5.3 People and nature beyond the boundaries of protected areas

5.3.1 Participatory management of natural resources

Community involvement in conservation strategies is important for tacking environmental challenges effectively. Inclusive- participatory processes embed the socio-economic needs of local communities within conservation goals. This promotes environmental stewardship and enhances resilience to negative pressures, like climate change and biodiversity loss.

In 2022, the 1st Africa Protected Areas Congress was held in Kigali, Rwanda, under the theme "For People and Nature". This event sought to identify priority actions for Africa's protected areas characterised by fairness, equity, and justice. The Congress concluded with the adoption of the Kigali Call to Action[1], which highlighted the essential roles of indigenous peoples and local communities, women, and youth in the delivery of conservation goals. As the first pan-African meeting of conservation leaders and experts, the Congress underscored that global conservation targets cannot be achieved without the active support and participation of indigenous peoples and local communities[1].

The active participation of indigenous peoples and local communities depends on transparent decision-making processes. Those whose livelihoods are intricately linked to natural resources should be able to contribute to the governance and management of nature. Inclusive and participatory natural resource management acknowledges the significance of nature to human well-being and the indispensable role played by communities in preserving wildlife and biodiversity[2].

Milka Chepkorir Kuto speaking at the opening of the Africa Protected Areas Congress.

"We, indigenous peoples and local communities, have had many experiences of conservation gone wrong: human rights violations, forced evictions, dispossession, displacement, and violence," said Milka Chepkorir Kuto, an anthropologist and representative of Indigenous Sengwer from Kenya. *"At the same time, we know our world is facing a crisis – we are losing biodiversity at a frightening rate and the climate is changing, making our planet unliveable for us all. Unfortunately, the conservation response, adopted from colonial times, has been sustained and even refined with increased militarisation. These approaches have not only failed to offer a real solution to this crisis, but they have also caused untold harm and trauma to the very citizens which governments should look to as conservators".*

Source: BIOPAMA Programme, with permission, all rights reserved.

The conservation leaders and experts attending the Africa Protected Areas Congress agreed on the importance of involving people in decision-making processes to address environmental inequalities. Ensuring such inclusive processes ought to harmonise conservation objectives with local socio-economic needs, fostering environmental stewardship and resilience against challenges like climate change and biodiversity loss. For this approach to work, participatory monitoring of biodiversity – through community-based monitoring or citizen science – must engage local communities and individuals to shift decision-making authority from centralised governments to local institutions[3]. Furthermore, participatory monitoring is a vital tool for gathering detailed biodiversity data at the local level. Adopting participatory monitoring is also a viable strategy for filling gaps in biodiversity evidence and implementing grassroots conservation strategies that involve local communities[4].

This feature map shows a two-dimensional rendering of the total biodiversity data accessible through the Global Biodiversity Information Facility (GBIF) and the proportion of data obtained through participatory monitoring[4]. Participatory monitoring is ubiquitous throughout Africa, making up 90% of all records[4]. The prevalence of participatory monitoring increased significantly between 2000 and 2020. During this period, 77% of the global biodiversity data added to GBIF was from participatory monitoring. For protected areas with GBIF data (roughly 61% of all protected areas globally), three-quarters of all data were from participatory monitoring[4]. These trends suggest that national policies for participatory monitoring, standardised biodiversity data collection, and open data can influence the degree to which communities participate in protected area monitoring and management.

Even though the ambitious Global Biodiversity Framework aims to protect 30% of lands and seas, it should not distract from efforts to manage remaining unprotected territories shared between people and nature[5]. The intact portions of these shared spaces already have considerable value for biodiversity, while restoration efforts can enhance the value of more heavily utilised human-dominated land- and seascapes. Harnessing the benefits of a shared earth will depend on multilevel and polycentric governance that incorporates local participation, spatial planning, and sustainable production. Therefore, the challenge for the upcoming decades is how to continue growing the participation of local communities in the monitoring, management, and governance of African territories, both inside and outside of protected areas.

Participatory mapping

A commonly used method in participatory monitoring and management of natural resources is participatory mapping. Participatory mapping merges cartography with community engagement to represent what local people and communities know. These maps highlight community perspectives on significant natural elements, like land boundaries, resource management practices, and sacred sites. Participatory mapping combines technologies – like GIS, GPS, and remote sensing – and community engagement to provide accurate data visualisation. Mobile apps and open-source software facilitate data collection and sharing. Participatory mapping empowers communities to assert their rights, manage resources sustainably, and influence land-use decisions.

Participatory mapping in Oukaïmeden (Ait Lkak, Al Haouz), Morocco.

Participatory mapping was used during a workshop on the cultural practices of conservation in the Municipality of Oukaïmeden" in the Atlas Mountains of Morocco. The workshop was organised as part of a project on the "Integrated Approach to Plant Conservation in the Moroccan High Atlas", funded by the MAVA Foundation and implemented by the Global Diversity Foundation and the Moroccan Biodiversity and Livelihoods Association. Community knowledge on cultural conservation practices and natural resource management was integrated as part of a geographical mapping process.

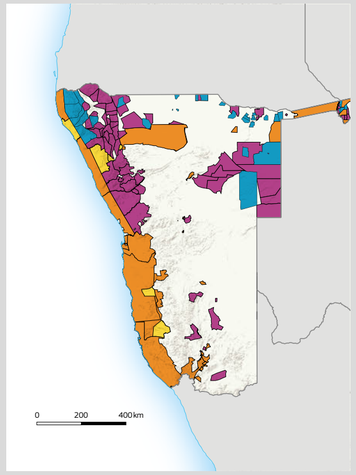
Source: Simona Lippi, with permission, all rights reserved.

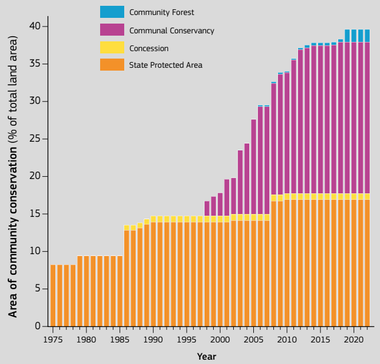
Case study 1: Namibian Conservancies

Community Conservation in Namibia.

