

The Power of Dissonance: Inconsistent Relations Between Travelling Ideas And Local Realities in Community Conservation in Namibia's Zambezi Region

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Abstract

Environmental conservation is presented as a success story in Namibia's Zambezi Region where conservation measures have led to an enormous increase in many wildlife populations. Complementary to historically exclusive fortress-conservation strategies, inclusive projects have gained prominence in the past few decades aiming to integrate local populations into conservation projects. Perhaps the most salient approach is community-based natural resource management (CBNRM), which sets ambitious goals of more participation, empowerment, and stewardship of local residents in the process of conservation. Despite its popularity in southern Africa, the CBNRM concept has met with criticism, especially with regard to the situations of many conservancy members. We aim to show that the idea of conservation, and the concept of CBNRM in particular, are in some respects detached from the lives of the conservancy members who are confronted with the effects and regulations of conservation measures. We therefore employ the notion of 'dissonance' to describe the inconsistencies between the intended effects of the CBNRM concept and how it is perceived by conservancy members. Three aspects of dissonance are identified here. First, we draw attention to the limited opportunities conservancy members have to benefit from the thriving safari- and hunting-tourism industry. Second, despite successful conservation leading to increased wildlife populations, impacts of human-wildlife conflicts (HWC) and their repercussions for farming and livestock husbandry aggravate the dissonant relationship between conservancy members and the CBNRM concept. Third, we illustrate the discrepancies between the notion of the 'community' in conservancies and the actual social organisation. Altogether, the inconsistencies between the travelling idea of conservation and its impact on local livelihoods will be demonstrated.

Keywords: Conservation, CBNRM, Dissonance, Community, Future-making, Zambezi Region, Namibia

INTRODUCTION

At national and international levels, conservationists' aspirations target the expansion of conservation areas to prevent species' extinction while maintaining biodiversity (Wilson 2016; Convention on Biological Diversity 2020, Desalegn et al. 2020). To this end, the focus has shifted from the mere governance of protected areas (PAs) to more participatory management approaches (Sullivan 2002; Haller and Galvin 2008). A variety of different approaches can be distinguished, ranging from areas being exclusively designated

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1 for wildlife and nature protection, such as national parks, to
2 more participatory and inclusive forms of conservation, such
3 as community-based conservation (CBC) models.

4 In Namibia, the structures of conservation areas are
5 multifaceted, and have developed a strong tendency to
6 strengthen participatory community-conservation projects
7 since the 1980s. The Nature Conservation Amendment Act
8 of 1996 (Republic of Namibia 1996) set the legal frame for
9 the CBNRM idea by regulating the management of wildlife
10 and natural resources. The underlying idea is that as “local
11 people already used, relied on and managed natural resources,
12 they were most suited to conserve them, though with
13 extra-local support” (Dressler et al. 2010: 7). The extension
14 of the conservation approach to communal lands in the 1990s
15 created opportunities for communities to participate in the
16 revenue generation associated with conservation projects
17 (Pellis 2011). The implementation of such projects serves
18 two major goals: 1) empowerment of those people who are
19 living in conservation areas by enabling them to participate
20 in the tourism industry, and 2) the protection of wildlife and
21 endangered species (Abensperg-Traun et al. 2011).

22 While the CBNRM concept and its implementation were
23 often advertised as a panacea to overcome shortcomings of
24 previous conservation policies, the approach has met with
25 criticism from both the sciences and local stakeholders
26 (Blaikie 2006; Sullivan 2006; Springer 2009; Measham
27 and Lumbasi 2013). More generally, conservation efforts
28 have been accused of reproducing colonial power structures
29 (Koot et al. 2020b), and criticised for the biased perspectives
30 of stakeholders involved in the conservation debate¹
31 (Koot et al. 2020a), for their “mode of global capitalist
32 production” (Garland 2008: 51), and for fortifying ‘green
33 grabbing’ (Fairhead et al. 2012). More specifically, scholars
34 have highlighted problems of elite capture (Hoole 2009),
35 the increasing control of CBNRM projects through national
36 governments (Schafer and Bell 2002) and the disempowerment
37 of local communities through conservation measures
38 (Noe and Kangalawe 2015). To sum up, concerns were raised
39 that CBNRM projects “often ended in less than ideal outcomes
40 when institutionalised” (Dressler et al. 2010: 5).

41 The extent to which CBNRM contributes to the improvement
42 of the local residents’ living conditions remains contested.
43 While on the one hand studies show the economic potential
44 of nature conservation (Naidoo et al. 2016), on the other hand
45 the unequal distribution of revenues is criticised, implying that
46 great proportions of the local population are excluded from
47 economic benefits (Nuulimba and Taylor 2015; Morton et al.
48 2016). These criticisms question the legitimacy of CBNRM as
49 a conservation strategy and highlight its link to neo-liberalism,
50 given that the commodification of natural resources and the
51 distribution of derived benefits among local residents is
52 the underlying logic of the CBNRM model. Explanations
53 are needed that help to explain the gap between envisioned
54 outcomes of the CBNRM policy and the experiences of local
55 residents. In this article, we argue that the incongruity between
56 the CBNRM concept as a travelling idea (Behrends et al. 2014)

1 and its evaluation by conservancy members can best be
2 understood by applying a conceptual framework that builds
3 on the notions of ‘resonance’ and ‘dissonance’.

