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Working Paper

The evolution of community based conservation and implications for Danish development cooperation

DIIS Working Paper, No. 2021:16

Provided in Cooperation with:
Danish Institute for International Studies (DIIS), Copenhagen

Suggested Citation: Funder, Mikkel; Ladekjær Gravesen, Marie (2021) : The evolution of community based conservation and implications for Danish development cooperation, DIIS Working Paper, No. 2021:16, ISBN 978-87-7236-069-0, Danish Institute for International Studies (DIIS), Copenhagen

This Version is available at:
https://hdl.handle.net/10419/250098

DIIS WORKING PAPER 2021: 16

Biodiversity and development:

THE EVOLUTION OF COMMUNITY BASED CONSERVATION AND IMPLICATIONS FOR DANISH DEVELOPMENT COOPERATION

Mikkel Funder and Marie Ladekjær Gravesen

Acknowledgements
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DIIS Working Paper 2021: 16
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ISBN 978-87-7236-069-0 (pdf)
DIIS publications can be downloaded free of charge from www.diis.dk

THE EVOLUTION OF COMMUNITY BASED CONSERVATION AND IMPLICATIONS FOR DANISH DEVELOPMENT COOPERATION

Mikkel Funder and Marie Ladekjær Gravesen

DIIS · DANISH INSTITUTE FOR INTERNATIONAL STUDIES

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LIST OF ABBREVIATIONS

CBC	Community Based Conservation
CBD	Convention on Biological Diversity
CSO	Civil Society Organisation
EbA	Ecosystem-based Adaptation
FPIC	Free Prior and Informed Consent
ICCA	'Territories and areas conserved by indigenous peoples and local communities'
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IUCN	International Union for Conservation of Nature
NbS	Nature-based Solutions
OECM	Other effective area-based conservation measures
PES	Payment for Ecosystem Services
UNFCCC	United Nations Framework Convention on Climate Change
WTO	World Trade Organisation

ABSTRACT

Biodiversity conservation is critical to address the loss of species and ecosystems, and a key component in Nature-based Solutions to development and climate change challenges. Denmark's strategy for development cooperation aims to strengthen biodiversity conservation and emphasises the importance of inclusive approaches. This DIIS Working Paper provides an overview of the evolution of community-based biodiversity conservation approaches, discusses selected overall lessons, and provides recommendations for Denmark's development cooperation.

SUMMARY

Loss of nature and biodiversity constitutes a major global crisis for environment and development and interacts closely with the climate crisis. Denmark has historically provided support to biodiversity conservation in a number of countries. After a period of limited attention, conservation is again rising on the agenda of Danish development cooperation, especially in the context of Nature-based Solutions (NbS) which form part of Denmark's strategy for development cooperation. In connection to this, the strategy emphasises the importance of an inclusive approach:

'Our climate and environment interventions must strengthen human rights and ensure that no one is left behind [..]. It is also vital to ensure local involvement of citizens in green initiatives. This applies particularly in relation to indigenous peoples and environmental activists, who have a crucial role in protecting and strengthening biodiversity as well as preventing and addressing climate change, environmental degradation and destruction of nature caused by humans' (MoFA/Danida, 2021b:34).

In the support to biodiversity conservation, attention to Community Based Conservation (CBC) will thus be critical. This working paper provides an overview of the evolution of community-based biodiversity conservation approaches since the 1980s, where new approaches are heading, and what the overall lessons are so far. The working paper focuses on the socioeconomic and governance dimensions of CBC and draws particularly on experiences from area-based conservation in the African setting.

On this basis, the working paper emphasises the following lessons learnt from CBC in the context studied:

- CBC has developed and expanded but is not yet consolidated on the ground
- CBC must be better anchored in local livelihoods and economies
- Economic compensation and income substitution is not enough in itself
- A growing emphasis on CBC in 'working landscapes' offers potential
- Devolved access rights are critical for successful CBC
- National associations and networks have been important platforms for CBC advocacy
- There is a need to strengthen horizontal and vertical links for CBC

The working paper recommends that, overall, Denmark should:

1. **Strengthen support to CBC outside traditional protected areas.** There is a growing global consensus that biodiversity goals can only be achieved by focusing more on conservation outside conventional protected areas. This offers opportunities for both conservation and community development, but it also poses a risk of 'green grabbing'. Denmark can play an important role in helping to ensure that conservation in these spaces is done in the right and most effective way, i.e. that it benefits biodiversity while also strengthening the livelihoods and rights of communities.

2. **Integrate support to CBC with support to climate change adaptation and resilience,** through a Nature-based Solutions approach. If done right, Ecosystem Based Adaptation

offers good scope for protecting and improving the conditions for both biodiversity conservation and development.

3. **Support protection of the land- and governance rights of communities and indigenous peoples in biodiversity conservation**. Denmark should further advance legal recognition and enforceable safeguards of rights-based approaches in the implementation of the CBD's post-2020 global biodiversity framework and support practical application of the IUCN's Natural Resource Governance Framework and standards for Nature Based Solutions. Denmark should furthermore prioritise multilateral and bilateral support to conservation initiatives that actively sustain and strengthen community land rights as part of the solution.

In terms of specific approaches to CBC, it is recommended that Denmark should:

4. **Support CBC approaches that transcend the conventional separation between human production and conservation.** This entails a broad approach to biodiversity conservation which goes beyond species protection in isolated islands of 'wild nature'. A key emphasis should be on supporting CBC in 'working landscapes', i.e. strengthening existing sustainable production systems in crop farming areas, rangelands, forests, wetlands, urban areas etc. Examples include farming- and grazing systems that support key pollinators and provides micro-habitats for endangered species, or community management of urban water flows and wetlands to enhance species habitats and provide clean water and flood regulation. Approaches that essentially follow NbS principles.

5. **Support CBC schemes to become more firmly anchored in local resource use economies.** Many conventional CBC schemes - especially in the African setting – are heavily dependent on international leisure markets such as tourism/hunting and on recurrent donor funding. This poses major risks, as illustrated by the major funding concerns for African conservation following the Covid-19 epidemic. A more diversified strategy is needed. In particular it is essential to anchor community conservation benefits and incentives better in existing local production systems, economies, and institutions. Danish development cooperation should help support this, thereby also working to make itself expendable in the long term, which would again be aligned with NbS principles.

6. **Facilitate bio-cultural approaches to the governance of biodiversity conservation**. This means accepting a diversity of conservation values and that conservation will look different from place to place. It entails an approach in which CBC arrangements are tailored to the socio-ecological and cultural context - rather than following a universal model - but which also builds broader nested governance frameworks for negotiation, decision-making, conflict resolution and knowledge sharing. Danish development cooperation can support this by (i) facilitating arrangements that improve the horizontal linkages between local actors in CBC, e.g. joint planning and conflict resolution mechanisms between pastoralists, small-scale crop farmers and tourism industry, and (ii) strengthening the vertical governance linkages in CBC, i.e. providing greater representation of communities and/or CBC associations in national land use and biodiversity planning and decision-making.

7. **Alongside place-based conservation, it is critical to sustain and strengthen Denmark's efforts to engage with the broader drivers of biodiversity loss** at global and national levels. While CBC is critically important for conservation, it cannot on its own address wider drivers of biodiversity loss. Options for Denmark's MoFA to address this includes work through the 'normative track', e.g. the CBD and UNFCCC Land Use and Forestry negotiations but also other international arenas such as WTO and related trade regimes. Multilateral and bilateral support can further help address the wider drivers, e.g. uptake and implementation of certification schemes and mainstreaming biodiversity into national policies, including agriculture, is also critical.

An extended version of the recommendations can be found in section 6 of this working paper.

INTRODUCTION

Background

The ongoing loss of nature and biodiversity constitutes a major global crisis for environment and development and is closely entwined with the climate crisis. Decades of conservation efforts have led to some successes but also many failures. In 2020, the CBD's 5th Global Biodiversity Outlook found that none of the 20 Aichi Targets set for 2011-2020 had been fully achieved in neither biological nor social terms (CBD, 2020; FPP/CBD, 2020). Collaborative efforts to address biodiversity conservation are therefore more important than ever.

Denmark has historically provided support to biodiversity conservation in a number of countries in Latin America, Southeast Asia and Africa. This has taken the form of both bilateral cooperation (including the former Danced support as well as Danida support); multilateral assistance (including support to the GEF and IUCN) and indirectly through support to Danish NGOs who have worked on community-based-conservation in the Global South (e.g. WWF, CARE and MS/ActionAid).

After a period of limited attention in Danish development cooperation, support to biodiversity conservation is again rising on the agenda - especially in the context of Nature-based Solutions (NbS), which form part of Denmark's strategy for development cooperation (MoFA/Danida, 2021a, 2021b).

In this work, attention to Community Based Conservation (CBC) will be critical. As part of its conclusion on the Aichi Targets, the CBD's Global Biodiversity Outlook found *'The need to strengthen further […] the role of indigenous peoples and local communities and the level of stakeholder engagement'* (CBD, 2020:11).

In extension of this, the First Draft of the CBD's post-2020 Framework for Biodiversity Conservation points to equitable management and sharing of resources and calls for 'a participatory and inclusive whole-of-society approach' as a key enabling factor for achieving conservation objectives (CBD, 2021:4). It sets out 21 targets for 2030, of which one is to '*Ensure equitable and effective participation in decision-making related to biodiversity by indigenous peoples and local communities, and respect their rights over lands, territories and resources, as well as by women and girls, and youth'* (CBD, 2021:7).

CBC is also relevant in the context of global climate change frameworks. For example, at the UNFCCC COP26, Denmark signed the Glasgow Leaders' Declaration on Forest and Land Use which commits to halt and reverse forest loss and land degradation by 2030. The declaration includes an aim to strengthen efforts that: '*…reduce vulnerability, build resilience and enhance rural livelihoods, including through empowering communities, the development of profitable, sustainable agriculture, and recognition of the multiple values of forests, while recognising the rights of Indigenous Peoples, as well as local communities, in accordance with relevant national legislation and international instruments, as appropriate*'.

These ambitions are in line with, Denmark's strategy for development cooperation which states: *'Our climate and environment interventions must strengthen human rights and ensure that no one is left behind [..]. It is also vital to ensure local involvement of citizens in green initiatives. This applies particularly in relation to indigenous peoples and environmental activists, who have a crucial role in protecting and strengthening biodiversity as well as preventing and addressing climate change, environmental degradation and destruction of nature caused by humans' (MoFA/Danida, 2021b:34).*

Focus of the working paper

Denmark's support to biodiversity conservation can and should draw on CBC approaches. However, approaches to CBC have developed and diverged in recent years and are the subject of vigorous debate.