Namibia's communal conservancies and community forests are legally recognised as self-governing entities by the Ministry of Environment, Forestry and Tourism (MEFT). Similarly, fisheries reserves (not mapped here) are legally recognised by the Ministry of Fisheries and Marine Resources (MFMR). Both are supported by the Namibian Association of Community Based Natural Resource Management Support Organisations (NACSO). Communal conservancies, community forests and fisheries reserves aim at conserving the environment and generate revenue through sustainable use of natural resources. Over the period 1990 – 2022, community conservation contributed an estimated N$ 13.47 billion to Namibia's net national income (roughly €680 million). The Community-based Natural Resource Management program focuses on conserving biological diversity and the benefits from natural ecosystems for communities living alongside wildlife. It emphasises partnerships with key stakeholders to foster a more sustainable, resilient, and community-centric approach to conservation.

Source: UNEP-WCMC and IUCN (2024) Protected Planet: The World Database on Protected Areas (WDPA). [On-line], [February/2024], Cambridge, UK: UNEP-WCMC and IUCN. Available at: www.protectedplanet.net





The growth of community conservation in Namibia between 1975 and 2022.

By the end of 2022, 86 registered communal conservancies covered more than 165 000 km² of Namibia's territory. These areas included roughly 245 000 residents, two community conservation associations, 46 registered community forests, 20 community fisheries, and 19 concessions within national parks or on other state land.

Source: The Namibian Association of Community Based Natural Resource Management (CBNRM) Support Organisations (NACSO) website: https://www.nacso.org.na/conservancies#statistics

The contribution of participatory monitoring and citizen science to the Global Biodiversity Information Facility (GBIF).

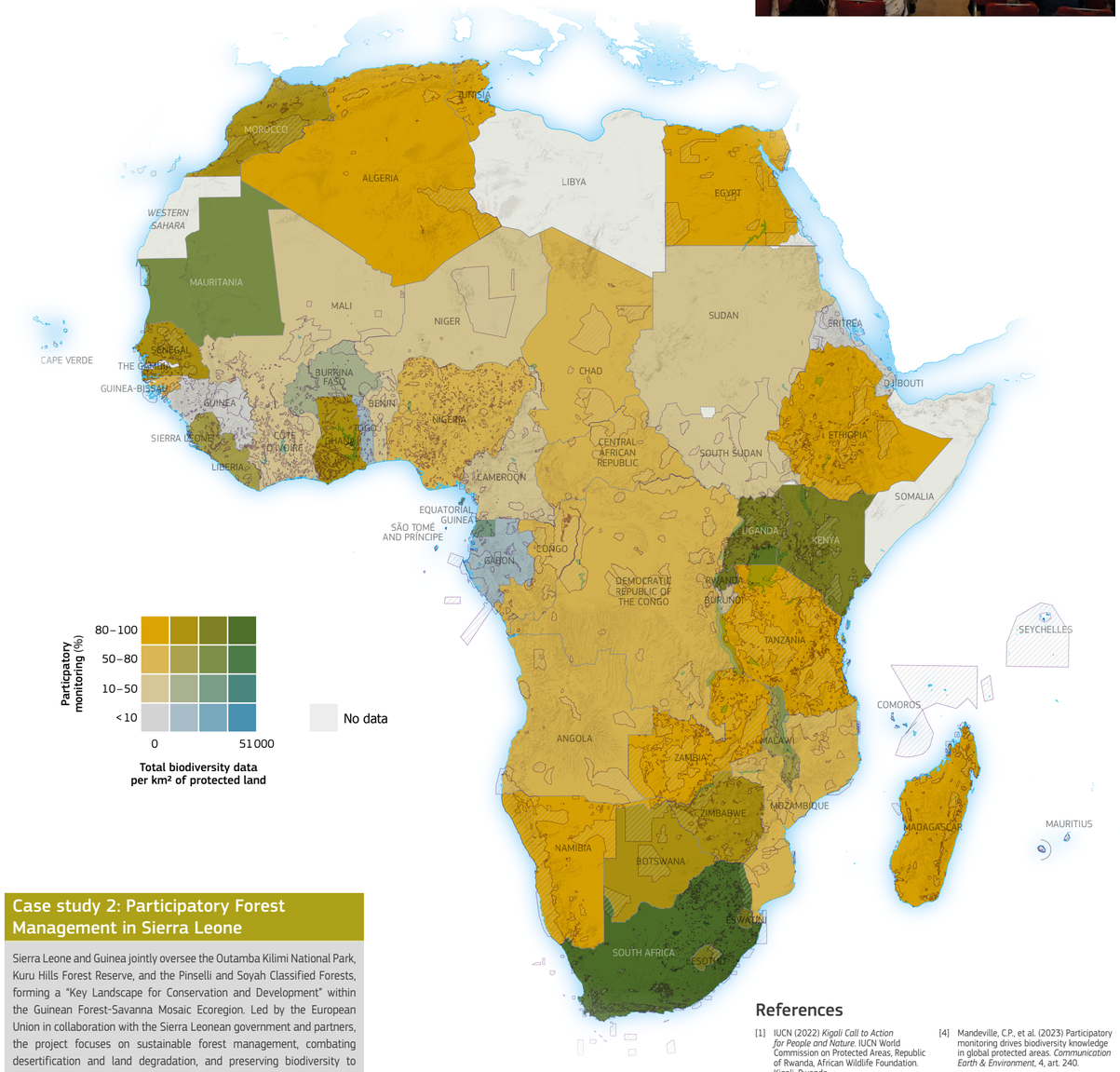
A two-dimensional rendering of the total biodiversity data accessible through GBIF and the proportion of data obtained through participatory monitoring. Differences between countries suggest that national policies for participatory monitoring, standardised biodiversity monitoring, and open data can influence the degree to which communities participate in protected area monitoring and management.

Source: Mandeville, C.P., et al. (2023) Participatory monitoring drives biodiversity knowledge in global protected areas. *Communication Earth & Environment*, 4, art. 240.

High level dialogue of female leaders on Environment in Africa at the Africa Protected Areas Congress.

Tanya Merceron (IUCN) moderated an event, featuring an introduction by Solange Bandiaky-Badji of the Rights and Resources Group titled "What gaps? Paving a path forward for Indigenous and community women leaders in conservation". Ministers and experts contributed to discussions emphasising the importance of integration of women's rights into conservation practices and the political recognition of their roles, responsibilities, and knowledge in biodiversity management. The panel centred on rights, justice, and power dynamics within protected areas, stressing the need for transformative changes to realise rights for marginalised groups.

Source: BIOPAMA Programme, with permission, all rights reserved.



