AFB/PPRC.17/17
25 September 2015

Adaptation Fund Board
Project and Programme Review Committee
Seventeenth Meeting
Bonn, Germany, 6-7 October 2015

Agenda Item 6 l)

PROPOSAL FOR NAMIBIA (4)

Background

1. The Operational Policies and Guidelines (OPG) for Parties to Access Resources from the Adaptation Fund (the Fund), adopted by the Adaptation Fund Board (the Board), state in paragraph 45 that regular adaptation project and programme proposals, i.e. those that request funding exceeding US$ 1 million, would undergo either a one-step, or a two-step approval process. In case of the one-step process, the proponent would directly submit a fully-developed project proposal. In the two-step process, the proponent would first submit a brief project concept, which would be reviewed by the Project and Programme Review Committee (PPRC) and would have to receive the endorsement of the Board. In the second step, the fully-developed project/programme document would be reviewed by the PPRC, and would ultimately require the Board's approval.

2. The Templates approved by the Board (OPG, Annex 4) do not include a separate template for project and programme concepts but provide that these are to be submitted using the project and programme proposal template. The section on Adaptation Fund Project Review Criteria states:

> *For regular projects using the two-step approval process, only the first four criteria will be applied when reviewing the 1st step for regular project concept. In addition, the information provided in the 1st step approval process with respect to the review criteria for the regular project concept could be less detailed than the information in the request for approval template submitted at the 2nd step approval process. Furthermore, a final project document is required for regular projects for the 2nd step approval, in addition to the approval template.*

3. The first four criteria mentioned above are:
   1. Country Eligibility,
   2. Project Eligibility,
   3. Resource Availability, and
   4. Eligibility of NIE/MIE.

4. The fifth criterion, applied when reviewing a fully-developed project document, is:
   5. Implementation Arrangements.

5. It is worth noting that since the twenty-second Board meeting, the Environmental and Social (E&S) Policy of the Fund was approved and consequently compliance with the Policy has been included in the review criteria both for concept documents and fully-developed project documents. The proposals template was revised as well, to include sections requesting demonstration of compliance of the project/programme with the E&S Policy.

6. In its seventeenth meeting, the Board decided (Decision B.17/7) to approve "Instructions for preparing a request for project or programme funding from the Adaptation Fund", contained in the Annex to document AFB/PPRC.8/4, which further outlines applicable review criteria for both concepts and fully-developed proposals. The latest version of this document was launched in conjunction with the revision of the Operational Policies and Guidelines in November 2013.

7. Based on the Board Decision B.9/2, the first call for project and programme proposals was issued and an invitation letter to eligible Parties to submit project and programme proposals to the Fund was sent out on April 8, 2010.

8. According to the Board Decision B.12/10, a project or programme proposal needs to be received by the secretariat no less than nine weeks before a Board meeting, in order to be considered by the Board in that meeting.

9. The following fully-developed project document titled “Integrating climate smart land management options in Namibia: to enhance long term productivity, profitability and resilience” was submitted by the Desert research Foundation of Namibia (DRFN), which is the National Implementing Entity of the Adaptation Fund for Namibia.

10. This is the first submission of the proposal. It was received by the secretariat in time to be considered in the twenty-sixth Board meeting. The secretariat carried out a technical review of the project proposal, assigned it the diary number NAM/NIE/Rural/2015/1, and completed a review sheet.

11. In accordance with a request to the secretariat made by the Board in its 10th meeting, the secretariat shared this review sheet with DRFN, and offered it the opportunity of providing responses before the review sheet was sent to the PPRC.

12. The secretariat is submitting to the PPRC the summary and, pursuant to decision B.17/15, the final technical review of the project, both prepared by the secretariat, along with the final submission of the proposal in the following section. In accordance with decision B.25.15, the proposal is submitted with changes between the initial submission and the revised version highlighted.

Project Summary

Namibia – Integrating climate smart land management options in Namibia: to enhance long term productivity, profitability and resilience

Implementing Entity: *DRFN*
Project/Programme Execution Cost: USD 525,346
Total Project/Programme Cost: USD 5,529,954
Implementing Fee: USD 470,046
Financing Requested: USD 6,000,000

Project Background and Context:

Despite several successes in the field of natural resources management, conservation programs implemented in Namibia have focused primarily on wildlife, tourism and sustainable utilization of resources, leaving aside the agricultural sector. Nevertheless, the majority of conservancy members practice and depend on agriculture (mostly at subsistence level), based on communal resources. This multi-sectoral initiative will build upon the work done by various stakeholders over the past years in the field of land tenure in Namibia, notably by the Ministry of Land Reform and its Integrated Regional Land Use plans. The project will create a national platform to coordinate national efforts in land tenure and implement them at different local levels. The project will take place in 12 selected sites, spread across the country.

Component 1: Integrated land management planning at local level (USD 736,680)

The goal of this component will be to achieve sustainable land use through participatory land use planning. Efforts will be made to inform targeted communities on the nexus between climate change and land use, and their respective impacts on communities' livelihoods, in order to support the implementation of a coherent land use vision in the targeted region in a participatory way. To support these activities, maps of current land use and trends will be produced. Ultimately, land use plans will be developed by communities, along with an actionable roadmap for the implementation of such plans in the targeted areas.

Component 2: Governance and Institutional structure (USD 250,230)

The project will seek to strengthen the competences of local institutions in the target areas, in implementing the local climate-smart plans prepared in a participatory manner under component 1. The activities will consist in identifying suitable community structures at local level, recognizing their potential gaps, and reinforcing them accordingly.

Component 3: Implementation of climate smart local level plans (USD 3,016,776)

This component will build upon component 1 and 2 to achieve the implementation of integrated and climate-smart land use plans in cooperation with local governing bodies. The project will implement practical technologies that could include rangeland management and cultivated pastures, conservation agriculture, livestock production, forest and woodland management, indigenous natural products, wildlife utilization, fire management, tourism, fisheries, small-scale horticulture and small animal production, marketing, among others.

Component 4: Learning and knowledge management (USD 500,461)

The project will document and share new knowledge, as it is developed, with relevant stakeholders such as land users, farmers, decision-makers, among others, in order to replicate best practices in other areas.

Component 5: Research and Development (USD 500,461)

The project will foster research and development of new technologies that could be tested and applied to local contexts. Precise needs will be identified under Component 1, but potential outputs include the development of research studies related to local fodder crops, rehabilitation of degraded rangelands, desertification of arid areas, economic viability of current forestry strategies, or woodland reforestation, among others.

ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: Regular-sized Project

Country/Region: **Namibia**
Project Title: **Integrating climate smart land management options in Namibia: to enhance long term productivity, profitability and resilience**
AF Project ID: **NAM/NIE/Rural/2015/1**
IE Project ID:
Requested Financing from Adaptation Fund (US Dollars): **$6,000,000**
Reviewer and contact person: **Hugo Remaury**
Co-reviewer(s): **Shyla Raghav, Andrew Chilombo**
IE Contact Person: **Dr. Martin Schneider**

Review Criteria	Questions	Comments on 21/8/15	Comments on 10/9/2015
Country Eligibility	1. Is the country party to the Kyoto Protocol?	Yes	
	2. Is the country a developing country particularly vulnerable to the adverse effects of climate change?	Yes, Namibia is cited as the most arid country in sub-Saharan Africa and is projected to have an increase in aridity and an intensification of climate variability.	
Project Eligibility	1. Has the designated government authority for the Adaptation Fund endorsed the project/programme?	Yes	
	2. Does the project / programme support concrete adaptation actions to assist the country in addressing adaptive capacity to the adverse effects of climate change	Requires clarification. The proposed activities for components and 1 and 2 are heavily focused on workshops/awareness raising which could draw more on existing knowledge – and the link to concrete adaptation actions is not clear. The	

	and build in climate resilience?	relevance of components 3, 4 and 5 is clearer. Certain elements of Component 5 could be built into Component 1 in order to inform the selection of prioritized activities as well. **CR1**: Please provide more detail about how sites were selected to respond to climate change (how many were considered, and how climate change vulnerability was considered as it was not included as a criterion). **CR2**: Please reassess the level of detail of activities, outputs, and outcomes. For instance, the outcome from component 3 should lead to a concrete impact such as broad uptake of climate-smart practices, rather than the implementation of a plan, which might be better-suited as an indicator. **CR3**: Please clarify if the intended land use plans from component 1 will cover the entire area of each selected site. **CR4**: Please provide more information on Component 2 – including how many local plans and engagement plans will be developed or integrated. **CR5**: The description of component 3 notes that the fields of work will not be restricted to the activities listed. Please clarify how the selection process will take place and how practices will be prioritized and refined. Please note that this will influence the project management and cost-effectiveness of the project significantly.	CR1: Partially addressed. The response still leaves some concerns regarding how the proposed steps (figure 8) will influence behavior of communities. For component 2, it will be useful to give some information to demonstrate how local institutions/governance structures will fit into prevailing national/state institutions at local levels. The response also does not directly respond to the CR on how vulnerability is used as a criterion for site selection. It is not sufficient to say the entire country is vulnerable to climate change. CR2: Partially addressed, as this was a general comment for all project activities. CR3: Addressed CR4: Not addressed. It is not clear in table 7 which are the local and engagement plans that component 2 seeks to develop. CR5: Not addressed. Further detail is required on how activities will be vetted and selected.

	3. Does the project / programme provide economic, social and environmental benefits, particularly to vulnerable communities, including gender considerations, while avoiding or mitigating negative impacts, in compliance with the Environmental and Social Policy of the Fund?	Requires additional information. The project does not clearly highlight the environmental, social, and economic benefits of the project. While the project sites have been selected, the beneficiary groups are not clear relative to the project activities. Further, certain claims are made about improved productivity without substantiating if productivity of crops or land is referenced. The level of information currently provided precludes a complete review of the fulfilment of this criterion. **CR6**: Please further develop this is section with detail on all quantifiable and verifiable benefits, as well as reference to measures that will avoid or mitigate negative impacts.	CR6: Partially addressed. Estimates for, for example, output 3.5.1 would be useful to include, as well as on the estimated increase of conservancies, etc.
	4. Is the project / programme cost effective?	Possibly. Much of the text in this section describes the types of approaches employed rather than cost-effectiveness evidence. **CR7**: Please elaborate on the potential cost for the alternative options (which could be more comprehensive by looking at alternative practices that could be utilized in component 3, etc.) and evidence for the value (costs vs. benefits) of the investment of the project. **CR8**: Please provide information on how funding this proposal will achieve the intended outcome in the most cost-effective manner.	CR7-8: Not fully addressed. The proposal should strengthen evidence for the value (costs vs. benefits) of the investment of the project.

	5. Is the project / programme consistent with national or sub-national sustainable development strategies, national or sub-national development plans, poverty reduction strategies, national communications and adaptation programs of action and other relevant instruments?	Yes, the project is consistent with various national development plans, and the project includes various national policy instruments that it is aligned with. However, no reference has been made to sub-national or local plans in the target project sites. **CR9**: Please provide information on any relevant sub-national, local, or sectoral plans that are relevant for the project and its sites.	CR9: Addressed
	6. Does the project / programme meet the relevant national technical standards, where applicable, in compliance with the Environmental and Social Policy of the Fund?	Yes, in compliance with the ESP, the project meets the technical standards stipulated in the Environmental management Act and Nature Conservation Ordinance. Additional detail should be provided on elements relevant to the proposed activities, however. **CR10**: Since it seems like the entire range of project activities have not yet been finalized, please comment on how activities not covered by the referenced laws will be considered and evaluated against national standards. **CR11**: Please clarify the land tenure situation of the project sites relative to the national standards and compliance with the AF's ESP.	CR10: Addressed CR11: Addressed
	7. Is there duplication of project / programme with other funding sources?	Requires some clarification. The project does not have any direct duplication, but seeks synergies with about 6 ongoing initiatives by different development entities. **CR12**: Given the broad scope of this project that covers a wide range of	CR12: Addressed

		activities in various sectors, please clarify how the results of ongoing initiatives will inform the project, and how duplication will be avoided over the course of the project.	
	8. Does the project / programme have a learning and knowledge management component to capture and feedback lessons?	Yes, the project has a learning and knowledge management component to capture and feedback lessons.	
	9. Has a consultative process taken place, and has it involved all key stakeholders, and vulnerable groups, including gender considerations?	Requires clarification. Consultations with some stakeholders have taken place. However, consultations with vulnerable groups and gender consideration specifically for this project have not been included. **CR13**: Please more fully describe the consultative process with communities and intended beneficiaries, the outcomes of those consultations, and how they have informed the design of the project. **CR14**: Please describe how vulnerable groups, indigenous people, and women were consulted in the design of the project – and how they will be engaged in the project. **CR15**: Please supply additional detail about the number of consultations and participants.	CR13: Partially addressed – the direct outcomes of consultations held to design the current proposal should be described. CR14: Partially addressed, the section should provide explicit reference to how women and particularly vulnerable people will be engaged in the project. CR15: Not addressed – specific details of the consultations have not been provided.
	10. Is the requested financing justified on the basis of full cost of adaptation reasoning?	Possibly, but pending resolution of CRs 1-5.	

	11. Is the project / program aligned with AF's results framework?	Yes, the project is aligned with the AF's results frameworks, and includes AF's outcomes its results framework.	
	12. Has the sustainability of the project/programme outcomes been taken into account when designing the project?	Yes, the sustainability of the project has been taken into account. It will also focus on value chain approach to ensure outcomes are sustained.	
	13. Does the project / programme provide an overview of environmental and social impacts / risks identified?	Yes	
Resource Availability	1. Is the requested project / programme funding within the cap of the country?	Yes	
	2. Is the Implementing Entity Management Fee at or below 8.5 per cent of the total project/programme budget before the fee?	Yes	
	3. Are the Project/Programme Execution Costs at or below 9.5 per cent of the total project/programme budget?	Yes	
Eligibility of IE	4. Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?	Yes, through Namibia's accredited NIE, DRFN.	
Implementation Arrangements	1. Is there adequate arrangement for project / programme management?	Mostly, but it needs to be clarified why similar roles should be played by different partners in the same project. **CR16**: Please clarify why similar roles are being played by different partners	CR16: Not addressed. The clarification raises another concern; how the

		in the project, and how the project will ensure coordination and efficient delivery of activities.	project will ensure consistency and conformity among different partners playing similar roles according to fields of expertise or area of focus of specific organizations.
	2. Are there measures for financial and project/programme risk management?	Possibly, but the risks identified are not exhaustive. For instance, misappropriation of resources has not been listed as a risk. Further, the project has many sites and many partners, for which multiple risks could be envisioned. **CR17**: Please provide more information on potential risks and mitigation measures.	CR17: Addressed
	3. Are there measures in place for the management of for environmental and social risks, in line with the Environmental and Social Policy of the Fund? Proponents are encouraged to refer to the draft Guidance document for Implementing Entities on compliance with the Adaptation Fund Environmental and Social Policy, for details.	Pending resolution of other CRs that refer to environmental and social issues, and additional detail. The assessments in the matrix need to be justified. **CAR1**: Please provide more information on the risks associated with the ESP principles, an environmental and social management plan, and grievance mechanism in this section.	CAR1: Mostly addressed, although a more robust assessment is required to justify the assigned risk level and mitigation measures.
	4. Is a budget on the Implementing Entity Management Fee use included?	Yes	
	5. Is an explanation and a breakdown of the execution costs included?	Yes	

	6. Is a detailed budget including budget notes included?	No. **CAR2**: The budget needs to provide information at much more level of specificity that disaggregates each activity for all components.	CAR2: Not addressed. Budget should be provided by budget line.
	7. Are arrangements for monitoring and evaluation clearly defined, including budgeted M&E plans and sex-disaggregated data, targets and indicators?	No, not yet developed. **CAR3**: Please provide more detailed information on the M&E plans, including sex-disaggregated data, targets and indicators.	CAR3: Partially addressed. Only some indicators have included sex-disaggregated data.
	8. Does the M&E Framework include a break-down of how implementing entity IE fees will be utilized in the supervision of the M&E function?	No. **CAR4**: Please provide a break-down of how the IE fees will be utilized in the supervision of the M&E function.	CAR4: Addressed
	9. Does the project/programme's results framework align with the AF's results framework? Does it include at least one core outcome indicator from the Fund's results framework?	Possibly, the results framework does not include key information such as baselines. Some of the outputs were framed as indicators. **CR18**: Please refine in the results framework, also in line with the requested revisions and clarifications made to respond to this review. **CR 19:** Please provide the grant amount disaggregation for each of the project objective/outcomes that aligns with the AF outcome/output.	CR18: Partially addressed, the revised version does not mention any relevant assumptions made. CR19: Addressed.
	10. Is a disbursement schedule with time-bound milestones included?	Yes	

Technical Summary	With components that focus on planning, research and improving institutional frameworks, this project is designed to improve the utilization of land in Namibia through integrated planning and management, for enhanced sustainability, resilience, and productivity. To achieve this objective, components may need to be

	revised to reflect activities that will contribute to achieve the objective beyond institutional frameworks. Additionally, it will be important to demonstrate mechanisms that will ensure that results of this project feed and inform policy, which is crucial for the long-term sustainability and impact of this project to influence long-term shifts in employing more integrated approaches. Certain fundamental issues remain to be resolved in order to ensure the proposal responds to climate change needs in a consistent manner. A number of required sections also remain to be supplied. During the initial review, the following corrective action requests were made: **CAR1**: Please provide more information on the risks associated with the ESP principles, an environmental and social management plan, and grievance mechanism in this section. **CAR2**: The budget needs to provide information at much more level of specificity that disaggregates each activity for all components. **CAR3**: Please provide more detailed information on the M&E plans, including sex-disaggregated data, targets and indicators. **CAR4:** Please provide a break-down of how the IE fees will be utilized in the supervision of the M&E function. In addition, the following clarification requests were made during the initial review: **CR1**: Please provide more detail about how sites were selected to respond to climate change (how many were considered, and how climate change vulnerability was considered as it was not included as a criterion). **CR2**: Please reassess the level of detail of activities, outputs, and outcomes. For instance, the outcome from component 3 should lead to a concrete impact such as broad uptake of climate-smart practices, rather than the implementation of a plan, which might be better-suited as an indicator. **CR3**: Please clarify if the intended land use plans from component 1 will cover the entire area of each selected site. **CR4**: Please provide more information on Component 2 – including how many local plans and engagement plans will be developed or integrated. **CR5**: The description of component 3 notes that the fields of work will not be restricted to the activities listed. Please clarify how the selection process will take place and how practices will be prioritized and refined. Please note that this will influence the project management and cost-effectiveness of the project significantly. **CR6**: Please further develop this is section with detail on all quantifiable and verifiable benefits, as well as reference to measures that will avoid or mitigate negative impacts. **CR7**: Please elaborate on the potential cost for the alternative options (which could be more comprehensive by looking at alternative practices that could be utilized in component 3, etc.) and evidence for the value (costs vs. benefits) of the investment of the project. **CR8**: Please provide information on how funding this proposal will achieve the intended outcome in the most cost-effective manner.