4 The authors conducted extensive fieldwork in northern and
5 north-eastern Namibia, starting in 2018. Multiple methods
6 were applied including interviews, cognitive methods, archival
7 research, and a household survey. These more systematic
8 approaches were complemented with non-systematic research
9 methods, such as, participatory observation. Fieldwork in the
10 Zambezi Region was conducted with both a regional and a local
11 orientation. While the geographical perspective considered the
12 roles of tourism in the larger context of integration into global
13 production systems, the anthropological perspective focused
14 on social dynamics in the three community conservancies of
15 Mashi, Kwandu, and Wuparo. This was enriched by a historical
16 perspective on the conservation landscape located at the centre
17 of the Kavango-Zambezi Transfrontier Conservation Area.
18 In the following, these two perspectives will be merged, to
19 understand the frictions that occur when travelling ideas alight
20 in perceived ‘communities’.

21 The article is structured as follows: first, the conceptual
22 framework is presented by introducing the notion of resonance
23 to conservation studies, and then a description is given of
24 the study region and a brief historical background. The
25 benefit-distribution practices in Zambezi conservancies are
26 then scrutinised, after which, we discuss the dissonances
27 occurring in the nexus of local livelihoods and human wildlife
28 conflicts. Finally, we show how the understanding of the
29 ‘community’, inherent to the CBNRM concept, dissonates
30 with local realities before drawing our conclusions.

31 REFLECTING ON THE NOTIONS OF 32 RESONANCE AND DISSONANCE 33

34 By drawing on the concepts of resonance and dissonance,
35 this article aims to examine frictions that occur when CBC
36 models are implemented. In this way, we aim to provide a
37 perspective on CBC that goes beyond the common framing
38 either as ‘failure’ or ‘success’. We perceive resonance
39 as a condition *sine qua non* (necessary, indispensable)
40 for the CBNRM-driven, long-term alteration of
41 human-animal-environment relationships. Dissonance on
42 the contrary is to be understood as a concept describing
43 inconsistencies between the travelling idea on the one hand
44 and lived realities on the other hand. We have chosen to use
45 the notion of dissonance in our analysis since it enables us
46 to describe inconsistencies that arise between different scale
47 levels, between the global travelling idea of conservation
48 and local realities. Our motivation to understand these
49 inconsistencies through the concept of dissonance was derived
50 from Wikan’s (1992) article on “the power of resonance.”
51 Inspired by her idea of shared spaces, we developed an
52 interest in understanding the CBNRM context in terms of the
53 resonances created (or lack thereof). Looking at Rosa’s (2019)
54 and Sullivan’s (2018) writings, we were able to refine our
55 understanding of dissonant relations, and Sullivan in particular,
56

1 who also works in the conservation context in Namibia, turned
2 our attention to Festinger's concept of cognitive dissonance.

3 In the humanities, the term 'resonance' has been applied in
4 various ways: Wikan (1992), for instance, uses resonance to
5 describe the nature of fieldwork, Ingold (2000) applies it to ways
6 of perceiving and understanding the world, and Rosa (2019)
7 draws on resonance to theorise about the interactions between
8 subjects, society, and their relationship to a (changing) world.
9 Resonance, according to Wikan (1992: 463), is an engagement
10 with the world (or aspects of it) that goes beyond words and
11 describes an orientation which is based on interaction between
12 people and their environments: "Resonance thus demands
13 something of both parties to communication, [...] a willingness
14 to engage with another world, life, or idea; an ability to use one's
15 experience [...] to try to grasp, or convey, meanings that reside
16 neither in words, 'facts,' nor text but are evoked in the meeting
17 of one experiencing subject with another or with a text."

18 Dissonance, on the other hand, describes inconsistent
19 relationships. Perhaps the most popular approach to
20 'dissonance' on an individual subject-oriented level is
21 the *Theory of Cognitive Dissonance* by Leon Festinger
22 (1957: 1) from the late 1960s,² who developed the principles
23 of a theory that attempts to explain the inconsistency between
24 "what a person knows or believes and what he does." He
25 distinguishes between two states. The state wherein harmony
26 is achieved, Festinger calls consonance:³ when both the belief
27 system and the action of an individual correspond with each
28 other; they are 'consistent'. The moment of inconsistency, by
29 contrast, is called 'dissonance' and describes a discrepancy
30 between an individual's knowledge and perception of a
31 matter concerning them, and actions that the individual
32 preforms that do not correspond to that knowledge and
33 perception (Festinger 1957). Festinger defines dissonance
34 as "the existence of non-fitting relations among cognitions"
35 (Festinger 1957: 3) and uses the two terms dissonance
36 (for non-fitting relations) and concordance (for fitting relations)
37 to describe his *Theory of Cognitive Dissonance*.

38 The use of the term dissonance with regard to relationships
39 between people and narratives is not completely new. Rosa
40 (2019: 145) has outlined a theoretical approach to "resonant or
41 responsive relationships [...] between world (or environment),
42 body, and brain." A more nuanced and concrete perspective
43 is taken by Sullivan (2018), who uses the term 'dissonant
44 sustainabilities' (also drawing on Festinger's *Theory of*
45 *Cognitive Dissonance*) to describe the inconsistencies
46 between economic and sustainable strategies regarding the
47 conservation-development nexus. As she puts it, "we are
48 bombarded continually, and with increasing intensity, by
49 diametrically opposed narratives and messages regarding
50 the world. Somehow we have to navigate a way through this
51 complexity [...]" (2018: 5). Sullivan (2018: 10) also notes the
52 multiple-win narratives in what she calls the conservation and
53 development nexus as being "radically dissonant with local
54 narratives." Based on this, we seek to understand three aspects
55 of dissonance in greater detail and with a regional focus in
56 Namibia's Zambezi Region.

