

## Article

# Getting Blended Finance to Where It's Needed: The Case of CBNRM Enterprises in Southern Africa

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**Abstract:** Blended finance aims to unlock additional private finance for the sustainable development goals (SDGs), however, it has not yet reached the anticipated scale to deliver on SDG 15: Life on Land. So far, blended finance approaches have not been fully adapted to the context where conservation activities take place, for example on communal lands—a common tenure arrangement for conservation in southern Africa. This study identifies opportunities, barriers, and risks to up-scaling private finance for nature in the context of community-based natural resource management (CBNRM) in southern Africa. It considers the feasibility and desirability of relevant revenue streams towards achieving long-term financial sustainability in conservation landscapes, including sustainable wildlife economies and payment for ecosystem services (PES), and involving indigenous peoples and local communities (IPLCs) particularly within CBNRM tenure arrangements. It concludes that a ‘CBNRM investment guarantee’ or similar would be transformational for hundreds of thousands of conservation enterprises and their beneficiaries regionally, but currently no such tailored de-risking mechanism exists.

**Keywords:** blended finance; conservation finance; biodiversity finance; CBNRM; indigenous peoples and local communities



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## 1. Introduction

The world is on track for a USD 4.1 trillion gap in nature finance by 2050 [1]. Current funding for nature is estimated to range between USD 124 and USD 143 billion per year whereas between USD 598 and USD 824 billion is needed annually to reverse the biodiversity crisis by 2030 [1,2]. This ‘conservation finance gap’ is estimated for South Africa specifically as 50% of the total cost of conservation [3]. Globally, only 14% of nature finance comes from the private sector [1], and recent estimates suggest that between one-sixteenth rising to one-quarter of this reaches the African continent [4]. The private financial sector *can* and *should* be providing a greater share of the needed finance—because of its impacts and dependencies on nature, and as a moral obligation particularly in Africa where the public sector has to prioritise immediate development priorities [5]. Blended finance—the use of development finance to mobilise additional private investment—is valuable and needed in this equation, involving, for example, concessional capital and guarantees or risk insurance provided by the public or philanthropic sector to create an investment opportunity with acceptable risk–return profiles for the private sector by de-risking the investment or improving the risk–return profile to bring it in line with the market for capital. There are many examples of sound blended finance transactions unlocking new

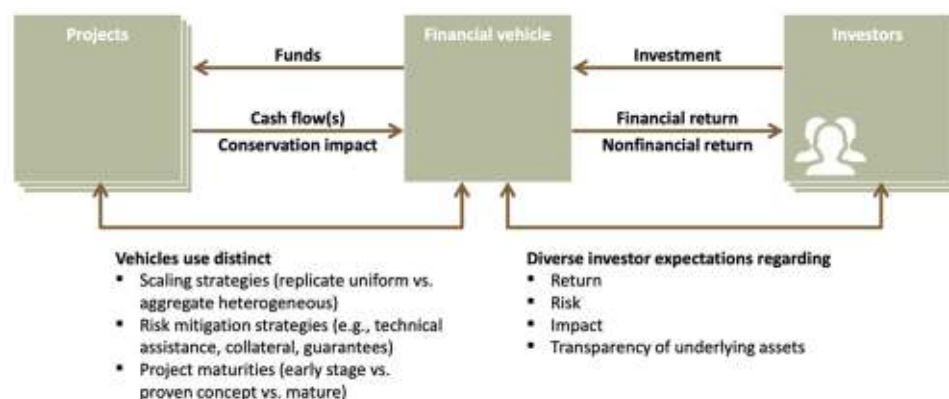
resourcing for sustainable development goals (SDGs), yet SDG 15: Life on Land is near the bottom with just 3% alignment between financing needs and blended financing solutions (just 2 of the 17 SDGs are rated lower) [6]. Despite recent improvements and some exciting model transactions, blended finance has not had sufficient traction to contribute to halting and reversing nature loss at speed. For blended finance to be a viable and effective tool for nature, it would need a suitable enabling environment at country level and mechanisms tailored to the reality on the ground in emerging markets, where biodiversity resources are largely situated.

In many southern and eastern African countries, community-based conservation or community-based natural resource management (CBNRM) are very effective sustainable development strategies addressing both the needs and realities of local livelihoods while providing necessary incentives for sustainable biodiversity management [7]. The model generally involves state-owned land where communities have resource management rights often including wildlife offtake; these areas are commonly known as communal conservancies. In Namibia, around 20% of land is under this form of arrangement, and it has been globally recognised for its success in accelerating wildlife populations while becoming a valuable part of the Namibian economy [8]. The economic returns stood at USD 60 million in 2019, cumulatively contributing USD 623 million to the economy since 1990, far exceeding the level of investment with a healthy internal rate of return of 18.8%. By 2020, land under community conservation (including conservancies and community forests) remained at 166,197 km<sup>2</sup> with over 220,000 Namibian residents [8]. The Namibian CBNRM example has been called “the greatest conservation story ever told” by WWF and others [9].