	CR9: Please provide information on any relevant sub-national, local, or sectoral plans that are relevant for the project and its sites. **CR10**: Since it seems like the entire range of project activities have not yet been finalized, please comment on how activities not covered by the referenced laws will be considered and evaluated against national standards. **CR11**: Please clarify the land tenure situation of the project sites relative to the national standards and compliance with the AF's ESP. **CR12**: Given the broad scope of this project that covers a wide range of activities in various sectors, please clarify how the results of ongoing initiatives will inform the project, and how duplication will be avoided over the course of the project. **CR13**: Please more fully describe the consultative process with communities and intended beneficiaries, the outcomes of those consultations, and how they have informed the design of the project. **CR14**: Please describe how vulnerable groups, indigenous people, and women were consulted in the design of the project – and how they will be engaged in the project. **CR15**: Please supply additional detail about the number of consultations and participants. **CR16**: Please clarify why similar roles are being played by different partners in the project, and how the project will ensure coordination and efficient delivery of activities. **CR17**: Please provide more information on potential risks and mitigation measures. **CR18**: Please refine in the results framework, also in line with the requested revisions and clarifications made to respond to this review. **CR 19:** Please provide the grant amount disaggregation for each of the project objective/outcomes that aligns with the AF outcome/output. The revised proposal has addressed some of the issues raised in the initial technical review. However, the final project review finds that the proposal fails to correctly address the corrective action requests and clarifications requests made in the initial review. The following observations are made: (i) While additional detail has been provided on a number of issues relative to the selected sites, the proposal should further clarify how the proposed activities will influence the behavior of communities, and how vulnerability is used as a criterion for site selection, (i) The proposal should provide additional detail for project activities, including how activities will be vetted and selected in Component 3, (ii) The proposal should provide additional information on the description of social and environmental benefits, as well as evidence for the value (costs vs. benefits) of the investment of the project, (iii) The description of the consultative process that informed the design of the project should be elaborated, particularly with respect to how women and particularly vulnerable people will be engaged in the project, (iv) The proposal should clarify how it will ensure consistency and conformity among different partners playing

	similar roles according to fields of expertise or area of focus of specific organizations, and (v) The budget should be revised in line with the requirements to provide information at the budget-line level, as well as the results framework to include the required information.
Date:	10 September 2015

PROJECT/PROGRAMME PROPOSAL TO THE ADAPTATION FUND

PART I: PROJECT INFORMATION

Project Category	Regular
Country	Namibia
Title of Project:	Integrating climate smart land management options in Namibia: to enhance long term productivity, profitability and resilience.
Type of Implementing Entity:	National
Implementing Entity:	Desert Research Foundation of Namibia (DRFN)
Executing Entity	Agra LTD via its division Agra ProVision
Amount of Financing Requested	USD 6 million

Short Summary

Namibia is already the most arid country in Africa south of the Sahara, and most climate change models project an increase in aridity and an intensification of climate variability. Agriculture is the main livelihood for about 70% of the population, and therefore in addition to improving the direct adaptive capacity of the agriculture sector, the Government‟s Proposed Climate Strategy and Action Plan promotes the maintenance of ecosystems on which the agriculture sector depends, and livelihood diversification towards other land uses that will be more viable under a changed climate.

Current land use practices in many parts of Namibia are not sustainable, with the majority of Namibia‟s population, including its most vulnerable communities, still reliant on subsistence cropping and livestock production, with a low uptake of improved technologies and practices; a poor diversity of income streams; and low levels of value addition taking place. This all means that people remain dependent on primary production (and are thus highly susceptible to the impacts of climate variability).

This said Namibia has a range of possible land use and resource governance options at its disposal. A strong natural resource base is already the foundation for a diversity of land uses, including wildlife, hunting, tourism, the use of natural products, forestry products, and an established rangeland based livestock production ("ranching") industry. Cropping and horticulture production is also already taking place at various scales, both for subsistence and commercial purposes, including some high-value export products. Just as biodiversity underpins a healthy ecosystem, diversity of land uses and income streams will be the enabler for a more climate resilient economy. Improving primary productivity opens the door for increased value addition, creating new jobs and income streams, thus reducing the vulnerability of people.

This diversity can be achieved if an **integrated, climate smart approach to land use management is adopted**, ensuring that the most appropriate and productive combination of land-uses is implemented for any particular parcel of land, in harmony with the needs and aspirations of the land-users, and with the "bigger picture" (larger scale) in mind.

A major challenge is that the various sectors are currently somewhat compartmentalized, with different authorities and organizations influencing activities and decisions, sometimes in an uncoordinated manner, without seeing the wider consequences of the decisions made. Often it is not just one decision, but an accumulation of decisions on land use over time, that causes unintended negative impacts. This applies to both the government sector and the supporting organizations and NGOs, where a segmentation has evolved, with organizations working within their fields of expertise (community based natural resource management (CBNRM), tourism, agriculture, fisheries, social upliftment etc.), with limited cross-linkages to each other"s programmes, despite the fact that in general the overall objective of most if not all interventions is to have a positive impact on the environment and people"s livelihoods through sustainable development practices.

It is commonly said concerning Africa that it holds 60% of the world's uncultivated arable land. Yet despite this huge agriculture potential, the continent remains a net importer of food. But equally, it can be argued that there is no need to tap into uncultivated land reserves, but rather to increase food production on land currently being farmed.

This project aims to create the mechanisms to promote synergies between the different supporting organizations, both public and private; the different potential land uses; and the land users, through the development of integrated land management plans that optimize the outputs from the land, whilst retaining and/or restoring the ecosystem, to create a natural and economic environment that diversified and more resilient to the impacts of climate change. The project will introduce best practices, techniques and technologies to achieve improved productivity with equal or even lesser inputs. Thus the project will act as a catalyst for change, embracing current programmes, projects and endeavours, to "*produce a combined effect greater than the sum of their separate effects*".

The fundamental premise of the project is the need to **change the way that people do things**, to ensure improved productivity from limited resources within a climate change environment, as a means of securing better livelihoods and climate change resilience.

To achieve this, the project is divided into five components that work in synergy to support the desired outcome and impact:

Component 1	Integrated land management planning at local level	**CHANGING BEHAVIOUR**	A guided and participatory approach is used to build the capacity of beneficiaries for **climate smart thinking and decision making** related to land use practices Beneficiaries are sensitized to the challenges of climate change, and provided with a range of land use options and alternatives. This component is the **key-stone** to *changing the way that people plan and take* The current form of subsistence smallholder agriculture in the communal areas of Namibia is a pathway towards impoverishment and degradation of natural resources. Farmers have to be assisted to convert to production-oriented, profitable and sustainable farming and land-use. Conversion has two critical aspects: • Identification of suitable alternatives that fit the local culture, value system and agri-ecology and- • Training initially to implement and subsequently to monitor and guide implementation. The former is an integral part of the proposed land-use planning component. *Give a man a fish, and you feed him for a day; show him how to catch fish, and you feed him for a lifetime.*
Component 2	Governance and Institutional structure	**SUPPORTING STRUCTURES**	Supporting beneficiaries to develop appropriate structures at local level for coordinated management and decision making, working within the existing governance and institutional environment; Identifying potential governance and institutional barriers, and addressing these through guided interventions, including support to policy reform. Communal land tenure systems inhibit the adoption of modern, efficient and sustainable farming systems. Creative ways need to be found around land tenure that facilitates instead of thwarting development. Traditional land and resource allocation institutions, often administered by senior male patriarchs, worsen deterrence, assist land flight by the relatively well-trained youth and hasten resource degradation. Again, creative ways to address generational conflict have to be found to encourage investment in agriculture and education.

Component 3	Implementation of climate smart local level plans	**CAPACITY BUILDING AND MENTORING**	Supporting beneficiaries to **implement their own plans**, with a view to **improved productivity and profit**, within the constraints of the environment and climate variability and change. Suggesting **climate-smart principles and technologies** to beneficiaries, adapted to their situation and focussing on increased production efficiency and value-addition while at the same time attempting to mitigate and adapt to climate change. Providing training and support on techniques and technologies for improved productivity and climate change resilience. Supporting local level **value chain development** for diversifying income streams, reducing vulnerability Introducing and institutionalizing at local level monitoring tools and the capacity for an **adaptive management approach** to decision making *"For the things we have to learn before we can do them, we learn by doing them." Aristotle*
Component 4	Learning and knowledge management	**REPLICABILITY**	Concentrates on capturing lessons learnt and best practices in order to enhance replicability into other areas and to transmit this information to local communities in an easily-understood manner that focuses on practical training with the use of demonstration sites and skills development. The diversity of land tenure systems and communities represented in the twelve selected sites increases the scope and potential relevance of the learning and knowledge management outcomes of this study.
Component 5	Research and Development	**TECHNOLOGY**	Climate smart solutions to identified **local level challenges** on productivity or land degradation will be investigated through research and development activities. Where necessary, additional financing will be secured for research projects. New or revised technologies will be availed to beneficiaries to help counter the challenges experienced.

Components 1, 2 and 3 are undertaken with and by beneficiaries, with the project aims to provide the support and capacity building to beneficiaries in such a way that they can change to doing things using a more climate resilient approach. Components 4 and 5 support the change and replicability of best practices identified, as well as the development of new techniques and technologies that help overcome the challenges experienced from climate variability and change.

On the need for change:

The definition of insanity is doing the same thing over and over again, but expecting different results.

Albert Einstein

On Africa's agricultural potential:

"*our small producers, whom most people describe as subsistence farmers, are basically engaged in a business that has failed. Why do I say it has failed? Because productivity on the average is about 40% of its potential.*

We have to increase productivity of existing farming systems. We have to become modern ... the potential is there.

The transformation of African agriculture is the transformation of smallholder agriculture. And because they live in rural areas it means the transformation of the rural space."

Kanayo Nwanze, President of the International Fund for Agricultural Development (IFAD) at a recent World Economic Forum on Africa held in Cape Town

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Acronyms

AALS	Affirmative Action Loan Scheme
ACN	AgriConsult
AES	Agri-Ecological Services
AF	Adaptation Fund
APV	Agra ProVision
C.A.N.	Conservation Agriculture Namibia
CBNRM	Community Based Natural Resource Management
CBO	Community Based Organization
CBRLM	Community Based Rangeland and Livestock Management
CPP-CALLC	Country Pilot Partnership
EE	Executing Entity
EU	European Union
FAO	Food and Agriculture Organization
FMD	Foot and Mouth Disease
FSP	Farmers Support Programme
GIS	Geographic Information System
GIZ	Gesellschaft für Internationale Zusammenarbeit
INP	Indigenous Natural Products
IRDNC	Integrated Rural Development and Nature Conservation
M&E	Monitoring and Evaluation
MAWF	Ministry of Agriculture, Water and Forestry
MCA-N	Millennium Challenge Account Namibia
MET	Ministry of Environment and Tourism
MF	MeatCo Foundation
MITSD	Ministry of Industrialization, Trade and SME Development
MLR	Ministry of Land Reform
MNC	Mudumu North Complex
NCA	Northern Communal Area
NDC	Namibia Development Corporation
NDP	National Development Plan
NDT	Namibia Development Trust

NGO	Non-Governmental Organization
NIE	National Implementing Entity
NNDFN	Nyae Nyae Development Foundation of Namibia
NNF	Namibia Nature Foundation
NP	National Park
NPC	National Planning Commission
NRP	National Resettlement Programme
NSCA	Namibia Specific Conservation Agriculture
PA	Protected Area
PCLD	Programme for Communal Land Development
PRA	Participatory Rural Appraisal
SADC	Southern African Development Community
SSCF	Small Scale Commercial Farms
UNAM	University of Namibia

A. Project background and context

Namibia is already the most arid country in Africa south of the Sahara (Figure 1), and most climate change models project an increase in aridity and an intensification of climate variability. In 2011, Namibia was classified as the 7th most at-risk country globally in terms of agricultural production losses due to climate change[1]. As agriculture is the main livelihood for about 70% of the population[2], in addition to improving the direct adaptive capacity of the agriculture sector, the Government‟s Proposed Climate Strategy and Action Plan promotes the maintenance of ecosystems on which the agriculture sector depends, and livelihood diversification towards other land uses that will be more viable under a changed climate[3].In 2013 UNICEF estimated that 778,000 Namibians, a third of the population, were either severely or moderately food insecure, and more recently the FAO, who have classified Namibia as “target not achieved, with lack of progress or deterioration” when assessing the 2015 status of progress on the Millennium Development Goal 1 and World Food Hunger Targets (Figure 2).

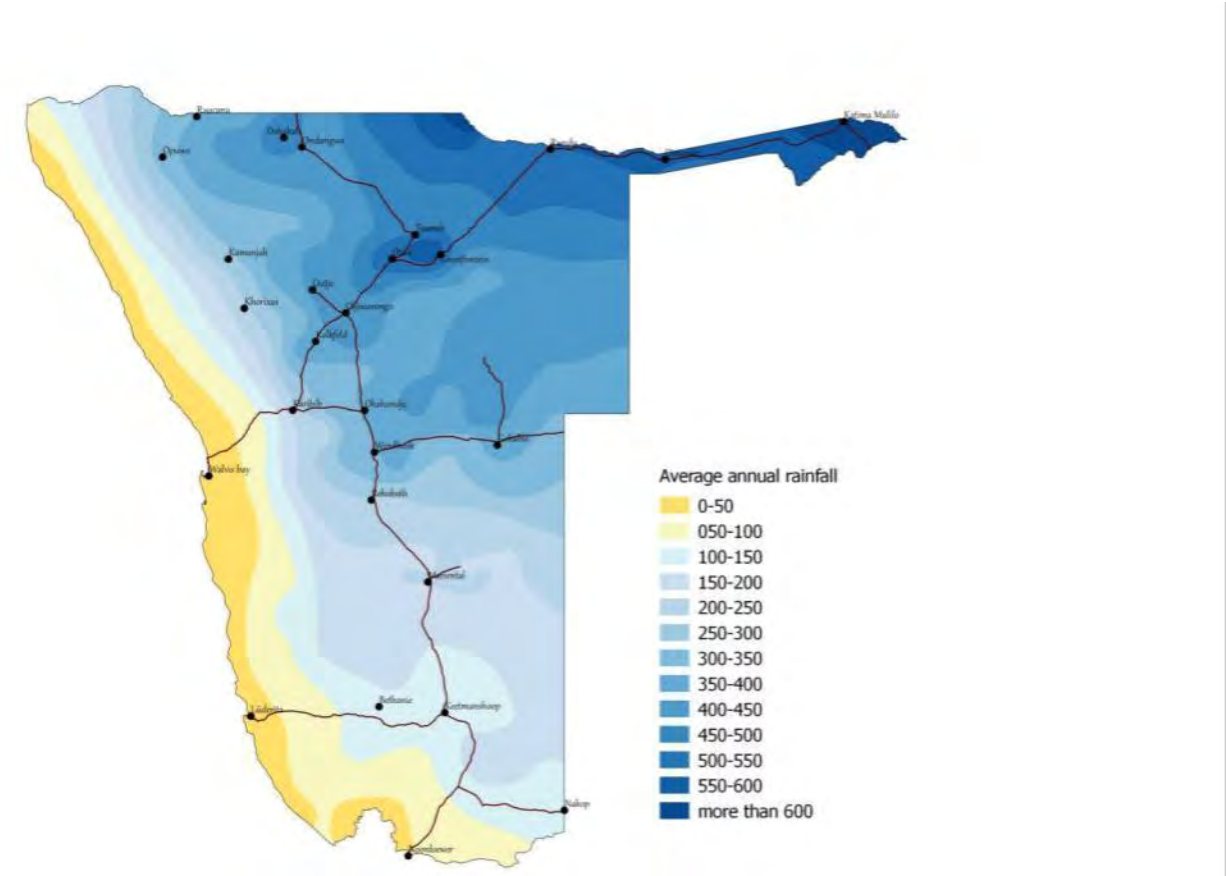

Figure 1: Average annual rainfall in Namibia, showing the clear west-east gradient.