1 In our context, we define resonance as being constituted
2 by both the willingness to engage with and the possibility
3 of accessing another world, life or idea, to understand its
4 meanings and establish consistency between the travelling
5 idea and local realities. Dissonance, on the other side, refers to
6 the lack of either the willingness or the opportunity to access
7 these ideas, resulting in inconsistent or askew relationships
8 with these very ideas. These dissonances can be identified
9 on several levels and are an expression of the inconsistencies
10 that arise when a travelling idea (and the promises that come
11 with it) meets the prevailing conditions in local contexts.
12 The underlying interest in our research is the extent to which
13 CBNRM can create a space that allows policymakers to engage
14 with local communities, and the extent to which conservancy
15 members have the means to access the travelling conservation
16 idea as intended by policymakers.

17 The notion of resonance is important for our study as it allows
18 us to better understand the expectations and experiences of
19 people living in conservancies and to recognise domains where
20 resonance between the conservation idea and the conservancy
21 members is not achieved but strong dissonances prevail,
22 hampering the engagement of conservancy members with
23 the current state of conservation. By drawing attention to the
24 different levels of dissonance, we gain enhanced knowledge of
25 how CBNRM is perceived at the local level, what expectations
26 people have regarding its benefits and which of these are not
27 met, and what challenges still remain for building resonance
28 between the CBNRM concept and existing hopes and
29 expectations towards it. For us the concept of dissonance is
30 particularly useful as it inherently implies a temporal dimension:
31 it does not put a focus on the current state of a problem but
32 understands the engagement of different actors in the Zambezi
33 Region with the CBNRM concept as an ongoing process.
34 After a short introduction to the study area, three dissonances
35 are examined in more detail to illustrate our understanding:
36 1) the dissonance between propagated and realised economic
37 returns from CBNRM; 2) the dissonance between increasing
38 wildlife populations and their effects on non-conservation-
39 related activities; and 3) the dissonance between the community
40 concept and the realities of conservancy 'communities.' The
41 acknowledgement of these dissonances, in our view, might help
42 to turn them into resonant relations.

43 44 **HISTORICAL AND ETHNOGRAPHIC** 45 **DESCRIPTION OF THE STUDY AREA** 46

47 During the twentieth and early twenty-first centuries, various
48 conservation models were applied to the Zambezi Region
49 aiming at profoundly reshaping human-environment relations.
50 Particularly the area along the Kwando River has been
51 transformed into a conservation landscape nowadays, consisting
52 of three national parks, seven communal conservancies
53 (four along the Kwando River), a forest reserve, and community
54 forests that cover almost the entire study area (Figure 1).

55 While the Caprivi Game Park (today Bwabwata National Park)
56 was gazetted in the 1960s and the forest reserve in the north

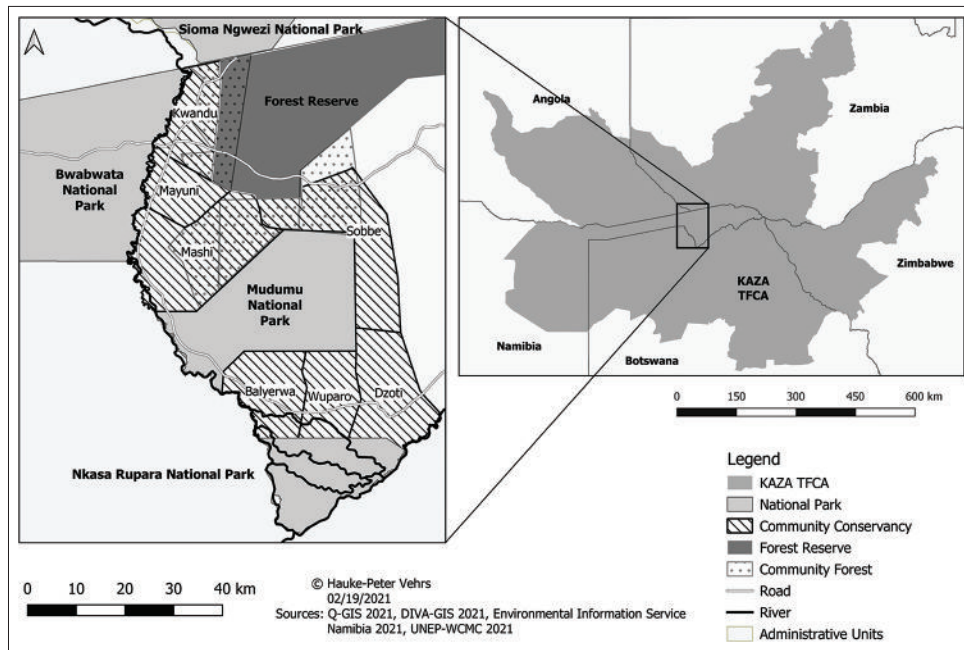


Figure 1
The Research Area in the Zambezi Region, north-eastern Namibia

in the mid-1970s, the Mudumu National Park and the Nkasa Rupara National Park were proclaimed just weeks before the Namibian Declaration of Independence in 1990 (Lenggenhager 2018). The conservancies along the Kwando River followed between 1999 and 2009 during a period when a “new conservation” approach gained prominence (Sullivan 2002). The study area is part of the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA), which was officially established in 2011 and is the “world’s largest terrestrial transfrontier conservation area,” covering about 520,000 hectares (Peace Parks Foundation 2019).