The aim of the current working paper is therefore to provide an overview of the evolution of CBC approaches since the 1980s, where new approaches are heading, and what the overall lessons are so far. It has a particular focus on the socioeconomic and governance dimensions of CBC. The working paper draws particularly on experiences from area-based conservation in the African setting, which Denmark and other donors have supported in especially East and Southern Africa. It concludes by providing a set of overall recommendations for Danish development cooperation.

The note forms part of a broader study conducted by DIIS with funding from Denmark's Ministry of Foreign Affairs on selected aspects of Nature-based Solutions. A previous working paper addressed Ecosystem-based Adaptation, including the relationship between conservation and adaptation (Gravesen & Funder, 2021). A case study of Sahel's 'Green Wall' is under preparation. It should be emphasised that the working paper is based on a desk study of selected literature, although backed up by earlier field experience of the authors.

Box 1. Definitions

Biodiversity: 'The variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.' (IUCN, 2021)

Conservation: 'The protection, care, management and maintenance of ecosystems, habitats, wildlife species and populations, within or outside of their natural environments, in order to safeguard the natural conditions for their long-term permanence.' (IUCN, 2021)

Community Based Conservation: 'Protection of biodiversity and ecosystems by, for, and with the local community' (Berkes, 2021; D Western & Wright, eds, 1994).

Nature-based Solutions: 'Actions to protect, sustainably manage and restore natural and modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefit' (IUCN, 2016).

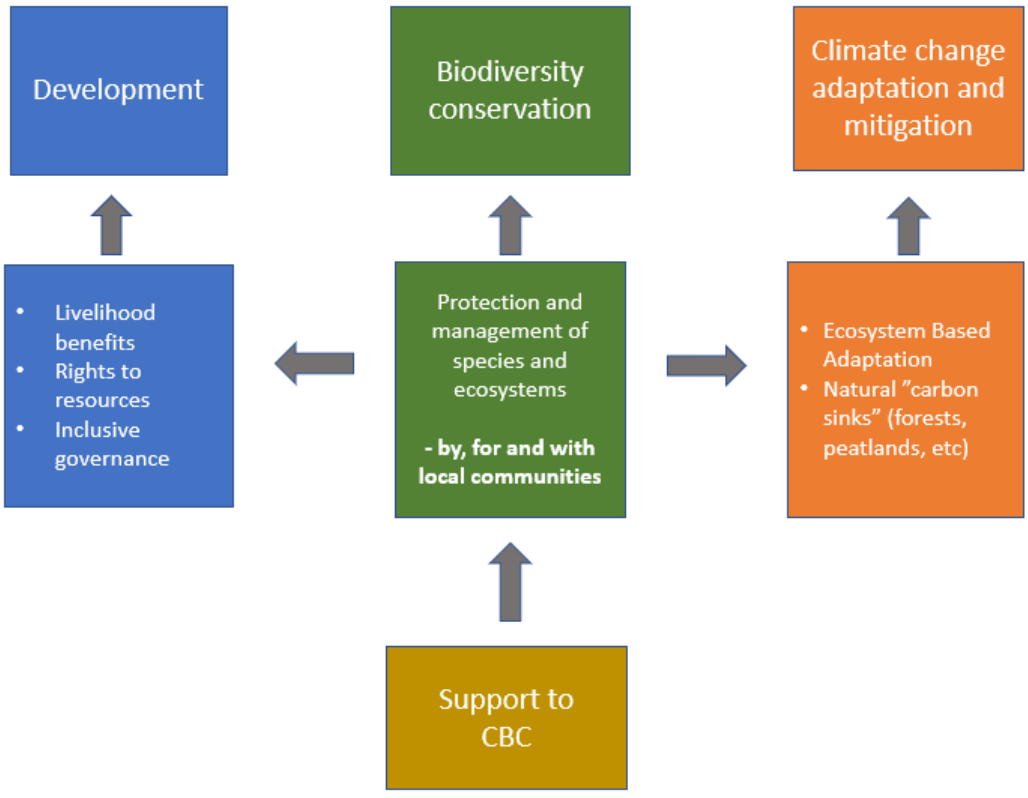
THE CASE FOR COMMUNITY BASED CONSERVATION

CBC and Nature-based Solutions

Biodiversity conservation is a key component of Nature-based Solutions (NbS). If done right, protection of species and ecosystems are key to securing sustained water, food, income and well-being for humans, and can be a core element in climate change adaptation and mitigation. Likewise, wise management of natural resources for human development through NbS can sustain and restore wildlife populations, forests, wetlands, marine areas and other ecosystems.

CBC can be a key means to achieve these aims (Figure 1). Here we understand CBC as the protection of biodiversity and ecosystems 'by, for, and with the local community' (Berkes, 2021; D Western & Wright, eds, 1994). This includes management but also sustainable use of a species, their habitats and other ecosystem resources by local communities. CBC thereby differs from conventional conservation which has tended to be driven and managed by government institutions, often in a protected area context.

Figure 1: Ideal role of Community Based Conservation in Nature-based Solutions



Box 2. Example of CBC - Strong Roots Congo

Kahuzi-Biega National Park in eastern DRC is renowned for its rich biodiversity, including 350 bird species and the endemic Grauer gorilla. It is also home to the Batwa people, who depend on the forest for their livelihood and cultural traditions. Forests in eastern DRC are generally threatened by persistent conflicts, high poverty rates, and high demands on the forest material – from minerals to charcoal. Moreover, mixed conservation efforts have over the years impacted the public support for conservation, where many in the general population associate the concept 'conservation' with something essentially colonial. Notably, previous efforts included the forceful displacement of thousands of people from the communities in and around the forest in the 1970's, which effectively turned them into conservation refugees. In addition, mining companies have increased the pressure on areas designated as community forests (see section 'The evolution of CBC' for conservation practices prior to the 1980s).

In 2009 the local organisation Strong Roots Congo was founded partly by descendants of the formerly displaced community members. The organisation aims to overcome forest and wildlife conservation challenges by addressing the needs and rights of communities in and around the national park (see: www.strongroots.org).

An example is the establishment of a habitat corridor for the Grauer gorilla that connects Kahuzi-Biega National Park with Itombwe Nature Reserve. Here, the organisation collaborates with chiefdoms across a non-protected area of c. 3500 km^2. Based on both scientific and indigenous knowledge and practices, the organisation supports sustainable livelihood activities hinged on reforesting the corridor with indigenous tree species. Strong Roots Congo furthermore helps to secure the land along the corridor as communal tenure for the communities. In addition, participatory mapping ensures that sacred areas of traditional importance to the communities are considered in the planning of the corridor. The tenure security of the communities' land protects them from being appropriated by foreign extractive industries.

Strong Roots Congo works with a broad spectrum of stakeholders, including the DRC government, local communities, traditional leaders, and other conservation actors operating in the area.

Potential development benefits of CBC

From a human development perspective, CBC can ideally contribute to development objectives through the following benefits:

- Environmental benefits, including the benefits from protection and restoration of key livelihood resources such as water, soils, pasture, forest resources and protein, and through

more indirect but equally critical ecosystem benefits such as pollination, water retention and filtration, gene preservation etc.
- Economic benefits, including a sustained basis for community production systems and land use; improved and more secure access rights to natural resources; livelihood diversification opportunities; employment and supplementary incomes from e.g. tourism; and access to improved credits and new markets as a follow-on from the above.
- Social and cultural benefits, such as education and health services financed by CBC schemes, social organisation and cohesion benefits, strengthened collective identities, values and mental well-being.
- Governance benefits, including greater local land and resource control, new platforms for participation and representation in decision-making and/or advocacy on natural resources and land use at local, national and international scale, and increasing peace and security as a result of collective action.
- Resilience benefits, including improved basis for dealing with risk and uncertainty resulting from climate change and other negative pressures, as a result of the above and in particular greater control over resource management and ability to respond quickly, flexibly and based on location-specific knowledge and experience.

Potential conservation benefits from CBC

The justification for CBC often focuses mainly on development benefits. However, the potential of CBC as a contributor to biodiversity conservation objectives are equally important. These can be summarised as follows:

- **The scale and extent of conservation efforts required in coming decades is very substantial**, especially given that conservation is a means not only to secure biodiversity but also an important aspect in land use and forest-related dimensions of climate change mitigation. This requires an effort beyond the ability of most government agencies and funds. Past experiences with conventional protected area management in developing countries furthermore suggest that governments often lack the reach, budgets and staffing to effectively manage protected areas and other forms of area-based conservation (P Lindsey et al., 2021). This can lead governments to prioritise a few protected areas (e.g. those with highest tourism revenue potential) while abandoning the rest as 'paper parks'. Through CBC, the conservation of species and ecosystems is instead devolved to actors who are already 'on the ground' and who, under the right circumstances, have a direct interest in ensuring sustained management, assuming these are well integrated in local economies (Berkes, 2021).
- **In a context of growing environmental uncertainty and highly varied local impacts**, adaptative management approaches will increasingly be key to secure biodiversity conservation. Locally anchored initiatives and institutions are well suited for this, while centralised approaches often struggle in such situations (Friis-Hansen, 2017; Makondo & Thomas, 2018; Westoby et al., 2021).

- As pointed out by socio-ecological systems research**, biodiversity and human resource use cannot be understood or managed independently** of each other (David Western et al., 2020). Local resource use practices can have negative effects on biodiversity but have often also played a major role in creating what we see as 'natural' ecosystems today (Homewood & Rodgers, 2004). Local land users thus inevitably play a key *de facto* role in the everyday shaping of ecosystems, and conservation will therefore fail if they are left out of the equation.
- **Local legitimacy of conservation efforts is critical**. Studies of protected area management and forest conservation initiatives illustrate how conservation efforts loose legitimacy and support among local citizens if they fail to involve and benefit local stakeholders (Benjaminsen et al., 2013; Chomba et al., 2016; Duchelle et al., 2019; Hein et al., 2020). As a result, efforts to regulate natural resource use become inefficient or may fail as they are ignored or directly countered by communities. Conversely, local interest in and support to biodiversity conservation can drive conservation action and can also help monitor and constrain unsustainable resource use by external actors, including governments (Campos-Silva et al., 2018; Slough et al., 2021; Soliku & Schraml, 2018).
- **Local knowledge and experiences with ecosystem management** can be critical to getting NbS approaches right in biological terms. For example, poorly conceived NbS activities can be detrimental to biodiversity by introducing mono-culture forests for erosion-control and water retention, or a new crop or fodder species that copes well with drought but is invasive. Local knowledge of indigenous tree species, crops and adaptation measures can help avoid this, while monitoring of the effects of conservation measures can provide national and international learning, either on its own or as part of multiple evidence approaches (Danielsen et al., 2021; Makondo & Thomas, 2018; Tengö et al., 2017).