This study, carried out with the Development Finance Centre at the University of Cape Town Graduate School of Business, identifies opportunities, barriers, and risks to up-scaling private finance for nature in the context of CBNRM in southern Africa, using blended finance as a lever. Blended finance is a financial structuring approach, not an investment approach, instrument, or end solution. It involves public and/or philanthropic catalytic finance normally geared to achieving the SDGs within transactions that are expected to yield a positive financial return; participants will have different return expectations, ranging from concessional to market-rate. The common archetypes of blended finance are: Concessional capital plus commercial debt and/or equity (CD/E); guarantees or insurance priced below market rates plus CD/E; a grant-funded technical assistance (TA) facility plus CD/E; and/or transaction design or preparation is grant funded plus C/DE [10]. Two archetypal blended finance transactions have occurred in southern African conservation, while many more have involved looser variations of public-private risk-sharing or incentives. The study involved a review of what has (and has not) worked in financing functioning conservation landscapes that deliver both measurable conservation outcomes alongside critical goods and services for the local people that depend on them. Broadly, and an assertion of this special issue, is that in order to be effective and to contribute to sustainable development, the planning, management, and governance of such landscapes must involve indigenous peoples and local communities (IPLCs) and must make use of a wide range of instruments such as effectively managed and equitably governed protected and conserved areas, connectivity conservation areas, transfrontier conservation areas, indigenous peoples’ and community-conserved territories and areas (ICCAs), and other effective area-based conservation measures (OECMs) [11].

For conservation finance practitioners, Huwyler et al. (2016) [12] provides the most complete over-arching theoretical model, covering demand, supply, and the elements in between, and consequently is the most-cited foundational reference in this field. The authors made the innovative proposal that new financial products could bridge conservation project funding needs and investor interests in the conservation space, with the starting hypothesis “that a concerted, systematic effort focused on structuring investment products that provide a conservation and financial bottom line would be the best way to overcome the current gap between conservation project funding requirements and the capital available to cover

these needs” (Huwyler et al., 2016, p. 9). Figure 1 illustrates the link between the project (demand) and investor (supply) sides.



**Figure 1.** Demand and supply for conservation finance (from Huwyler et al., 2016, p. 9).

The study builds on a hypothesis that blended finance can be an effective tool for risk transfer, supporting financial intermediation and unlocking the flow of funds from savers to borrowers, in emerging markets [13]. This hypothesis is showing to hold true across a range of sustainable development objectives, including for conservation, with at least 30 blended finance transactions with aggregate financing of USD 3.1 billion focused on financing conservation identified as of October 2019 [10]; however, currently none of these transactions takes place on communal land tenure types such as CBNRM.

Members of the Coalition for Private Investment in Conservation (CPIC) have produced a series of conservation finance “blueprints”, elaborating from the Huwyler et al. model, for delivering risk-adjusted returns from specific types of investment in natural capital. The blueprints provide more specificity and often an emerging market lens for example cocoa supply chains, though again remaining generic and without location-specificity, and indeed are intended to be adapted to local conditions [14]. Other authors in this domain focus in on specific aspects within the demand–supply model, for example integrated landscape-wide approaches to conservation finance [14]. There still remain considerable gaps in understanding the opportunities for conservation finance at specific regional and national levels, given for example the ecology, context of governance, and the unique approaches to indigenous- and community-conserved areas. As such, no publication has considered large-scale conservation finance for communal land tenure.

‘Opportunities’ in the study were defined through a comprehensive literature review of potential revenue streams from conservation, refined with stakeholders and experts in Phase 1 of the study. Potential revenue streams included considerable inspiration from the work of Roe et al. (2020) [15] in the context of diversifying community conservation income away from the volatility underway in both eco-tourism due to the pandemic and game hunting tourism due to social backlash. ‘Risks’ were categorised into financial, environmental and social according to typical practice in development finance particularly for project finance. Financial risks are further defined in terms of market risk, credit risk, liquidity risk, operational risk, legal/regulatory risk, and business risk, which are each in turn quite systematically defined in the practice of financial risk management [16]. ‘Barriers’ were refined to the context in Phase 1, based on a review of the international literature:

*Demand-side barriers for potential project proponents:* a lack of investment-ready projects is a well-known challenge for attracting and channelling private investment in emerging markets, requiring significant planning and capacity during the pre-investment and implementation phases [17]. Limited or non-existent project pipelines can have manifest causes, yet two types of barriers are highlighted in the literature around conservation finance: **desirability-type** barriers include concerns about monetising nature and natural capital, concern for uneven power relations, unmanageability of risks, and new forms of externalities; **viability-type** barriers include the financial, legal, technical, and sustainability-related

challenges associated with projects, cultural differences, knowledge and capacity on both sides of an agreement, and the ability to monetise without damaging the underlying resource; and **scaling challenges** include the development and social challenges and the need for more time and flexibility in generating returns than financial agreements could allow for [18,19].

*Supply-side barriers for investors:* There are often reported to be more willing investors than investable projects in this space, yet viability barriers on the investor side can still be identified. These include insufficient scale or scalability of vehicles, timescale of returns, unpredictability of cash flows, novelty of project types, and insufficient or inappropriate development of fiscal incentives [18,19].

*Context-related barriers:* These include regulatory pre-requisites that are needed e.g., for any PES-related project to succeed, specific policy gaps such as the need for conservation easements as a pre-requisite for some projects to be viable, and/or lack of common standards with and between jurisdictions [20–24].

The blended finance toolkit may be used sequentially through a project to address many demand and supply barriers [14]. Context-related barriers are more likely to need early and sustained investments in the enabling environment for projects (e.g., via technical assistance grants but not necessarily linked to private D/E at this stage).