[1]IPCC Fifth Assessment Report WGIIAR5 2014

[2]Namibia Second National Communication to the UNFCC 2011

[3]Proposed Climate Change Strategy and Action Plan (p28)

Climate adaptation interventions have started to take place, however implementation is at an early stage. Projects have mostly focused on development of national level capacity, assessments and strategies, and, for example, piloting support for farmers in the North of Namibia. However, significant effort is needed to build integration, capacity and resilience, especially at the local level.

Current land use practices in many parts of Namibia are not sustainable, with the majority of Namibia‟s population, including its most vulnerable communities, still reliant on subsistence cropping and livestock production, with a low uptake of improved technologies and practices; a poor diversity of income streams; and low levels of value addition taking place. This all means that people remain dependent on primary production (and are thus highly susceptible to the impacts of climate variability). In many areas a self-perpetuating downward spiral of degradation and reduced productivity has taken hold, with loss of perennial grasses, erosion and/or bush encroachment becoming more pronounced. In Namibia‟s more arid western areas, this degradation spiral has reached the point of desertification, which is more difficult to reverse. Rangeland degradation and desertification contribute significantly to rising atmospheric CO_2 levels by releasing soil-bound C. These processes need to be halted and, if possible, reversed at the local level to improve food security and mitigate against climate change.

This said Namibia has a range of possible land use and resource governance options at its disposal. A strong natural resource base is already the foundation for a diversity of land uses, including wildlife, hunting, tourism, the use of natural products, forestry products, and an established rangeland based livestock production (“ranching”) industry. Cropping and horticulture production is also already taking place at various scales, both for subsistence and commercial purposes, including some high-value export products. Just as biodiversity underpins a healthy ecosystem, diversity of land uses and income streams will be the enabler for a more climate resilient economy. Improving primary productivity opens the door for increased value addition, creating new jobs and income streams, thus reducing the vulnerability of people. This diversity can be achieved if an integrated, climate smart approach to land use management is adopted, ensuring that the most appropriate and productive combination of land-uses is implemented for any particular parcel of land, in harmony with the needs and aspirations of the land-users, and with the “bigger picture” (larger scale) in mind.

> *"A prosperous and industrialised Namibia, developed by her human resources, enjoying peace, harmony and political stability."*
>
> ***Namibia Vision 2030***

In 2004, Namibia adopted Vision 2030, a document that explicitly elucidates the country's development programmes and strategies to achieve its national objectives. Vision 2030 concerns itself with the population in relation to their social, economic and overall well-being, with the aim of transforming Namibia into a healthy and food-secure nation, where people enjoy high standards of living, a good quality of life and have access to quality education, health and other vital services. The Vision furthermore aims also to promote the creation of a diversified, open market economy, with a resource-based industrial sector and commercial agriculture, and competitive in the export sector, in terms of product quality and differentiation.

Among the major objectives of Vision 2030 are three that relate directly to the utilization of the countries natural resources, and to the economic environment in a way that improves quality of life:

- Transform Namibia into an industrialized country of equal opportunities, which is globally competitive, realizing its maximum growth potential on a sustainable basis, with improved quality of life for all Namibians.
- Ensure the development of Namibia's „natural capital' and its sustainable utilization, for the benefit of the country's social, economic and ecological well-being.
- Accomplish the transformation of Namibia into a knowledge-based, highly competitive, industrialized and eco-friendly nation, with sustainable economic growth and a high quality of life.

Vision 2030 is being implemented through successive 5-year National Development Plans (NDP), the latest being NDP4 which runs from 2012/13 to 2016/17. Whilst recognizing that there has been a positive trend in the growth trajectory since Independence, NDP4 highlights that such growth is below par compared to more dynamic and growing emerging market economies, and has not resulted in sufficient job and wealth creation. The Namibian economic structure remains primarily resource-based, with low levels of downstream value addition within the country.

Through the “Growth at Home” initiative of the Ministry of Industrialization, Trade and SME Development (MITSD), recognition is now being given to the fact that enhanced domestic buying power can become a catalyst to encourage and support local manufacturing for the benefit of all Namibians – producers and consumers. Imported products still dominate supermarket shelves, highlighting a wide range of opportunities for local downstream value addition to Namibia‟s rich diversity of agricultural, marine, mineral and natural resources. Furthermore, tourism, the fastest growing industry in the country, also presents opportunities for the sale (and subsequent export) of a diverse range of high quality Namibian products. Nonetheless, industrialization is dependent on primary production, so to achieve Vision 2030; Namibia will need to ensure that land use is optimally used, to maximize benefits, albeit in a sustainable and adaptive manner that creates resilience to climate variability and change.

There are three main land tenure regimes in Namibia: free-hold (title deed) or commercial areas; communal land (non-title deed); and state-owned land (Figure 3). Free-hold land users can be broadly categorized into established commercial farmers, emerging (or new) farmers, and those living on government-owned resettlement farms. On non-title-deed land the main land uses are subsistence oriented communal farming, communal conservancies and community forests. On state-owned land the major land uses are local government (municipalities) and National Protected Areas.

Each of the land tenure regimes is subject to different governance and control structures. Free-hold land owners in general have the most flexibility and decision making powers over the use of land, provided that they still remain subject to legislation related to agriculture, water, wildlife, tourism, environmental management. Communal land farmers experience the most challenges given the inherent difficulty of managing shared

resources, often in the absence of management structures that allow for shared decision making. Communal conservancies are a mechanism that gives rural people responsibilities and rights over natural resources. Communal conservancies have management plans in place, as well as governance structures that represent the conservancy members, providing mechanisms for shared decision making over defined areas.

In each of these tenure regimes and over all land uses the condition, resilience and productivity of the land are under threat. On free-hold areas the major problems are manifested in terms of loss of perennial grasses, extreme bush encroachment, extensive soil erosion and a huge reduction in the soil nutrient and soil water status, mostly as a result of unsustainable practices such as exceeding carrying capacity. This results in reduced land productivity per hectare and production efficiency, manifesting as reduced animal and crop production per hectare, with subsequent increases in farming inputs and decline in profitability of farming enterprises. On communal land similar problems are being experienced, but are further compounded by the subsistence oriented nature of the land use, and the land tenure model, leading to lower incomes of farming households.

Efforts are currently underway to address the challenge of bush encroachment through a GIZ-funded project that is looking at the bush biomass value chain, to create a value and thus an incentive to thin and control encroacher bush. This, of course, increases the grazing productivity of farmland but also results in release of wood-bound C into the atmosphere, thus contributing to global warming. It is essential that these rehabilitatory processes are implemented correctly to maximise their impact on rangeland rehabilitation while minimising their impact on climate change.

In summary, as an arid to semi-arid, developing country with an economy dependent primarily on renewable and non-renewable natural resources, it is safe to say that every part of the country is at risk of the adverse effects of climate change.

A major challenge is that the various sectors are currently somewhat compartmentalized, with different authorities and organizations influencing activities and decisions, sometimes in an uncoordinated manner, without seeing the wider consequences of the decisions made. Often it is not just one decision, but an accumulation of decisions on land use over time, that causes unintended negative impacts. In Namibia management of communal conservancies falls under the Ministry of Environment and Tourism (MET) and is supported by a number of non-governmental organisations, while the management of community forests is the mandate of the Directorate of Forestry within the Ministry of Agriculture, Water and Forestry (MAWF) with its own array of non-governmental and donor support organisations. Agriculture on both title and non-title deed areas falls within the mandate of the Ministry of Agriculture, Water and Forestry. The provision of advisory services to emerging and resettled farmers is currently still the responsibility of the Ministry of Land and Resettlement (MLR). Under the recently implemented Programme for Communal Land Development (PCLD), the MLR also embarked upon infrastructure development, tenure security issues and advisory services to farmers in communal areas. Many of these ministerial functions will in the near future be devolved to regional governments. What makes the challenge even greater is that in

many geographic areas a combination of different land uses occur with often competing objectives, confusing the land user and manager on the ground.

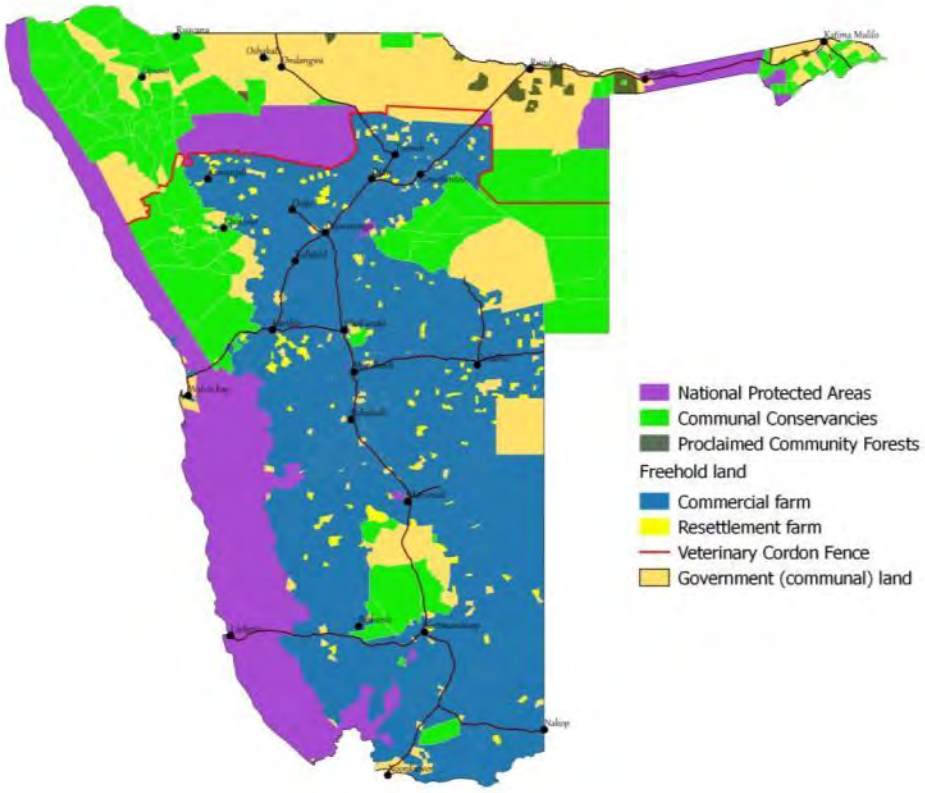

Figure 3: Map of Namibia showing the distribution of various land tenure categories

When it comes to supporting organizations and NGOs, a similar segmentation has evolved, with organizations working within their fields of expertise (community based natural resource management (CBNRM), tourism, agriculture, fisheries, social upliftment etc.), with limited cross-linkages to each other‟s programmes, despite the fact that in general the overall objective of most if not all interventions is to have a positive impact on the environment and people‟s livelihoods through sustainable development practices. These interventions have resulted in a number of recognized initiatives such as, CBNRM (Communal Conservancies, Community Forests), CBRLM (Community-Based Rangeland and Livestock Management) and the Farmers Support Programme (FSP). But there is a growing recognition from those involved that no single approach in isolation is going to solve the challenges faced by the impacts of climate change. Resilience will come from applying the appropriate and flexible mix of land uses sustainably (natural resources, wildlife, agriculture); enhancing the role of protected areas (PAs) as catalysts for local level economies; implementing climate smart agriculture technologies (conservation agriculture; efficient irrigation; improved animal husbandry, genetics etc.) in order to produce more with less; use a value chain approach

to encourage value addition, thus involving more people in secondary production and the formal economy.

A major shortcoming of past development initiatives in Namibia has been to split conservation activities (in “conservancies”) from regular farming (agricultural) activities, often resulting in animosity between those in favour of conservation or of farming. This is an undesirable and somewhat artificial separation as, at the grassroots or community level, natural resource use is integrated and people clearly understand that one needs to conserve what one wants to utilise. There is thus an urgent need to integrate these two major topics at the project and policy level as well.

It is in recognition of the need for a more integrated, climate smart approach to land management that the partners in this consortium have taken the initiative of joining forces and consolidating efforts under the framework of a broader project that can act as the driver for improved coordination and synergy, avoiding duplication of efforts and complementing existing interventions through a sharing of knowledge and expertise. The challenges to be addressed through this intervention are therefore to explore modalities for:

- Initiating participatory local level land-use planning processes that integrate different land-use options whilst recognising community vulnerabilities, particularly in light of predicted climate changes;
- applying land use and management practices that will enhance the condition, productivity and resilience of land sustainably for optimum efficiency and profit over the long term under different land use scenarios and in different land tenure regimes;
- creating mechanisms at different levels where relevant stakeholders cooperate for integration of land use planning and prioritisation of land use options and appropriate technical interventions;
- creating resource governance mechanisms across different user groups that can respond in a timely and coordinated manner to environmental variables;
- enhancing the integration of planned interventions into farming and land use routines based on their inherent value for production, efficiency, environmental and social acceptability and thus ensuring the post-project sustainability of these interventions.

To our knowledge, this proposal is the first time that Namibian institutions with a proud history in conservation or in farming work together to set and achieve common goals, to the benefit of the natural environment and its users.

Site selection and description

Namibia is an arid to semi-arid country, with a rainfall gradient that increases from the south west to the north east (Figure 1). There are four broad vegetation biomes identified, that follow the same pattern as rainfall, with the Namib Desert along the coastline, and a portion of the biodiversity-rich Succulent Karoo in the extreme south west, and the Nama Karoo (Figure 4). The tree and shrub savannah covers the rest of

the country, roughly following the > 200 - 250 mm rainfall isohyet. A fifth classification is that of lakes and salt pans, which rarely support much plant life at all.

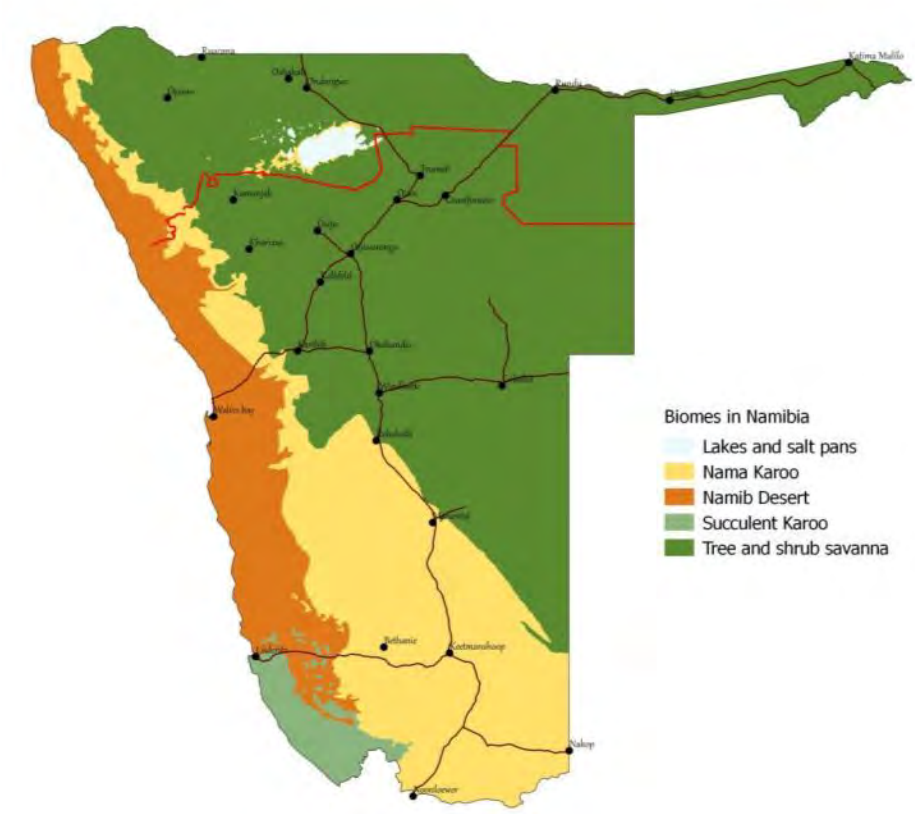

Figure 4: Map of Namibia showing the broad vegetation biomes

Namibia has a population of approximately 2.1 million people, making it one of the least densely populated countries in the world, at approximately 2.6 persons per km^2. The numbers of people living in urban areas are estimated to be 43%, whilst the remaining 57% live in rural areas. English is the official language, but Namibia's relatively small population is extraordinarily diverse in language and culture, with 11 indigenous languages recognized, the most widespread being Oshiwambo (49% of households), followed by Nama/Damara (11% of households), Afrikaans (10% of households), Kavango (9% of households), and Otjiherero (9% of households)[4].Namibia also has two small groups of traditionally nomadic people; the Khoisan speaking people, known as the Bushmen or San and the Ovahimba people.