Theoretically, the case for CBC is thus appealing and highly relevant to current global challenges. These ideals are however by no means guaranteed and the ways to achieve them are contested. In the following we provide an overview of the evolution of CBC since the 1980s.

Box 3. Example of CBC - Nyandarua Tree Growers Association

In Nyandarua county in Kenya, the livelihoods of the majority of citizens are based on small-scale farming. The farmers typically have a primary focus on potatoes and dairy production but many also have set aside c. 0.5 hectares of their land for tree growing that can be sold as timber for construction, for electricity poles, or to be used for firewood. With assistance from the Forest and Farm Facility (an international development organisation with multilateral funding) and FAO, the member based Nyandarua Tree Growers Association have created incentives for the farmers to designate more space for trees on their farm plots. They developed an inventory of the trees grown on the members' lands, which in turn enabled them to negotiate better prices on the timber markets and access funds for buying saplings

This has provided an important source of income for the farmers that has provided economic security. The number of trees on the members' lands amount to 1.7 million, equal to USD 13.5 million when following the market rates. The association's ability to negotiate improved rates has resulted in the members willingness to increase the areas designated for trees by 50%. Although this project would not be considered a biodiversity conservation project in conventional terms, it contributes to conservation efforts by relieving the pressure on deforestation in public forests and protected areas, such as in the nearby Aberdare National Park. In addition, it nurtures a sustainable tree planting culture that supports the achievement of the government's national tree cover target to increase tree cover by 10% - a target that is already under pressure from Kenya's large-scale infrastructural and real estate developments that necessitates deforestation in other areas.

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THE EVOLUTION OF CBC

Indigenous conservation practices have historically been widespread. A number of customary lands, water, wildlife and pasture management practices that were at one time considered backward have since been shown to constitute wise approaches, which under the right conditions sustain both biodiversity and ecosystem services. Traditionally, many local lands use regimes have furthermore included culturally protected species and parts of e.g. forest and wetland- areas. Although often under pressure, some such practices continue to contribute directly to creating favourable conditions for biodiversity and/or iconic ecosystems today, ranging from coffee agro-forestry systems and sacred groves in India's Western Ghats (Berkes, 2021), via pastoralism in East African rangelands (Homewood & Rodgers, 2004; Little, 1996), to indigenous ecosystem management in the Amazon (Garí, 2001).

Until the 1970s, the role of communities was largely absent in conservation approaches. Instead, conservation was almost universally modelled on the conventional protected area approach, evolved from the creation of Yellowstone National Park (King, 2010). African communities already resident in these new protected areas were usually re-located. Following independence this classic protectionist approach largely continued, often driven by international funding to conservation, which consolidated mainstream approaches through support to institutional structures and staff training in the wildlife departments of African countries (Death, 2016; Neumann, 2002).

The 1980s: communities as beneficiaries

In the late 1970s and 1980s, the role of communities gradually gained attention in conservation debates. In 1975 the IUCN Kinshasa resolution recognised the existence of local populations in some protected area categories, especially in Latin America (Berkes 2021). In the African context, poaching and encroachment on protected areas was seen as a result of 'vicious circles' of poverty and environmental degradation, and therefore primarily as a result of improper resource use practices by communities.

In extension of this, some development donors began funding CBC activities as part of their poverty alleviation and 'rural development' projects. CBC projects at this time typically focussed on (i) awareness-raising, and (ii) developing 'alternative livelihoods', i.e. substituting the use of protected area resources with other forms of income. Conservation activities were driven by government staff and conservation organisations, and community participation was limited and primarily instrumental, i.e. aimed at facilitating government conservation goals. Financing of conservation and development activities often came from separate sources and thus tended to be uncoordinated (Borrini-Feyerabend, 2001).

The 1990s: communities as stakeholders

In the 1990s, CBC strategies developed a greater emphasis on integrating conservation and development efforts. In 1992 IUCN protected area categories were expanded to include 'Protected Landscape or Seascapes' (category V) and 'Protected Area with Sustainable Use of Natural Resources' (category VI). Both provided for sustained management and resource use to some extent, although these were add-on categories and thus rarely replaced higher status categories

such as National Parks. In African countries, the post-Cold War period furthermore saw a trend towards political decentralisation and economic liberalisation, which became reflected in approaches to natural resource management generally and CBC approaches specifically (Nelson et al., 2021; Ribot, 2004).

CBC efforts at this time began to pay greater attention to participation and representation of communities as stakeholders in conservation management, although typically within parameters already established at higher levels of government. The main thrust of CBC efforts was still on providing economic benefits to communities, but now with a greater emphasis on creating economic linkages between conservation and development. This included an emphasis on channelling revenues generated from commercial activities such as tourism and trophy hunting towards communities, thereby seeking to provide economic incentives for communities to support conservation. This was typically based on thinking in New Institutional Economics and 'Green Economics', which sought to bring out the economic value of conservation, with the assumption that it would equal or surpass the value of existing resource management practices. These approaches were particularly prominent in Southern African countries such as Zimbabwe, Zambia and Namibia with some related activities in East African countries, e.g. Tanzania. A number of development donors and international NGOs supported these schemes, which at the time were seen as leading models for CBC in the African context (Nelson et al., 2021).

The 2000s: communities as partners

The 2000s saw the articulation of what proponents called a 'New Paradigm' for protected areas management at the 2003 World Parks conference (Phillips, 2003). Driven especially by a growing acknowledgment of Indigenous People's (IP) role in conservation – including substantial areas not formally designated as protected areas - this approach called for greater recognition of the rights of IPs and communities in conservation and emphasised their knowledge and capacity in biodiversity conservation. This resonated with a concurrent growing focus on ecosystem-oriented 'landscape' approaches to conservation (Agersnap & Funder, 2001), and greater attention to the macro-level drivers of biodiversity loss. In this light, IPs and other local communities were now seen as 'stewards' and 'guardians of biodiversity and ecosystems – rather than as the main threat.

This led to a greater emphasis in CBC on fostering institutional arrangements through which communities could be brought into co-management partnerships alongside government agencies and conservation NGOs. In practice, this often consisted of support to community level mechanisms (CBOs) and occasionally local governments, through which local decision-making and conservation activities could be organised. National representation and influence of communities beyond the local level was however rare, except in the case of more general IP organisation and advocacy and – in a few countries – efforts to establish national networks of conservation CBOs and involved local governments. Global UN rights frameworks for IPs such as the 2007 FPIC (Free, Prior and Informed Consent) principles were also sought applied in the conservation context.

These efforts were however constrained by a number of factors. The 'new paradigm' raised concern in some conservation circles and was not universally adopted (see e.g. Locke & Dearden, 2005). Meanwhile, place-based biodiversity conservation and protected areas fell off the radar of

some development donors, who switched attention to climate change and global schemes such as REDD+. At the same time, the political space for devolved approaches in African countries - and elsewhere - turned out to be less forthcoming in reality than it appeared on paper, with political elites holding on to resource control and revenues, in some cases even rolling back devolution in natural resource governance. As a result, development of CBC significantly slowed in some African countries (Nelson et al., 2021; Ribot, 2004).

The 2010s – now: diverging approaches to CBC

In principle, establishment of the 2011-2020 Aichi Targets under the UN CBD paved the way for further development of CBC, including as it did promotion of 'sustainable use', 'enhancing benefits to all' and undertaking 'participatory planning' alongside biodiversity goals[1]. Adoption of the 2010 CBD Nagoya Protocol also provided some emphasis to indigenous knowledge, FPIC measures and local benefits (Buck & Hamilton, 2011). The IUCN has furthermore since 2016 developed a Natural Resources Governance Framework which provides principles and guidelines that aim to support and safeguard community rights and benefits from conservation (Springer et al., 2021). The recently adopted standards for Nature-based Solutions also include principles on local rights (Gravesen & Funder, 2021; IUCN, 2020 a). Since 2016 Indigenous Peoples organisations have been voting members of IUCN.

Alongside this, growing concern over the escalation of biodiversity loss and the inadequacy of existing frameworks has led to an increasing emphasis on the opportunities for conservation outside the existing protected area system. This has brought further attention to the importance of communities in conservation. An influential 2018 study estimated that 37% of what was classified as 'natural lands' is currently managed by Indigenous People, and that 40% of this intersects with protected areas and 'ecologically intact' landscapes such as primary forests, savannas and marshes (Garnett et al., 2018).

In extension of this there is growing emphasis on so-called 'Other Effective area-based Conservation Measures' (OECMs), i.e. activities where biodiversity conservation is not necessarily the primary or only aim, but nevertheless a result of it[2] (IUCN, 2019). Examples include communal rangeland systems, indigenous forest management practices or watershed management initiatives that also sustain or regenerate biodiversity. Alongside this the ICCA Consortium of CSOs have promoted the ICCA concept, which denotes Territories and Areas Conserved by Indigenous Peoples and Local Communities (ICCA, 2021)[3].

[1] The five overall goals of the Aichi Targets were: (1) Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society; (2) Reduce the direct pressures on biodiversity and promote sustainable use; (3). Improve the status of biodiversity by safeguarding ecosystems, species, and genetic diversity; (4) Enhance the benefits to all from biodiversity and ecosystem services and (5) Enhance implementation through participatory planning, knowledge management and capacity building.

[2] IUCN (2019:3) defines OECMs as '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'.

[3] ICCAs are characterised by (i) 'a close and deep connection between a territory or area and an indigenous people or local community', (ii) 'the custodian people or community makes and enforces decisions and rules (e.g., access and use) about the territory, area or species' habitat through a functioning governance institution', and (iii)

These developments further emphasise the critical role of communities in biodiversity conservation and thereby provide further potential for CBC. However, it also poses risks for communities as their everyday resource management and livelihoods now become fully exposed to the interests of other conservation actors.

the governance decisions and management efforts of the concerned people or community contribute to the conservation of nature (ecosystems, habitats, species, natural resources), as well as to community wellbeing'. (See www.iccaconsortium.org and ICCA 2021).