This study is concerned with a context that has had limited experience with the blended finance approach, yet many conservation-related enterprises could be grown with additional finance. In southern Africa, communal conservancies' income is generated by private enterprises benefiting the community at large, such as joint venture lodges, sustainable agriculture, cultural tourism, and residential developments [7]. These businesses provide cash income, jobs, educational and women empowerment opportunities, and cultural benefits such as preservation of languages and pride of stewardship over ancestral areas. Conservancies have huge potential for next-level financial opportunities such as payment for ecosystems services in the voluntary carbon market or for watershed maintenance. However, they are often hampered in growing their assets and revenue streams by limited access to commercial finance. Lenders and investors are reticent to get involved in transactions where enterprises sit on communal land and ownership is shared, despite the more than 20-year track record of some highly-regarded businesses working in this space including for example some listed companies on regional stock exchanges.

The study considers whether blended finance can better help scale up private investment in southern Africa's community-based conservation efforts. It considers the array of stakeholders' perspectives on the opportunities, barriers and risks of using blended finance to help scale up private investment in southern Africa's community-based conservation, and which revenue-generating activities available to communities from conservation are most viable to upscale with blended finance. The study identifies stakeholder convergence on some promising options, notably there was broad agreement that, despite its challenges, the carbon market presented the biggest opportunities for large-scale private finance of CBRNM, followed closely by joined-up, landscape-wide efforts (grouping transactions into a collateralized debt obligation or other suitable product). While there are external challenges to the wildlife economy (backlash against trophy hunting), this is seen by mainly regional investors as a viable sector with a range of tangible opportunities.

The authors assert that there is an enormous gap for de-risking tools to come into such a context, to provide development backing that would unlock the huge potential growth of enterprises on communal conservancy land. The sheer *development dividend* (return on investment towards local empowerment, rural livelihood opportunities, community pride, and other benefits in addition to cash income) that could reach rural communities through the availability of such de-risking tools is considerable, and growing investments in nature would make a significant contribution to the attainment of SDG 15 in this context. The study provides just one example of how blended finance needs to be appropriately designed to the context in order to unlock new private financial flows for nature at the

necessary pace and scale. It also serves to refine the working theory of conservation finance in this regional context.

## 2. Materials and Methods

The research questions were answered via an exploratory sequential mixed-methods research (MMR) design [25], utilising interviews in Phase 1, a survey completed by 104 respondents in Phase 2, and the integration of results including stakeholder review and validation in Phase 3.

The research questions were as follows:

- Question 1: What are stakeholders' perspectives on the opportunities, barriers, and risks of using blended finance to help scale up private investment in southern Africa's community-based conservation?
- Question 2: Which, if any, of the revenue-generating activities available to communities from conservation are most viable to upscale with blended finance?

The first question implies a quantitative approach, scoped in Phase 1 and undertaken in Phase 2: the independent variable is a type of stakeholder; and the dependent variable is a range of categorised perspectives on this topic measured via a survey instrument. The second question suggests a qualitative assessment, informed by Phases 1 and 2 but validated by stakeholders within Phase 3 [26], based on considering the range of stakeholder perspectives and the desirable and viable space between their demand and supply for conservation finance.

In explorative sequential MMR, the qualitative sample is typically much smaller than the quantitative sample. The research design for Phase 1 involved 15 exploratory interviews from diverse stakeholders including those from the region and those with global expertise. The objective was to explore different perspectives on a range of topics, selected because they are considered essential in realising private finance for conservation at the community level, and can give insight into context, considerations, and range of views relevant to the viable space between demand and supply in a financial transaction. This phase served to define the six key stakeholder groups utilised in the quantitative portion of the study, identified as key participants in the development and/or realisation of a conservation finance transaction. These are: A. Investors, bankers, and fund manager (private sector, and commercial), B. representatives of a public donor or non-profit foundation, C. entrepreneurs or managers related to biodiversity enterprises, D. technical experts, academics, and/or researchers (called 'advisors' in short-hand), E. residents in or near a conservation area, affected group, or civil society, and F. government representatives. Estimates of population size for each of these are based on: search of LinkedIn profiles with relevant search terms for A, B, C, D, and USAID [16] for E. Finally, F. was estimated as circa one to five individuals in key national and sub-national departments (environment, rural development, protected areas, CBNRM extension, etc.) in the five countries, assuming countries with larger populations and higher budgets and/or donor support would have more contact points relevant to the topic. The scope of 'southern Africa' was defined in the study per the United Nations scheme of geographic regions as five countries: Botswana, Eswatini, Lesotho, Namibia, and South Africa. A 'saturation' sampling strategy was utilised in Phase 1, i.e., continuing until no further novel insights can be obtained, in order to define Phase 2.

Phase 1 qualitative interview data were transcribed and coded by themes. It was reduced in quantity, displayed, transformed, and correlated. The results from this were presented in draft, alongside a draft survey for use in Phase 2, and an analytical framework for the results. The design of the survey used in Phase 2, including relevant categorisations used in Likert scales, was informed by feedback from the research supervisor, Phase 1 respondents, and other reviewers.

