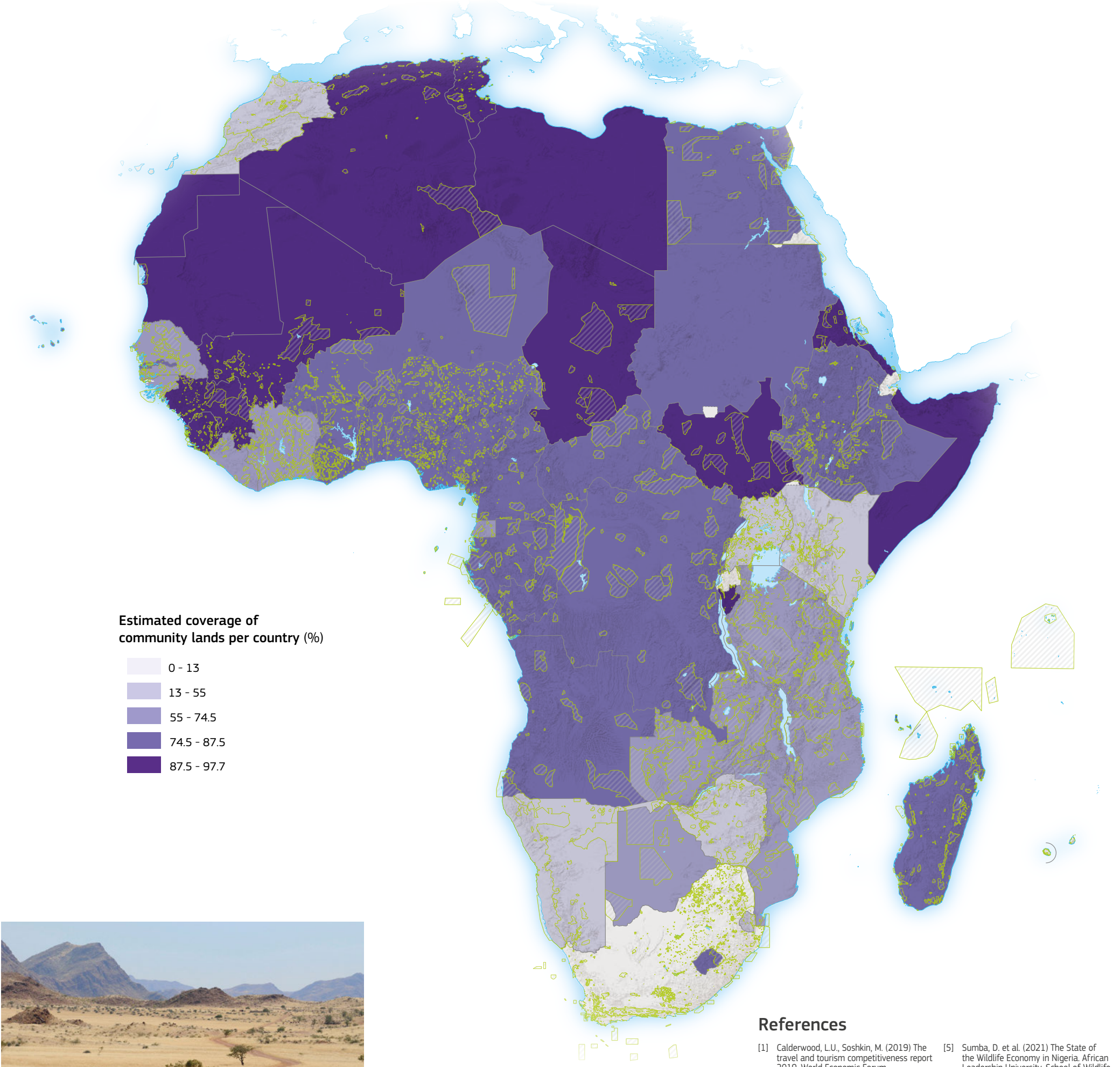
Map of the Kawawana Conserved Area zonation. In the map, the red colour shows the sacred Mititj bolong, the no take area. The yellow shows the Tendouck bolong, where fishery is regulated.

Source: Kawawana ICCA Coordinator Salatou Sambou, with permission, all rights reserved.



Community-based coastal protection in Senegal. Mangroves like these along a tributary of the Casamance River, Senegal, are managed by local communities in the Kawawana Community Conserved Area.

Source: Jododane on flickr CC BY-NC 2.0.



Community conservation in Namibia. Nomadic Himbas ride through the Marienfluss Conservancy, Namibia, a country that has embraced community-governed protected areas.