Namibia is divided into fourteen governance regions (Figure 5).

[4]Namibia 2011 population census

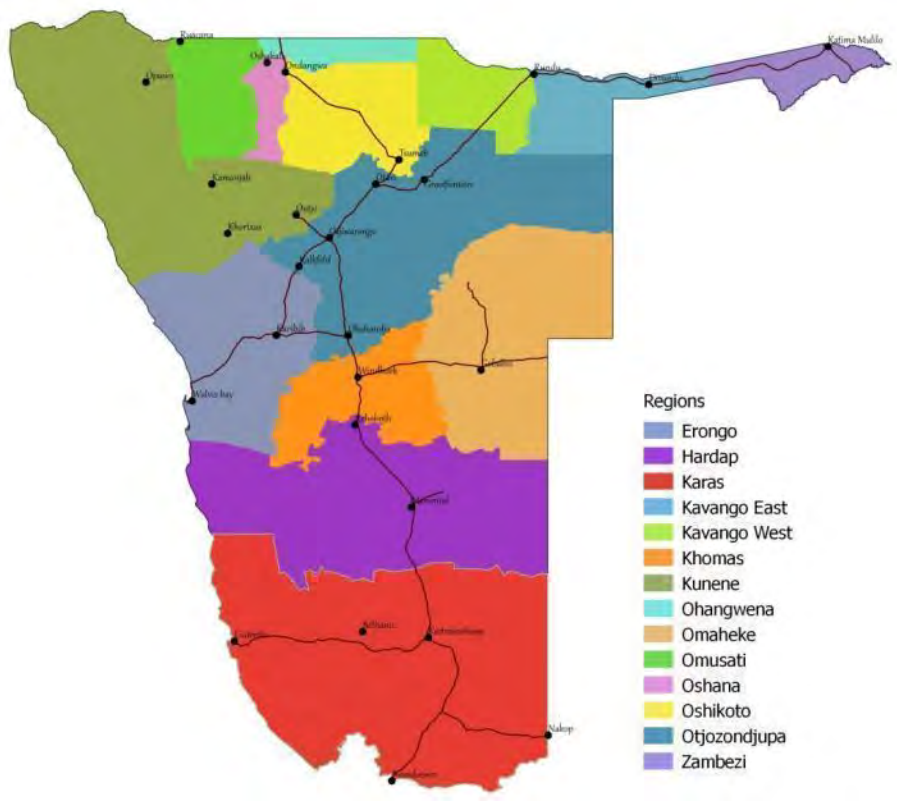

Figure 5: Map of Namibia showing the fourteen governance regions

The population demographics indicators for each of these regions are provided in Table 1, including the gender distribution; the distribution of female vs male headed households; and the percentage of the population residing in rural areas. Nationally, 44% of households are headed by females.

Table 1 Regional population demographics indicators (*Namibia 2011 Population and housing census*)

Region	Population size			Head of households		% rural
	Total	Female	Male	Female	Male	
Erongo	150 809	70 986	79 823	34%	66%	13%
Hardap	79 507	38 935	40 572	36%	64%	40%
Karas	77 421	38 014	39 407	44%	56%	46%
Kavango East	223 352	118 591	104 761	43%	57%	71%
Kavango West						
Khomas	342 141	172 469	169 672	39%	61%	5%
Kunene	86 856	43 253	43 603	40%	60%	74%

Region	Population size			Head of households		% rural
	Total	Female	Male	Female	Male	
Ohangwena	245 446	133 316	112 130	57%	44%	90%
Omaheke	71 233	34 016	37 217	34%	66%	70%
Omusati	243 166	133 621	109 545	55%	45%	94%
Oshana	176 674	96 559	80 115	54%	46%	54%
Oshikoto	181 973	94 907	87 066	49%	51%	87%
Otjozondjupa	143 903	70 001	73 902	37%	63%	46%
Zambezi	90596	46497	44099	44%	56%	57%
Total	**2 113 077**	**1 091 165**	**1 021 912**	**44%**	**56%**	**57%**

In considering sites for this project, a number of parameters were considered:

- diversity of land tenure systems and existing land uses;
- the existence of at least some local/regional institutional structures through which to channel climate-smart interventions,
- geographic distribution;
- representation of different language groups;
- representation of different environmental conditions (rainfall, vegetation); and
- existing involvement/presence by consortium partners.

Figure 6 provides the approximate locations of the twelve selected sites.

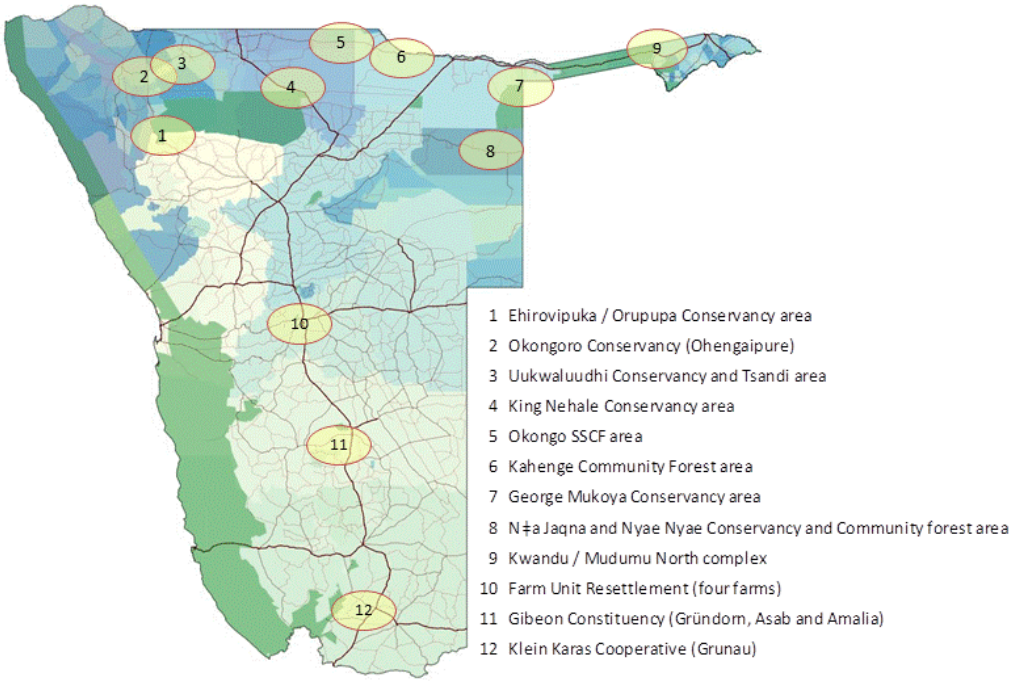

Figure 6: Map showing the location of selected sites

Table 2 provides an overview of the selected sites. What characterises all these sites is that farming is currently predominantly subsistence-oriented and not knowledge- and input-intensive. “Best practices” under these conditions imply best possible yield and not best possible sustained yield. In addition, most resources are commonly / not individually owned, leading to the well-known “tragedy of the commons” conundrum. Resources are exploited as quickly as possible by any individual before the next individual comes along and exploits the resource. Delaying resource utilisation or structuring it over time does not make sense in such a situation. The pressure on the natural resource increases with an increase in the human population, which is growing rapidly (3.5% p.a.) in all these areas. As a result, resources are currently not utilised sustainably.

This causes widespread resource degradation in all areas with specific symptoms in specific areas (e.g. deforestation in moister and desertification in drier sites) depending on site characteristics. For example, deforestation has just started in the Kavango sites, is advanced in Ohangwena sites and “successfully” completed in Oshana/Omusati sites (where no forest is left). This degradation and resource erosion makes human populations more vulnerable to climate change as CC is expected to erode natural resources in the same direction as human use due to drying and heating-up of the

climate. All sites are thus vulnerable to CC due to the structure of land use (a communal system) more than any ecological differences between sites.

The common approach to this cross-cutting problem is to stimulate a change in human activities through better land-use planning that considers indigenous knowledge and the promotion of climate-smart technologies and techniques. Within the larger communal area, sites were selected specifically for their inhabitants being primed to changing land-use in a participatory manner by previous interventions, i.e. sites were selected based on how receptive their inhabitants were judged to be to interventions and how much of an "intervention infrastructure" already exists in an area (site). If communities have to be mobilised from the ground up, it will be a lengthy process that easily takes more time than allotted under the AF facility. Sites were thus selected on the basis of having been sensitised before, and receptive to changes. Obviously, sites in which vulnerability was already successfully reduced (if these sites existed at all) were avoided.

Interventions to date have been characterized by being sectorally driven: wildlife; tourism; livestock etc, and have not been assessed against climate change scenarios and adaptive capacity nor implemented in an integrated manner. The introduction and use of the diagnostic tool will help determine the most climate smart (and feasible) interventions, and will empower beneficiary communities to apply these principles into the future.

Table 2 Overview of selected sites

Map ref.	Site name	Land tenure system	Size	Approximate no. of people	Area targeted by project	Project intervention site selection
1	Ehirovipuka / Orupupa Conservancy area	Communal Conservancy	1 975 km^2 * (Ehirovipuka) 1234 km^2 * (Orupupa)	1 651 * (Ehirovipuka) 1 769 * (Orupupa)	Land use plan will cover entire area Detailed grazing area planning with connections to the broader conservancy will be undertaken on 30 000 ha (6 GAs), involving 18 households (approximately 144 people) 50% of conservancy members will benefit - not necessarily all from direct benefits from hunting/ tourism/ agriculture/ INPs but they will all benefit from improve institutional capacity in their conservancies, leading to reduced wastage of conservancy income and better management of natural resources.	Ehirovipuka / Orupupa fall within the Kunene Region, which has been severely affected by a three-year drought. Several Kunene sites were considered, but these were selected as prior work here has laid the 'building blocks' for livelihood diversification, especially with regards to integrated landscape level conservation, livestock management and holistic rangeland management. The MCA initiative which started in 2010 built on work done by Namibian organisations but selected communities from 7 northern communal areas from a treatment and control group where rangelands were degraded and susceptible to climate change. Sites were selected to represent a range of cultural settings, regions and Traditional Authorities with varying climates and environmental issues. Sites one to seven below were selected using this process. Within these sites grazing areas were selected that were willing to engage with improved rangeland, livestock and marketing activities. The CAN/Meatco Foundation project took over most of these sites from the MCA project. Six grazing area sites in these two conservancies were selected in the west as this area is mountainous, has low and highly variable rainfall. The area is the only area in the NCAs that is mountainous and has active water erosion. Farmers are largely dependent on livestock and are resident in the area. These areas are highly eroded with most topsoil and perennial grass having been lost and perennial grasses have been replaced by annual grasses. Cropping is practised in some of these Grazing Areas riverine areas but remains highly risky with poor yields. Predator loses are high in some areas. These rangeland and cropland sites were selected as they are highly vulnerable to climate change.

Map ref.	Site name	Land tenure system	Size	Approximate no. of people	Area targeted by project	Project intervention site selection
2	Okongoro Conservancy (Erora and Ohengaipure)	Communal Conservancy	956 km^2 *	1 222 *	Land use plan will cover entire area. 50% of conservancy members will benefit - not necessarily all from direct benefits from hunting/ tourism/ agriculture/ INPs but they will all benefit from improve institutional capacity in their conservancies, leading to reduced wastage of conservancy income and better management of natural resources. Detailed grazing area planning with connections to the broader conservancy will be undertaken on 10 000 ha (2 GAs), involving 25 households (approximately 200 people)	Okongoro also falls within the area seriously affected by drought, but was selected because it has limited wildlife and no tourism facilities, and currently has limited livelihood options other than livestock production. This conservancy was selected because it of its similarity to at least another ten conservancies in Kunene, all of whom have limited tourism and wildlife options, but envisage expanding this sector - if livelihood diversification to reduce vulnerability to climate change can be achieved in Okongoro, then there would be potential to replicate or upscale the approaches applied here to other similar conservancies.
3	Uukwaluudhi / Ongandjera Conservancies and surrounding area	Communal Conservancy	1 437 km^2 * (Uukwaluudhi) 4 000 km^2 (Ongandjera)	25 000	Detailed grazing area planning with connections to the broader conservancy undertaken on 5 000 ha (1 GA) involving 12 households (approximately 96 people)	One grazing area was elected in this conservancy. The rainfall is low and highly variable. This area is flat and encroached by invader bush and farmers live in larger cities and visit the farm several times per year. Cropping is not allowed in this area. Farmers have other incomes and farming is in most cases not a commercial enterprise. These areas have lost topsoil to wind erosion and perennial grass has been lost and has been replaced by annual grasses. These sites are also bush-encroached and productivity is in decline. Farmers here are also highly vulnerable to climate change.

Map ref.	Site name	Land tenure system	Size	Approximate no. of people	Area targeted by project	Project intervention site selection
4	King Nehale Conservancy area	Communal Conservancy	508 km^2 *	4 564 *	Detailed grazing area planning with connections to the broader conservancy undertaken on 5 000 ha (1 GA) involving 15 households (approximately 120 people)	One grazing area was elected in this conservancy and is similar to site 3 above. The rainfall is moderate but highly variable. This area is divided into a plain where no settlement or cropping is allowed or feasible. The plain is surrounded by highly settled and fenced off areas where cropping is a key activity. Most livestock owners live in larger cities and visit the farm several times per year. Farmers have other incomes and farming is in most cases not a commercial enterprise. These areas within the plain have lost palatable perennial grass, which have been replaced by unpalatable perennial grasses. These sites are also bush encroached and productivity is in decline. Predator losses are a problem here. Farmers here are also highly vulnerable to climate change.
5	Okongo SSCF area	Small scale leasehold farm	800 km^2 fenced into 20 units of varying size		Detailed grazing area planning with connections to the broader conservancy undertaken on 15 000 ha (4 GAs) involving 30 households (approximately 240 people)	Six grazing areas have been selected in this fenced off Small scale commercial farming area. The rainfall here is moderate but variable. This area is in general highly bush encroached making a livelihood from livestock very difficult. This issue is typical of this area and needs to be addressed in an acceptable manner. Cropping is also practised here but yields are relatively low and the soils are poor. Most livestock owners live in larger cities and visit the farm several times per year. Farmers have other incomes and farming is in most cases not a commercial enterprise. These areas have lost palatable perennial grass and replaced by bare ground. Predator problems are an issue particularly for small stock. These areas vulnerable to climate change.

Map ref.	Site name	Land tenure system	Size	Approximate no. of people	Area targeted by project	Project intervention site selection
6	Kahenge Community Forest area	Community forest	267 km^2 *		Detailed grazing area planning with connections to the broader community Forest undertaken on 10 000 ha (2 GAs) involving 66 households (approximately 528 people)	Two grazing areas have been selected in this community Forest. The rainfall here is moderate but variable. This area is in general bush encroached making a livelihood from livestock very difficult. Livestock and cropping are key factors. Cropping is practised here as a key livelihood activity but yields are relatively low and the soils are poor. Most livestock owners live in the grazing Area. Farmers have little other incomes and farming but in most cases livestock are not a commercial enterprise. These areas have lost palatable perennial grass and replaced by bare ground. Predator problems are an issue particularly for small stock. These areas are vulnerable to climate change.
7	George Mukoya Conservancy area	Communal Conservancy	486 km^2 *	930 *	Detailed grazing area planning with connections to the broader conservancy undertaken on 5 000 ha (1 GA) involving 36 households (approximately 288 people)	One grazing area has been selected in this conservancy. The rainfall here is moderate but variable. This area is in general bush encroached - making a livelihood from livestock is therefore very difficult. Livestock and cropping are key factors. Cropping is practised here as a key livelihood activity but yields are relatively low and the soils are poor. Most livestock owners live in the grazing Area. Farmers have little other incomes and farming but in most cases livestock are not a commercial enterprise. These areas have lost palatable perennial grass and replaced by bare ground. Predator problems are an issue particularly for small stock. These areas are vulnerable to climate change.
8	N‡a Jaqna and Nyae Nyae Conservancy and Community forest area	Communal Conservancy and community forest	9 123 km^2 * (N‡a Jaqna) 8 994 km^2 * (Nyae Nyae conservancy and community forest)	3 579 * (N‡a Jaqna) 2 609 * (Nyae Nyae conservancy and community forest)	30%	The project will target approximately 30% of the villages directly, with the rest benefitting through general information and seed distribution etc. All beneficiaries will be San and the methodology will be creating role model villages that others will be motivated to follow.