Following the description of explorative sequential MMR, the second step—the quantitative sample—is typically larger: Accordingly, the majority of effort was ascribed to Phase 2. The desired sample size was obtained via a widely-used formula [15]. The study's qualifying thresholds were set as  $e = 15\%$  i.e., margin of error 0.15 for 15% and  $z = 1.28$

i.e., z-score of 1.28 for 80% confidence level. Aligned with Phase 1, non-probability sampling methods were used with the intent to reach respondents from each stakeholder group, through a combination of self-selection sampling—wherein the respondent decides whether or not to participate, typically in one and purposive, expert sampling—with their expertise left to the judgment of the researcher. The advantages of this strategy were reaching the largest possible proportion of the target population, with the disadvantage that some populations will be harder to reach than others (The original intention was to interview stakeholders with the survey instrument in-person, visiting a number of regional conservancies, enterprises, and financial centres, which became practically unfeasible during the COVID-19 pandemic. A best-effort attempt was made to reach stakeholders remotely during lockdown). The calculation of sample sizes overall is presented here, but varies for individual questions given that all questions except category of respondent were voluntary. Major variations or unusual differences in sample sizes are noted in the results as relevant.

$$\text{Sample size} = \frac{\frac{Z^2 \times p(1-p)}{e^2}}{1 + \left( \frac{Z^2 \times p(1-p)}{e^2 N} \right)} \quad (1)$$

where,

$N$  = population size

$e$  = Margin of error

$Z$  = z-score or level of confidence required

$p$  = percentage occurrence of a state or condition

Where disclosed, the geographic location of respondents was South Africa (26), other southern-African regional country (23), then elsewhere in Africa (particularly Kenya, which also has conservancies but does not allow offtake, and we wanted to explore the difference with southern Africa) or international (24). The geographic location was a voluntary question in the survey, and in many cases respondents had origins, residency, work, and/or study experience in multiple locations leading to challenges strictly categorizing these; thus, the geographical location of respondents is not a major focus of analysis (but remarked on if there was an anomalous result). Per Table 1, the results for community residents and government officials do not meet the minimum thresholds set for the study, and thus are presented with caveats as illustrated.

The exploratory sequential mixed-method was able to answer the defined research questions, with one caveat: With the inability to travel to conservation areas during the COVID-19 pandemic and reach the relevant community and government categories of respondent, this condition limited the validity of results for these smaller sample size categories. These have been marked throughout to note the limitation. Otherwise, the methods documented enable the following four criteria of valid qualitative research to be met as related particularly to the investor, advisor, and entrepreneur/manager categories of study participants: (1) sensitivity to context, (2) commitment and rigour, (3) coherence and transparency, and (4) impact and importance [12]. The lens of the study participants was employed in the validation of the final results by circulating a draft of the research output for their comments prior to finalisation (in Phase 3). The additional groups' sample sizes and representation, particularly in the advisory group, were very strong and represent a cutting-edge view on this topic.

Extracts of survey data are available on a limited basis by request to the authors, to maintain the confidentiality of respondents. Ethical review and approval for the interviews and survey conducted were provided by the University of Cape Town.

**Table 1.** Details of target populations, margin of error, confidence level, sampling sizes and qualifying sample sizes utilised in study.

Target Populations/ Stakeholder Type	Estimated Number of Individuals in Target Population	Margin of Error (Desired)	Confidence Level (Desired)	Sampling Size (Desired)	Number of Survey Responses	Desired Sample Size Met Overall
A. Investors, bankers, and fund managers (private sector, commercial)	50	15%	80%	14	$n = 15$	Yes
B. Representatives of a public donor or foundation (non-profit)	30	15%	80%	12	$n = 16$	Yes
C. Entrepreneurs or managers related to biodiversity enterprises (inspired by the World Bank definition of entrepreneurs as “the activities of an individual or a group aimed at initiating economic activities in the formal sector under a legal form of business” [18] (p. 3); entrepreneurs and managers here is defined as those engaged in registered activities and/or with formal employment by a registered enterprise)	80	15%	80%	15	$n = 17$	Yes
D. Technical experts, academics, and/or researchers (advisors)	100	15%	80%	16	$n = 45$	Yes
E. Residents in or near a conservation area, affected group, or civil society	6400+	15%	80%	19	$n = 4$	No
F. Government representatives	60	15%	80%	15	$n = 7$	No

### 3. Results

The study identified broad alignment in stakeholders’ perspectives on the opportunities (3.1), barriers (3.2), and risks (3.3) of using blended finance to help scale up private investment in southern Africa’s community-based conservation efforts. It further demonstrated which of the revenue-generating activities available to communities from conservation activities were perceived by stakeholders as most viable to upscale with blended finance, considering the relevant criteria of desirability and viability (3.4). This section provides a summary with further analysis available from the corresponding author.

#### 3.1. Opportunities for Up-Scaling Conservation-Related Revenue Streams Using Blended Finance Structuring Approaches

The public donor/non-profit group and the government were more optimistic about the opportunities for private finance in community-based conservation than investors and entrepreneurs/managers (mean concurrence with a positive statement on opportunities of 0.93 and 1 compared to  $-0.13$  and  $-0.14$ , respectively, on a scale where 2 represents ‘strongly agree’ and  $-2$  is ‘strongly disagree’). Those in the advisory services were somewhat optimistic (mean of 0.65). Most groups had a wide range of responses from the top to the bottom of the scale (range of  $+2$  to  $-2$ , standard deviations up to 1.55), although government and residents of community-conserved areas had lower variation in their responses. Reflective of the ‘wicked gap’ between the outlook of entrepreneurs and investors, in other words a mismatch of funding between willing investors and investees [7], write-in comments reflect different perceptions of where the problem lies (i.e., with available finance, intermediation, risk-reward profiles, etc.). Those located overseas or outside of southern Africa were more optimistic about the opportunities than those resident in southern Africa (mean of 0.75 for those outside the region compared to 0.35 in South Africa and 0.38 in

southern Africa more broadly, on a scale where 2 represents ‘strongly agree’ and –2 is ‘strongly disagree’, with a statement on the opportunities for conservation finance).