Source: USAID Biodiversity & Forestry on flickr CC BY-NC 2.0.

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2.4.3 UNESCO Man and Biosphere Reserves

UNESCO Man and Biosphere Reserves are multi-use landscapes aiming to establish a scientific basis for improving the relationship between people and nature. The 114 African biosphere reserves not only offer diverse ecosystem services, they promise to enhance the livelihoods of local communities who take centre stage in planning and managing these sites.

In 1971, the United Nations Educational, Scientific and Cultural Organization (UNESCO) launched the “Man and the Biosphere” (MAB) science programme to improve the interactions of people with their natural environment and to establish a scientific basis for promoting the sustainable use of natural resources and ecosystem services¹⁻³.

In 1976, UNESCO began implementing what has become the main tool under the MAB Programme: biosphere reserves. Although the concept of biosphere reserves has undergone continuous adaptation since its inception, these sites are multi-use landscapes to learn and study the relationship between biodiversity conservation and sustainable socio-economic development¹⁻³. Because scientific research has been intrinsic to the MAB Programme, biosphere reserves are managed as complex adaptive social-ecological systems, which serve as scientific research arenas focusing on the human-environment interface².

Unlike many other categories of protected area designations, the main objective of biosphere reserves is to achieve harmony in the relationship between humans and nature within the designated area⁴. To do so, biosphere reserves combine three primary functions¹⁻³:

- 1. Conservation of both biological and cultural diversity.
- 2. Sustainable economic development focusing on socio-cultural and environmental aspects, with communities sharing responsibility for planning and managing the site.
- 3. Logistic support promoting research, monitoring, education, and training.

These functions are achieved through three levels of spatial zonation:

- One or more “core areas”: these are formally protected areas devoted to biodiversity conservation where activities are restricted to research and low-impact actions compatible with the goals of conservation.
- A clearly identified “buffer zone” surrounding the core areas: this zone is used for activities compatible with conservation goals, which can strengthen research, monitoring, training, and education.
- An adaptable “transition area”: this is an area where communities cooperate with other stakeholders to manage and develop economic and human activities that are socio-culturally and ecologically sustainable.

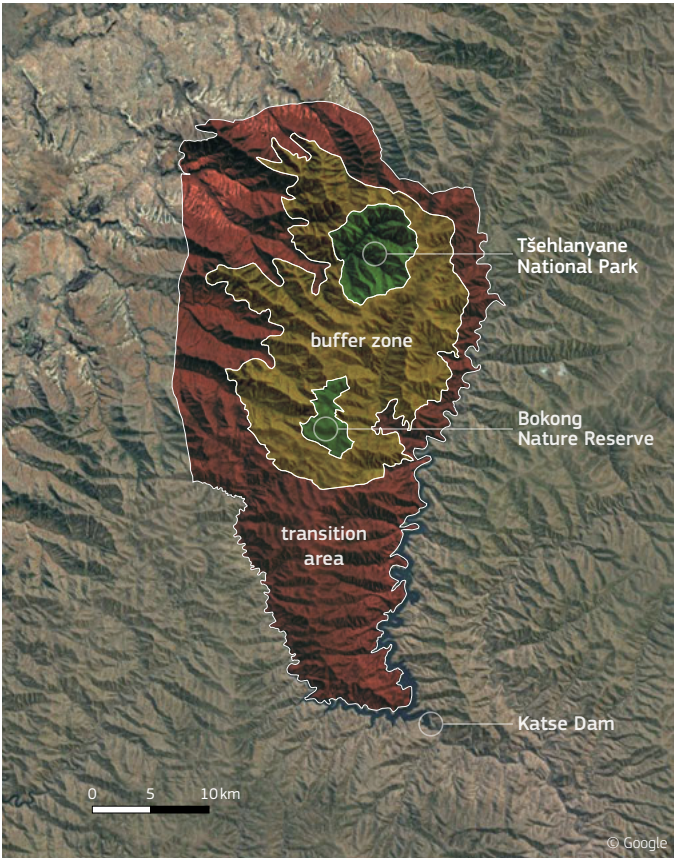


Figure 2.4.3.1. Zonation of Matšeng Biosphere Reserve, Lesotho.

Lesotho's first Man and Biosphere Reserve is made up of two protected areas at its core (Tsehlanyane National Park and Bokong Nature Reserve), surrounded by a buffer zone, and an adaptable transition area. All biosphere reserves follow a similar approach to spatial zonation.