Case study 2: Participatory Forest Management in Sierra Leone

Sierra Leone and Guinea jointly oversee the Outamba Kilimi National Park, Kuru Hills Forest Reserve, and the Pinselli and Soyah Classified Forests, forming a "Key Landscape for Conservation and Development" within the Guinean Forest-Savanna Mosaic Ecoregion. Led by the European Union in collaboration with the Sierra Leonean government and partners, the project focuses on sustainable forest management, combating desertification and land degradation, and preserving biodiversity to mitigate climate change impacts in the landscape. To date, the project has successfully achieved collaborative agreements between park authorities, coordinated landscape activities, livelihood support for local communities (particularly women), prioritisation of endangered species, and environmental education initiatives.

Source: Press and information team of the Delegation to Sierra Leone.

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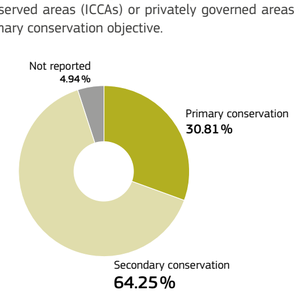
5.3.2 Other effective area-based conservation measures (OECMs)

Other effective area-based conservation measures (OECMs) are sites outside protected areas that deliver effective and long-term *in situ* conservation of biodiversity. Because protected areas and OECMs complement each other to protect and conserve biodiversity, recognising and supporting OECMs will be crucial to national commitments in achieving conservation targets. A number of African countries have already identified and reported OECMs to the World Database on Other Effective Area-based Conservation Measures (WD-OECM), reflecting the significant contribution OECMs make towards achieving the area component of Target 3 of the Kunming-Montreal Global Biodiversity Framework.

'Other effective area-based conservation measures' (OECM) refer to sites outside of protected areas that achieve long-term biodiversity conservation through equitable governance and management.

While protected areas should have a primary conservation objective, OECMs are areas that deliver effective long-term *in situ* conservation of biodiversity, regardless of their primary management objectives. Depending on the intention to conserve biodiversity, OECMs can fall into three categories[7]:

1. **Ancillary conservation**: areas delivering *in situ* conservation as a by-product of management, where biodiversity conservation is not an objective. Examples include certain military areas or sacred sites.
2. **Secondary conservation**: areas achieving conservation through active management, although biodiversity conservation may be a secondary management objective. Examples include conservation corridors or watershed protection areas.
3. **Primary conservation**: areas meeting the definition of a protected area, but that are not currently designated and reported as such, e.g. some indigenous and community conserved areas (ICCAs) or privately governed areas with a primary conservation objective.



Types of approaches that deliver effective conservation in African OECMs.

In more than half (64.3%) of the OECMs reported to the World Database on OECMs (WD-OECM), conservation is accomplished via active management of the sites where biodiversity outcomes are a secondary management objective.

Source: Own calculations based on data from the WD-OECM[10].

The International Union for Conservation of Nature World Commission on Protected Areas (IUCN-WCPA) has developed technical guidelines explaining the definition of OECMs and how these may be applied in practical conservation strategies[7]. Moreover, they have also prepared a site-level methodology for identifying OECMs[8].

Site assessments according to OECM criteria should be on a case-by-case basis. Because OECMS are based on existing management that already provides effective biodiversity conservation, OECMs are 'recognised' rather than 'designated'. The identification and mapping of OECMs is essential for these to be factored into decision-making and tracked alongside conservation targets. Countries can submit data on OECMs to the World Database on OECMs (WD-OECM).

In Africa, 344 OECMs have been reported to the WD-OECM across four countries, the majority of which are terrestrial (332 or 96.5%) with only a few marine OECMS (12 or 3.5%)[9]. The first African country to report OECMs to the WD-OECM was Algeria, which recognised its five cultural parks as OECMs. With an extension of 633 000 km^2 – approximately the size of the Central African Republic – Ahaggar cultural park is the largest OECM in Africa[10].

Although not defined formally until 2018, OECMS were recognised in Aichi Biodiversity Target 11 under the Convention on Biological Diversity's 2011-2020 Strategic Plan. At the 15th Congress of the Parties, nations adopted the more ambitious 30% area-based conservation target as part of the Kunming-Montreal Global Biodiversity Framework[11]. Because protected areas and OECMs complement each other to protect and conserve biodiversity through well-connected networks, recognising and supporting OECMs will be crucial to achieving this and other targets. In countries such as Algeria or Morocco, OECMs make a significant contribution to conserved area coverage. In Algeria, OECMs conserve 49.6% of the terrestrial and inland waters in the country whilst protected area coverage is just 4.6%[3]. Protected areas cover 2.2% of the terrestrial and inland waters in Morocco whilst OECM coverage is 30.9%[4].

Similar to protected areas, OECMs occur under a range of governance types: by government agencies, private actors, Indigenous peoples and/or local communities, or by shared arrangements. Identifying OECMs provides an important opportunity to recognise *de facto*, effective and long-term biodiversity conservation that exists beyond the boundaries of protected areas, under a variety of governance and management forms, providing at the same time support and security to these areas[7,8]. Therefore, future conservation science and policy will need to adjust to protection defined by the outcomes for biodiversity and not just the formal designation of areas for conservation.

OECMs in South Africa: Kruger to Canyons UNESCO Man and Biosphere Reserve (K2C).

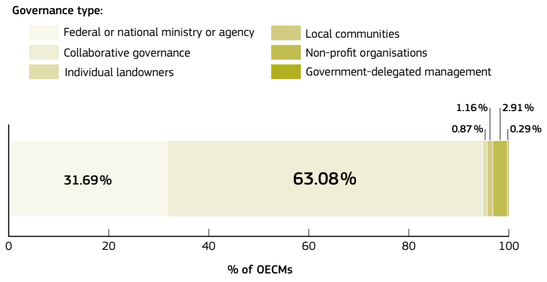
South Africa was one of the first countries in the region to assess OECMs and develop a methodology that aligns and integrates the global OECM framework within the national context. The first country-level study assessed various sites outside protected areas, including the Kruger to Canyons UNESCO Man and Biosphere Reserve (K2C). The study identified sites that meet the OECM criteria, located in the buffer and transition zones of K2C, which surround core protected areas. Biosphere reserves are not OECMs, but may contain OECMs within their area[1,2].

Source: Carolina Odman on Wikimedia Commons CC BY-SA 2.0.