As Bollig and Vehrs (2021) show, the conservation landscape presently prevalent in the Zambezi Region, was gradually assembled over the course of the twentieth century. After the brief presence of the German colonial government in the so-called Caprivi Strip (which is today’s Zambezi Region) in the early twentieth century, it came under the control of the South African Union in 1929, having previously been part of the Bechuanaland Protectorate between 1915 and 1929. Until Namibia’s Declaration of Independence in 1990, several displacements took place. In 1937, the South African administration declared the panhandle strip that connects the eastern side of the Zambezi Region with the rest of Namibia—present day Bwabwata National Park—a cattle-free zone, and most Hambukushu people were displaced (Fisch 1996). In the 1940s, and again in the 1970s and the 1980s, the colonial administrator Kruger aimed to fight the tsetse fly, particularly *Glossina morsitans*, infestation through both ground campaigns and airplanes.⁴ This intervention later paved the way for the establishment of Mudumu National Park as well as the Nkasa Rupara National Park (formerly known as Mamili National Park). Negative experiences during colonial rule did not strengthen confidence

of the local population in negotiating policies between local groups and the state.

The reshaping of the landscape was accompanied by changing livelihood strategies. The people were moved away from the riverine area and established new settlements towards the road that was constructed at a distance of a few kilometres from the river. Today, this road also demarcates the border between the larger areas of cultivation (towards the east of the road) and the most attractive tourist areas along the Kwando River. For instance, compensation for damages incurred due to larger mammals cannot be claimed by conservancy members if the incidents occur in the riverine areas west of the road. This is a strong incentive that encouraged most people to transfer their fields to the eastern side of the road. These fields were consequently mainly used for rain-fed agriculture. Dry-season irrigation along the river, on the contrary, became unattractive, although it was an important strategy when people still settled in the riverine area (Seiner 1909). The hope that the community conservancies would benefit the conservancy members in terms of revenues and village development was also linked to the establishment of conservancies.

The three conservancies that we consider in this article—Kwandu, Mashu, and Wuparo—are all located along the Kwando River. Kwandu and Wuparo conservancies were established in 1999, and the Mashu conservancy in 2003. Kwandu is located north of the Kongola-Katima highway, covering a conservancy area of about 190 sq. km with a local population of almost 4,000 people (NACSO 2021a), and has ventures in trophy hunting, craft sales, a campsite, and the Mafwe Living Museum. Wuparo Conservancy, located between the two national parks Nkasa Rupara and Mudumu, lies in the south of the Zambezi Region and covers an area of 148 sq. km, with a local population of about 1,027. Wuparo

1 has an operating lodge and campsite, trophy hunting, and craft
 2 selling (NACSO 2021d). The Mashi Conservancy comprises an
 3 area of almost 300 sq. km with a population of approximately
 4 2,500 people (NACSO 2021b). Besides the two tourist sites
 5 of the Namushasha lodge and Camp Kwando, it also has
 6 a traditional village operating (including the exhibition of
 7 cultural elements), cooperates with a trophy hunter, and offers
 8 craft selling.

9 In general, 10 to 12 people are in the management committee
 10 of each conservancy and several more are in the executive
 11 committee or occupy positions such as community rangers
 12 and game guards (with a strong bias towards a majority of
 13 men in most instances; see, for instance, Sullivan 2000). With
 14 regard to the current situation, it cannot go unmentioned that
 15 all tourist activities are challenged due to the repercussions of
 16 the SARS-CoV-2 pandemic (Lendelvo et al. 2020).

17 **BENEFIT DISTRIBUTION IN ZAMBEZI** 18 **CONSERVANCIES**

19 *“Habitat and wildlife are critical resources that contribute*
 20 *to the economic and social wellbeing of communities and*
 21 *nations. For that reason, communities need to conserve*
 22 *their natural resources and unlock the value of wildlife by*
 23 *building a ‘Wildlife Economy.’ (NACSO 2021c)”*

24 The idea of CBNRM occurred in the context of post-
 25 colonial nation-building in southern Africa and served as a
 26 tool for new political elites to bring about rural development
 27 in previously disadvantaged areas, for democratic institution-
 28 building, and for the stabilisation of wildlife populations.
 29 International donor agencies identified the opportunity to
 30 scale up and support these initiatives. These include, for
 31 example, USAID, DANIDA, and NORAD. USAID in
 32 particular was crucial in the diffusion and implementation of
 33 CBNRM and started a programme across Southern Africa in
 34 1989. Besides ecological concerns, the aim was to implement
 35 a market logic in nature conservation to a point at which the
 36 stakeholders perceive “that their total socioeconomic and
 37 financial benefits exceed their individual total input costs”
 38 (USAID 1998: 3). Thus, “wildlife production systems” are
 39 seen to make a “meaningful contribution to many local
 40 economies” (ibid.: 3).

41 In Namibia, the legislation providing for the CBNRM
 42 programme was passed in 1996, and has induced the formation
 43 of 15 conservancies in the Zambezi Region. CBNRM is
 44 aligned with the national tourism strategy, which aims to
 45 convey a progressive and economically successful future.
 46 The MEFT⁵ states that “the key objective of the [tourism]
 47 investment strategy is to transform Namibia into the most
 48 competitive tourism destination in Africa” (MET 2016: 5),
 49 whereby the CBNRM programme is one “investment focus
 50 area” (ibid.: 7). In 2019, the 86 Namibian conservancies
 51 were reported to have generated a total income of NAD156
 52 million (roughly USD10 million), 90% of which was
 53 derived from tourism, both safari and hunting tourism
 54 (MEFT/NACSO 2021). Complementary income sources, such

1 as the harvesting of forest products or sales of craft products,
 2 play a marginal role.