Box 4. Example of CBC - Zambia's Community Resource Boards

From 2002-2008 Denmark was one among several donors who supported CBC in Zambia. This involved support to the development of Community Resource Boards (CRBs) in selected districts adjoining National Parks. According to Zambia's Wildlife Act, CRBs are entitled to 45% of proceeds from wildlife hunting in so-called Game Management Areas. The Danish support aimed to enhance CRB organisation for this purpose in two districts, and to facilitate sustainable agriculture and alternative income generating activities. Support to the formation of a national association of CRBs was also provided.

A 2010 evaluation of the support found some positive outcomes in terms of local organisational strengthening and capacity development. However, it also found that the support had underestimated the need to involve ministerial levels and work cross-sectorally (Danida, 2010).

Subsequent research on Zambia's CRBs more generally has shown that community incomes have been limited in areas where hunting and tourism is not viable (Sakala & Moyo, 2017; Umar & Kapembwa, 2020). In other areas where wildlife is richer, central wildlife authorities have been reluctant to release hunting proceeds to communities in full (Davis et al., 2020; Matenga, 2015). One major cause of this is the government's under-funding of wildlife authorities, meaning that the latter are strongly reliant on proceeds from international hunting and tourism (P. A. Lindsey et al., 2014). CRBs have furthermore not been provided with inclusive decision-making rights over wildlife and other resources in the areas under their management, or any form of regulated access to nearby protected areas (Davis et al., 2020). Consequently, they have no mechanisms or incentives for regulating in-migration, forest clearing and poaching (P. A. Lindsey et al., 2014).

On the positive side, support to the development of the Zambia National Community Resources Board Association and other civil society platforms (e.g. the Zambian CBNRM Forum) have provided a means for communities and CSOs to organise and advocate for implementation and expansion of the national legal provisions for CBC of wildlife and forestry. Although challenges remain, a recent Wildlife Policy and Forest Act provides some promise for more devolved CBC (Davis et al., 2020; Nelson et al., 2021).

These experiences highlight (i) the importance of anchoring CBC in local livelihoods rather than making them entirely dependent on external incomes; (ii) that CBC requires considerable attention to enabling national frameworks, including support of key actors and suitable legal and budgetary frameworks; and (iii) that support to national associations and networks for CRB can provide important leverage for communities.

OVERVIEW OF CURRENT APPROACHES TO CONSERVATION AND CBC

Current major and developing approaches to conservation and CBC share some perceptions but also diverge on critical issues. Approaches include[4]:

Half earth

This encompasses initiatives such as the Half Earth project, Nature Needs Half, and the Global Deal for Nature (Immovilli & Kok, 2020). While these differ in some respects, a common point is an emphasis on the intrinsic values of nature, and that the existing Protected Areas system is insufficient and must be connected and expanded through the development of corridors and new expanses of protected areas, amounting to 50% of the earth's surface. This in turn leads to an emphasis on agricultural intensification in the remaining areas, in order to meet global food security. The Global Deal for Nature also incorporates climate action into its initiative, proposing 30% set aside for formal conservation and 20% as 'climate stabilisation areas' (Dinerstein et al., 2019). A common critique is that Half Earth approaches are overly biocentric and protectionist. In fairness, these approaches do include some efforts to mobilise communities as co-actors, e.g. the Global Deal for Nature emphasises self-nomination by indigenous lands to become OECMs or climate stabilisation areas as a critical part of the initiative (Dinerstein et al., 2019; Dudley et al., 2018).

New conservation science

This category covers the shift by some international conservation NGOs (such as The Nature Conservancy) and -practitioners away from biocentric conservation to a more utilitarian and instrumental focus on conservation of species and ecosystems that have economic value to society/ communities. The approach carries forward the Green Economics that emerged in the 1990s but has gained further impetus in the last ten years in response to growing disillusion with conventional conservation (Kareiva et al., 2011; Marvier & Kareiva, 2014). The approach often has an emphasis on creating market-based incentives for conservation. This includes working with industry stakeholders on sustainable production and resource extraction, building business-oriented conservation models with communities, and introducing Payment for Ecosystem Services (PES) schemes. Critics claim that the approach abandons the intrinsic values of conservation (nature for its own sake) and could lead to loss of those species and ecosystems that do not have any immediate economic benefit (Doak et al., 2015). Others have argued that a strong reliance on market-mechanisms may create perverse incentives and reproduce the underlying drivers of biodiversity loss (Büscher & Fletcher, 2019).

Conservation from within

Socio-ecological systems research has highlighted the adaptive nature of traditional resource management systems. This has led to approaches with a strong emphasis on the traditional and/or evolving local resource management systems of individual communities as the primary driver of biodiversity conservation (David Western et al., 2020; D Western & Wright, eds, 1994). In this

[4] The following categorisation of approaches have been adapted and expanded from Berkes (2021).

approach, conservation is led by individual communities and decision-making is strongly grounded in their existing internal social regulation and organisation. The emphasis is on supporting the (sustainable) production systems and livelihood strategies of communities and letting these act as the primary incentive for resource users to continue indigenous practices, from which biodiversity conservation will then follow 'indirectly rather than through direct incentive-based approaches' (David Western et al., 2020:282). A potential shortcoming of the approach is that the strong grounding in individual local resource management systems and communities does not take into account situations where multiple communities and resource use practices compete, e.g. pastoralists and crop farmers. It may also not address wider political economic drivers of biodiversity loss, e.g. expansion of large-scale commercial farming. This has led to development of two related approaches which have the same point of departure – that conservation must be driven from within communities – but which adds further dimensions to the work required, namely 'Convivial Conservation' and 'Bio-cultural Conservation'. These are described in the following:

Convivial conservation

This approach draws on critical research within Political Ecology and related fields, which has highlighted how externally driven and/or market-based conservation approaches to CBC can lead to 'green grabbing' of community resource rights in the name of conservation (Büscher & Fletcher, 2019; Fairhead et al., 2012). It furthermore sees biodiversity loss itself as a result of global (capitalist) market forces. Accordingly, the approach focuses on de-linking CBC - and conservation in general - from the market economy and reorienting it to a process driven by local action and aspirations (Buscher & Fletcher, 2020). Specific proposals include historical reparations for past injustices (e.g. redistributing protected areas to evicted communities); introducing a 'conservation basic income' for communities living in conservation areas; re-purposing PES and tax schemes to facilitate redistribution of finances for poverty alleviation and equality; and broad democratisation of conservation decision-making (Buscher & Fletcher, 2020). Distinct but related to this approach are calls from some African conservationists who argue for a de-linking of African conservation from the influence and funding of international conservation organisations and donors. They see current conservation agendas as expressions of cultural and economic imperialism, and advocate a fully autonomous and locally determined approach, driven for example by African co-existence philosophies such as *Ubuntu* (Chemhuru, 2019; Museka & Madondo, 2012). Although these approaches offer innovative ideas, they are so far mainly theoretical, and it is not clear if and how broad support for the proposals can be mustered (Berkes, 2021).

Bio-cultural conservation

This approach seeks to move beyond current conservation debates by taking a pluralistic perspective which recognises that conservation inevitably involves a diversity of cultures and associated objectives, values, resource management systems and socio-cultural settings (Gavin et al., 2018; Gavin et al., 2015; Maffi & Woodley, 2012). This diversity of conservation values and practices is seen as a strength to be embraced, because it allows conservation to be context-specific and adaptive to social and environmental change in each particular setting (rather than universalistic), while also allowing joint action and knowledge sharing across scales, regions and worldviews (Berkes, 2021). The emphasis is on (i) tailoring interventions to the individual bio-

cultural context, including a focus on communities' own adaptive management and resilience; but also (ii) identifying common ground across different conservation values and interests; (iii) developing diverse and nested governance institutions across scales, including negotiation fora and conflict resolution mechanisms; and (iv) fostering shared knowledge systems (Gavin et al., 2015). The approach thus takes an outset in local resource management systems and cultures as per the 'Conservation from Within' approach but situates this within a broader process of multi-layered and polycentric governance processes. This links CBC in individual communities to efforts that also involve other actors at local, national and global levels, thereby increasing chances of addressing broader drivers of biodiversity and conservation conflicts. Challenges include the complexity of multiple stakeholder engagement, and the risk that the most powerful actors will determine outcomes. Attention to governance is therefore critical.

These different approaches reflect a maturing of the field in which different visions for the future of biodiversity conservation and the nature of CBC are gradually crystallising. The boundaries between them are not clear-cut, and practices often overlap. In recent years, much of the support from development partners to biodiversity conservation has focused on creating economic incentives. However, lessons learnt so far (see below) suggest a need to increase the focus on features emphasised in the Bio-cultural approach. In practice this entails (i) facilitating locally and culturally adapted conservation arrangements that are fully integrated with local livelihoods and land use practices (rather than imposing universal models), and (ii) supporting polycentric governance frameworks, including institutional frameworks that enable collaboration, negotiation and conflict resolution between different stakeholders at and across scales. Annex 1 illustrates key focal points of the Bio-cultural approach and two other approaches.

Box 5. Example of CBC - Rangeland management and conservation in Kajiado, Kenya

While some community conservancies in Kenya have been surrounded by controversy (see Annex 4), others have met with less opposition. In Olkiramatian and Shompole Group Ranches in Kajiado County in southern Kenya, land is managed collectively by local committees of Maasai members.

Seeking to respond to growing pressure on - and competition for - rangelands and water resources, these Group Ranches have since the mid-2000s adopted a diversified land use system:

- A crop-farming zone in which group ranch members are allocated a plot for cultivation, allowing households to pursue a favoured adaptation strategy of diversifying incomes from crop production through sales to wider markets. Residue from the farming is used as livestock fodder.
- A grazing zone used for livestock in the wet season, when pasture is rich and widely available. The area is jointly accessed and managed by a dedicated grazing committee. Wildlife also disperses here during the wet season.
- A conservation zone consisting of a wetland area and surrounding pasture. This fertile area is used for grazing livestock in the dry season, with some areas furthermore set aside as 'Grass Banks' for particularly dry periods and droughts. The zone also sustains resident and migrating wildlife populations.