The definition for other effective area-based conservation measures (OECM)

Other effective area-based conservation measures (OECMs) were first defined in 2018 at the 14th Conference of Parties (COP) of the Convention on Biological Diversity (CBD) in Sharm el Sheik, Egypt. OECMs represent a new conservation approach, separate from protected areas, where conservation is achieved mainly as a by-product of other management. The official definition of an OECM is:

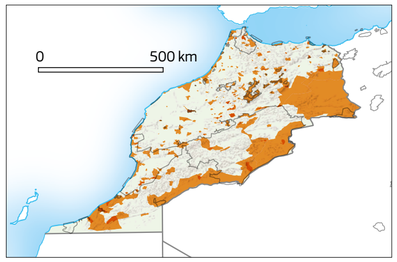
"A geographically defined area other than a protected area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in-situ conservation of biodiversity, with associated ecosystem functions and services and where applicable, cultural, spiritual, socio–economic, and other locally relevant values"[12].



Governance mechanisms in African OECMs.

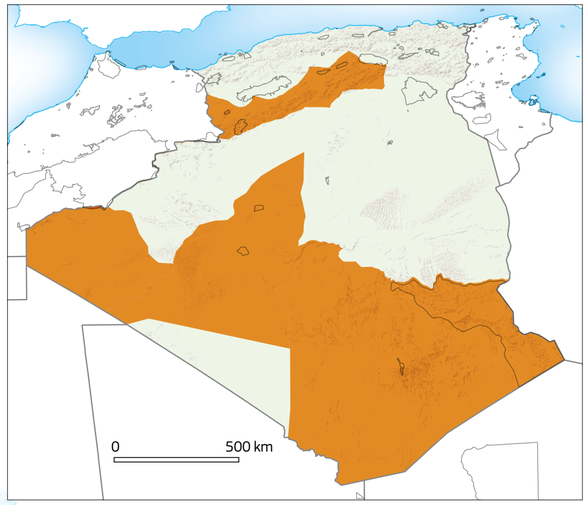
The governance authority refers to the entity responsible for decision-making about how an area is managed. The majority of the African OECMs reported to the World Database on OECMs (WD-OECM) are under the authority of the government or have a shared governance

Source: Own calculations based on data from the WD-OECM[10].



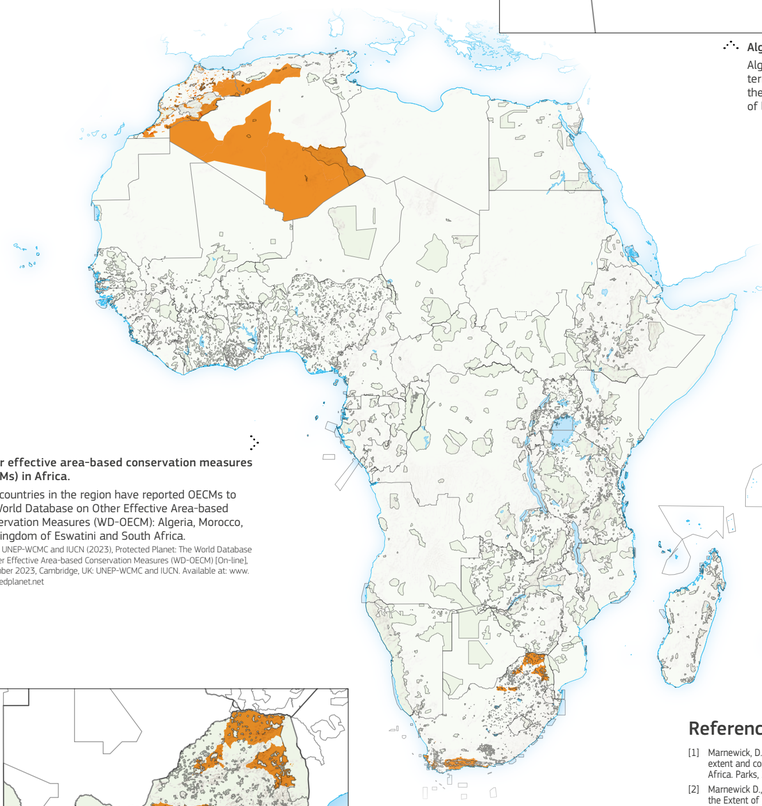
Morocco.

Morocco has reported 314 OECMs. The coverage of these sites is 30.9% of the terrestrial and inland waters and, together with the 2.2% protected area coverage, results in an overall 33.1% of land area protected and conserved in the country. OECMs conserve 0.1% of Morocco's marine and coastal areas which, added to the 0.7% protected area, results in 0.7% of marine area being protected and conserved[4].



Algeria.

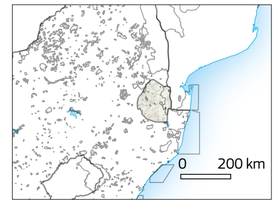
Algeria has reported 5 OECMs. These cover 49.6% of the terrestrial and inland waters in the country which, added to the 4.6% protected area coverage, results in an overall 54.3% of land area being protected and conserved in Algeria[3].



Other effective area-based conservation measures (OECMs) in Africa.

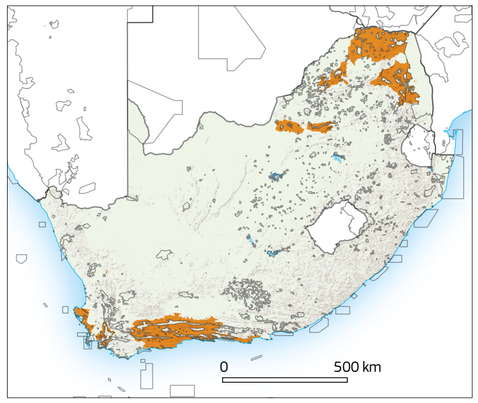
Four countries in the region have reported OECMs to the World Database on Other Effective Area-based Conservation Measures (WD-OECM): Algeria, Morocco, the Kingdom of Eswatini and South Africa.

Source: UNEP-WCMC and IUCN (2023), Protected Planet: The World Database on Other Effective Area-based Conservation Measures (WD-OECM) [On-line], September 2023, Cambridge, UK: UNEP-WCMC and IUCN. Available at: www.protectedplanet.net



Kingdom of Eswatini.

The Kingdom of Eswatini has reported 8 OECMs. These areas cover 0.5% of the national terrestrial and inland waters, whilst protected areas cover 4.2%. An overall 4.7% of the country's land area is protected and conserved[5].