An essential ingredient for blended finance transactions (indeed any type of financing) is the availability of viable revenue streams to pay back the return-seeking capital; therefore, the revenue streams available for up-scaling through investment are a considerable concern. Respondents were asked to scale a number of examples of “non-tourism (The definition of “non-tourism” excludes activities directly linked to tourist visits such as lodges and mobile safaris, but includes activities that have indirect linkages to tourism such as game ranching, which can derive non-tourism revenue streams such as selling of fur and leathers, and long-term residential agreements that are mainly geared to long-stay or seasonal visitors and retirees, not necessarily high-turnover international tourists) revenue streams that can be derived from community-based conservation”, described as:

- Wildlife economy including game ranching, live animal sales, and ‘shoot-to-sell’ (did not including carbon opportunities, though some definitions of wildlife economy do)
- Payment for ecosystem services (PES): carbon market e.g., reducing emissions from deforestation and forest degradation (REDD+) and voluntary or verified emissions reductions (VERs)
- PES: Biodiversity restoration, species and habitat conservation e.g., for biodiversity offsets and biodiversity credits
- PES: Water security/watershed management
- Sustainable or wildlife-friendly forestry e.g., via certification
- Long-term residential lease agreements e.g., for holiday homes
- Other ‘bundling’ of biodiversity with other services/where biodiversity is a co-benefit

Responses were indicated on a scale from 1 = most scalable to 8 = least scalable, as summarised in Table 2.

All groups except public donors were aligned that ‘bundling’ of biodiversity under other services is a less desirable approach to revenue generation (per Table 2); this may be in part due to the target audience of the survey being self-selected as those who have an interest in finance for nature, or that the concept (indicating the spatial co-occurrence of ecosystem services in a landscape [14]) was not sufficiently defined. Public donors/non-profit, advisory, and government-rated PES solutions linked to carbon and biodiversity restoration higher than other groups. Investors, particularly those based in the region, thought that wildlife economy—an already proven sector—is the most scalable (rating it 3.21 for South Africa, and 2.85 for the rest southern Africa, compared to 4.70 for investors outside the region; with the scale above where 1 is most promising for scalability).

All groups except advisory were fairly aligned that there are scalable opportunities related to food and agriculture e.g., through biodiversity certification. Southern African residents (including RSA) were more likely to rank wildlife economy as scalable as compared to those outside the region (mean ranking of 3.21 for South Africa, 2.85 for rest of Southern Africa, compared to 4.70 from outside the region, where 1 is ‘most scalable’ and 8 is ‘least scalable’). In comparing the difference between mean and mode for advisor responses, fully 11 of 39 advisor respondents (or 28.2%) see wildlife economy as the most scalable revenue option. In the advisor category, we should also consider the presence of strong views on the controversial topic of offtake, with one investor noting that the dynamics here were “very misunderstood outside of most southern African countries”.

Residents of the region (in across all categories) were marginally less optimistic about the prospects for PES related to carbon than those outside the region (mean ranking of 3.31 for South Africa, 3.43 for rest of Southern Africa, compared to 2.55 from outside the region, where 1 is ‘most scalable’ and 8 is ‘least scalable’, in aggregate across all category types).



**Table 2.** Stakeholder perspectives on scaleable CBNRM revenue streams.

Stakeholder Group (see Table 1)	Count <i>n</i>	Mode: Most Likely Rated 1 (Most Scalable)	Mode: Most Likely Rated 8 (Least Scalable)	Mean Rating							
				Wildlife Economy	PES: Carbon	PES: BD Restoration	PES: Water	Forestry-Related	Agriculture-Related	Residential	Bundling/BD Co-Benefits
A. Investor	10	Long-term residential agreements	Tie between long-term residential and bundling	3.00	4.67	4.30	4.10	3.20	3.45	3.75	6.38
B. Public Donor/Non-Profit	13	PES carbon market	Long-term residential	4.67	3.077	3.36	4.5	5.17	3.38	5.56	4
C. Entrepreneur/Manager	8	4-way tie	Bundling	4.12	3.42	3.64	4.3	4.9	3.18	4.82	6.5
D. Resident	4	<i>Long-term residential agreements</i>	<i>Bundling</i>	3.93	3.72	3.77	4.30	4.42	3.34	4.71	5.63
E. Advisory	39	Wildlife economy	Bundling	3.47	2.88	4.41	4.03	4.24	4.11	4.69	5.60
F. Government	6	<i>Agriculture-related</i>	<i>3-way tie</i>	3.84	3.55	3.89	4.25	4.39	3.49	4.71	5.62

**Legend:** Colour scale from green being most in agreement to red being least in agreement; for standard deviation and variation, green represents more consistent responses and red is less consistent responses within the group. Responses from residents and government are italicized as a reminder that the results are illustrative and did not meet minimum qualifying sample size thresholds.