The system is based on customary Maasai rangeland management practices but adjusted to address a changing social and ecological context and associated adaptation needs.

The approach has been facilitated by the African Conservation Center (ACC), but unlike many other CBC initiatives, decision-making and implementation does here rest with Maasai Group Ranch committees. The Maasai-led land-owner's association SORALO furthermore serves as a platform for outreach to national and international actors. Low key tourism to the conservation zone contributes supplementary income, but the economic mainstay of the system is the agro-pastoral and pastoral production system. Biological studies suggest that the conservation zone is producing good results in terms of species and ecosystem protection.

The system is not without problems, including intergenerational struggles over resource governance, some Group Ranch members wanting to individualise ownership, and limited ability to influence land and water management outside the system, which have impacts on the local ecology. However, it represents an example of CBC that is locally managed and driven, is well integrated with the local economic production, and where biodiversity conservation takes place in a 'working landscape'.

Sources: On-going research by University of Nairobi and DIIS within the wider Rights & Resilience research programme. See also (Ontiri & Robinson, 2018; Schuette et al., 2013; David Western et al., 2020).

LESSONS LEARNT

CBC has developed and expanded but is not yet consolidated on the ground

- CBC has expanded significantly in scope and form since the 1980s, especially in countries where policies and frameworks for devolved natural resource management exist. In some African countries (e.g. Kenya and Namibia) more land is now estimated to be under some form of CBC than under National Park protection (Nelson et al., 2021). However, in many other countries the approach is still marginal in biodiversity conservation, or subject to major institutional constraints (see below). It is also important to note that while CBC has expanded, conventional protection regimes (e.g. IUCN categories I and II) have not been reduced. In other words, the expansion of CBC primarily takes place on lands that were not previously under formal protection. An example of this is the community land managed under the NRT model (see Annex 4).
- Moreover, alongside CBC, concerns over poaching and the illegal wildlife trade have intensified the 'militarisation of conservation', in which armed force protection of species and ecosystems has become more widespread, often escalating conflicts between external conservation actors and community members (Duffy et al., 2019; Massé, 2020).
- Despite their promise and potential, CBC approaches are thus far from consolidated on the ground and require further support and scaling up if they are to become a well-functioning mainstay of conservation.

CBC must be better anchored in local livelihoods and economies

- Conventional conservation in Africa and globally is typically heavily dependent on international tourism and external donor funding. Lindsey et al (2020) found that 80% of the national parks and wildlife department budgets of South Africa and Zimbabwe are funded by tourism, with Kenya at 50%. Across Africa, donor contributions are assessed to account for 32% of protected area funding. In the African setting, this dependency includes many CBC schemes. Lindsey et al found that photographic tourism covers 80% of the operating budgets of Kenya's community- and private conservancies. Other CBC schemes such as Namibia's community conservancies and Zimbabwe's CAMPFIRE programme are heavily dependent on (mainly foreign) trophy hunting (Lendelvo et al., 2020; Peter Lindsey et al., 2020). Approximately 90% of the budget of Kenya's Northern Rangeland Trust (NRT) - which Danida supports - is assessed to be derived from international aid (Peter Lindsey et al., 2020). See Annex 2 for details.

- The collapse of the travel industry under Covid 19 and potential re-direction of aid and philanthropy funding to the health sector has raised major concerns that conservation in Africa will be acutely undermined (Evans et al., 2020; Lendelvo et al., 2020; Peter Lindsey et al., 2020). This has led to calls for the global community to step in with increased funding. While this is valid, it is important to reflect on the underlying structural problem that the Covid19 crisis has illustrated. Namely that conservation in Africa – including CBC – has tended to be driven by external actors and financing without a proper anchoring in local livelihoods and economies. While the income from tourism, hunting and donors will likely remain important in some areas and settings, it is critical to apply a more diversified strategy and in particular to ensure that conservation is anchored in and benefits local economies, production systems and livelihoods. Development cooperation can help support this shift and thereby – over the long term - work to reduce African's dependency on development cooperation.

Economic compensation and income substitution is not enough in itself

- Studies of CBC impacts in the African context show mixed results in terms of socio-economic benefits (Keane et al., 2020). Galvin et al's (2018) meta study of 74 CBC projects in Africa found that the most prolific economic activities in CBC projects were eco-tourism (59% of cases), hunting (51%) and sustainable grazing and/or forest product harvesting (19%). Ecological outcomes of CBC were mainly reported to be positive, including stabilised wildlife populations, enhanced biomass and improved productivity of soils (reporting on actual diversity was limited). Social outcomes were, by contrast, found to be more mixed: Most cases in the study reported both positive and negative social outcomes, but with a higher tendency for the latter. Reported positive outcomes included cash dividends from tourism and hunting, as well as employment and income diversification, increased access to education, health and infrastructure (e.g. boreholes, irrigation and roads) and improved social relationships. Negative social outcomes included unequal distribution of benefits within communities and elite capture, undermining of local socio-cultural institutions, and reduced access to natural resources. Notably, the negative outcomes are all governance challenges, leading Galvin et al (2018) to conclude that economic benefits are not enough in themselves for successful CBC, i.e. institutional and governance measures are also critical (Galvin et al., 2020).
- Direct economic payments as compensation for lost resource access are far from always sufficient as conservation incentives at the individual level. For example, when cash dividends from hunting schemes are distributed to individual households, they may prove insignificant compared to other
livelihood incomes. To make a difference, such benefits may therefore require pooling and allocation for public goods that support local livelihood strategies (e.g. water infrastructure, veterinary facilities etc). This in turn requires inclusive governance

mechanisms and coordination with other public planning processes. Even where conservation incomes are relatively substantial for individual landowners, communal governance of land and resources is critical to secure (Weldemichel & Lein, 2019). It is therefore important to avoid assuming that direct monetary benefits are the main enabling factor for successful CBC. Strong local governance mechanisms and non-monetary benefits such as land/resource rights are equally – and sometimes even more – important.

- External efforts to entirely substitute local resource use with alternative livelihoods have proven problematic. Externally led interventions urging communities to switch from e.g. forest use or pastoral livelihoods to sedentary agriculture have rarely succeeded when they were not locally driven, and if anything has increased conflicts over access to protected resources and ecosystems. Better results can be seen where conservation income opportunities add to people's existing portfolio of livelihood activities and are driven by communities themselves. Support to CBC should therefore always take and outset in supporting existing local livelihoods where they are sustainable, in addition to which alternative livelihood options that are driven by people themselves can be facilitated.

A growing emphasis on CBC in 'working landscapes' offers potential

- Past failures to link CBC strongly to local livelihoods and resource management practices can be seen as the result of the conventional distinction between 'nature' and 'society', whereby natural spaces and human activity are understood as separate elements that should be kept apart. Moving beyond such distinctions is important for CBC (and conservation in general) to succeed. A common theme in several of the more recent approaches to CBC discussed above is to accept that there can be sustainable livelihood activities in some protected 'wilderness' areas, but also that there can be more biodiversity conservation in human production areas and urban spaces (Büscher & Fletcher, 2019; Gavin et al., 2018; David Western et al., 2020).
- One example is the growing interest in 'conservation in working landscapes', i.e. biodiversity conservation that takes place on farmland, rangelands, actively used forests, etc[5] (Kremen & Merenlender, 2018). See Annex 3 for an illustration. This is a good match with NbS approaches such as Ecosystem-based Adaptation. It also allows CBC to become more fully anchored in local livelihoods and sustainable resource management practices than has so far been the case. However, when planning support to CBC in 'working landscapes' it is critical to support socio-ecological systems and institutional frameworks as a whole, rather than only supporting particular conservation activities and -sites within them (David Western et al., 2020). If that is not done, the nature/society distinction will

[5] 'Conservation in working landscapes maintains biodiversity, provides goods and services for humanity, and supports the abiotic conditions necessary for sustainability and resilience'. Kremen and Merelender (2018: 1).

remain, and past failures may be repeated. Box 5 provides an example of a positive example and its challenges.

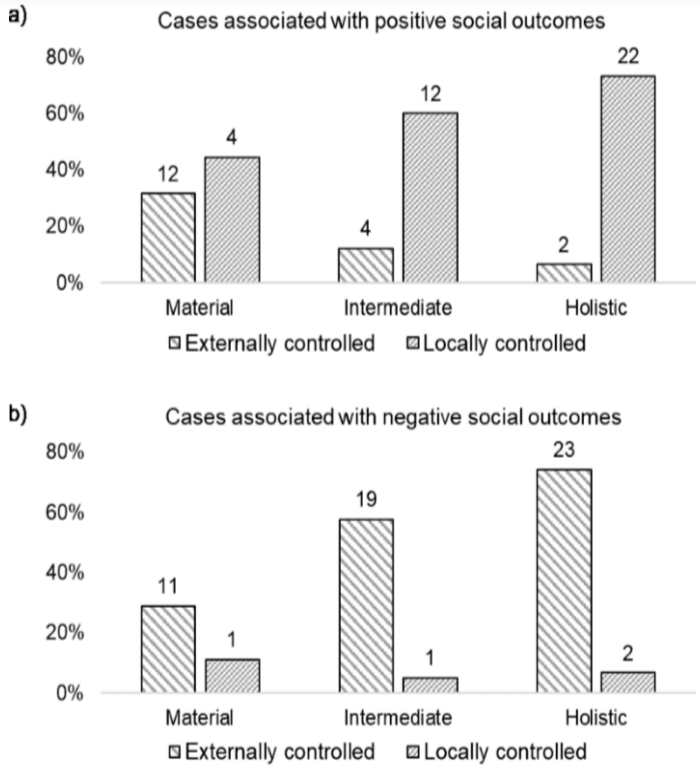
- It should be noted that while there has been much interest in promoting conservation outside protected areas and in the people-managed categories of protected areas, the parallel issue of allowing sustainable use inside *higher* categories of protected areas – such as National Parks – is more contested. Nevertheless, given the ongoing conservation conflicts in many such areas and the lack of capacity for governments to manage them, it seems timely to support efforts to provide CBC approaches in some such areas. The potential for linking this to EbA activities seems obvious (e.g. forest catchments in National Parks that provide water and non-timber forest products).