Map ref.	Site name	Land tenure system	Size	Approximate no. of people	Area targeted by project	Project intervention site selection
9	Kwandu / Mudumu North complex	Communal land			Land use plan will cover entire area 50% of conservancy members and residents will benefit - not necessarily all from direct benefits from hunting/ tourism/ agriculture/ INPs but they will all benefit from improve institutional capacity in their conservancies, leading to reduced wastage of conservancy income and better management of natural resources.	The Kwandu / Mudumu North Complex is one of the first large landscape conservation initiatives in Namibia - incorporating multiple land-uses and sectors. The communities here are at an advanced stage of diversifying their livelihoods to include tourism and trophy hunting, though benefits are not yet reaching household level, so the dependency on traditional (though largely ineffective) forms of agriculture still predominate. The establishment of secure institutional foundation to manage natural resources at landscape level here, and the challenges to ensure that benefits from alternative income sources, present a unique opportunity to demonstrate how important institutional strengthening is to reduce vulnerability to climate change. This site was chosen above other emerging 'landscape level complexes' in the Zambezi Region as it was the first to be established and there is higher likelihood of achieving tangible results, that can then be replicated by local NGOs in other sites.
10	Farm Unit Resettlement	Government owned freehold land (leasehold)	4 resettled farms x approximately 5500 ha each	± 16 households	100%	The resettlement process is an on-going project of Government, and seeks to address the needs of landless, previously disadvantaged people in Namibia. The gender distribution of beneficiaries is approximately 60% male and 40 %female.
11	Gibeon Constituency (Gründorn, Asab and Amalia)	Communal land	19 974 ha	240 people in 46 households	100%	This communal land in southern Namibia, inhabited by Nama-speaking Bondelswarts, lies within an entirely different vegetation biome, in an extremely arid part of the country, and is faced with its own climate change challenges. It was selected given it"s distinct special and population demarcation.

Map ref.	Site name	Land tenure system	Size	Approximate no. of people	Area targeted by project	Project intervention site selection
12	Klein Karas Cooperative (Grünau)	Group resettlement farm	7 850 ha	± 150	100%	The group resettlement model was an earlier form of land reform, where groups of people were resettled onto the same area of land. The group resettlement model suffers from similar challenges and threats as communal land. Klein Karas is additionally in the far south, extremely arid part of Namibia.

* The State of Community Conservation in Namibia 2013 annual report

embracing
people, places and wildlife

Community conservation embraces a large number of Namibia's communal area residents and covers a vast portion of communal land (Figure 3). It also creates important linkages with state protected areas and initiatives on freehold land (Figure 4). By joining huge contiguous areas where wildlife can roam free at a landscape level, community conservation is enabling environmental restoration, healthy game populations, and diverse community returns. Through this, the true potential of Namibia's spectacular places can be realised.

entrenching
a proven model

Community conservation has shown that it can improve rural lives while contributing to biodiversity conservation, and is recognised as a national development strategy. The movement is still young and growing rapidly, and continues to require broad support. Yet community conservation can become fully sustainable and largely self-financing in the foreseeable future, if appropriate resources can continue to be invested to entrench governance foundations, optimise returns, and mitigate threats and barriers.

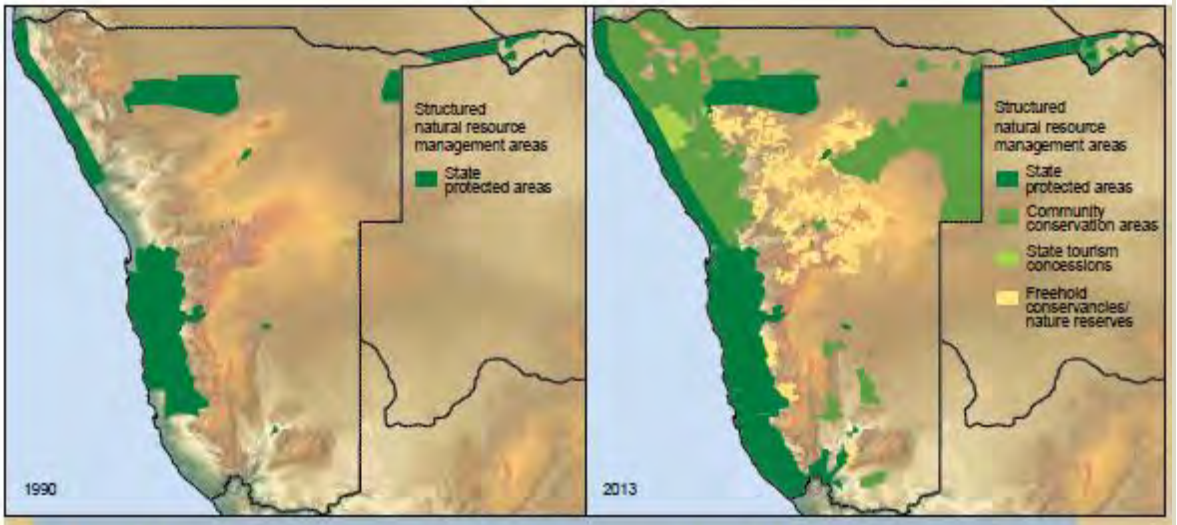

FIGURE 4. The expansion of structured natural resource management across Namibia
At the end of 2013, land under structured natural resource management covered 43.5% of Namibia. At independence in 1990, there were no registered community conservation areas, freehold conservancies did not exist, and a mere 12% of land was under recognised conservation management.

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Zoning

Land use planning has to consider both the needs of farmers to grow crops and rear livestock, and of wildlife to move across the landscape. Zoning conservancies for different land uses can significantly reduce conflicts, while wildlife corridors allow movement between seasonal ranges, reducing local pressure. Many conservancies have zoned their areas, but are constrained by the fact that they do not have legal powers to enforce the zones.

barriers
persist

While progress has been made, barriers to investment in communal areas persist. Insecurity of land tenure and lease agreements continues to present a challenge. Despite ongoing negotiations, the planned Ministry of Lands and Resettlement tax on lodges in communal areas was not resolved during 2013 and still threatens the viability of lodges and the returns flowing to communities.

Integration is often a slow process and a lack of recognition of community-based organisations remains a barrier to the long-term sustainability of conservancies and other initiatives. Integration of policies at ministry level, as well as of management structures and activities on the ground, can improve efficiency and significantly expand the current range of returns being generated by community conservation. Sectors that will benefit from closer collaboration include inland fisheries and agriculture.

Figure 7 Extracts from the state of community conservation in Namibia 2013 annual report (Annex 2)

Site 1: Ehirovipuka/ Orupupa Conservancy Area

Ehirovipuka Conservancy, which borders on Etosha National Park, was gazetted in 2001. The conservancy covers 1,975 km², and has approximately 1 650 members (Table 1), most of them Herero livestock farmers. The conservancy‟s savannah woodlands cover its rolling landscape while river valleys support taller trees. Significant wildlife numbers are present, including lion, leopard, cheetah and elephants, among multiple other plains game, and the conservancy generates most of its income from trophy hunting. It is also currently engaged in several joint venture tourism negotiations, which are likely to create considerable jobs and income opportunities in the area. The conservancy is managed by a committee, and employs five staff to monitor its wildlife and other natural resources. The conservancy also has a craft centre and a traditional homestead, though earnings from these are limited. Orupupa Conservancy, which was gazetted in 2011, neighbours Ehirovipuka. It has about 1,250 adult members, and covers 1,234 km². Resident‟s livelihoods are heavily reliant on livestock (cattle, sheep, and goats). A hunting contract generates some income for the conservancy, and there is potential for further gains from wildlife. In Orupupa, up to 200 harvesters also earn income from the harvesting of mopane (*Colophospermum mopane*) seeds which are sold to the Opuwo Processing Facility for essential oil extraction. Harvesting is currently limited by demand. The potential for other indigenous natural products (INPs) exists. For example, *Myrothamnus* resources in this area could potentially be harvested for the production of a tea product or as an ingredient for the cosmetic market. These need to be further investigated.

Currently, these two CBOs produce about 5 tons of sustainably harvested Devil‟s Claw per year. The species here is *Harpagophytum procumbens* which is favoured by the international market. About 100 harvesters collectively earn N$ 150 000 and the CBOs a management fee of N$ 20 000.

Under an EU-funded Climate Change Adaptation initiative, work has already begun with Regional Livestock Marketing Co-operatives in supporting preparations for adaptations to climate change. One key aspect that requires additional attention is the ability to combine local farm planning with broader landscape planning.

Site 2: Okongoro Conservancy Area

Okongoro Conservancy was gazetted in February 2012 and covers 956 km². Its‟ residents are made up of about 1,274 adults who are cattle and small-stock farmers. People also occasionally plant crops in the rainy season. Ohengaipure is a village whose residents depend almost entirely on livestock for their livelihoods. The conservancy does not have a hunting quota or tourism activities, though there are caves in the area that have been explored during a recent expedition, which might have the potential to attract tourists.

This area only started with Devil‟s Claw harvesting during 2014 and is expected to producebetween 1 and 2 tons of dried material in the current season. Further investigations are necesary to identify other possible high value plant species. Other possible INPs are *Myrothamnus* and mopane.

Field trials performed during the just concluded MCA-N interventions established the extent and severity of rangeland degradation in this and adjoining arid areas of Kunene; identified serious (clinical and sub-clinical) nutrient deficiencies in livestock and their resolution by nutrient supplementation; and the prevalence of sexually transmitted and immune-depressing diseases and parasites that, all together, limit livestock production to significantly lower levels than potentially possible.

Under an EU-funded Climate Change Adaptation initiative work has already begun to prepare Regional Livestock Marketing Co-operatives for adaptations to climate change. One key aspect that requires additional attention is the ability to combine local farm planning with broader landscape planning. For this purpose, links are being established with another EU-funded Climate Change Adaptation initiative that is investigating means of combating desertification that is widespread in this and adjoining areas of the Kunene region. For example, fertile sedimentary soil in river valleys (the mainstay of local crop production) is washed away by serious gully erosion and may be contained, possibly reclaimed, by establishing indigenous drought-tolerant fodder shrubs and relevant soil erosion control measures.

Site 3: Uukwaluudhi / Ongandjera Conservancies Area

These conservancies are representative of the Omusati land use, covering over 6,500 km², with moderate biodiversity. These areas and their surrounds have more than 25,000 residents that include multiple cultures but residents are predominantly Oshiwambo speaking. Within these areas cropping and livestock as well as core wildlife areas have been identified. Farming enterprises are run by a combination of permanently settled farmers as well as absentee farmers who work elsewhere in Namibia. The main livelihood activities are livestock and crop production. Many areas are already over-grazed and crop productivity is generally low. Land is limited and increased production per ha in these areas is needed. This can be achieved through the identification, adoption, adaptation and/or expansion of application of climate smart activities. Potential income sources from Etosha National Park are being investigated.

From a national political perspective it is vital that these communities that are heavily dependent on farming for survival are exposed to climate smart opportunities and that a conducive environment is created to enable the land potential to be realised.

The recently concluded MCA-N intervention established that rangeland condition in this and adjoining areas in the Kalkveld biotope of the Omusati region is poor and rehabilitation is urgently required. Furthermore, livestock production is limited by serious (clinical) nutrient deficiencies that can be addressed successfully by appropriate nutrient supplementation, as proven during a local pilot trial, as well as certain sexually transmitted and immune system-linked animal diseases. Under an EU-funded Climate Change Adaptation initiative work has already begun with Regional Livestock Marketing Co-operatives to prepare and adapt to climate change. One key aspect that requires additional attention is the ability to combine local farm planning with broader landscape planning.

Site 4: King Nehale Conservancy Area

This conservancy is approximately 500 km² in size and borders Etosha National Park in the Oshikoto region, yet with moderately low biodiversity. The Andoni plain is vitally important for the livestock industry in this area as well as wildlife and tourism income for the conservancy. The surrounding areas are more densely populated and cropping is a vital livelihood activity. The area includes multiple cultures but residents are predominantly Oshiwambo speaking. These areas have been zoned traditionally into cropping and livestock/ wildlife areas. Farming enterprises are run by a combination of permanently settled farmers and absentee farmers who work throughout Namibia. The main livelihood activities are livestock and crop production. However many areas are already over-grazed and crop production is low. Land is limited and increased production per ha in these areas is needed through the identification, adoption, adaptation and/or expansion of application of climate smart activities.

From a national political perspective it is vital that these communities that are heavily dependent on farming for survival are exposed to climate smart opportunities and that a conducive environment be created to enable the land potential of these areas to be realised.

Field trials performed during the recently concluded MCA-N interventions established the extent and severity of rangeland degradation in this and adjoining areas of the seasonally-inundated Ekuma Floodplain, identified serious (clinical and sub-clinical) nutrient deficiencies and their resolution by nutrient supplementation and the prevalence of sexually transmitted and immune-depressing diseases and parasites that, all together, limit livestock production to significantly lower levels than potentially possible. Under an EU-funded Climate Change Adaptation initiative work has already begun to work with Regional Livestock Marketing Co-operatives to prepare and adapt to climate change. One key aspect that requires additional attention is the ability to combine local farm planning with broader landscape planning and support climate smart actions that increase production and profit per ha for these residents.

Site 5: Okongo Small-Scale Commercial Farm Area

This small scale commercial farm (SSCF) area has been demarcated by the Ministry of Land Reform to enable commercialisation through infrastructure support, head lease and sublease holding and technical support. The area is approximately 800 $km^2$and has been fenced into approximately 20 units of varying size and number of sub lease holders. The western area is not fenced and is communal. The area is in the Ohangwena region and has relatively high biodiversity but low endemism. There is considerable bush encroachment and bush thinning is required to improve rangelands for livestock carrying capacity. Residents are largely dependent on cropping and livestock. The areas are not densely populated but the fenced off farming units enable detailed farm planning to be conducted and leaseholds provide increased security for investment. The area is remote and relatively inaccessible. The farmers here are largely Oshiwambo speaking. Farming enterprises are run by a combination of permanently settled farmers with some absentee farmers. The main livelihood activities are livestock and crop production. Areas surrounding villages are overgrazed and generally heavily bush encroached. There is

potential for increased production per ha in these areas through the identification, adoption, adaptation and/or expansion of application of climate smart activities.

From a regional perspective it is vital that these communities that are heavily dependent on farming for survival are exposed to climate smart opportunities and that a conducive environment be created to enable the land potential of these areas to be realised.

Under an EU-funded Climate Change Adaptation initiative work has already begun to work with Regional Livestock Marketing Co-operatives to prepare and adapt to climate change. One key aspect that requires additional attention is the ability to combine local farm planning with broader landscape planning and support climate smart actions that increase production and profit per ha for these residents.

Site 6: Kahenge Community Forest Area

This area in Kavango West has been registered as a community forest by the Directorate of Forestry under MAWF. The forestry area is 14,700 ha, with relatively low biodiversity and low endemism. The area is bush encroached in places and bush thinning is required in parts. Residents are largely dependent on cropping and livestock. The area is remote and relatively inaccessible, thus the areas are not densely populated and as a consequence the rangeland is not highly degraded. Farmers in the area are largely resident but there is a mix of residents and absentee farmers. The farmers here are largely RuKwangali speaking with some other groups. Farming enterprises are run by a combination of permanently settled farmers with some absentee farmers. The main livelihood activities are livestock and crop production. Areas surrounding villages are overgrazed and generally heavily bush encroached. There is potential for increased production per ha in these areas through the identification, adoption, adaptation and/or expansion of application of climate smart activities.

From a regional perspective it is vital that these communities that are heavily dependent on farming for survival are exposed to climate smart opportunities and that a conducive environment be created to enable the land potential of these areas to be realised.

Under an EU-funded Climate Change Adaptation initiative work has already begun to work with Regional Livestock Marketing Co-operatives to prepare and adapt to climate change. One key aspect that requires additional attention is the ability to combine local farm planning with broader landscape planning and support climate smart actions that increase production and profit per ha for these residents.

Another initiative by the Nkurenkuru Town Council and newly-constituted Kavango West Regional Council is investigating the sustainable utilisation of the abundant woody resource, which includes demarcating additional community forests, re-foresting degraded woodlands and planting additional woodlots of indigenous timber tree species, making charcoal, sawn timber for making traditional Kavango furniture, biomass electricity generation, the development of agriculture (eg by promoting take-off of cattle by building a local abattoir) and eco-tourism (eg by containing free-roaming elephant to a large “elephant reserve” to limit their destruction of agricultural infrastructure), etc. These activities are highly relevant to mitigating climate change and increasing the resilience of local land users to better withstand climate shocks.

Site 7: George Mukoya Conservancy Area

This conservancy is approximately 500 km²in size and borders the Khaudom National Park in the Kavango East Region, with relatively high biodiversity but low endemism. Residents are largely dependent on cropping and livestock but high value animal species have enabled trophy hunting to become an important activity. The areas are not densely populated (100 people in 500 km²), and are remote and relatively inaccessible. The area includes largely resident people, predominantly Gciriku speaking. These areas have been zoned into cropping and livestock/ wildlife areas. Farming enterprises are run by a combination of permanently settled farmers with some absentee farmers. Areas surrounding villages are overgrazed however rangelands are intact but bush encroachment and unplanned fires are a problem. Crop production is largely low. Land is in general not a limiting factor but productivity is low. There is potential for increased production per ha in these areas through the identification, adoption, adaptation and/or expansion of application of climate smart activities.

From a regional perspective it is vital that these communities that are heavily dependent on farming for survival are exposed to climate smart opportunities and that a conducive environment be created to enable the land potential of these areas to be realised. A Farmers‟ Support Programme is already active in this and other small-scale farming areas of the Kavango East and West regions that aims to improve farming efficiency and this needs to be strengthened to improve climate change mitigation.

Field trials performed during the recently concluded MCA-N interventions established the extent and severity of rangeland degradation in this and adjoining areas of the Kalahari Sand Plateau that stretches through the Kavango West and East regions, identified serious (clinical and sub-clinical) nutrient deficiencies and their resolution by nutrient supplementation and the prevalence of sexually transmitted and immune-depressing diseases and parasites that, all together, limit livestock production to significantly lower levels than potentially possible.