Source: Own mapping.

Although biosphere reserves contain one or more formally protected core areas, buffer zones and surrounding transition zones have limited or no formal protection status⁴. Biosphere reserves typically require nuanced management because they offer a varied array of ecosystem services and display diverse degrees of vulnerability. Zonation allows for a spectrum of management strategies within each site. Consequently, site managers must identify ecosystem services and ensure their sustained supply in the long term. Africa, in particular, has a high direct reliance on ecosystem services, with 62 % of its rural population depending directly on these services for survival⁴.

Africa's first biosphere reserves.

In 1976, Luki (left) and Yangambi (right) became the first biosphere reserves designated in Africa. Both sites are located in the semi-deciduous moist forests of the Democratic Republic of the Congo and have notable histories of research. These sites are often considered the birthplace of most research from Central Africa on forest ecology, climatology, botany, and more.

Sources: Left, Sameulgb on Wikimedia Commons CC BY-SA 4.0; Right, Henrybadjoko on Wikimedia Commons CC BY-SA 4.0.



Biosphere reserves are nominated by national governments and designated by the MAB International Coordinating Council (MAB ICC)^{1,3}. Once sites are designated, they remain under the jurisdiction of their home countries while acquiring an internationally recognised status⁵. Designated sites are listed in the World Network of Biosphere Reserves (WNBR) and organised into regional and thematic networks to enhance cooperation among sites¹⁻³. Biosphere reserves in Sub-Saharan Africa are organised in the African Biosphere Reserves Network (AfriMAB), which was launched in 1996 and currently represents 33 African states. Biosphere reserves in North Africa are organised in the ArabMAB network, created in 1997, which covers 18 Arab and Mediterranean countries³. To guarantee long-term quality, sites included in the WNBR undergo a review process every ten years to monitor, assess, and report on achievements associated with the three primary functions of biosphere reserves^{1,3}.

Africa houses 114 biosphere reserves across 40 countries, including all AfriMAB countries and seven of the 18 ArabMAB countries. This accounts for 15 % of all biosphere reserves globally. South Africa has the highest number of biosphere reserves (10), followed by Algeria (8), Kenya and the United Republic of Tanzania (each with 6 reserves).

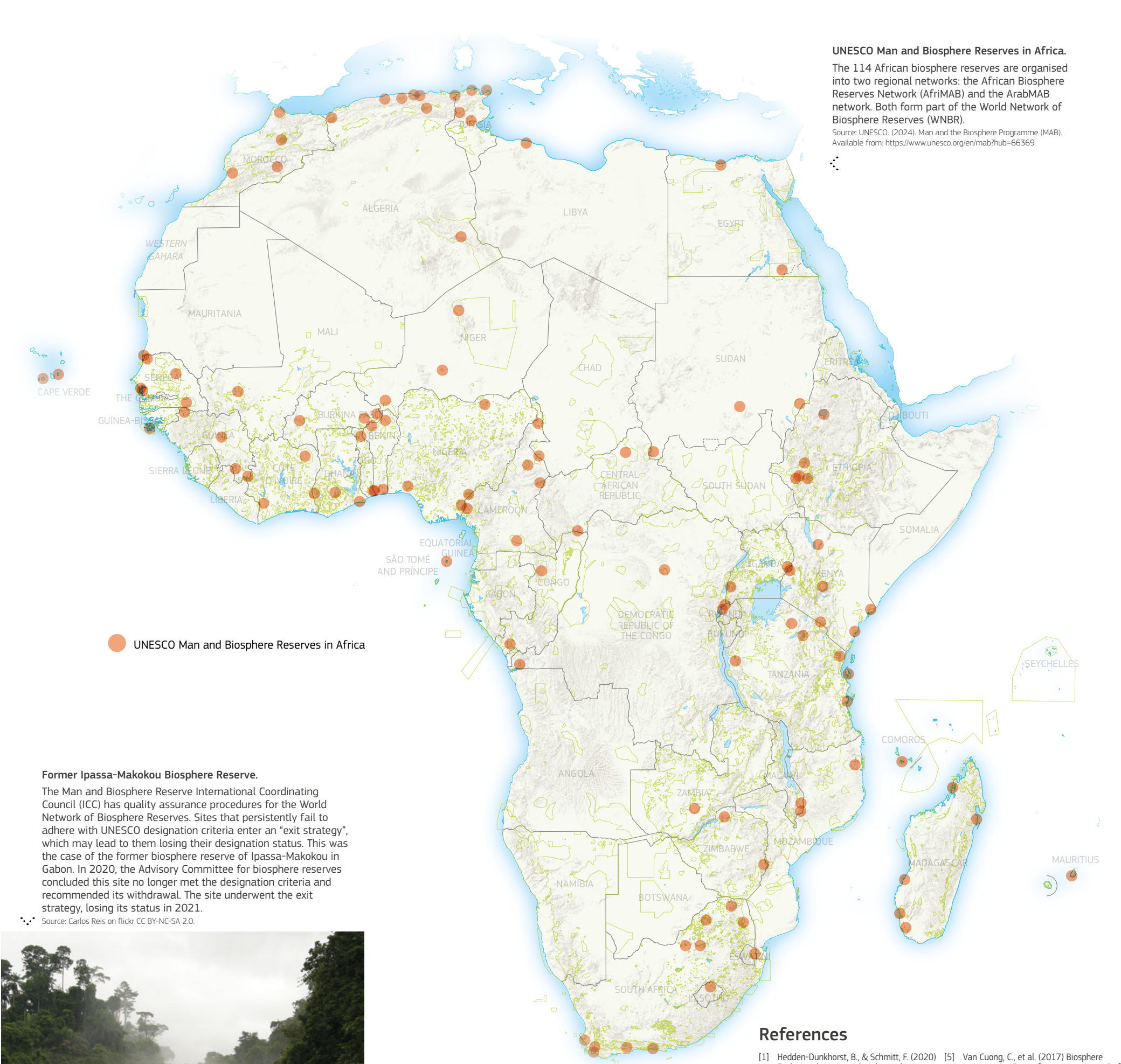
A key feature of UNESCO biosphere reserves is the way they involve local communities and interested stakeholders in decision-making and implementation. They also have a direct say in effective benefit-sharing systems. Local ownership by stakeholders who share the biosphere reserve's vision and mission is a crucial determinant for successful sites. In addition to creating economic opportunities for the local population and reducing conflicts of interest, inclusive engagement increases the effectiveness of development-oriented measures^{2,5}. Besides strong stakeholder participation and collaboration, effective management of biosphere reserves relies on factors such as inclusive governance, adequate finance and resources, and clear understanding of the broader concept of biosphere reserves (by both governments and the public)⁵.