Devolved access rights are critical for successful CBC

- Despite their promise of being community-based, many CBC schemes have not reached a point where rights to benefit from conservation and sustainably used species and ecosystems have been substantially or *de facto* devolved to communities. The lack of devolved rights has been a major source of contention in many CBC schemes, and often serves to undermine them. This is partly the result of central governments being reluctant to loosen their grip on valuable resources (Nelson et al., 2021), and partly the result of general concerns that communities will mismanage resources (Ferse et al., 2010). In such situations, CBC is at risk of becoming little more than an implementing mechanism for external conservation interests. In some cases, CBC has also been used as a means for political elites to appropriate community land rights (Bluwstein & Lund, 2018).
- By contrast, studies indicate that outcomes are more positive where governance and rights to benefit from and use biodiversity have been devolved to communities (Figure 2) (see also Galvin et al., 2018; Silva & Mosimane, 2014). This is supported by studies in community forestry (Porter-Bolland et al., 2012), which also show that secure access and tenure rights that support livelihoods may be a more important conservation incentive than direct economic benefits, due to their long-term value for households (Wollenberg et al., 2001).
- Devolved rights in CBC does not imply that protected species and ecosystems can be exploited at will. Rights-based CBC entails that the particular form of conservation in a given area strengthens or sustains community rights and livelihoods, rather than undermine them. Successful CBC arrangements have established collective agreements among community members that determine opportunities for, but also limitations on, resource use and access – just like any other resource management scheme. This is clearly not without challenges. For example, CBC has in some areas been strained by individual community members' private sale of land to large-scale agricultural schemes or logging companies. Here collective land/resource ownership is often an advantage because it

allows for collective regulation of such cases (see an examples in Box 1 and Box 5). Even so, such challenges highlight that CBC must be accompanied by parallel efforts at national and international levels to engage with the broader drivers of unsustainable land use related to large-scale agricultural expansion, forest-clearing etc.

Figure 2. Relationship between conservation governance and social outcomes in 169 publications



Findings from a systematic review of 169 publications that examine the relationship between conservation governance arrangements and social outcomes.

'Externally controlled' = management regimes that are controlled by external actors, e.g., the state, NGOs, private firms, etc.

'Locally controlled' = management regimes consistent with decentralised or nested forms of conservation governance, including customary systems, and which involve use/control/authority over natural resources by Indigenous Peoples and/or local communities.

'Material/Intermediate/Holistic' = whether the examined publications documented only material conservation benefits or took a more holistic approach to benefits including e.g. spiritual/cultural and empowerment benefits.

Source: (Dawson et al., 2021).

National associations and networks have been important platforms for CBC advocacy

- In order to succeed, CBC schemes are dependent on supportive national frameworks and institutional reforms that devolve rights. The experience so far shows that this key factor cannot be assumed. Even where rights have in fact been devolved *de jure*, governments have not necessarily delivered on them, or have even retracted them (Nelson et al., 2021;

Ribot, 2007). Attention to not only creating but also implementing and sustaining national frameworks for CBC is therefore critical.

- On the positive side, experience from countries such as Zambia, Zimbabwe and some areas of Kenya suggest that once CBC has been introduced, communities and civil society organisations have been persistent in joining together to lobby for the adoption or implementation of reforms and nationwide expansion of CBC. In this respect, national associations consisting of CBC communities, CSOs and (in some cases) local governments have been important vantage points from which to lobby for CBC and pressure central governments (Nelson et al., 2021).
- Even where governments or other stakeholders have dominated CBC, the fundamental introduction of CBC schemes and associated institutional frameworks has in some countries served as a form of 'scaffolding' upon which communities and CSOs have been able to organise and advocate for their role and property rights in resource management and conservation (Salerno et al., 2021). In this respect, coalitions between communities and NGOs or private sector actors can be beneficial in promoting community rights, although it is also important to be aware of potential conflicts of interest if conservation values differ.

There is a need to strengthen horizontal and vertical links for CBC

- As discussed above, a key requirement for successful CBC is to shift more influence and rights towards communities. However, studies also show that this is not enough in itself. If CBC schemes are to function, they must be supported by broader polycentric governance landscapes that also involve other communities and actors, and which are linked to national government measures that can address national and international drivers of biodiversity loss.
- In this respect, recent studies point to the need for (i) strengthening horizontal linkages between different local actors and institutions in conservation, e.g. across different local CBC schemes adopted variously by pastoralists and small-scale crop farmers, and (ii) strengthening vertical linkages, such as providing greater representation of communities and/or CBC associations in land use planning processes at regional and national levels, and in the development of national policies related to conservation (Salerno et al., 2021).
- A more influential role for local knowledge in decision-making can be a means to enhance leverage of communities in conservation governance. This however requires that local knowledge schemes go beyond just providing information to government management systems. They must also allow communities to make actual conservation decisions based on their knowledge (Danielsen et al., 2021). An example of local and scientific knowledge being integrated in the design of the solutions is provided in the implementation of a habitat corridor in Box 1. Through so-called Multiple Evidence Approaches, local

knowledge can be joined with scientific knowledge and practitioners' knowledge for collaborative decision-making at national levels or even beyond (Tengö et al., 2014).

- An often-overlooked aspect of CBC governance is the need to provide conflict resolution fora where grievances can be expressed, and conflicts resolved. This applies both to local and national levels. These need not be specific to conservation but can form part of broader environmental conflict resolution mechanisms and could be linked to an 'Ombudsman' function. Kenya's National Environmental Tribunal provides such a role, though it is underfunded and limited in mandate.

Box 6. Summary of lessons learnt

- CBC has developed and expanded but is not yet consolidated on the ground
- CBC must be better anchored in local livelihoods and economies
- Economic compensation and income substitution is not enough in itself
- A growing emphasis on CBC in 'working landscapes' offers potential
- Devolved access rights are critical for successful CBC
- National associations and networks have been important platforms for CBC advocacy
- There is a need to strengthen horizontal and vertical links for CBC

RECOMMENDATIONS FOR DANISH DEVELOPMENT COOPERATION

Biodiversity conservation is at a critical juncture. Conventional approaches have not managed to halt the loss of species and habitat. A major effort is needed to support biodiversity conservation, and Denmark's development cooperation can and should contribute to this.

Overall, Denmark should:

1. **Strengthen support to CBC outside traditional protected areas.** There is a growing global consensus that biodiversity goals can only be achieved by focusing more on conservation outside conventional protected areas. This offers opportunities for both conservation and community development, but it also poses a risk of 'green grabbing'. Denmark can play an important role in helping to ensure that conservation in these spaces is done in the right and most effective way, i.e. that it benefits biodiversity while also strengthening the livelihoods and rights of communities. This is well in line with past and current principles in Danish development cooperation on rights-based approaches and empowerment of vulnerable groups.

2. **Integrate support to CBC with support to climate change adaptation and resilience** through a nature-based solutions approach. If done right, Ecosystem Based Adaptation (EbA) offers good scope for protecting and improving the conditions for both biodiversity conservation and development (see separate working paper on EbA, Gravesen and Funder 2021).

3. **Support protection of the land- and governance rights of communities and indigenous peoples in biodiversity conservation**. Denmark should further advance legal recognition and enforceable safeguards of these rights in the development and implementation of the CBD's post-2020 global biodiversity framework. Denmark should also support practical application of the IUCN's Natural Resource Governance Framework and the standards for Nature Based Solutions, especially criteria 5 and 6.2 on governance and rights (IUCN, 2020 a, 2020 b; Springer et al., 2021). This includes applying the standards and guidelines in the assessment of new proposals in Danida's pipeline and advocating for their use (and especially their *de facto* application) in the multilateral funds to which Denmark contributes. Denmark should furthermore prioritise multilateral and bilateral support to conservation initiatives that actively sustain and strengthen community land rights as part of the solution. In particular, experience from CBC suggests that it is important to support national associations and networks for CBC that can provide longer-term platforms through which communities and CSOs can promote and defend rights in biodiversity conservation.

In terms of specific approaches to CBC, Denmark should:

4. **Support CBC approaches that transcend the conventional separation between human production and conservation.** This entails a broad approach to biodiversity conservation which goes beyond species protection in isolated islands of 'wild nature'. A key emphasis

should be on supporting CBC in 'working landscapes', i.e. strengthening existing sustainable production systems in crop farming areas, rangelands, forests, wetlands etc. This requires a holistic approach which works with broader production systems and facilitates a mosaic of land uses including both traditional and more recent ones (see Annex 3). This is also reflected in the IPBES recommendations on furthering conservation through multi-functional landscapes (IPBES, 2019). Such an integrated approach allows space for communities to sustain production and livelihoods, while also providing new options for biodiversity conservation. Examples include farming- and grazing systems that support key pollinators and provides micro-habitats for endangered species, or community management of (peri-) urban water flows and wetlands to enhance species habitats and provide clean water and flood regulation. The approach does not exclude efforts to protect charismatic species and scenic landscapes but aims at greater integration of such conservation with other land uses (see Box 2 for an example). Integrated approaches do however remain constrained by conventional rigid institutional frameworks and land use classifications that separate nature and human activity. Many CBC projects in the African setting are also still built around separating rather than integrating land use forms. Danish development cooperation can helps shift this by supporting the innovation and sharing of integrated conservation and land use planning arrangements in the context of CBC.

5. **Support CBC schemes to become more firmly anchored in local resource use economies.** Many conventional CBC schemes – especially in the African setting – are challenged with (i) limited *de facto* community revenues and benefits from conservation, which thereby do not sufficiently outweigh the alternatives for individual households; (ii) reluctance by governments to redistribute revenues from e.g. tourism and commercial hunting to communities despite agreements; and (iii) risks associated with sole reliance on international leisure markets such as tourism/hunting and on recurrent donor funding, as highlighted by the major funding concerns voiced during the current Covid 19 pandemic. Income from tourism, hunting etc can play an important role in CBC and can form part of Danish support, but a more diversified strategy is needed. It is critically important to anchor community conservation benefits and incentives better in existing local production systems and economies. Danish development cooperation should help support this, thereby also working to make itself expendable in the long term. In practice this includes: (a) identifying the conservation practices already exercised in many indigenous and community production systems and land uses, and supporting the enabling conditions for these - e.g. markets, value chains, tenure rights and representation in governance; and (b) identifying how biodiversity conservation measures can strengthen and innovate existing production systems and economies, e.g. habitat protection that provides ecosystem services, or farming practices that sustain agricultural production while conserving plant and insect diversity. In addition to this, further incomes from tourism etc can then be developed with support as appropriate. For an example, see Box 5.