3 The introduction of CBNRM has led to a rise in wildlife
 4 numbers and significantly contributed to the expansion of
 5 safari tourism and the emergence of a hunting-tourism sector
 6 on communal lands (Breul et al. 2021). Conservancies, due
 7 to the presence of abundant wildlife, are of huge interest for
 8 the tourism industry, either for wildlife safaris or hunting
 9 endeavours (Stoldt et al. 2020).⁶ The sale of trophy-hunting
 10 quotas to hunting operators, and joint-venture agreements
 11 operating lodges and campsites (Naidoo et al. 2016) are the
 12 key sources of income for conservancies. In the Zambezi
 13 Region, for instance, 22 lodges and campsites make transfer
 14 payments to conservancies of USD0.2 million per year, while
 15 the sale of quotas to hunting outfitters earned USD1.7 million
 16 in 2017 (Kalvelage et al. 2020). Communal conservancies,
 17 through benefit-sharing agreements with private investors, are
 18 able to capture 20% of the value derived from tourism in the
 19 Zambezi Region (Kalvelage et al. 2020). However, the degree
 20 to which conservancy members benefit from these economic
 21 benefits varies.

22 Researchers have criticised the fact that “the positive returns
 23 at community level [...] do not necessarily translate into
 24 positive returns at household level” (Barnes 2008: 355), which
 25 means that community members bear the costs of conservation
 26 but do not benefit adequately (Jones and Weaver 2008; Schnegg
 27 and Kiaka 2018). There are three ways in which conservancy
 28 members can benefit from conservation, though none of
 29 them are fully inclusive: through employment opportunities
 30 at tourism establishments and the conservancy, through cash
 31 transfers and other benefits from the distribution schemes, or
 32 via broader community-development projects.

33 A recent study estimates that the tourism sector in Zambezi
 34 conservancies creates about 780 jobs, and an additional 411
 35 employment opportunities are indirectly created through
 36 employment in one of the 15 conservancies. However, the
 37 wages for these jobs are low, with an average monthly wage of
 38 NAD1,600 in tourism or NAD1,200 in management positions
 39 in the conservancies (Kalvelage et al. 2021a).⁷ An extensive
 40 household survey conducted in the Zambezi Region in 2019
 41 (Meyer et al. 2021) showed a low level of entrepreneurial
 42 engagement in the tourism sector beyond larger lodges. Major
 43 obstacles faced by individual members wishing to enter the
 44 sector include lack of necessary skills, investment capital or
 45 industry-specific knowledge.

46 While 70% of the revenues are needed to cover running
 47 costs, Zambezi conservancies pass 16% of their revenues
 48 on to their members, in the form of cash payouts (7%),
 49 traditional authority payments (3%), funeral assistance
 50 payments (3%), human-wildlife conflict-offset payments
 51 (2%) and other benefits (1%). An additional 14% of the total
 52 conservancy revenues are invested in community development
 53 projects, such as drilling of boreholes, bridge construction
 54 or the electrification of villages. Community development
 55 projects are, however, regarded with some suspicion by many
 56 conservancy members, as they are perceived as ineffective.

1 However, tourism and conservancy benefits combined only
2 contribute 5.5% to the income of rural Zambezi households
3 (Kalvelage et al. 2021a).

4 We argue that an initial dissonance can be observed in the
5 mismatches between the realities of community members
6 and the proclaimed benefits brought about by CBNRM. Most
7 community members lack the means to engage with the
8 tourism sector and are thus decoupled from potential benefits
9 accruing from CBNRM. Furthermore, the sizeable revenue
10 gains in the conservation-related sector are well known, but are
11 equally inaccessible to most community residents, especially
12 at household level. This, too, prevents the establishment of a
13 resonant relationship with the conservation approach. Tourism
14 still plays a minor role as a livelihood strategy in a setting
15 where the majority rely on farming and agricultural production
16 for food security. However, the execution of agricultural
17 activities is also affected by the conservation regulations and
18 negatively impacted by human-wildlife conflicts (HWC),
19 resulting in an even higher level of dissonance between the
20 conservation members and the CBNRM concept.

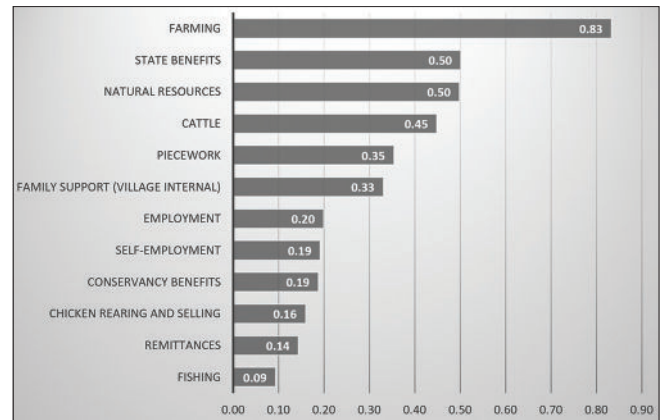
22 LIVELIHOODS AND HUMAN-WILDLIFE 23 CONFLICTS

24
25 *“To live with wildlife means striving for balanced land
26 use and a healthy environment. Wildlife—and all natural
27 resources—can be utilised sustainably and integrated with
28 other rural livelihood activities for the benefit of the people
29 and the land. (MET/NACSO 2018: 10)”*

30 While direct benefits from conservation-related activities
31 are limited, the implementation of a conservation landscape
32 furthermore competes with other livelihood assets, such as
33 agricultural production and livestock husbandry. First, the
34 zoning practices set aside plots for wildlife conservation,
35 which consequently cannot be used for agricultural production
36 (Hulke et al. 2020; Breul et al. 2021). Second, a major constraint
37 is human-wildlife conflict in conservancy areas where wildlife
38 populations increasingly enter settlements and cropping areas
39 and destroy human infrastructure (e.g., fences, boreholes)
40 and crop fields (Hulke et al. 2020). A recent study by Drake
41 et al. (2021) calculated that in Mashi conservancy, the income
42 from hunting tourism only compensated for 30% of the value
43 of crop losses due to wildlife raids. Third, predators, such as
44 lions and hyenas, regularly cause losses in livestock herds.
45 These reoccurring insecurities have negative effects on both
46 the farming outcome and the well-being of the people affected
47 (Mayberry et al. 2017).