South Africa.

South Africa has reported 17 OECMs. The OECM coverage of the terrestrial and inland waters is 6.93%, whilst protected area coverage is 9.3%. In total, 16.2% of South Africa's land area is protected and conserved. Moreover, OECMs add 0.1% coverage to the already protected 15.5% of marine and coastal areas, leading to an overall 15.6% of the marine and coastal area being protected and conserved in the country[6].

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5.3.3 Transfrontier Conservation Areas

Transboundary conservation areas do not only transcend geographical and administrative borders, but also cultural and socio-economic barriers. By promoting international collaboration for shared nature conservation and human-nature coexistence, transboundary conservation areas have the potential to alleviate conflicts between neighbouring states.

Environmental experts often highlight the role of environmental pressures on the emergence of conflicts. This elevates the significance of conservation as a means to reduce conflict across international borders. Critics argue that environmental factors in conflict are minor when compared to other economic, ethnic, or demographic factors. Nevertheless, even if conservation does not reduce conflicts by alleviating environmental pressures, the process of transboundary conservation has the potential to foster cooperation between nations, providing an entry point for broader conflict resolution. Despite this potential, transfrontier conservation areas (TFCA) were developed independently of their potential use in conflict mitigation[1].

The pioneering transboundary park was the formed between Poland and Czechoslovakia under the Krakow Protocol in 1924. Even though fostering peace was not amongst the original goals of the park, the transboundary protected area allayed tensions originating from a remnant border dispute from World War I because the border region was managed jointly as a collective good.

The Virunga Mountains were designated as Africa's first national park in 1925 in the then Belgian Congo. After independence in 1960, the area became a *de facto* transboundary park split across Rwanda and Zaire (now the Democratic Republic of the Congo). By 2005, the administrators of the individual national parks within the separate countries formally proclaimed the Central Albertine Rift Transfrontier Protected Area Network, now known as the Greater Virunga Landscape.

In the latter parts of the 20th century, many transboundary protected areas became known colloquially as Parks for Peace (or "peace parks"), designed to promote goodwill and peace between sovereign nations through the preservation of nature[2]. This trend led to the establishment of the Peace Parks Foundation in South Africa in 1997, spurred on by then president of WWF-South Africa and founding member of WWF, Anton Rupert, and supported by IUCN. The Peace Parks Foundation aimed at promoting regional cooperation among countries of the Southern Africa Development Community (SADC) economic community, primarily for nature-based tourism.

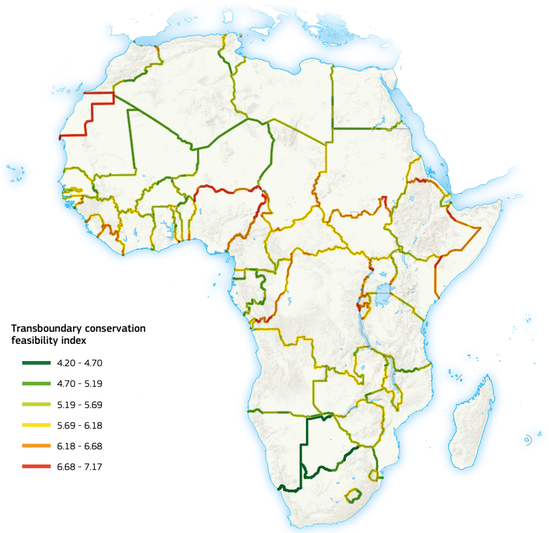
At the same time, IUCN established a task force within the World Commission on Protected Areas with the purpose of stimulating transboundary protected areas for peace and cooperation[3]. By 2001, the task force reported the existence of 166 transboundary protected areas globally, comprising 666 individual conservation zones[3]. According to the latest assessment in 2007, 222 transboundary protected areas, incorporating 3043 individual protected areas or internationally designated sites globally[4].

The feature map shows 27 existing Transboundary Conservation Areas (TBCAs) in Africa, covering roughly 850000 km², encompassing more than 500 protected and conserved areas (including different designations for the same sites)[5]. Based on connectivity and geographical adjacency, a total of 8481 potential TBCAs were identified[5], representing possible combinations of 2326 individual protected areas. A few large and well-connected new TBCAs could potentially provide protection against future threats, such as climate change, by ensuring that transboundary connectivity is maintained to mitigate impacts of species range shifts. However, the larger majority of potential TBCAs are made up of small and poorly connected protected sites, which would require strong investment in enhancing ecological connectivity via improved collaboration, protected area expansion, and restoration[5].

The feasibility of transboundary conservation initiatives.

This feasibility index combines the strength of governance in neighbouring countries, their international collaboration, and human pressure at country borders to estimate the feasibility of establishing transboundary protected areas. Higher values signify areas where transboundary conservation may be more feasible.

Source: Mason, N., et al. (2020) Global opportunities and challenges for transboundary conservation. *Nature Ecology and Evolution*, *4*, 694–701.



However, transboundary conservation feasibility goes beyond geographical proximity. The secondary map represents country boundaries that may be suitable for establishing transboundary conservation areas. It is based on a feasibility index that combines the strength of governance in neighbouring countries, their international collaboration, and human pressure at country borders[6].

In southern Africa, the Peace Parks Foundation and SADC regional economic community stimulated transboundary conservation under the Protocol on Wildlife Conservation and Law Enforcement (1999), which defined a transfrontier conservation areas as *"a component of a large ecological region that straddles the boundaries of two or more countries encompassing one or more protected areas as well as multiple resource use areas"*. Under the Protocol, the objectives of transfrontier conservation areas are to collaboratively manage shared natural and cultural resources across international boundaries for improved biodiversity conservation and socio-economic development[7]. In SADC, the Great Limpopo Transfrontier Park was the first of six planned peace parks across South Africa's borders. It was created in 2002 by officially combining Limpopo, Kruger and Gonarezhou national parks across the South Africa, Zimbabwe and Mozambique borders. The second phase of the Great Limpopo Transfrontier Conservation Area – which also includes communal areas and private reserves – extends to almost 100000 km², larger than Portugal.

The Limpopo River near Crook's, the point where borders between Mozambique, South Africa, and Zimbabwe converge.

The Great Limpopo Transfrontier Park combines the Limpopo, Kruger and Gonarezhou National Parks across Mozambique, South Africa, Zimbabwe. In 2002, the presidents of the respective countries signed the international treaty establishing the transfrontier park.