6. **Facilitate bio-cultural approaches to the governance of biodiversity conservation**. This means accepting a diversity of conservation values and that conservation will look different from place to place. It entails an approach in which (i) CBC arrangements are tailored to the socio-ecological and cultural context - rather than following a universal model - but which

also (ii) builds broader nested governance frameworks for negotiation, decision-making, conflict resolution and knowledge sharing in conservation[6]. Danish development cooperation can support this in two areas in particular. Firstly, there is a need to enhance arrangements that improve the horizontal linkages between local actors in CBC, e.g. joint planning and conflict resolution mechanisms between pastoralists, small-scale crop farmers and tourism industry. Secondly, there is need to strengthen the vertical governance linkages in CBC, i.e. providing greater representation of communities and/or CBC associations in national land use and biodiversity planning and decision-making. This is essentially also what the nature-based solutions approach to conservation demands. Denmark can support this work by facilitating the innovation of such mechanisms and dissemination of the experiences nationally and globally. This could be done through work with associations such the ICCA Consortium (ICCA, 2021), and the IUCN work on developing OECMs (Other Effective area-based Conservation Measures, (IUCN, 2019) and knowledge sharing on implementation of the IUCN governance and rights standards for NbS and Natural Resource Governance (IUCN, 2020 a, 2020 b; Springer et al., 2021).

7. **Alongside place-based conservation, it is critical to sustain and strengthen Denmark's efforts to engage with the broader drivers of biodiversity loss** at global and national levels, as described in e.g. the IPBES 2019 Global Assessment Report (IPBES, 2019). While CBC is critically important for conservation, it cannot on its own address wider drivers of biodiversity loss. Options for Denmark's MoFA to address this includes work through the 'normative track', e.g. the CBD and UNFCCC Land Use and Forestry negotiations but also other international arenas. For example, there is a need for reforms of WTO and other trade regimes to better address environmental concerns in the regulation of global commodities (see IPBES 2019 chapter 6). Multilateral and bilateral support can further help address the wider drivers. For example, the *de facto* uptake and implementation of certification schemes for e.g. palm oil, soybean and timber remains a challenge and requires further support (Tayleur et al., 2017). Mainstreaming biodiversity into national policies, including agriculture, is also critical. Interestingly, a global review of national biodiversity strategies found that the strategies of developing countries, and especially African countries, paid more attention to mainstreaming than those of developed countries (Whitehorn et al., 2019). This provides a good point of departure for support to implementation, which remains a challenge in many countries, and which can provide a direct link to CBC support.

[6] Nested governance frameworks are ones in which 'key governance functions, like monitoring and enforcement of resource use, are organised into multiple, reinforcing, layers of governance…'. They 'allow users on the ground to operate, on most occasions, *without* higher level interference'. They are 'inclusive systems which aid autonomous functioning of smaller, more exclusive units operating within broadly agreed principles' (Kashwan & Holahan, 2014:560).

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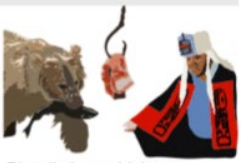
ANNEX 1. THREE DIFFERENT VISIONS OF CONSERVATION

	New Conservation Science Approach	Half Earth Approach	Biocultural Approaches
What?	 Biodiversity conservation, especially ecosystem services	 Biodiversity conservation, especially species and ecosystem integrity	 Multiple objectives of relevant stakeholders
Why?	 Emphasis on instrumental value of biodiversity	 Emphasis on intrinsic value of biodiversity	 Pluralistic worldviews (including relational (7), intrinsic, instrumental values)
Where?	 More emphasis on human-dominated landscapes	 More emphasis on remote locations and wilderness	 Tailor interventions to social-ecological context
How?	 Emphasis on economic incentives and payment for ecosystem services	 Emphasis on strict protected areas	 Diverse and nested institutions with adaptive governance and management
Who?	Not specified	Not specified	 Partnerships and social learning among multiple stakeholders

Source: Gavin et al 2018:2.

ANNEX 2. COVID-19 IMPACTS AND EXAMPLES OF CONSERVATION FUNDING SOURCES IN AFRICAN COUNTRIES

Funding sources for conservation	Regional impact and funding	Examples of funding supporting government wildlife authorities, NGOs and community-based conservation	COVID-19-related threats to funding
Photographic tourism	• ~70 million visits per year to protected areas in Africa worth US$10–50 billion[68] • ~8.5% of continent's GDP[7] • 3.6 million direct jobs on the continent[7] • ~24 million indirect jobs	• ~50% (US$30 million) of Kenya Wildlife Service's annual budget from tourism, supporting management in 39 national parks and reserves[69] • ~80% of Zimbabwe Parks and Wildlife Management Authority's budget derived from tourism (including trophy hunting) (ZimParks, personal communication) • ~80% of Kenya community and private conservancies' operating budget from tourism, covering >60,000km², supporting >3,000 rangers and >700,000 households[70] (D.K., personal communication) • ~50% of Uganda Wildlife Authority's budget from gorilla-based tourism[71] • ~80% (US$52 million) of South African National Parks' annual budget from tourism, supporting 19 national parks[72]	• Closure of international travel, which could extend for months, reduces tourism • Closure of domestic travel reduces tourism • Economic recession reduces future international travel • Fear of travel during COVID-19 pandemic reduces arrivals
Trophy hunting	• ~US$200 million annually, practised over an area of >1 million km² (refs. [8,9]) • ~552,000 km² (43%) of PA extent in lion range dependent trophy hunting (R. Feber, personal communication)	• Supports budgets of 82 conservancies in Namibia covering ~20% of the country (162,000 km²), encompassing ~189,000 community members (9% of Namibia's population)[73] • ~68% of Tanzanian PAs rely on income from trophy hunting, covering 250,000 km² • ~38% of Zimbabwe's state-owned PAs are designated as hunting areas, as are large areas of community and private land (ZimParks, personal communication)	• Closure of international travel, which could extend for months, reduces hunting • Economic recession reduces hunting • Fear of travel during COVID-19 pandemic reduces arrivals • Increase in blanket opposition to all wildlife trade
International aid	• ~US$833 million from 2010–2016 to combat illegal wildlife trade, of which ~US$609 million to PA management estimated for the period 2000–2009 for the whole continent[74] • Makes up an average of 32% of the management budget of PAs in Africa, up to 70–90% in some countries[11]. • >US$6 million from the Association of Zoos and Aquariums members to African species in 2018[75]	• ~90% (~US$3 million) of Northern Rangelands Trust's budget supporting 39 community conservancies across 42,000 km² (ref. [76]) • ~25% (US$3.35 million) of Gorongosa National Park's 2019 budget from bi- and multilateral cooperation partners[77]	• Economic recession reduces aid budgets • Focus shifts to humanitarian and financial crisis relief
Philanthropy • Individuals • Corporations • Foundations • Zoos		• 40% (US$120 million) of World Wildlife Fund's global budget from individual donors[78] • ~35% (US$12 million) of African Wildlife Foundation's 2019 budget from individual donors, ~30% (US$10 million) from public sector donors[79] • ~32%, 25% and 23% of Africa Parks' 2018 budget of US$50 million donated by public institutions, individuals and foundations, respectively, supporting 15 parks across 105,000 km² in 9 countries[80] • 58% (~US$8 million) of Gorongosa National Park's 2019 budget from foundations, philanthropy and donations[77] • >US$11 million for Sheldrick Wildlife Trust in 2018–2019[81], donated by individuals, corporations, private foundations and public charities, supporting PA management, lease fees, community education and outreach, and veterinary assistance across Kenya	• Economic recession reduces philanthropic spending[38] • Focus shifts to humanitarian and financial crisis relief • Zoo closures limit income and conservation spending (215 of 238 American zoos and aquariums closed as of 23 March 2020[82]; US museum and zoo community requesting US$4 billion support[83])
Domestic expenditure	• Variable, but often low	• ~50% (US$30 million) of Kenya Wildlife Service's budget from national government[69] • Only 3% of African Parks' 2018 operational budgets from national governments[80]	• Local economic recessions reduce national budgets • Governments shift focus to humanitarian and financial crisis response and healthcare infrastructure

Funding from international aid is higher than estimated because spending has increased since previous estimates[11,74] and estimates are not exhaustive. No comprehensive estimate for domestic governmental expenditure exists.

Source: Lindsey et al, 2020.

ANNEX 3. ECOSYSTEM BENEFITS FROM CONSERVATION IN 'WORKING LANDSCAPES'