Under an EU-funded Climate Change Adaptation initiative work has already begun with Regional Livestock Marketing Co-operatives to prepare and adapt to climate change. One key aspect that requires additional attention is the ability to combine local farm planning with broader landscape planning and support climate smart actions that increase production and profit per ha for these residents.

Site 8: N≠a Jaqna Conservancy and Nyae Nyae Conservancy and Community Forest

N≠a Jaqna and Nyae Nyae Conservancies are the two largest conservancies in the country, covering over 18,000 km² of precious bio-diverse broad-leafed acacia woodlands. These are the only two San-run conservancies in the country and there are approximately 4 000, mostly !Kung San, in N≠a Jaqna and 3 000, mostly Ju/‟hoansi San in Nyae Nyae. Due to the lifestyle of the San and their respect for natural resources, these areas are the last remaining communal areas that are not over-grazed and as such need to be protected for their biodiversity and the San encouraged to maintain this environment.

These San communities are also some of the most impoverished in the country with few livelihood options and are heavily dependent on subsistence agriculture and traditional

veld (bush) foods, which are particularly vulnerable to the impacts of climate change (Indigenous Peoples and Climate Change in Africa, LAC, 2013). It has also been identified that the poor with lack of employment opportunities are more vulnerable to the impacts of climate change (National Policy on Climate Change for Namibia 2011).

Thus the indigenous San communities in Nyae Nyae and N≠a Jaqna conservancies represent particularly vulnerable communities, being rurally based, heavily dependent on subsistence farming and veld (bush) foods for survival and having even fewer employment opportunities than other language groups due to a historic lack of formal education and marginalisation. A Review of Poverty and Inequality in Namibia by the Central Bureau for Statistics (October 2008) found incidence of poverty and severe poverty amongst San language groups to be „more than double the national averages" and that „reducing overall levels of poverty amongst the small more deprived groups will require more targeted efforts compared to the more broad-based initiatives to reduce poverty".

Under an EU-funded Climate Change Adaptation initiative work has already begun to help these communities prepare and adapt to climate change, but much more effort is needed if these remote, impoverished, indigenous communities are to survive.

Site 9: Kwandu (northern area) / Mudumu North complex - community forests, wildlife, TFCA, conservancy, protected area

The Mudumu North Complex (MNC) is a cluster of communal area conservancies, community forests and state-run protected areas in eastern Zambezi Region that cooperate in the management of wildlife, forests and other natural resources. It covers 3,400 km² on either side of the Kwando River and consists of fertile floodplains, riparian forests, and dry savannah woodland. Wildlife includes elephant, buffalo, hippo, crocodile, lion, leopard, cheetah, red lechwe and a wide variety of birdlife including endangered species such as wattled crane.

The land management units comprising the Complex are:

Conservancies:	Community Forests:	Protected Areas:
Kwandu	Kwandu*	Bwabwata NP
Mayuni	Lubuta**	Mudumu NP
Mashi	Masida ***	State Forest
Sobbe	Sachona**	

* Overlaps partially with the Kwandu Conservancy

** Overlaps partially with the Mashi and Sobbe conservancies

*** Overlaps partially with Sobbe Conservancy and the State Forest Reserve

The MNC is a complex of diverse and often conflicting land-uses, which are not separated by fences. It is integrally tied to land-use in the three neighbouring countries, Zambia, Angola, and Botswana, which adjoin the MNC. There is considerable poverty, underdevelopment and human wildlife conflict in the area.

Wildlife-based tourism and sustainable use of the natural resources present significant opportunities for poverty alleviation but to achieve greatest impact, habitats need to be rehabilitated, wildlife populations rebuilt and developments properly planned.

Local stakeholders in the area have agreed to work together towards these common objectives. They recognize that co-management does not involve or interfere with local issues best managed at the management authority level. They have established a management body representing a collective of all the management authorities and key stakeholders in the area. This management body seeks to collaborate on issues of common concern, work together to achieve greater management and development efficiency and collectively unlock the human and natural resource capital that is in the area.

This area is currently producing about 50 tons of sustainably harvested Devil‟s Claw. The species here is *Harpagophytum zeyheri*, and although this is not the favoured species, the community forests have a contract with a reputable buyer. About 600 harvesters earn N$ 1,400,000 (approximately USD 140,000) annually which provides an important cash income to otherwise marginalized members of these communities.

Although these community forests have valuable timber species, the total allowable offtake in order to ensure sustainability, does not attract buyers that are willing to pay market related prices. Innovative ways for unlocking potential benefits from timber products desperately need to be investigated. The quantity of commercially harvestable wood was measured in a few places during the just concluded MCA-N intervention that aimed to increase beef marketed from the perennially FMD-infected Zambezi region. In addition, rangeland condition and degradation was determined, as were the nutrient deficiencies, sexually-transmitted and immune system-depressing diseases and parasites that seriously limit animal production to levels much lower than potentially possible. This information needs to be disseminated urgently and in an easily-understood format to local land users as well as decision-makers at national level to improve agricultural offtake, resilience and reduce rural poverty in this remote region of Namibia.

Site 10: Farm Unit Resettlement in central Namibia

At Independence in 1990, Namibia inherited a skewed land distribution pattern as the result of past colonial policies. Of approximately 69.6 million hectares available for agricultural purposes, some 36.2 million hectares (or52%) was deemed free-hold land (loosely referred to as "commercial land"). This land was owned by about 4,200 (predominantly white) farming households. Conversely, some 33.4 million hectares (48%) could be described as communal or "non-freehold" land, and State-owned. In response, the Government of the Republic of Namibia initiated a land reform programme in 1990. Land reform continues to be considered one of the priority programmes for Government. It aims to facilitate affordable access of all citizens to land and services for the responsible exploitation, efficient use, shared and sustainable benefits of all Namibian land stake-holders. The main objectives of the land reform programme are to bring about more equitable distribution of and access to land; promote sustainable economic growth; lower income inequalities; and reduce poverty.

The Ministry of Land Reform has developed a National Action Plan, adopted in 2005, that defines and describes clear targets, timeframes, actions to be carried out as well as estimated financial requirements for land reform. This land reform programme builds on four pillars namely re-distribution of land (involving state acquisition according to the willing buyer-willing seller principle); the Affirmative Action Loan Scheme (AALS) administered by the Agricultural Bank of Namibia (Agri-bank); tenure reform; and the development of under-utilised non-freehold land.

The Government of Namibia has redistributed over 7.8 million hectares of freehold land to formerly disadvantaged Namibians under the National Resettlement Programme (NRP). Under this Project, the two principle acquisition methods have been state acquisitions (MLR's NRP) and the Affirmative Action Loan Scheme (AALS) through which formerly disadvantaged Namibians are assisted by the state to buy freehold farms.

Under the current government land resettlement model, multiple families are resettled on a farm formerly owned by a single farmer. These farmers find it very difficult to apply proper rangeland and livestock management practices due to limited number of camps and other infra-structure. Conflicts very often arise regarding the pumping of water and the use and maintenance of infra-structure on the farm. These farms were initially planned and developed for central decision-making by a single person. Currently, various units are allocated to different farmers and central decision-making is no longer possible, resulting into inadequate flexibility of farming practices (e.g. mating and weaning seasons, rotational grazing, etc.) to be applied. Furthermore, individual land unit size is considered borderline to not economically viable, leading to increased rangeland degradation, inadequate improvement of farm productivity and subsequent increased vulnerability to climate variability.

In fact, a study of the national resettlement policy in Namibia by Shigwedha Leevi Hafeni found that generally, the size of the individual plots are insufficient for cattle and crop farming; that women are given less prominence in the resettlement process; and that those who have benefited from the resettlement process are still engaged in traditional farming activities and this tends to limit their productivity.

Four such resettlement farms will be selected, in the Khomas region (see Area 10 in Figure 5) close to Windhoek to allow a closer interaction with beneficiaries. The aim will be to develop combined plans involving all households resettled, with an aim of increasing the long term sustainability and productivity, and to mitigate against the impacts of climate change. Agra ProVision has considerable experience in working on resettlement farms, mainly through the development and management of a farmers‟ support programme that provides mentorship services to resettled farmers.

Site 11: Gibeon Constituency (Gründorn, Asab and Amalia)

The development of communal land is a crucial component of land reform. Making communal land more productive will improve the overall productivity of the land and contribute to improving people‟s livelihoods. Development of communal land benefits from synergies with the CBNRM models developed by MET taking the form of conservancies and community forests.

Gründorn, Asab and Amalia are three localities settled by Nama-speaking Bondelswarts people in the mid-1960s and are located south of Mariental in the Gibeon Constituency, Hardap Region. The two parts of the farm Gründorn totalling 19,974 hectares were purchased by the then government in 1964 under the Odendaal scheme for expansion of communal farming areas. Amalia and Asab were also commercial farms prior to this time and purchased under the same scheme.

These villages lie on the Central Plateau of Namibia at an elevation ranging between 800-1000m above sea level. The area experiences a mean rainfall of 150-200mm per year and a mean water deficit -2,300 to -2,500 (mean annual rainfall – mean annual evaporation in mm/year). Amongst nearby commercial farmers, the area is considered a fair farming area where goats, sheep and game farming are currently the dominant land uses.

Vegetation of the dwarf shrub savannah is dominated by *Rhigozum trichotomum* (driedoring), *Acacia mellifera* (swarthaak*)* and *Catophractus alexandri* (ghabbabos). *Acacia karroo* (soetdoring) and *Parkinsonia africana* (lemoendoring) grow along the usually dry watercourses and are used for firewood. Some of the river courses are seriously invaded by exotic *Prosopis* species. Goats are the most numerous domestic livestock with horses, donkeys, sheep, cattle and chickens also present. Small gardens with *inter alia* pumpkins and corn are planted. At least 240 people live in and around Gründorn (28 households), Asab (6 households) Amalia (12 households), and other nearby posts in 46 individual households (mean of 5.22 per household).

Agra Provision has considerable experience in working with the people from that area through different initiatives in the past that include Namibia‟s Programme to Combat Desertification (Napcod) and the Ephemeral River Basin project, funded by the Norwegian government.

Site 12: Klein Karas Cooperative (Grünau)

The community of Klein Karas live on an area of 7 850 ha about 30 km west of Grünau in the Karas region. Small livestock production is the major livelihood activity supported by limited vegetable production, mainly for own consumption in backyard gardens. The farming area is divided into 3 big camps with 3 water points. The potential carrying capacity for that part of Namibia is 6 ha per small stock unit, giving the area the capacity to carry 1,308 small stock units. Current animal numbers are 700 goats and sheep, 350 springbuck and 45 oryx, translating into about 1,095 small stock units.

The community formed the Klein Karas Cooperative and have started with a form of planned herding of livestock. They are very well organised with a high sense of cohesion amongst them. Staff from Agra ProVision has been involved with them through various initiatives in the past.

The area is threatened by desertification as its rainfall is already low (<150 mm p.a.) and highly variable (CV > 40%) and the carrying capacity is low (>60 ha/LSU). It is a marginal environment for livestock ranching and only improved climate-smart rangeland management and livestock husbandry techniques will enable the community to survive and prosper despite environmental challenges. Also, the area has a rare beauty due to

its extremely open spaces; something that could be developed into a thriving eco-tourism industry.

Table 1 provides a matrix with an assessment of the current status of various conditions at the thirteen selected sites. This project aims to impact positively on the current status, by supporting an integrated land management approach that will create synergies and ensure that the most beneficial mix of land-uses and technologies are adopted that maximize productivity and diversity of incomes, and to support the use of adaptive management approaches that will help beneficiaries deal with the impacts of climate variability and change. Improving primary productivity will provide the raw materials required for value addition activities, thus creating more opportunities for income generation and job creation.

Table 3 Overview of beneficiaries and anticipated economic, social and environmental benefits they will realize

Map ref.	Site name	Profile of beneficiaries	Economic, social and environmental benefits that the beneficiaries (vulnerable communities) will realize
1	Ehirovipuka / Orupupa Conservancy area	National census data and conservancy registration data show a pastoral community impoverished by inappropriate and unsustainable grazing and rangeland management practices that resulted in rangeland degradation and soil erosion ("desertification").	Improved, sustainable rangeland management will increase livestock production (goats and cattle). Diversification into wildlife tourism (e.g. communal conservancy) will enable community to access tourism wealth. Increased income at household level from tourism, trophy hunting, agriculture and Indigenous Natural Products (INP). Women will be major beneficiaries of increased income from goats, especially, and INPs. Target is to increase conservancy income by at least 30% over three years. Income from INPs going directly to harvesters will be increased by 10%.
2	Okongoro Conservancy (Ohengaipure)	National census data and conservancy registration data show an impoverished community living in an area characterised by highly fertile but erodible river valleys that are being destroyed by landscape-level soil erosion ("Ozondoto" in the local vernacular), so bad that local people sometimes drown in the floods of rainwater washing down the gullies.	Stabilising the soil, reducing soil erosion and preventing further desertification of fertile river valleys will increase crop production, the responsibility of women (thus giving them greater influence in the community) and is a prime benefit to the nutrition of children (better-fed children pay more attention at school = better education). Increased income at household level from cropping, rehabilitation of some ecosystem services (e.g. soil retention).

Map ref.	Site name	Profile of beneficiaries	Economic, social and environmental benefits that the beneficiaries (vulnerable communities) will realize
3	Uukwaluudhi / Ongandjera Conservancies area	A mixed farming area in which people are herding livestock (cattle and goats) and cultivating dry-land grain fields (mainly pearl millet). A very traditional and self-sufficient society that is threatened by imploding grazing capacity of their commonage due to over-stocking and inappropriate grazing methods, bush encroachment and declining soil fertility on cultivated fields.	Grazing practices need to be aligned to increased population pressure and degraded rangelands by introducing rotational herding, dry-land cultivated pastures, hay-making etc. Many of these activities are the domain of young people (herding) and women (pastures, making hay). Economic benefits of diversification and vertical efficiency improvements are incalculable, as is improved drought tolerance and climate resilience.
4	King Nehale Conservancy area	A largely pastoral community at the bottom end of the Ekuma Floodplain, with lots of grazing due to natural irrigation (seasonal flooding). High soil salinity limits cropping. Just north of the Etosha National Park, the area benefits from escaped wildlife.	Huge tourism potential of a flat, well-watered landscape unique to Namibia, with tremendous birding and wildlife potential. Existing tourism activities are rudimentary at best and income is still dominated by cattle. Tourism development would favour women for their people skills and preserve a uniquely beautiful landscape for the future. A highly productive ecosystem that can serve as a grazing reserve in the annual dry season if well managed.
5	Okongo SSCF area	Livestock ranchers on fenced, small-scale farms in a rapidly deforesting and degrading environment. By farm design, a relatively well-structured community in which a few large landholders are relatively well-off and influential and tend to dominate many smaller pastoralists. Injudicious burning, illegal logging and uncontrolled clearing of the woodland endanger the valuable wooden resource.	Local people want to practice agriculture because silviculture is as-yet a foreign concept and the wood resource is under-priced. Yet, is has tremendous economic potential if correctly utilised through improved protection of natural forests and their opening up to eco-tourism (with associated employment benefits especially to women), and the planting of woodlots for fuel (domestic, charcoal, etc.). Forests in good condition offer superb grazing, thus facilitating livestock production. Preserving and farming with trees sequesters carbon in the long term and mitigates climate change.

Map ref.	Site name	Profile of beneficiaries	Economic, social and environmental benefits that the beneficiaries (vulnerable communities) will realize
6	Kahenge Community Forest area	A small grain/livestock mixed farming community living in a relatively pristine forested area with an abundance of valuable, indigenous timber trees. Soils are marginal thus crop yield is poor, but forest grazing is good. Outsiders plundered valuable timber to such an extent that there is a complete ban on all wood utilisation for commercial purposes (no sawmill, no charcoal, only domestic firewood, construction timber and utensils)	Part of a wider (regional) initiative to re-structure wood utilisation to become more sustainable and diversified, with strong silvicultural elements. Set up to control wood harvesting (by Directorate of Forestry) more effectively to prevent over-utilisation. Diversified value chains (wood, cattle, tourism) offer increased employment, better quality jobs, a greater variety of jobs (many suitable for women), more sustainability and less waste/more efficiency in converting a natural resource into a high-value product. A real carbon sink that, if maintained, would mitigate climate change.
7	George Mukoya Conservancy area	A fertile conservancy based on forest products, traditional pastoralism and newly-introduced wildlife utilisation, bordered (and “invaded”) by small-scale farmers on the southern side. Conservancy members themselves are pestered by free-ranging elephants trampling crops, structures and people. Differences of opinion exist on whether conservancy should be continued or scrapped in favour of SSCF.	Elephant management will be crucial to retain conservancy character. The lure of crop production on fertile soils is great and grazing in the forest is supreme. Converting this beautiful natural landscape into an agri-/silvicultural one is certainly an attractive option but at the expense of naturalness and the carbon sink. The challenge is to combine the best of the conservancy and agriculture approach to maintain biodiversity while producing more produce from a smaller surface (efficiency of production), preferably value-added products.
8	N‡a Jaqna and Nyae Nyae Conservancy and Community forest area	Nyae Nyae has 1 350 Ju/'hoansi San with approximately the same number again of children under 18 and approximately equal number of men and women. N‡a Jaqna has 2000 !kung and Ju/'hoansi with approximately the same number again of children under 18 and an approximately equal number of men and women. All those involved are indigenous marginalised San and thus are all the equal focus of the project. UNDP analysis indicates that the San language groups are consistently the lowest in terms of human development indices. 'Scraping the pot' a recent review of the status of the San in Namibia found that the San are still highly marginalised and impoverished with limited livelihood options due to limited formal education historically and currently.	Three major development options offer themselves for further development: teach locals to farm with cattle and dry-land crops which is technically feasible but a cultural challenge, increased exploitation of INP which is a cultural activity but has to become sustainable in harvest, and to develop eco- and sport-hunting tourism with trickle-down financial benefits and employment to local communities. Successful development of a highly marginalised community will have multiple social and economic benefits while doing so based on sustainable resource utilisation would preserve an environmentally valuable landscape in near-pristine state.