Source: OwProfberger on Wikimedia Commons CC BY-SA 3.0.

The W-Arly-Pendjary Complex is a huge international complex of protected areas spanning about 10000 km² along the Niger River across three countries: Niger, Benin and Burkina Faso. Transforming this natural reserve into a true peace park to promote international cooperation and conflict resolution will require improving both the management of the broader socio-ecological system as well as the governance of resources by bordering populations. The W-complex has been a UNESCO World Heritage site since 1996[8].

W National Park spanning the borders of Niger, Benin and Burkina Faso.

An old information board showing the species in W National Park bordering Niger, Benin and the Haute Volta, former name for Burkina Faso. This conservation area was originally established by colonial authorities in 1926, lending its name from the shape of the Niger River in the northern part of the area (shown in the upper-right of this signboard).

Source: Andrea Batta on flickr CC BY 2.0.

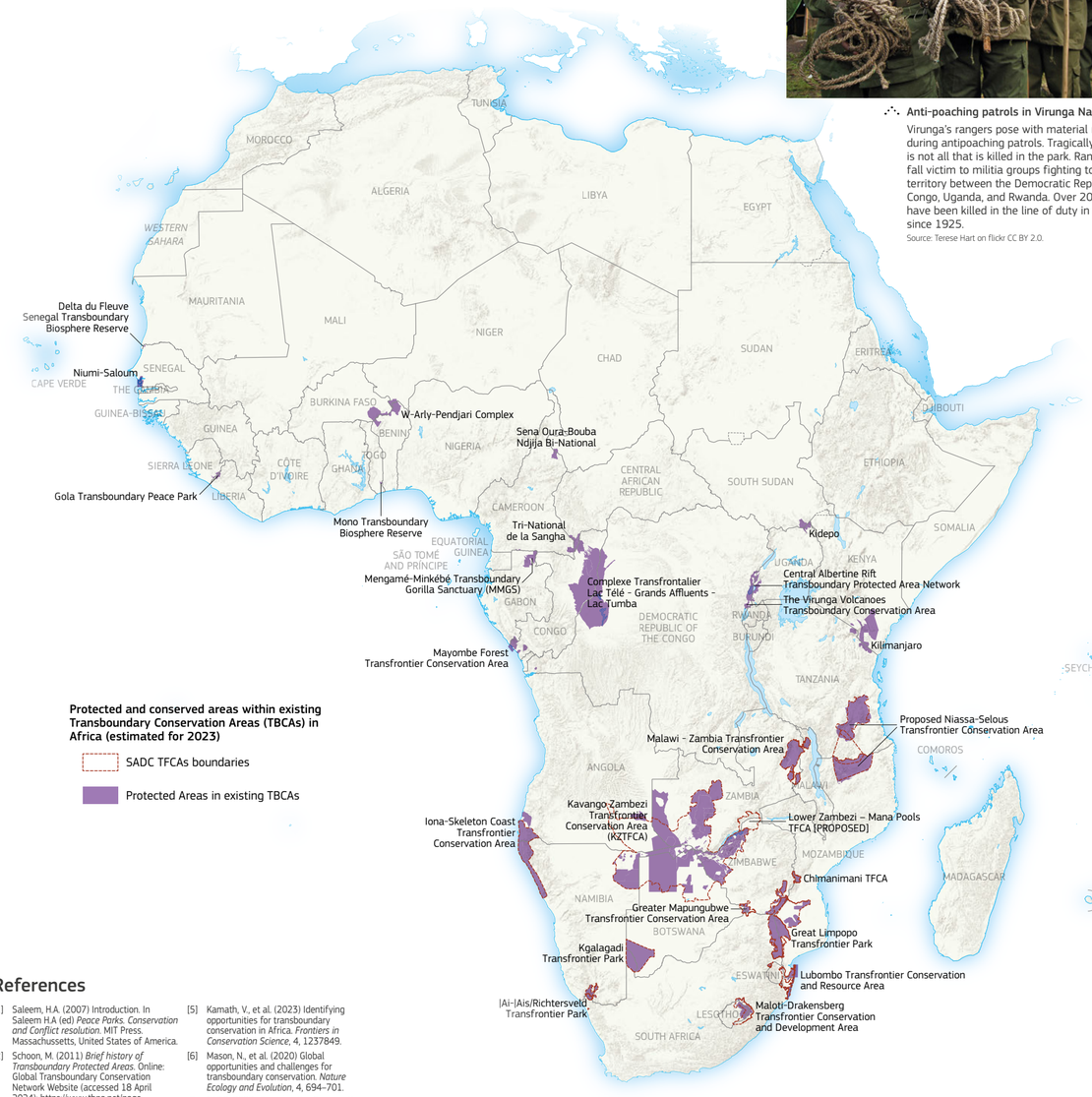
The Greater Virunga Landscape includes Virunga National Park in the Democratic Republic of the Congo and ten contiguous protected areas in Uganda and Rwanda. This landscape is famous for the population of mountain gorillas (*Gorilla beringei beringei*)[9]. Wildlife densities increased since the establishment of protected areas in the 1920-30s, but these recoveries were jeopardised by poaching and civil conflict. The attractiveness of gorillas for tourism revitalised conservation efforts, first in Rwanda and in neighbouring countries through the International Gorilla Conservation Program. The Greater Virunga Landscape includes at least 32 species that need coordinated management between protected areas, both across international borders and between institutions within the same country[9].

Conservation across international borders will become more important as long as pressures on biodiversity continue to worsen. This will require international cooperation and diplomacy, which can be enabled by credible biodiversity information that form a foundation for deeper engagement and trust.

Anti-poaching patrols in Virunga National Park.

Virunga's rangers pose with material recovered during antipoaching patrols. Tragically, wildlife is not all that is killed in the park. Rangers often fall victim to militia groups fighting to control territory between the Democratic Republic of the Congo, Uganda, and Rwanda. Over 200 Rangers have been killed in the line of duty in the park since 1925.

Source: Terese Hart on flickr CC BY 2.0.



Protected and conserved areas within existing Transboundary Conservation Areas (TBCAs) in Africa (estimated for 2023).

Existing African TBCAs tend to be large complexes (median surface area = 10041 km²) made up of multiple conservation areas (median = seven protected areas). The Southern Africa Development Community (SADC) also defines boundaries of transfrontier conservation areas beyond the extent of protected areas.

Source: Kamath, V., et al. (2023) Identifying opportunities for transboundary conservation in Africa. *Frontiers in Conservation Science*, *4*, 1237849.