Biosphere reserves can help national governments in Africa find solutions to the pressing challenges in the region. However, the concept of a biosphere reserve is sometimes misinterpreted due to inconsistent boundaries and zoning of protected areas. Additionally, Africa's funding for biosphere reserves coming from the MAB Programme is limited⁶.

In 2017, the new global MAB Strategy and associated Lima Action Plan emphasised the role of biosphere reserves in achieving the global Sustainable Development Goals and other multilateral environmental agreements, such as the Aichi Biodiversity Targets for 2010–2020^{2,6}. More recently, biosphere reserves have also been identified as instruments to implement the post-2020 Global Biodiversity Framework because they can contribute to meeting

both area-based targets and mainstreaming biodiversity beyond area-based targets⁷. Nevertheless, in some instances new biosphere reserves in Africa have reportedly been nominated arbitrarily, leading to the selection of areas that may not always receive optimal protection⁸. This is possibly the case in South Africa, where the national government nominated sites on an as-needed basis, often in response to petitions from community groups. Although

both national and provincial government departments supported these nominations, site locations were not chosen systematically⁸. There is, therefore, an opportunity to use integrated spatial planning to maximise the way biosphere reserves in Africa align with the broader goals of conservation and development.



UNESCO Man and Biosphere Reserves in Africa.

The 114 African biosphere reserves are organised into two regional networks: the African Biosphere Reserves Network (AfriMAB) and the ArabMAB network. Both form part of the World Network of Biosphere Reserves (WNBR).

Source: UNESCO. (2024). Man and the Biosphere Programme (MAB). Available from: <https://www.unesco.org/en/mab/hub-66369>

Former Ipassa-Makokou Biosphere Reserve.

The Man and Biosphere Reserve International Coordinating Council (ICC) has quality assurance procedures for the World Network of Biosphere Reserves. Sites that persistently fail to adhere with UNESCO designation criteria enter an “exit strategy”, which may lead to them losing their designation status. This was the case of the former biosphere reserve of Ipassa-Makokou in Gabon. In 2020, the Advisory Committee for biosphere reserves concluded this site no longer met the designation criteria and recommended its withdrawal. The site underwent the exit strategy, losing its status in 2021.

Source: Carlos Reis on Flickr CC BY-NC-SA 2.0.



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