Map ref.	Site name	Profile of beneficiaries	Economic, social and environmental benefits that the beneficiaries (vulnerable communities) will realize
9	Kwandu / Mudumu North complex	No detailed household level data available except census data and conservancy registration data. Locals live mainly off subsistence fishing, cattle and maize production and informal sale of timber. Wildlife management areas proliferate in the vicinity (e.g. community and state forests, communal conservancies, national parks with and without hunting concessions), etc.) and offer a number of attractive jobs.	Blessed with an abundance of natural resources (water, wood, cattle, crops, wildlife), there is so much potential to increase income at household level from tourism, trophy hunting and Indigenous Natural Products. Women will be major beneficiaries of increased income from INPs. Target is to increase conservancy income by at least 30% over three years, and to increase number of INP harvesters by at least 10%. Sustainable utilisation of valuable timber trees and judicious agriculture in a forested area offer multiple benefits but the challenge is to maintain ecological integrity and the carbon sink characteristics of the wider area.
10	Farm Unit Resettlement	Theoretically, FUR enables farmers to uplift themselves but inadequate starting stock, farming infrastructure and knowledge as well as assistance beyond the resettlement stage keeps communities poor and destitute. Squatting by extended family members and strangers is a real problem, leading to overcrowding, social malaise and pollution.	The basic prerequisites to efficient farming are in place ("title deed" areas and boundary fences, some water holes) or could be put into place (more water holes, farming knowledge, stock acquisition, farming inputs) if the relevant authorities could be alerted and assisted properly. There is a huge base of experience of what works in commercial farming and what not, and how to make it work in adverse conditions. This experience has to be made to work for FUR beneficiaries to uplift resettled communities, erase social ills and improve efficiency of agricultural production. Availability of extra labour makes value addition on-farm feasible (e.g. meat processing).
11	Gibeon Constituency (Gründorn, Asab and Amalia)	Poor communities in arid areas subsist mainly off goat farming. Cattle farming is no longer viable due to rangeland degradation while copious water resources are not used for irrigated horticultural production due to lack of knowledge and markets. Thus, communities stay poor despite a relatively good level of schooling and social ills proliferate: alcoholism, substance abuse, gender-based violence etc.	Both goat and cattle farming could be vastly improved if rangeland were rehabilitated or fortified with dry-land and irrigated cultivated pasture. Horticultural production creates ideal opportunities for women in production, marketing and processing. Vast tourism potential that is completely untapped. Former processing skills that got lost due to cessation of projects, e.g. weaving of karakul wool carpets, carpentry using invasive Prosopis wood, small-scale manufacturing and preserving of foodstuffs, etc.

Map ref.	Site name	Profile of beneficiaries	Economic, social and environmental benefits that the beneficiaries (vulnerable communities) will realize
12	Klein Karas Cooperative (Grünau)	A relatively well-organised and motivated rural community with existing agricultural structures in need of advanced support to reach the next tier of development: changing from (cheap) meat production to (expensive) pelt production, adding horticultural and farm-processing elements, etc.	A community that could easily be elevated into a model to show other communal farmers that the “glass ceiling” is a figment of the imagination and not a real construct. It can be overcome with dedication and hard, intelligent work. Further benefits would accrue to the targeted community but real value is in demonstrating what is possible with limited means and to motivate other rural communities to achieve success themselves.

Table 4: An assessment of the current state of integrated planning; governance; implementation of climate smart local level plans; and existing land uses at the twelve selected sites

		Ehirovipuka / Orupupa Conservancy area	Okongoro Conservancy (Ohengaipure)	Uukwaluudhi / Ongandjera Conservancies area	King Nehale Conservancy area	Okongo SSCF area	Kahenge Community Forest area	George Mukoya Conservancy area	N‡a Jaqna and Nyae Nyae Conservancy and Community forest area	Kwandu / Mudumu North complex	Farm Unit Resettlement	Gibeon Constituency (Gründorn, Asab and Amalia)	Klein Karas Cooperative (Grünau)
	Map reference	1	2	3	4	5	6	7	8	9	10	11	12
	Spatial lead	IRDNC	IRDNC	CAN	CAN	CAN	CAN	CAN	NNDFN	IRDNC	APV	APV	APV
Integrated land-use planning at local level		*1= none or not effective; 2 = present but requires operational improvements; 3 = effective*											
Joint forum for implementation and planning exists		1	1	1	1	1	1	1	2	2	1	2	1
Local level integrated land use plan done and available		1	1	1	1	1	1	1	2	1	1	1	1
Integrated workplans and budgets developed		1	1	1	1	1	1	1	2	1	1	1	1
Governance and Institutional structure		*1= none or not effective; 2 = present but requires operational improvements; 3 = effective*											
Appropriate representation structures in place		1	1	1	1	2	1	1	1	1	1	2	1
Level of capacity to govern resources		2	2	2	2	2	2	2	2	2	1	1	1
Level of coordination between representative structures		1	1	1	1	2	2	2	2	2	1	1	1
Level of security over resource rights		1	1	1	1	1	1	1	2	1	2	2	1
Level of social inclusion		1	1	2	2	2	2	2	3	2	2	2	2
Implementation of climate smart local level plans		*1= none or not effective; 2 = yes but room for improvement; 3 = effective*											
		1	1	2	2	2	2	2	2	1	1	1	1
Status of existing forms of land use / livelihood practices		*1= none or not effective; 2 = yes but room for improvement; 3 = effective*											
Rangeland management		2	2	2	2	2	2	2	2	1	1	1	1
Cultivated pastures/ veld re-enforcement		1	1	1	1	1	1	1	2	1	1	1	1
Conservation Agriculture (dry land crops)		1	1	2	2	2	2	2	2	2	1	NA	1
Livestock production		2	2	2	2	2	2	2	2	2	2	2	2
Forest and woodland management		2	1	1	1	1	1	1	2	2	NA	NA	1
Indigenous natural products		2	1	1	1	1	1	1	2	2	1	1	2
Wildlife utilization (Multi-species production systems)		2	2	1	1	1	1	2	2	2	NA	NA	2

		Ehirovipuka / Orupupa Conservancy area	Okongoro Conservancy (Ohengaipure)	Uukwaluudhi / Ongandjera Conservancies area	King Nehale Conservancy area	Okongo SSCF area	Kahenge Community Forest area	George Mukoya Conservancy area	N‡a Jaqna and Nyae Nyae Conservancy and Community forest area	Kwandu / Mudumu North complex	Farm Unit Resettlement	Gibeon Constituency (Gründorn, Asab and Amalia)	Klein Karas Cooperative (Grünau)
	Map reference	1	2	3	4	5	6	7	8	9	10	11	12
	Spatial lead	IRDNC	IRDNC	CAN	CAN	CAN	CAN	CAN	NNDFN	IRDNC	APV	APV	APV
Fire management		1	1	2	2	2	2	2	2	2	1	1	1
Tourism		2	1	2	1	1	1	2	1	2	NA	1	1
Fisheries		1	1	1	1	1	1	1	NA	1	NA	NA	NA
Horticulture (small scale)		1	1	1	1	1	1	1	2	2	1	1	1
Crafts		1	1	1	1	1	1	1	2	2	NA	1	1
Marketing		2	2	1	1	1	1	1	1	1	2	2	1
Natural resource based small enterprise development		1	1	1	1	1	1	1	2	2	1	1	1

B. About the consortium partners

Agra ProVision (APV)

Agra ProVision is an integral part of Agra Ltd, formerly an agricultural cooperative that converted to a public company in 2003. Since its formation in 1980, Agra (and before 1980, its predecessors) has gained vast experience in developing the agricultural sector in Namibia. It is recognized that agricultural development requires more than supplying the sector with inputs and marketing its products; it also requires specialist knowledge of production methods, training to achieve optimal production and advice and mentoring to implement this knowledge sustainably, which is the reason that Agra formed its division of Professional Services in 2009 (now Agra ProVision).

The main aim of APV is the development and growth of the agricultural and natural resource sector of Namibia. Specifically, the objectives are:

- to build and maintain a comprehensive data resource base/centre on which to draw for decision making, trend analyses and M&E for all sectors of the economy
- to provide commercial advisory and consulting services to agricultural producers and the agricultural industry at large, including corporate stakeholders, financial institutions, Agricultural Unions and development agencies on all aspects of agricultural production and sustainable resource use;
- to develop capacity (personal, institutional and production) and sustainable resource use by training, skills/knowledge transfer and mentorship;
- to contribute to solving industry constraints by applied research and strategic planning;
- to continuously improve the efficiency of agricultural production and the sustainability of natural resource use through multi-disciplinary interaction with land users;
- to advise and serve the Swakara industry by helping to grow productive capacity and marketing its products; and
- to synergize socio-economic interventions in the context of national development goals.

To facilitate the rapid achievement of Vision 2030, Agra ProVision is regularly involved in joint development projects and smart partnerships with partners that complement their strengths, e.g. MeatCo, Namibia Agricultural Union, Cheetah Conservation Foundation, Polytechnic of Namibia, UNAM, ECFSP, MCA-N, NPC, GIZ, various Ministries (e.g. MAWF, MITSD, MET, MLR), independent consultants.

AgriConsult Namibia (ACN)

AgriConsult Namibia was founded as a consultancy business in 2013 by Dr. Axel Rothauge, with 32 years professional experience of which 12 years regional (SADC) experience. The consultancy specialises in sustainable agriculture and natural resource management and utilisation. It aims to stimulate and contribute to the agricultural development of Namibia, especially in its densely-populated communal areas and focussing on value addition. ACN has significant expertise in extensive animal production ("ranching"), sustainable rangeland management and the rehabilitation of degraded natural resources. Specialities are research and development matters, training and information dissemination and project management. ACN has a wide base of experienced field staff that can be sub-contracted at short notice to implement national projects with a strong focus on widely-dispersed field work. In particular, ACN has thus far been involved in the following major activities:

- advising Namibian industry, especially NamPower, on environmentally-friendly vegetation control and ecological management in industrial areas and power line transects,
- advising MeatCo on the production and marketing of beef from the FMD-stricken Zambezi region,
- advising NDC on beef production and game conservation in their 300,000 ha Mangetti cattle ranch,
- compiling several baseline reports for development NGOs such as GIZ and international bodies such as FAO on the sustainable management and utilisation of rangeland resources,
- conducting several feasibility studies for local institutions such as Town Councils and Regional Councils and international development NGOs such as GIZ on local economic development and capacity building of farmers and institutions,
- implementing climate change adaptation projects for the EU and Namibian companies,
- farmer development through training, mentoring and developing farmer support programmes,
- applied research on optimising livestock production and sustainable rangeland management all over Namibia but especially in communal areas, and
- advising commercial livestock and game farmers on optimising production efficiency of their enterprises.

AgriConsult has extensive and proven experience in performing work such as that required in the present proposal; working independently (of course with supervision), up to standard, within budget and on schedule.

Agri-Ecological Services (AES)

Agri-Ecological Services (AES) was founded in 2010 and is a local consulting firm focusing on ecological applications in the agricultural, mining and conservation sectors. In the agricultural sector, AES is currently involved in developing and testing a rangeland monitoring system for Namibia in partnership with Agra Provision. This project involves intensive field monitoring, GIS, remote sensing and modelling capabilities. AES has a strong background in assessing rangeland health and setting up rangeland monitoring systems in both communal grazing lands and commercial ranches.

In the mining and conservation sectors, AES is associated with the Gobabeb Research and Training Centre and African Wilderness Restoration in developing ecological restoration plans. As part of the restoration planning, experiments and trials are conducted and best practices and monitoring programs developed. Related to this, AES has been involved in biodiversity impact assessments and environmental auditing.

Conservation Agriculture Namibia (C.A.N.)

Conservation Agriculture Namibia was formed in 2008 to increase agricultural production in Namibia. C.A.N. staff has been responsible for the development of the technology as well as the practise Namibia Specific Agriculture in Namibia, which has now been recognised as a national Conservation Agriculture strategy to increase production in the cropping sector. C.A.N. staff has also pioneered both conservancies as well as rangeland initiatives in Namibia as well as being part of the National Rangeland and Policy drafting team. C.A.N operates in 7 of the 8 Regions in the northern communal areas (NCAs) of Namibia.

C.A.N."s current support includes then provision of technical resource based as well as governance support to six regional livestock marketing co-operatives. Specific support includes rangeland, livestock, and marketing as well as cropping and disease control actions in these regions. Governance support to co-operatives as well as grazing areas is provided.

C.A.N. is also investigating the development of commercial opportunities related to service delivery in the NCAs. In most areas the rangeland resource base has degraded and soils are unproductive, land has become limited and crop fields are encroaching into the rangelands in an unplanned manner. The adoption of climate smart practises is vital to secure livelihoods and increase production and profit per ha in the future.

Integrated Rural Development and Nature Conservation (IRDNC)

Integrated Rural Development and Nature Conservation (IRDNC), Namibia"s oldest and largest field-based implementing non-governmental organisation and registered trust, pioneered the country"s first community-based natural resource management work in the 1980s. The resultant renewed sense of ownership over wildlife formed the basis for a local vision of wildlife becoming a valuable cultural, social, and economic resource. Post-independence the new Namibian Government embraced the community-based conservation model to democratise discriminatory aspects of the conservation legislation

and in 1996 communal area dwellers received the same legal rights as freehold farmers through conservancies. The concept of community-based natural resource management is now firmly entrenched in Namibia's national development plans and seen as a mechanism to reduce poverty.

IRDNC‟s55 staff members work with 46 conservancies and neighbouring areas in the Kunene and Zambezi Regions, to diversifying the socio-economy in Namibia‟s communal areas to include wildlife and other natural resources, including indigenous natural products. IRDNC further aims to build up the capacity of rural Namibians, and to assist them to develop democratic community structures and enterprises through which to sustainably manage and benefit from their natural resources.

IRDNC‟s programs in conservation, agriculture, business and enterprise development, good governance and institutional support have three main aims. These are improved management of natural resources by the users themselves, diversified local economic development and the growth of a strong civil society.

Meatco Foundation

Meatco Foundation is the corporate social investment vehicle of Meatco with the principle objective to promote and support improvements of socioeconomic conditions in rural areas in the livestock sector. The Foundation was established by the Meat Corporation of Namibia (Meatco Namibia) as its founder on the 8th of April 2011 (Protocol no. 5/2011).

The Meatco Foundation aims to leverage the developmental work that Meatco Namibia is carrying out amongst the cattle farmers and com-munities it operates in. The Foundation is governed by a Board of Trustee with a membership of 7 members. Additionally the Foundation is tasked with the responsibility of administering the corporate social responsibilities interventions of Meatco.

The Foundation is currently funding and implementing activities on climate smart agriculture that includes among others livestock marketing, animal husbandry, rangeland and the facilitation of the establishment of marketing infrastructure in the rural communities. This includes collaboration and partnerships with other service providers.

Namibia Development Trust (NDT)

Namibia Development Trust is an indigenous non-governmental organization that was founded in 1987 as a welfare organization to channel aid from the European Commission to “Victims of Apartheid”. It later transformed itself into playing an active role in community development. NDT aims to develop organisational and institutional capacities of rural and urban marginalised communities through people centred development within an enabling environment that aims to ensure improved livelihoods and empower communities to act for socio – economic justice and social change

NDT‟s strategic objectives include building the organisational structures of the rural poor, promoting a people centred approach to development, approach facilitating the coordination of development activities and ensuring operational sustainability.

NDT‟s core work involves improving the organisational capacity building of community formations. NDT‟s current main target groups are community formations such as conservancies, cooperatives, community forests and other forms of CBOs.

Currently, NDTs work mainly focuses on improving the governance and management capacities within conservancies, community forests and cooperatives.

Namibia Nature Foundation (NNF)

The Namibia Nature Foundation (NNF) is a non-governmental organization, established under a Deed of Trust as a charitable and funding institution of a public character, with an independent Board of Trustees and was founded in 1987. NNF has 25 years of conservation experience and currently implements, manages or administers more than 60 active projects, ranging from small local initiatives to national and regional programmes. Areas of technical support include but are not limited to:

- Institutional support to government, environmental institutions and community-based organizations;
- Integrated land use planning at regional and local level
- A range of biodiversity projects incl. special habitats and species, grants to biodiversity initiatives and the national community-based natural resource management programme;
- Supporting harvesting of Indigenous Natural Products (INP) and access and benefit sharing.