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5.3.4 NaturAfrica

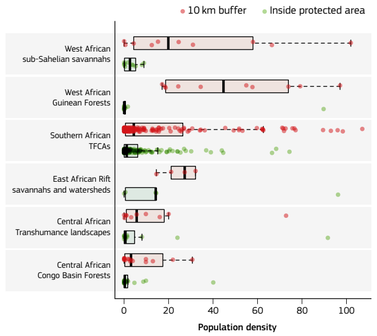
The European Union's Biodiversity Strategy for 2030 announced the launch of NaturAfrica, an initiative to conserve nature while supporting opportunities for locals in green sectors. NaturAfrica offers a modern take on conservation because it looks beyond the borders of protected areas and considers wider landscapes and the people who live there. While this initiative has tremendous opportunity, it will also face novel challenges that will require new forms of problem solving.

NaturAfrica is a policy initiative led by the European Union (EU) to support nature conservation in Africa, using a people-centred approach to improving sustainable livelihoods[1]. It was first announced in 2020 as part of the EU Biodiversity Strategy 2030[2] with a brief statement of intent that "*the EU will step up support to partner countries across the world to achieve the new global targets, fight environmental crime, and tackle the drivers of biodiversity loss. In Africa, the EU will launch the NaturAfrica initiative to protect wildlife and key ecosystems while offering opportunities in green sectors for local populations*". Although that statement seemed straightforward, its implementation is much more complex because it involves multiple objectives, a variety of stakeholders, and a dynamic policy process that evolves with time.

NaturAfrica intends to integrate strictly protected areas with privately, publicly, or communally owned land in production landscapes, where people work with nature rather than against it. Responsibility for managing sites in an ecologically and economically sustainable way is devolved to local communities, but coordinated regionally.

It would not be possible to launch an initiative like this across the whole continent simultaneously, so the European Commission designed a meta-landscape approach for implementation. NaturAfrica includes six broad-scale meta-landscapes across sub-Saharan Africa, which combine multiple Key Landscapes for Conservation and Development (KLCDs). KLCD were first identified the as part of the EU's strategic approach to wildlife conservation in Africa and its landmark "Larger than Elephants" report[3]. These landscapes were identified for being large enough to sustain viable populations of African wildlife and functional ecosystems, while simultaneously being the strategic focus for developing the rural economy through the sustainable use of natural resources[3]. The boundaries of these KLCD are not rigid and are currently being revised in the context of NaturAfrica (which is why they are blurred in the feature map).

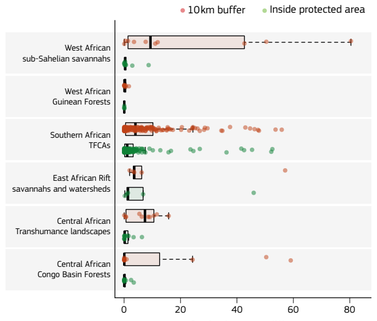
Expanding the focus of NaturAfrica to KLCDs beyond the boundaries of individual protected areas introduces novel challenges. When considering the protected areas earmarked to receive direct support from the EU, existing information suggests that a whole-landscape approach will need to navigate situations with higher human populations and more cultivation for croplands. This is accompanied by higher levels of moderate and severe land degradation. Therefore, NaturAfrica initiatives will need to adapt in order to implement conservation interventions in human-dominated landscapes.



Higher human populations in landscapes around protected areas.

Here, each point shows the population density in the protected areas within NaturAfrica landscapes, compared to population densities in the 10 km buffers surrounding the protected areas. Data are aggregated at the meta-landscape level (summarised as boxplots). In all instances, population densities are higher in the landscapes around protected areas.

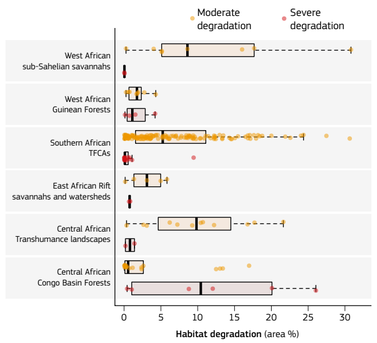
Source: Own calculations based on data from the Digital Observatory for Protected Areas (https://dopa-explorer.jrc.ec.europa.eu/)



Increase cultivation in landscapes around protected areas.

Here, each point shows the cropland coverage in the protected areas within NaturAfrica landscapes, compared to cropland cover in 10 km buffers surrounding the protected areas. Data are aggregated at the meta-landscape level (summarised as boxplots). Clearly, there is more agricultural activity in the landscapes around protected areas.

Source: Own calculations based on data from the Digital Observatory for Protected Areas (https://dopa-explorer.jrc.ec.europa.eu/)



Land degradation in NaturAfrica protected areas.

Here, each point shows the coverage of moderately and severely degraded land in protected areas within NaturAfrica landscapes, aggregated at the meta-landscape level (summarised as boxplots). In forested meta-landscapes (West African Guinean Forests and Central Africa Congo Basin forest), severely degrade land is more prevalent than moderately degraded land. The opposite is true for meta-landscapes in savannahs and open ecosystems.

Source: Own calculations based on data from the Digital Observatory for Protected Areas (https://dopa-explorer.jrc.ec.europa.eu/)

To tackle these novel challenges, NaturAfrica acknowledges that it needs a hierarchy of interventions across all levels.

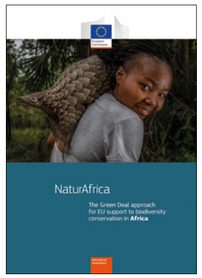
At the landscape level, NaturAfrica aims to:

1. **Strengthen capacity for inclusive conservation across key landscapes**. This includes efforts to manage protected areas and other effective area-based conservation measures (OECMs) more effectively, and improve the integrity and connectivity between these conserved areas.
2. **Enhance access to sustainable green economy livelihoods for all local community members**. This includes opportunities for micro- and small-enterprises in peripheral areas for agroforestry, agroecology, rangeland management, and nature-based tourism; as well as feasibility studies for novel opportunities, like payments for ecosystem services.
3. **Strengthen capacity for land use governance and natural resource management**. This entails developing and implementing participatory spatial land use planning and strategies for exploiting natural resources sustainably.