Generally, all groups were aligned that bundling is the least-scalable route (perhaps for reasons noted before). Those living in South Africa are more optimistic about the scalability of residential lease agreements (rated 4.11 compared to 5.50 from outside the region, per the rating scale above), potentially due to the already established market segment in that country, in which those outside the region are not considered to be scalable potentially because outside East Africa, particularly Kenya, the concept is less known). For those based in or familiar with Kenya, there are successful examples in Ol Pejeta and Lewa conservancies that enhance familiarity with this kind of arrangement as a scalable model. In comparing the difference between mean and mode for investor responses, we note a big division between those who see residential lease agreements as scalable, potentially for this reason.

The perception of opportunities involved not only looking towards the horizon but considering the existing first-hand experience particularly with blended finance tools for this purpose. As may be expected, investors followed by public donors and entrepreneurs had the most experience with concessional capital (26.7%, 18.8%, and 17.6% respectively, while public donors had most experience with technical assistance (TA) funds (25%). The conservancy resident and government respondents (remembering these groups had below-threshold sample sizes) had no first-hand experience with blended finance, while those in the advisory's experience was as may be expected skewed towards TA funds and design-stage grants (17.8% then 15.6% respectively). None of the respondents (in any category) had any experience with guarantees or insurance as a blended finance tool in this space.

### 3.2. Barriers

The barriers to private finance for conservation generally are well-covered in the international literature [14–17] and described on pages three to four. Asked to consider the 'significance of barriers' (defined in Phase 1, per methods) to scaling up community-based conservation in southern Africa with blended finance, respondents provided ratings on the most relevant barriers identified in Phase 1 via a Likert scale, from the following options:

- Lack of skilled intermediaries who understand finance and the context at sufficient levels
- Available revenue streams are not proven or promising enough
- Too much time and investment required at the design stage
- Lack of willing payers for concessional capital, guarantee/insurance, design stage grants, or TA
- Concern for risks involved and stakeholders unwilling

Most stakeholders agreed that the issue of time and investment at the design stage was a manageable issue (mean ratings between 1.29 and 2, where 0 is a manageable issue and 4 is a significant or insurmountable barrier). The different perspectives were more notable around which barriers were more serious or even insurmountable: Investors and advisory agreed on the importance of revenue streams being proven or promising enough (ratings of 2.50 and 2, per scale above), while investors also expressed concern about the risks involved and unwillingness of stakeholders to engage in such transactions (rated 2.18). Government officials pointed to the lack of willing payers for concessional finance and concern for the risks involved (both rated 2, on the scale above) as the main barriers. Entrepreneurs and managers were most concerned about the lack of skilled intermediaries who could successfully navigate the local context and investor expectations, as well as the viability of revenue streams (rating both as 1.63, with all other concerns less than this).

### 3.3. Risks

Risks involved in private finance of community-based conservation span financial risks, environmental risks, and social risks. Contextually, these are significant given the transactions would take place in an emerging market, in sensitive conservation areas and locations with high poverty and inequality. Respondents were asked what they saw as the most significant risks in scaling-up private investment to community-based conservation in southern Africa (open text responses by risk type, which were then coded into sub-types). Following expectations, investors had the most concern about financial risks (86.7% wrote

in an example), whereas public donors and residents of conservancies or civil society (small sample of four) were most concerned about social risks (100% of community residents wrote-in a social risk example); although a small sample (of seven) government respondents also expressed more concern about financial risks (85.7% wrote-in on this). Public donors listed the largest proportion of additional risks. The top-mentioned risks were heavily focused on credit risk (general and of specific types), over-exploitation, and conflict over benefit distribution. In the write-in comments, investing where there is communal land tenure was highlighted as a major challenge for investors to grapple with, particularly where there is a lack of standard forms of collateral. Just two countries, notably Namibia and South Africa, were noted by respondents to have adequate CBNRM governance that allows for operating in communal areas with any near enough certainty.

A summary of the top-mentioned risks by each stakeholder type and typical examples of relevant mitigation measures typical to development finance are provided in Table 3. *This is a high-level indicative explanation for a non-financial audience on the topic of financial risks, which is in itself an enormous discipline and requires major undertaking of the financial sector to identify, price, manage, transfer, avoid, accept and/or control risk in various ways according to degrees of risk–return expectations and other considerations.*

#### 3.4. Overall Assessment of Viable and Desirable Options between Stakeholder Groups

Respondents were asked to synthesise what they saw as the most promising opportunities at different levels of transaction, from USD1 million, USD 10 million and USD 100 million ballparks (and South African Rand/ZAR equivalents). There was broad convergence from respondents in the write-in qualitative assessment that, despite its challenges, the carbon market presented the biggest opportunities for USD 100 million + private finance of CBNRM. While critics of CBNRM argue that the approach has so far been too narrowly focused on the smaller-tier opportunities linked to wildlife utilisation and forestry resources, many perceive that the governance structure of CBNRM is an excellent basis for building other conservation-related revenue-generating enterprises at the larger transaction sizes, especially when conservancies group together in a landscape. Considering the growing backlash against offtake-related opportunities, especially trophy hunting, the fragility of tourism exacerbated by COVID-19, and other factors, the carbon market seems to be the most promising avenue to unlock revenue streams for CBNRM and thereby both grow and diversify their income. Carbon markets through emission avoidance of renewable energy investments holds tremendous opportunities for CBNRM, especially in countries where enabling policies for renewable energy deployment are well established, for example Namibia. Here there are a large number of CBNRM entities in Namibia that are perfectly located in geological areas suitable for carbon capturing and storage, via community projects that yield a high development dividend.