48 To understand the relations between conservation and
49 other livelihood assets, we asked 107 household heads in
50 the Kwandu, Mashi, and Wuparo conservancies about the
51 extent to which different income strategies contribute to their
52 livelihoods; Figure 2 shows the ranking of 12 livelihood
53 activities, which were identified as important for making a
54 living in the rural areas.

55 Unsurprisingly, farming was top-ranked, followed by
56 state social benefits (such as, the orphans and vulnerable



14 **Figure 2**
15 *Evaluation of the importance of income assets among household*
16 *members in Mashi, Kwandu, and Wuparo conservancies (n=107);*
17 *indexed*

18 children grants, and old-age pensions).⁸ The direct benefits of
19 conservation (cash, meat, infrastructure, and more) were only
20 ranked in the last third of the options. Local small-scale farming
21 was the undisputedly most important and predominant income
22 strategy. The acceptance of farming along the Kwando River
23 is very high and many people rely on subsistence farming
24 (and surplus selling) as a promising strategy. While farming
25 is an important source of income for over 90% of households
26 (only 7.4% say that farming does not contribute), the other assets
27 are much more diverse in their distribution and importance.
28 For example, not every household has access to the state social
29 protection systems, so that family support is often very important
30 for individual households, while it is completely lacking in others.
31 Cattle husbandry (and sometimes keeping goats) is also generally
32 described as central and important, but only about half of the
33 households have cattle (Bollig and Vehrs 2020). Surprisingly,
34 the items ‘self-employment’ (informal jobs) and ‘employment’
35 (formal employment), which are often considered to be a
36 significant income strategy for individual households, are
37 also to be found here.⁹ Conservancy benefits are also found
38 in the lower third of the table, although all respondents live
39 in and are members of a conservancy. However, the effects of
40 conservation measures, such as conflicts with wildlife, occur
41 regularly and conservancy offset payment schemes are regarded
42 with suspicion.

43
44 *“I do not see any benefit from the conservancy to us,
45 because if there was any benefit, we would not face
46 these human-wildlife conflicts. As you heard from
47 one man in another village, his crops were destroyed
48 by hippos and the conservancy did nothing about it.
49 (Anonymous, August 8, 2019)”*

50 Complaints about HWC losses are numerous and so are
51 the concerns about the administrative procedures. The proof
52 of livestock losses lies with the conservancy members and
53 many losses following predator attacks are not easily verifiable
54 (if the corpse is missing).

55 The difficulties of revenue generation, compensation, and
56 distribution are also emphasised beyond our local case. For

instance, Hewitson and Sullivan (2021: 14) state that local farmers are “suffering the greatest economic and emotional burden of living alongside elephants [and] are not necessarily those who benefit from CBNRM’s economic opportunities.” Therefore, “structurally entrenched poor [...] protect biodiversity and ecosystems and increasingly [...] shoulder the cost of providing these services” while at the same time “the primary beneficiaries and consumers of wildlife appear to be those from high-income countries and contexts” (Sullivan 2006: 127).

Conservation is, in many cases, not perceived as being able to adequately distribute revenues, but rather highly unevenly and offset payments are often delayed (Lendelvo et al. 2020 for the case of Wuparo Conservancy) or do not offset the damages caused by HWC. Pellis et al. (2016) report the high amount of resentment of members in Namibian conservancies in the north-western Kunene Region about the mismanagement and disappearance of funds that were meant for the communities. One of the major critiques is that the state was not able to devolve the full control over resources (also including the management of wildlife) to the conservancy communities, but still retains some control over their utilization and use (Taylor 2012).

Often less addressed, however, are the indirect costs of HWC, such as the loss of economic production potential (e.g., when livestock are killed that were needed for work, such as ploughing or the transport of goods, or young heifers that were to contribute to the reproduction of the herd). Moreover, moving agricultural activities to other areas is hardly possible, not only because most regions are already inhabited and allocated, but also because CBNRM regulations and the inconsistent offset payment scheme make a reorganisation difficult.

Generally, the CBNRM concept is not designed to replace agricultural activities or to compete with them, but rather to add value and provide income opportunities at yet another economic level. This approach, however, obscures the opportunity costs connected to such a commodification of nature. While some people have access to the conservation structures, many conservancy members are not able to participate in an adequate way so as to gain from conservation revenues. This illustrates how differentially the access to and the understanding of conservation, its underlying principles, and its benefits is distributed on the community level—where we observe the third form of dissonance.

CONCEPTUAL INCONSISTENCIES OF THE ‘COMMUNITY’ TERMINOLOGY

“Community conservation is governed by local communities working together to manage the natural resources of their areas. All members of the community are empowered to have a democratic voice in the management of the resources and the distribution of the returns generated. Since the inception of the community conservation movement, CBNRM governance structures and management systems have been developed and tailored to meet local needs. (MET/NACSO 2018: 58)”

CBNRM builds on the assumption that the generation and distribution of revenues is steered by conservancy members that have the opportunity to participate in decision-making processes. Evidence suggests, however, that organisational structures exist beyond the community concept that are often stewards of other interests beyond conservation. In the following section, we describe the dissonances between the conceptual assumptions of the CBNRM concept and the organisation of local livelihoods, which do not conform to the vision postulated for community conservation, but rather illustrate the fragmentations and differentiations in the conservancy community.