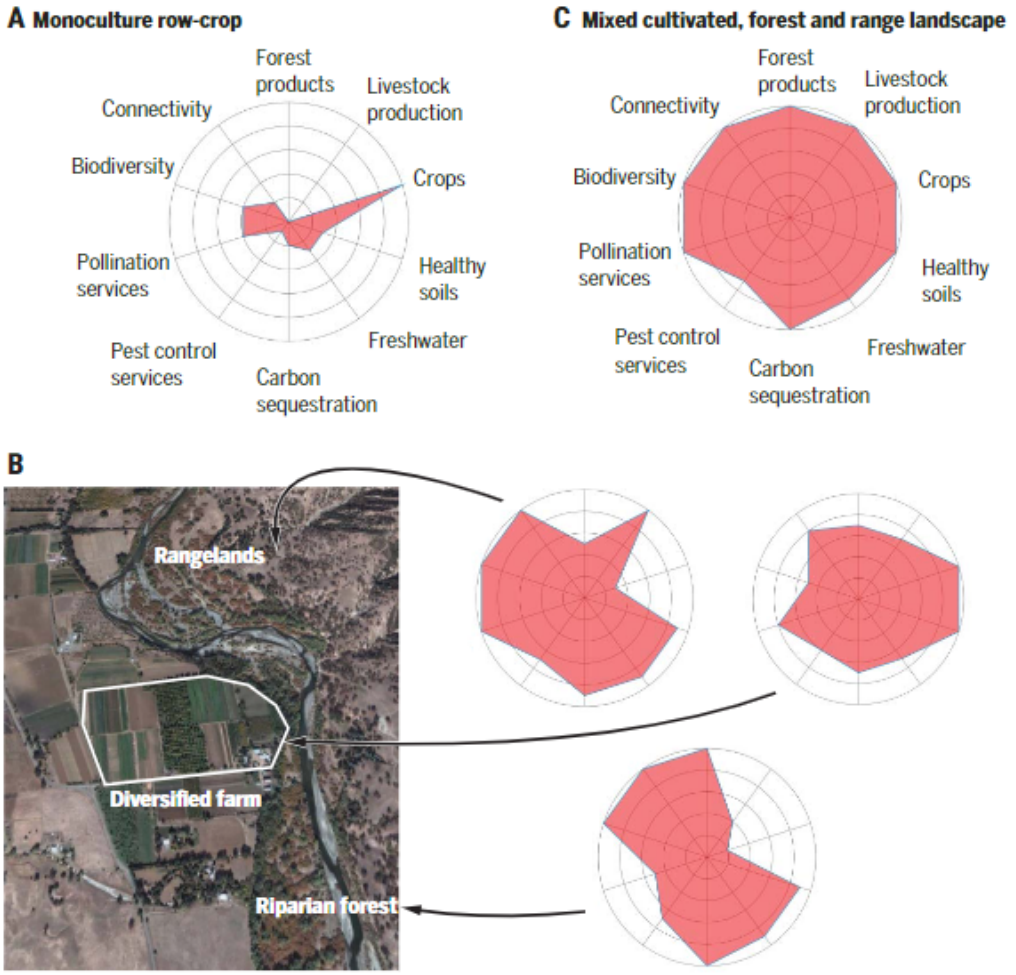


Fig. 2. Ecosystem service trade-offs with land management. Radar diagrams display how different land uses affect various ecosystem services and biodiversity. (**A**) Monoculture row cropping contributes to food production at the expense of other ecosystem services and biodiversity. (**B**) In a working landscape managed for conservation, patch types differ in the services they provide, but each patch type should display a relatively even array of services, minimizing trade-offs. (**C**) Across patches, the services provided for the working landscape in (B) are multifunctional.

Source: Kremen and Merenlender 2018.

ANNEX 4. KENYA'S NORTHERN RANGELANDS TRUST

The CBC programme under Kenya's Northern Rangelands Trust has been supported by Danida since 2012. The programme has been innovative and achieved results in several respects. At the same time, it has been challenged by conflict and politicisation over land rights issues. As such, the programme highlights the political nature of CBC and provides experiences on governance issues. While there is little doubt that positive results have been achieved, it is also important to understand the challenges and contestations in order to move forward. The following provides a summary of the main issues of conflict, and briefly discusses emerging lessons for CBC support.

Background

Northern Rangelands Trust (NRT) is an organisation that is owned and led by its 39 community conservancies in Northern and Coastal Kenya, areas that span 42,000 km^2 and 18 ethnic groups. According to NRT, the organisation was established to support and develop community-based conservation among people living on community-owned land, as they argue that people in conservation areas are best positioned to better their livelihoods, address conflicts and manage the natural environment. In their own words, NRT works '*to conserve wildlife and sustainably manage the grassland, forest, river and marine ecosystems upon which livelihoods depend'* (https://www.nrt-kenya.org/). They do so by supporting the communities' own objectives formulated to develop locally led governance structures that complement traditional systems, tackle security questions, establish peacebuilding and training programmes, establish sustainable businesses connected to conservation, raise funds for the conservancies, and to take a lead on the management of the natural environment.

Since its founding in 2004, the NRT has received extensive funds from particularly foreign donors, including DANIDA, the EU, USAid[7] Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), and Agence Française de Développement (AFD) of France. In addition, a range of conservation organisations fund the NRT including The Nature Conservancy, Fauna & Flora International, Zoos South Australia, US Fish and Wildlife Service, San Diego Zoo, International Elephant Foundation, Saint Louis Zoo, and Running Wild.

Progress

Currently, the NRT flags to have 1,360 people permanently employed in the conservancies, to have rehabilitated 3,900 hectares of degraded grassland, and to

[7] USAid approved USD 20 million for NRT for a five-year programme in 2016 – an unprecedented amount offered directly to a recipient in Northern Kenya.

have eradicated poaching of elephants in the NRT conservancies[8] (https://www.nrt-kenya.org/).

According to observers and available literature some aspects of the NRT programme have been successful. This includes enhanced water security; reduced poaching and human-wildlife conflict in Samburu County, and newer initiatives of coastal biodiversity protection with expansion of mangrove forests (Measham & Lumbasi, 2013; Pellis et al., 2015; Wandera et al., 2020).

The 2020 evaluation of Danish support to climate change adaptation cited the NRT's adaptation-related activities among examples of support that had *"contributed to increased incomes, improved food security and enhanced resilience to extreme weather events* "(Danida, 2020, Annex F, page 19).

These achievements seem important. They would benefit from further documentation and elaboration through e.g. a thorough evaluation and more in-depth research on the benefits to livelihoods, resilience and natural resource access among the varied user groups and the often quite different settings in which the NRT works.

Contestation/conflict points

Despite its notable results and popularity in some locations, NRT has also seen substantial criticism from communities, local politicians and scholars in some areas. This evolves around the following main areas of contestation:

- Critics claim that the NRT manipulate pastoralists into agreements that expand the areas under NRT authority in exchange for the establishment of schools and health care clinics, and access to income from tourism – agreements that allegedly lock out the herders from accessing grazing for their livestock at their ancestral lands in exchange for little alternative income (Bersaglio & Cleaver 2018; https://www.standardmedia.co.ke/commentary/article/2001355766/why-conservancies-are-clashing-with-villagers). Critics have further pointed out that the financial model tends to be highly reliant on donor funds, and thus potentially unsustainable in the long run (https://www.theelephant.info/long-reads/2021/06/07/bring-back-the-herder-conservationist/;).
- The NRT has further been challenged for privatising wildlife management through the support for conservancies that are run by foreign organisations and donor funds, arguing that the conservancy

[8] Zero incidents were recorded in 2020 contrasted by 103 in 2012.

managements are given carte blanche to appropriate community land and set it aside for wildlife at the expense of the communities. Essentially, NRT is blamed for pushing Illegal landgrabs in the name of conservation and wildlife protection, and in doing so, threatening the lives and livelihoods of the pastoralist communities. Some pastoralist communities are said to view conservancy projects run by foreign investors, such as NRT, as 'Trojan horses' that will lead to further annexation of pastoral community lands (Bersaglio & Cleaver 2018).

- Moreover, concerns have been voiced that insecurity and conflicts in Northern Kenya are exacerbated by the conservancies' appropriation of community lands, the associated increased pressure on, or exclusion from, accessible grazing areas, as well as the Government's presumed complicity (Greiner, 2012; Bersaglio & Cleaver 2018; Daily Nation, June 14 2021 https://www.breakingkenyanews.com/2021/06/stop-conservancies-in-north-to-protect.html). Specifically, in Isiolo county, pastoralists feel subjected to a 'double-squeeze' which challenges their access to grazing lands. From one side, Kenya's National Development Plan, Vision 2030, envisioned the establishment of several mega infrastructure projects which has necessitated that the state appropriated large areas of land, including community land used by pastoralists as dry season reserves. From the other side, the NRT has introduced conservancies in community lands (https://www.aljazeera.com/opinions/2017/8/3/the-ugly-truth-about-wildlife-conservation-in-kenya/)..

Protests and counterprotests

Communities whose grazing resources are already dwindling, not least due to climate change, have demonstrated against NRT, for instance on the streets of Isiolo, arguing that they did not ask for large investments into conservation on their community lands (Daily Nation, June 14 2021, https://www.breakingkenyanews.com/2021/06/stop-conservancies-in-north-to-protect.html).

In Turkana County, the local government challenged and cancelled permits of conservancies on the grounds that rights and authority were not clarified, while donations from the Tullow Oil Company have led to local politicisation and suspicions about the interest of NRT in Tullow Oil's extraction activities (Fox 2018; Mkutu, K., & Mdee, A. 2020).

However, there have also been counter protests, where residents from communities under NRT have come forth to show their support for the

organisation (https://www.the-star.co.ke/news/2019-04-24-isiolo-residents-say-conservancies-help-them/).

The NRT has responded to the critique by saying that they as an organisation do not own the land, that community owned land that receives NRT conservancy status legally remain in the hands of the communities, and that NRT provides training on land rights for the communities in the membership conservancies to sensitise the members on their legal rights (https://www.nrt-kenya.org/news-2/2021/7/14/response-to-an-article-published-in-the-daily-nation-stop-conservancies-in-north-to-protect-community-lands-there-by-kaltum-gayo).

Emerging lessons

We draw attention to this criticism not to discount the NRT as such, but in order to underline the importance of attention to governance in CBC work. This includes:

(i) ensuring analysis of stakeholder interests and the political dimensions of conservation and land rights when planning support to CBCs
(ii) off-setting power imbalances between external conservation actors and communities in the governance process, e.g., by ensuring that decision-making is *de facto* anchored in exiting institutions and that this is also the entry point for support)
(iii) ensuring checks and balances in local CBC governance to minimize local elite capture, e.g., community monitoring of local accountability and grievance/conflict resolution mechanisms
(iv) avoiding a one-size fits all model when scaling up CBC across numerous socio-ecological settings. Many of these points have been underlined by scholars specifically in relation to NRT (Greiner 2012; Pelis et al. 2015; Bersaglio & Cleaver 2018).

The latter point on scaling is worth particular consideration: Since 2004, the NRT has grown to span over 4 million hectares across Northern Kenya, a region that is highly diverse with 18 different ethnic groups, that is prone to conflict, and that continues to hold severe environmental and developmental challenges related to water scarcity, food security and access to state services such as health care and education.

Given this diversity and complex set of challenges, one should be weary of assuming that the same system for community involvement can simply be scaled to fit across the entire region of Northern Kenya. This is especially the case since parts of this region has a history of marginalisation directly related to colonial land appropriation and conservation practices are often associated with this tainted past (see Greiner 2012; Pelis et al. 2015; Gravesen 2020). This provides an added challenge in terms of establishing local trust and legitimacy in efforts such as the NRT initiative, which may be tackled well in a small-scale project implementation area but becomes much trickier as the programme grows across counties to involve a wider variation of ethnic groups, livelihood zones, and

context dependent socio-economic conditions. As mentioned in the recommendations, working with a Biocultural approach can help address this, i.e. (i) ensuring that CBC are tailored to the socio-ecological and cultural context - rather than following a universal model - but also (ii) building broader nested governance frameworks for negotiation, decision-making, conflict resolution and knowledge sharing.