Within the larger transaction size range, respondents also emphasised the potential in agricultural supply chains, and the need for potentially financeable projects to join-up, in landscape-wide efforts. Each of these requires considerable early and sustained efforts in the enabling environment to build the offering and reach the market at a scale that is attractive to mainstream investors who prefer transaction sizes much higher than currently on offer.

In the small and medium range, long-term residential agreements (especially for holiday homes) were noted to have cultural and social drawbacks but a very promising approach to grow private finance in the more immediate term. While there are external challenges to the wildlife economy (backlash against trophy hunting), this is still seen—especially by regional investors—as a viable sector with a range of tangible opportunities at the smaller end of the transaction size range.

**Table 3.** Perceived risks and corresponding mitigation measures for investing in communal land by stakeholder group (Generalised).

Stakeholder Type	Most-Cited Risks (Aggregated from Write-in Comments) (a Future Study should Consider This Topic More Systematically and Further Elaborate on the Financial, Social and Environmental Risk Typologies and Mitigations for This Context)	Common Forms of Mitigation for This Risk
A. Investor	Most concerned with financial risk—especially credit and operational risks—particularly around lack of tenure and collateral, and the dual layer of communities (who hold rights) and governments (who hold tenure), and general market and political risks common to operating in emerging markets.	Financial: credit risk—external and self-insurance, risk-based pricing, covenants, limiting exposure, creditworthiness assessments, due diligence/KYC, etc. Financial: operational risk—insurance, training. Financial: political risk—political risk insurance.
B. Public Donor/Non-Profit	Concerned with financial risks especially operational risks. Second highest level of concern for social risks after residents themselves.	Financial: operational risk—planning for and training on common risk types. Social risk—apply safeguards such as the IFC performance standard 7 PS7 on indigenous peoples, including informing modalities for the free, prior and informed consent (FPIC) of indigenous and local communities.
C. Entrepreneur/Manager	Concerned with social risk conflicts followed by the environmental exploitation of the underlying resource.	Social risk—IFC PS7. Environmental risk—IFC performance standard 6 on Biodiversity Conservation and the Sustainable Management of Living Natural Resources (PS6).
D. Resident	Most concerned with social risks (though low sample size limits validity of results for this group)	Social risk—IFC PS7 as above.
E. Advisory	Identification and concern with risks of all types, but most likely to highlight potential mitigation measures.	As above.
F. Government	More concern on financial risks that may be expected (though as above, validity is challenged by low sample size)	As above.

#### 4. Discussion

An assumption of the researchers tested through the study was that a few options for private finance of community-based conservation could be identified that would be mutually agreeable to the necessary range of stakeholders. Yet, there was in fact general convergence (per Section 3.4) on some revenue streams that have potential scalability with blended finance i.e., that could overcome barriers of viability and desirability to meet investor-level expectations. The material gathered through this study could serve as a basis for further examination of these options in the regional CBNRM context, in the format of pre-feasibility-type studies at a country, landscape, or other refined scale.

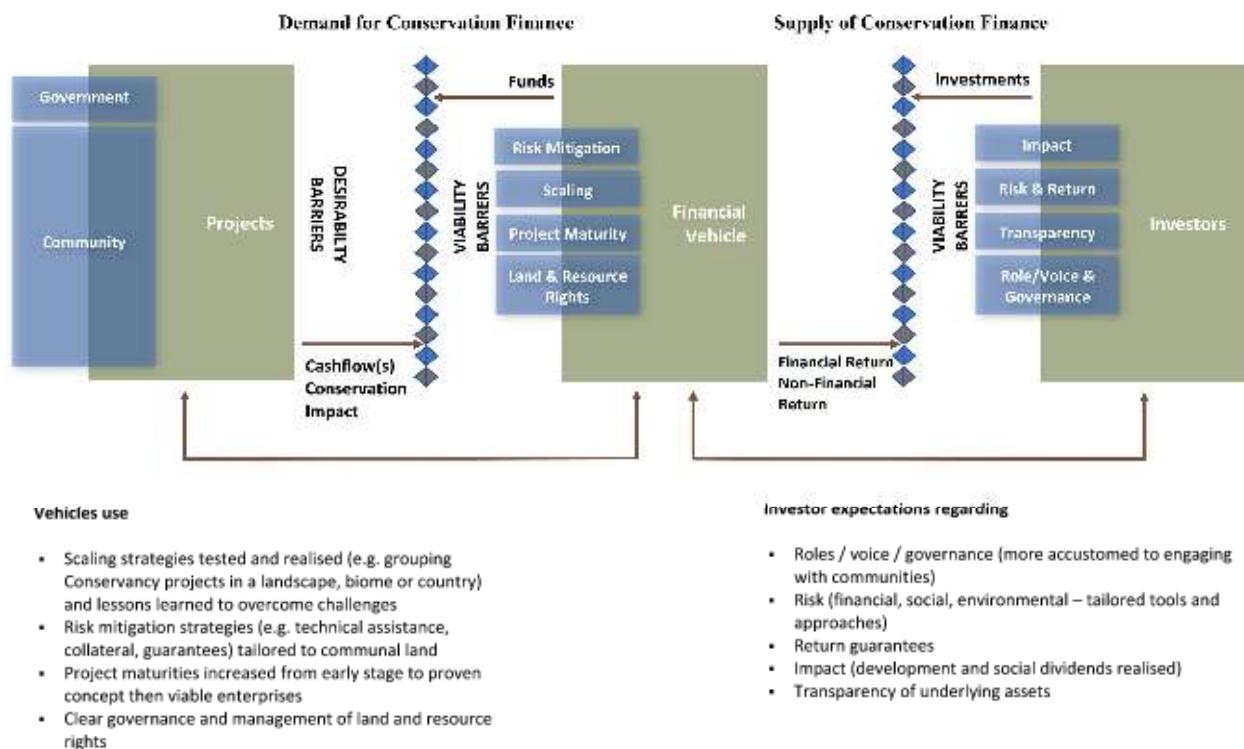
More broadly, the study showed that there are currently only limited first-hand examples of blended finance being used for community-based conservation in southern Africa but high interest in this topic based on e.g., number of total responses to the study. A notable finding was no evidence of insurance or guarantees being used as part of the blended finance toolbox for conservation finance. These tools are widely used in both public and private development finance to mitigate precisely the kind of financial risks that are expected in such projects, as a financial agreement that transfers risk of the insured loss to a risk pool administered by an insurer either for commercial or development purposes [13]. These tools are widely used within finance of other SDGs using blended finance approaches with