A ‘community’ in a conservancy in the Zambezi Region can be subdivided into separate components. In the context of a Hambukushu settlement, the *dighimbo* (village)¹⁰ is a larger settlement unit and consists of several *dilapa* or *pl. malapa* (independent individual households). The number of these households varies considerably with the size of the family living in a village. The village usually consists of the members of one family who are directly related (consanguineal or affinal kinship relations) to the induna (the village headman). Thus, a village may consist of two households (which averages about 10-12 people in total), or it may consist of 30 households or more (which may contain more than 150 people).

On a higher level of organisational structure, two further units can be identified: the area (*thikiriti*; which is also often translated as community, but adheres more to spatial characteristics than to social ones) and *khuta* (the legal institution). The area (e.g., Lizauli) consists of a number of villages. These also belong to the local *khuta* and are represented by their respective *induna*. The *khuta* deals with all social and legal matters that are in the hands of the local authorities (and under control of the traditional authority—in this case Chief Mamilili). This includes the access to land and the allocation of land-use rights, and the adjudication of disputes between individuals. Established units such as the Mashu conservancy comprise a larger number of local legal units (for instance, multiple *khutas* exist inter-pares in the Mashu Conservancy), which also compete for resources and positions within the ‘conservancy community’.¹¹ Moreover, beyond the management level, the ‘community’ disintegrates into an assemblage of many different elements, as can be seen in the example of customary land tenure.

Conservancies themselves do not entail a formal tenure reform (Mosimane and Silva 2014), but in most villages along the Kwando River, village heads have customary land rights and decide on access to land. Land rights are allocated by the traditional authorities (TAs) and can be statutorily registered as customary land rights through the regional Communal Land Boards (Nghitevelekwa 2020). Registration of customary land rights can only take place after consent and confirmation has been acquired from the traditional authorities—in this case, the local *khuta*. In the same light, land rights allocated by traditional authorities that have not been ratified by the regional land boards have no legal effect. Customary land rights are registered for the use of residence as well as farming (MET 2010; Nghitevelekwa 2020).

1 In our case, we focus on customary land rights and land
2 that is not legally registered in one's name. This can also be
3 observed as access to designated pieces of land which are
4 often inherited within the nuclear family and passes from one
5 generation to the next. The access to land is also organised on
6 the village level (except for disputes, which are resolved in the
7 *khuta*) and has a long history of occupation and often belongs
8 to family members (or is inherited by descendants). Therefore,
9 land that was once occupied cannot be easily occupied by
10 others or by one family member alone, without consent, as the
11 following quote illustrates: "People keep their land because of
12 their grandchildren and for the upcoming generation, so they
13 would have enough land where they can build and do whatever
14 they want. So, they cannot give the land to another person; that
15 is the problem" (Anonymous, March 18, 2019).

16 Even without any land use applied, many families sustain their
17 customary rights to land in order to secure their children's access
18 to land. This de facto reservation of land, with or without current
19 land use, constitutes an orientation towards the future that assures
20 potentialities for the next generations, but restricts possibilities
21 for current development efforts. The organisation of land tenure
22 and access to land is another example of inconsistencies between
23 CBNRM's intentions and local realities. The allocation and use
24 of land are constrained by its local organisation on the one hand
25 and on the other by the regulations enacted by the CBNRM (i.e.,
26 defined areas without offset eligibility).

27 The notion of the 'community' has met with much criticism.
28 Koch (2004: 79) argues that "the 'C' in CBNRM is nebulous,
29 fluid and elusive and often a figment of the imagination of
30 project managers and donors seeking quick fixes." Kumar
31 (2005: 282) even describes community as "an enduring
32 dilemma," and the implementation of a 'community' approach
33 in CBNRM often lacks the perspectives of conservancy
34 members and is also subject to the detrimental effects of politics
35 and power (Dove et al. 2019). Pellis et al. (2016) also discuss the
36 character of conflicts in a Namibian conservancy and unfold the
37 narrative of "a local conflict" and show its multiple layers and
38 its roots in historical events and former conflict situations. In
39 their case of the Anabeb and Sesfontein Conservancies they also
40 point to the set of problems that arises around the homogenising
41 'community' concept and the shifts in the organisation of local
42 and traditional authorities that come with the implementation
43 of a conservancy, but that might also steer further conflicts.

44 Also Thomsen et al. (2021) discuss the role of trophy hunting
45 for local communities in Bwabwata NP and the multiple layers
46 of empowerment that are associated with it. They conclude
47 that local community perspectives are only to a limited extent
48 included in the trophy-hunting activities, and highlight how
49 members of the local communities are to varying extents
50 empowered and disempowered, highlighting the heterogeneity
51 of communities from an insider's perspective.

52 In accordance with these authors, our examples also point
53 to greater social differentiation in the localities portrayed as
54 communities. Thus the CBNRM concept, with its stereotypical
55 idea of a homogeneous community, is not able to access
56 local realities and that these dissonant relationships between

conservancy members cannot be used to create positive
experiences with community conservation that will legitimize
CBNRM practices in the future. The 'communities' consist of
a large number of local administrative units, often including
people from several ethnic groups, who, in turn, feel that
they belong to different traditional authorities (even within
one conservancy). Acknowledging this heterogeneity is
essential in order to be able to improve the CBNRM concept.
Furthermore, the concept of a 'community' does rather reflect
the premise of the CBNRM concept, but not local realities,
in terms of power relations and social stratification, which
we argue are paid little attention. The dissonance here lies
not in the community's desires for homogeneity, but in that
the new CBNRM structures compete with existing, layered
structures, such as legal institutions, the social organisation at
the village levels, the land tenure system, and the conservation
management, among others, and fosters a reorganisation of
these structures (see also Kalvelage et al. 2021b).