At the regional level (meta-landscapes and beyond), NaturAfrica aims to:

1. **Enhance awareness and access to information on conservation and sustainable use of biodiversity**. This includes supporting knowledge sharing platforms that underpin research, data collection, and evidence-based policy.
2. **Increase capacity of natural resource managers to manage protected areas and their surrounding ecosystems**. This entails training natural resource managers and establishing communities of practice on conservation, green economy development, and territorial governance.
3. **Enhance regional coordination and policy harmonisation**. This will foster trans-border cooperation to harmonise land use practices across landscapes and align policies across jurisdictions to ensure compliance with international protocols and conventions.

This feature map shows the protected areas that have been identified to receive direct support from the European Commission under NaturAfrica. However, these are not the only protected areas supported under the much larger NaturAfrica initiative, which also includes contributions from EU Member State. The entirety of NaturAfrica is a step-change the way Europe supports African conservation. This is not only challenging technically. It also requires an approach to conservation that is more fluid and open, because land-management is no longer characterised by the clear boundaries of protected areas, but rather by transient edges defined by humans and their changing interactions with nature.



NaturAfrica.

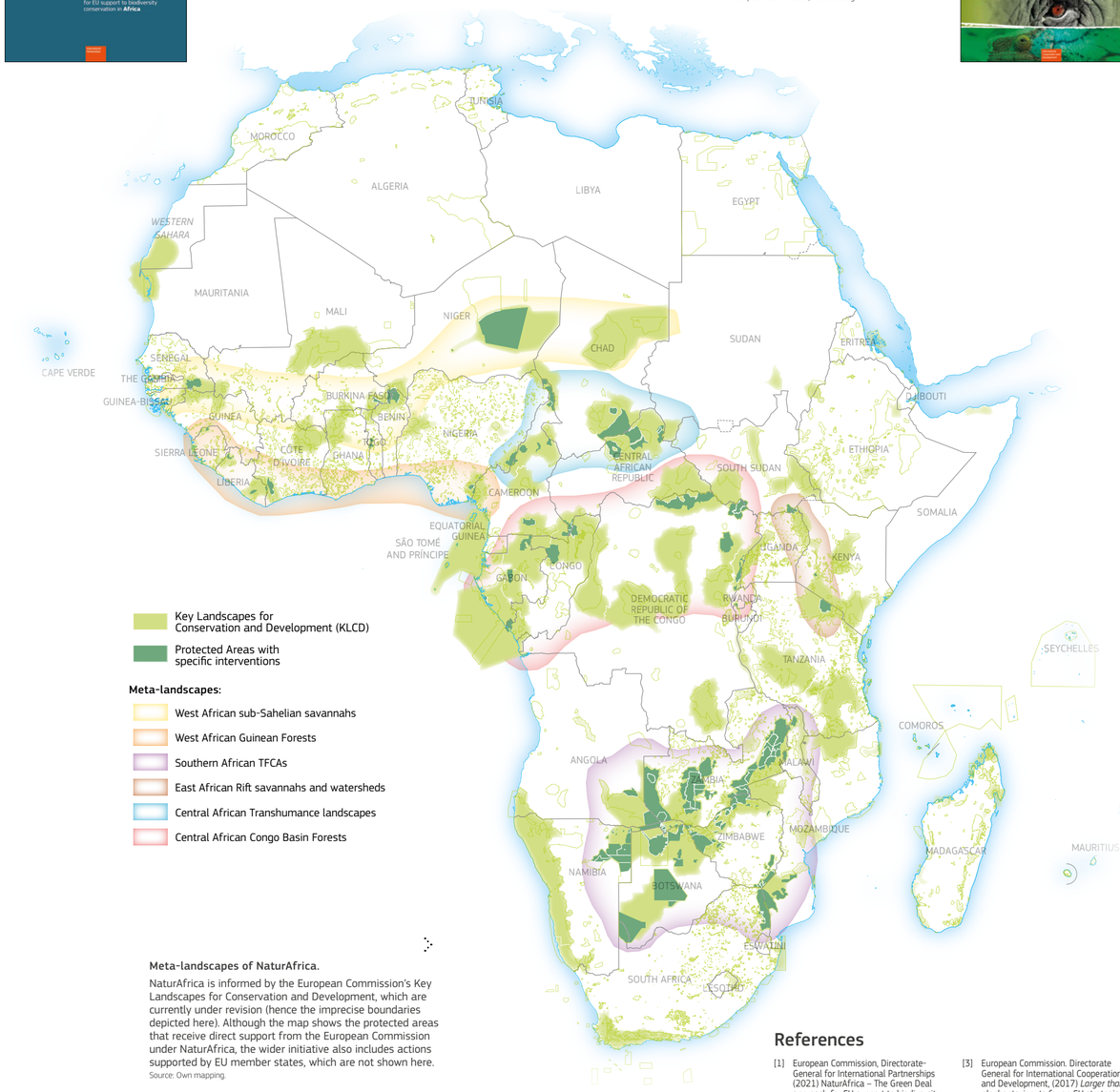
The cover of the informational document describing NaturAfrica.

Source: European Commission, Directorate-General for International Partnerships (2021) NaturAfrica – The Green Deal approach for EU support to biodiversity conservation in Africa. Publications Office of the European Union. https://data.europa.eu/doi/10.2841/09962

Larger than Elephants.

The cover of the flagship report that first identified the Key Landscapes for Conservation and Development (KLCD) as part of the EU's strategic approach to wildlife conservation in Africa. Revised versions of these KLCD now form the foundation of NaturAfrica.

Source: European Commission. Directorate General for International Cooperation and Development, (2017) *Larger than elephants: inputs for an EU strategic approach to wildlife conservation in Africa: synthesis*. Publications Office of the European Commission, Luxembourg.



Meta-landscapes of NaturAfrica.

NaturAfrica is informed by the European Commission's Key Landscapes for Conservation and Development, which are currently under revision (hence the imprecise boundaries depicted here). Although the map shows the protected areas that receive direct support from the European Commission under NaturAfrica, the wider initiative also includes actions supported by EU member states, which are not shown here.

Source: Own mapping.

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[1] European Commission, Directorate-General for International Partnerships (2021) NaturAfrica – The Green Deal approach for EU support to biodiversity conservation in Africa. Publications Office of the European Union. https://data.europa.eu/doi/10.2841/09962.

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[3] European Commission. Directorate General for International Cooperation and Development, (2017) *Larger than elephants: inputs for an EU strategic approach to wildlife conservation in Africa: synthesis*. Publications Office, Luxembourg.