tailored products such as ‘renewable energy insurance’, which illustratively covers the risks faced by renewable energy enterprises from their initial planning stages and construction to energy production.

When looking at the risks of concern to potential investors (credit and operational risks especially around lack of tenure and collateral, and the dual layer of communities and governments), more tailored insurance and guarantee products seem to be a potentially very powerful tool in this context to de-risk transactions and unlock further investment. The finding on lack of tailored insurance and guarantee mechanisms for operating on communal land was deemed as novel and interesting (and relevant also for the context of state-operated protected areas).

With the insight of the study, it is possible to refine the working theory of conservation finance for this context and show that blended finance can be a viable approach to grow private conservation finance when the right measures and considerations are applied. Figure 2 elaborates the model presented in Huwylar et al. (2016) [12] with the contextual circumstances and identified solutions related to CBNRM in southern Africa.

As the application of blended finance to CBNRM projects is a new concept at the intersection of conservation finance, blended finance, and empowerment of IPLCs in protected and conserved areas, with limited experiences and studies to date, there are many avenues for future research. An immediate follow-on study would be to develop and test stakeholder perceptions of a number of ‘model transactions’ (idealised examples such as the CPIC blueprints but tailored to the context) based on innovative blended finance approaches linked to the highest-promise revenue streams, with different groupings of stakeholders, for example, bundling regional groups of conservancies with common potential. Innovations in blended finance are rapidly coming to market that show new ways of structuring financial transactions to better lever financial flows to nature. Further effort could be applied to develop the taxonomy and typology of risks related to conservation finance on communal land, given that this would be a valuable and practical resource to support de-risking efforts (noting that Table 1 provides only very coarse illustrative examples). Finally, valued insight would come from further examining the potential for insurance and guarantees as tools of blended finance for conservation particularly in communal areas. Further, the stakeholder survey could be repeated in 3–5 years to measure each stakeholder group’s changes in perceptions on the various topics over time, to determine for example if some options have become more or less acceptable, and if more blended finance examples have been applied and what has been learnt and how perceptions have evolved with this experience. With regards to the desirability of different investment themes, for example, with more education about the wildlife economy and the role of offtake in sustainable management, this could become a more attractive investment theme. Furthermore, it is hoped the COVID-19 pandemic will abate, vaccination access will increase, and otherwise conditions will improve for research engagement in CBNRM areas to gain more insight from community members and relevant governments officials who were insufficiently represented in this study.



**Figure 2.** Working theory of conservation finance showing potential future demand and supply for community-conservation finance with tailored de-risking measures (adapted from Huwyler et al., 2016 [12] with CBNRM context and findings).

## 5. Conclusions

This is the first published research linking blended finance and CBNRM, adapting the theory of conservation finance to the context of communal conservation landscapes in southern Africa. It illustrates key stakeholders' perspectives on the opportunities, barriers, and risks of using blended finance to help scale up private investment in southern Africa's community-based conservation. The study demonstrates that a number of mutually agreeable options for growing CBNRM revenue streams appear possible if the available support would be in place to structure and enable/permit such transactions. A number of revenue-generating activities available to communities from conservation are perceived by stakeholders as viable to upscale with blended finance, addressing the barrier of 'scale' that is often cited as a barrier to conservation finance.

Recalling the common archetypes of blended finance (concessional capital plus commercial debt and/or equity (CD/E); guarantees or insurance priced below market rates plus CD/E; a grant-funded technical assistance (TA) facility plus CD/E; and/or transaction design or preparation is grant funded plus C/DE [10]) the study identified no examples of guarantees or insurance products available to support conservation finance in communal areas. This could be an offering of public insurers and guarantors at below-market rates to leverage commercial debt and/or equity into a conservancy financial transaction. This is but one example of blended finance approaches that could be further tailored. Such efforts would help unlock more financial flows for nature in the circumstances where it is needed.

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