CONCLUSION: RESONANCE AS A POLITICAL VISION AND DISSONANCE AS A LOCAL REALITY

CBNRM programmes are built on the anchoring of
travelling conservation ideas from the global sphere in
local 'communities.' However, the practice and future of
conservation in the Zambezi Region, and also in the KAZA
TFCA at large, strongly depends on smallholders in the region
and their resonance with conservation as a viable future vision.
Resonant relationships imply an awareness of one's own
role (conservancy member) in a conservation context, the
recognition of institutions (e.g., conservancy as an institution,
MEFT, IRDNC, NACSO, traditional and local authorities, etc.),
and the acceptance of rising wildlife numbers (with positive
and negative effects) over the long term. It also comes with
the limited but nevertheless powerful promise that funds are
generated and jobs created and that community conservation
will enable some form of self-determined participation.

We examined three levels of dissonances: 1) the unequal
distribution of revenues; 2) the effects on agricultural
livelihoods; and 3) the intrusion into existing social
organisation by CBNRM institutions. First, CBNRM has the
potential to generate high revenues but research shows that
not all members are equipped to benefit from these novel
opportunities. Second, agriculture and animal husbandry are
exposed to strong negative consequences due to restrictions
in land management and especially the negative effects of
HWC. Last, the CBNRM concept assumes homogeneity at
'community' level and it does not take into account existing
differential power and social structures.

A perspective that focuses on dissonances can contribute to
CBNRM literature by identifying linkages and interactions
between different scale levels. By doing so, we move beyond
success and failure debates that highlight the responsibility
of institutions implementing CBNRM, as well as realise the
importance and the particularities of local structures and

1 realities in this debate, in turning a dissonant relationship into
2 a resonant one over time.

3 CBNRM is not perceived to be the only development
4 trajectory of the region and was never designed to be so. But
5 the expectations are still high, especially with the political
6 communication that promotes CBNRM and thus increases
7 local residents' awareness of the large revenues generated. In
8 contrast to earlier fortress-conservation approaches, integrative
9 community approaches promise to be an essential part of the
10 future of conservation at large that help to distribute benefits
11 more justly. If one acknowledges the fact that a 'community' is
12 not a homogeneous entity, it is easier to understand why benefits
13 are not adequately distributed in conservancy communities.

14 Conservancy members' current discontent with community
15 conservation measures is comprehensible when nature and
16 animal conservation and their 'use' by wealthy consumers is
17 given priority and do not translate into some kind of benefit
18 for the conservancy members themselves. Compared to other
19 regions on the African continent the Zambezi Region, with
20 its conservancies and the strong involvement of government
21 organisations (GOs) and non-government organisations
22 (NGOs), is well equipped for participation and involvement.
23 Yet, the improvement of CBNRM requires a continuous
24 dialogue between members and policymakers, with the aim
25 of developing a common vision of the future.

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42 Declaration of competing/conflicting interests

43 The authors declare no competing interests in the conduct of
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45 Author contributions statement

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NOTES

- 20
21
22 1. We use the term 'conservation debate' to refer to the wide-ranging
23 controversy among various actors (from practitioners, to
24 scientists, to local stakeholders and GOs, NGOs, international
25 non-government organisations) in the field of conservation and,
26 in our case, especially about its manifestations in the southern
27 African context and the CBC approaches that have gained
28 widespread prominence in that region. This includes the strong
29 lobby for an expansion of conservation and protected areas on a
30 global scale (including representatives such as the International
31 Union for Conservation of Nature (IUCN), World Wide Fund For
32 Nature (WWF), the UN Environment Programme (UNEP), or
33 the Peace Parks Foundation and African Parks, to name a few)
34 as well as the proponents of more critical conservation studies
35 with a wide range of scientific voices from around the world, as
36 epitomised for instance by the recent Routledge book series of
37 studies in conservation and the environment.
38 2. The term concordance, however, is not further elaborated here,
39 and we consider the term 'resonance' as adequate in our analysis.
40 3. What in Wikan's terminology is called 'resonance.'
41 4. The Tsetse Fly Control Programme (TFC) was founded in
42 Botswana in 1943 and the efforts to control and eradicate the
43 tsetse fly population lasted until the early 1980s (Bollig and Vehrs
44 2021).
45 5. The Ministry of Environment, Forestry and Tourism (MEFT) was
46 formerly known as the Ministry of Tourism and Environment
47 (MET).
48 6. In KAZA-TFCA (2016: 11) the authors estimate the world's
49 largest elephant and wild dog populations in the KAZA TFCA
50 to be "about 250,000, and about one quarter of the African wild
51 dog population", respectively.
52 7. Which is slightly more than USD100.
53 8. The Ministry of Labour and Social Welfare offers old age and
54 disability grants of NAD1,250 monthly, while the Ministry of
55 Gender Equality and Child Welfare offers NAD250 in the form
56 of a foster care grant or maintenance grant.
57 9. In the category 'self-employment' 69% of the respondents
58 mention that it does not contribute to their income at all.
59 Respectively, this holds true for 74% of the respondents in the
60 category 'employment.'

10. All vernacular term listed here are in Thimbukushu, the language of Hambukushu people in the region. As regional variations frequently occur, we refer to the spelling in the research region. In addition to villages inhabited by Hambukushu people, there are also villages in the conservancy inhabited by people belonging to the Mafwe or Mayeyi ethnic groups.
11. The khuta authority however has little control over illegal activities conducted within the CBNRM framework: the misuse of money in the conservancies occurs repeatedly (Lubilo 2018), and the limited ability to sanction and then enforce irregularities reduces conservancy members' confidence in the viability of CBNRM mechanisms.

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