The focus of work is on broad sustainable development: environment and people, environment and development. This is seen in NNF‟s work in CBNRM, combating of desertification, emphasis on policy, training and education, and grants to initiatives that promote democratization of environmental management, thus linking socio-economic development with sound environmental management. NNF has been a support organisation to CBNRM in Kavango, Omaheke, Otjozondjupa, Erongo, Kunene-South and Zambezi region since the programme‟s inception more than 15 years ago. NNF and its team have many years‟ experience in participatory planning on resource management and local zonation planning with communities countrywide, and led the development of the Sperrgebiet and the Kavango Land Use Plans.

Nyae Nyae Development Foundation of Namibia (NNDFN)

Nyae Nyae Development Foundation of Namibia (NNDFN) was founded in 1981 to support the indigenous Ju/‟hoansi San people of the Nyae Nyae area in the former eastern Bushmanland (Nyae Nyae area). NNDFN now supports the Nyae Nyae Conservancy and Community Forest and more recently has begun support the neighbouring N≠a Jaqna Conservancy largely populated by !Kung San. NNDFN‟s mission is to support and empower the San people in Namibia to improve their quality of life economically and socially including land and human rights and the sustainable use of natural resources.

NNDFN‟s support to the two San communities includes:

- Organisational support to the conservancies and community forest in governance, staff, project and financial management
- Natural resource management including wildlife management, water development and protection (from elephants), fire management
- Livelihoods development including crafts, Devils Claw harvesting and tourism
- Rangeland and livestock management to promote livestock alongside wildlife and prevent overgrazing as local herds grow
- Agricultural development including sweet potato gardens and conservation agriculture

Many of these activities are not traditional for the San, but while their traditional livelihoods are becoming less sustainable, diversification is essential. Thus a sustained effort is required, but increasing enthusiasm and adoption of agriculture and livestock management practices is being observed.

C. Project objectives

The Overall Goal of this project reflects an improvement of the living conditions of all beneficiaries and reads:

"**Livelihoods of people directly or indirectly dependent on land are improved and their vulnerability to the impact of seasonal variation and climate change is reduced".**

In order to significantly contribute towards this overall goal, the Project Purpose or Specific Objective that needs to be achieved is:

"Namibia's land is better utilised through integrated planning and management, for enhanced sustainability, resilience, and productivity".

This reflects a change in the way in which Namibia‟s land is used and managed by the direct target group (selected land users and managers).

The project presents five Components:

- **Component 1: Integrated land management planning at local level (USD 736 680)**

  Undertake integrated land management planning with the active participation of all relevant stakeholders including beneficiaries involved in the field of land use and management in a specific geographic area. This includes women and other vulnerable groups.

- **Component 2: Governance and institutional setups are strengthened (USD 250 230)**

This thematic area recognises the importance of strong local level institutions to ensure good governance of natural resources at different levels, especially at the local level.

- **Component 3: Implementation of climate smart local level plans (USD 3 016 760)**
  Implementation of integrated land management plans, including the incorporation of practical and well-tested technologies to maximize productivity whilst safeguarding the environment, enhancing people's ability to adapt to variable and changing climatic conditions.

- **Component 4: Learning and knowledge management (USD 500 461)**
  Documenting and sharing new knowledge as it is developed and best practices are documented and widely shared *with land users, farmers, decision-makers and other stakeholders in order to replicate best practices elsewhere*.

- **Component 5: Research and Development (USD 500 461)**
  Research and development of climate smart technologies will be tested and adapted to local circumstances, to assist land users to improve productivity and profits.

D. Project / Programme Components and Financing

Project/Programme Components	Expected Concrete Outputs	Expected Outcomes	Amount (USD)
• Integrated land management planning at local level	1.1 Informed communities who understand the causes and effects of climate change on the land use and the resultant impact on their livelihood 1.2 A map of the current land use and trends, alternative land management options for each site 1.3 Communities and stakeholders support the concept of land use change as a climate adaptation measure and have developed a common land use vision for the area at local level 1.4 Land use plans are developed by beneficiary communities and stakeholders and action plans for implementation are available	Communities and stakeholders are empowered to, and have changed their land management approach, adopting climate smart land use practices to optimize productivity and profit, whilst retaining and restoring land resilience to climate change.	736 680
• Governance and Institutional structure	2.1. Suitable community structures at local level identified 2.2. Gaps in the competence of identified local level community structures are identified	Capacitated community structures at local level are operational and able to independently implement their land use	250 230

Project/Programme Components	Expected Concrete Outputs	Expected Outcomes	Amount (USD)
	2.3. Capacity of local level community structures has been strengthened	plans, now and beyond the project period	
• Implementation of climate smart local level plans	3.1. Integrated activities that optimize benefits for resource users – inter alia livestock, cropping, tourism, wildlife, indigenous natural plant products, fisheries management, and sustainable timber harvesting are developed and implemented	Beneficiary communities have improved the productivity of the land and diversity of income streams to create a more climate resilient local economy	3 016 776
• Learning and knowledge management	4.1. Land-users have access to a range of case studies that help them understand best practices and land-use options 4.2. Land-users have been trained in range of relevant topics, and have applied the knowledge in their day to day activities	Beneficiaries have ready access to information on best practices, and have applied those relevant to their situation	500 461
• Research and Development	The research and development component will be determined by needs identified during the planning and implementation phases (components 1-3), and may include: 5.1. Adapted research into growing local fodder crops (grasses, legumes) done 5.2. Research into rehabilitation of degraded rangeland, per biotope/AEZ conducted 5.3. Research into combating desertification in arid areas done 5.4. Economic viability of current community forestry strategies assessed and alternative economic approaches available 5.5. Research into re-foresting dry woodland in the north-east conducted 5.6. Research into the use of indigenous species for live fencing done 5.7. Growth characteristics and establishment requirements of planted woodlots of valuable indigenous timber tree species identified 5.8. Various value addition options, e.g. charcoal from indigenous and invasive alien woody plants trialled 5.9. Research on fire management in bush savanna conducted Funding provided will be used as a means of raising further funding for detailed	Research and development has identified techniques and technologies to overcome challenges to productivity and climate resilience. Land productivity per ha has increased through the application of appropriate technologies and habitat is rehabilitated for improved climate resilience.	500 461

Project/Programme Components	Expected Concrete Outputs	Expected Outcomes	Amount (USD)
	research.		
6. Project Execution cost			525 346
7. Total Project Cost			5 529 954
8. Project Cycle Management Fee charged by the Implementing Entity (if applicable)			470 046
Amount of Financing Requested			6 000 000

E. Projected Calendar

Milestones	Expected Dates
Start of project (Inception workshop)	February 2016
Mid-point of project implementation	July 2018
Mid-term evaluation report	October 2018
Project implementation completion	December 2020
Project completion report	March 2021
Final evaluation report	May 2021
Final audited financial statement (IE grant account)	May 2021

PART II: PROJECT JUSTIFICATION

A. Project Components

Namibia is internationally recognized for its successful CBNRM program, in particular through Communal Conservancies (Annex 2). Under this program, among the vital components of successful community conservation is the need for communities to be empowered to make decisions, engage in partnerships and practise responsible management. Thus, the CBNRM program has helped create democratic, community-based governance structures that have achieved community empowerment and equity; well managed communal resources; have generated collective returns; countered common threats; and achieved joint development and growth. The Communal Conservancy program has proven that it is possible to introduce and entrench a changed approach to communal natural resources for the benefit of the people and the environment. However, so far the Communal Conservancy program has focussed primarily on wildlife and tourism activities, and the sustainable utilization of natural resources, with less attention given to the agricultural component; despite the fact that the majority of conservancy members practice and depend on some form of agriculture (mostly at subsistence level), based on communal resources (Figure 7).

This action builds on work done by various partners in the different land tenure systems over the past few years, including interventions by MAWF, IRDNC, MCA-Community Based Rangeland and Livestock Management project (CBRLM), other MCA-N projects aimed at sustainable utilisation of indigenous natural products and improved efficiency of livestock production, Country Pilot Partnership (CPP-CALLC) project, Agribank Farmers‟ Support Project, and Meatco Foundation projects. These projects conducted in partnership with MAWF and MLR have pioneered and refined best practise related to rangeland management, increasing livestock productivity and marketing of livestock, as well as improved crop production using Namibia Specific Conservation Agriculture. Training and mentoring have been utilised in all aspects resulting in scope for scaling up these actions. Uptake and implementation still holds a small footprint. In many cases farmers own livelihood activities (eg cropping and livestock) are competing for the best land in a given area and allocations of land do not consider a longer term perspective.

Concurrent to this MLR has, as part of its mandate, formulated Integrated Regional Land Use Plans for some of the Regions. The overall strategies for these plans and in regions where they exist provide a departure point for better integrated local level land-use plans.

This action takes these projects to the next level of locally appropriate and sustainable implementation.

Previous experience with development projects in communal areas has shown that interventions that do not make land use and farming more efficient, profitable and environmentally and socially sound do not get adopted by beneficiaries over the long

term. This driven multi-sectoral initiative will ensure that interventions can contribute significantly to the triple bottom line (economic, environmental and social acceptability) of beneficiaries‟ enterprises rather than promoting theoretical ideas that are difficult to implement in practice, thus enhancing adoption and sustainability.

Most importantly, this project aims to bring together the efforts currently underway in the different sectors, and create a platform to coordinate and synergize efforts for a greater National impact. The modalities for integrating separate projects and activities of a variety of institutions into an overarching National program will be tested and expanded to include more players beyond the scope of this project. In doing so, the ability to bring about adaptive responses will be enhanced.

In formulating the project, the proposed interventions were clustered into Components under which core activities to be implemented and major outcome to be achieved.

Component 1: Integrated land management planning at local level.

Local Level Integrated Land use planning

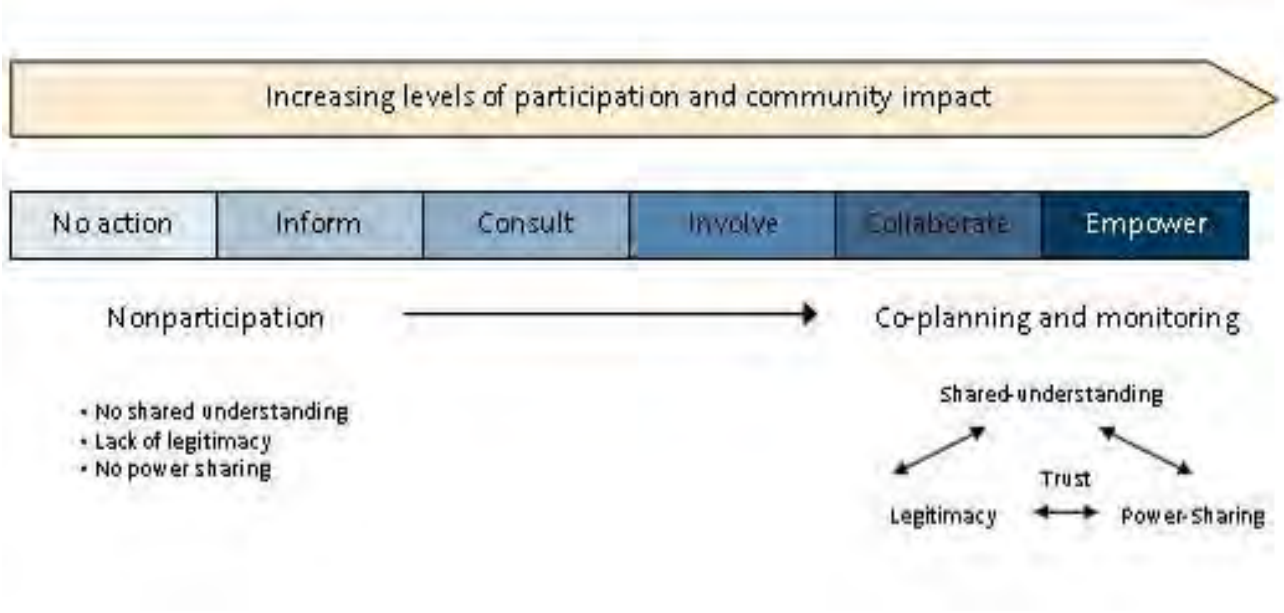
Participatory land use planning is an iterative process based on the dialogue amongst all stakeholders aiming at the negotiation and decision for a sustainable form of land use in rural areas as well as initiating and monitoring its implementation. The objective of participatory land use planning is to achieve sustainable land use, that is, a type of land use which is socially just and desirable, economically viable, environmentally sound and culturally and technically compatible. It sets in motion social processes of decision-making and consensus-building concerning the use and

Local level land use planning is an integrated and integrative exercise which requires both sound methodological skills but also in-depth knowledge of the area, including ecosystems and how they support the livelihoods of people, history of the area, cultural norms, social structures etc.

In order to ensure that local land use plans will positively contribute climate change adaptation it is critical to ensure that the communities know the process and create a high sense of ownership for the results, so that the implementation will eventually be driven by the communities.

The International Association for Public Participation distinguishes five levels of participation:

- to inform,
- to consult,
- to involve,
- to collaborate and
- to empower



Since the impact of an intervention can be maximised through a maximum of participation, it is recommended to use a very participatory approach for this local level integrated land use planning exercise and empower the local people and

The general steps that are proposed for this local level integrated land use planning exercise are shown in Figure 7.

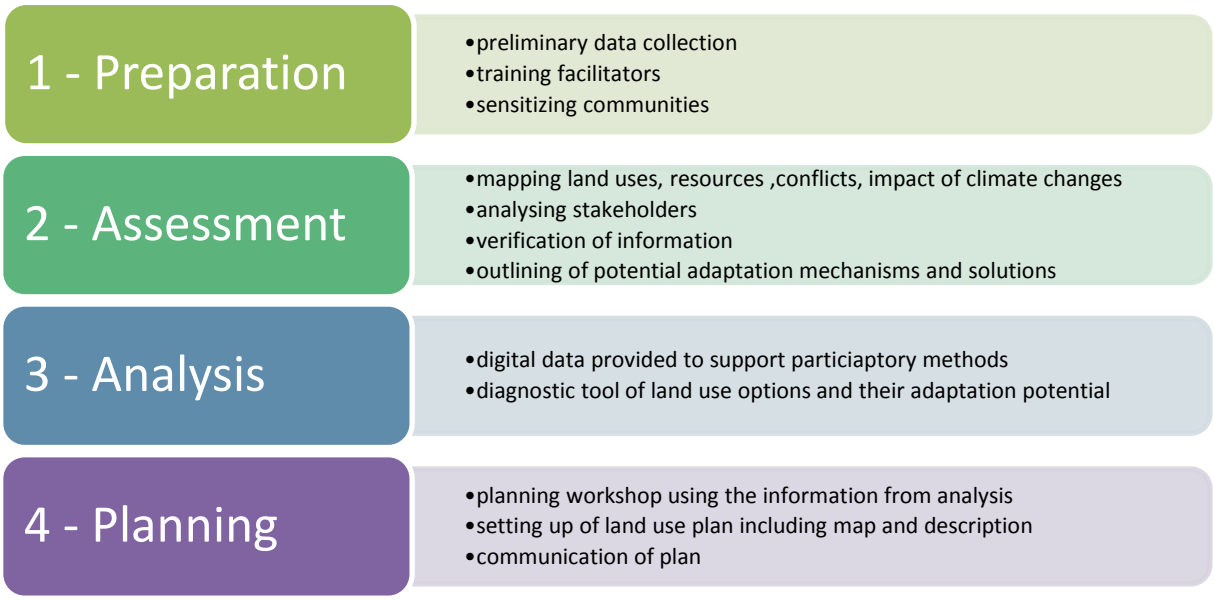


Figure 8: Diagram showing the steps to be taken in developing an integrated land management plan

Phase 1: Preparation phase

During this phase, it is important to bring the methodology of land use planning and climate change adaption and site-specific knowledge as close together as possible. It is suggested to train key staff members of the spatial lead on local level land use planning and climate change adaption and put this knowledge on a broad basis, create capacity to eventually operate sustainably. The following output as a result of the implementation of tasks under phase one is envisaged:

Output 1.1: Communities are informed about causes and effects of climate changes on the land use and have an understanding of the impact on their livelihood. In order to achieve this output, a number of tasks are to be implemented:

Task 1.1: Project Planning

The initial phase will involve planning amongst the core project team (task force) with the key objective of planning a facilitators‟ training, agreeing on key background data/information needs and preparing a draft schedule for site interventions.

The areas of intervention will not have to be clearly defined but suggested and roughly identified under the guidance of the spatial lead. As their first task, the facilitators together with the spatial lead will be collecting information on the area of intervention.

Task 1.2: Facilitators Workshop

The spatial leads will be requested to identify local level facilitators (a staff member of their organisation) who will be involved in the planning process and needs to be adequately trained and informed about the project. Local facilitators will have local language skills and in as far as possible a relative neutrality to local issues. The local level facilitators and project partners will be invited to attend a 5-day workshop to be trained on climate change trends in Namibia, the upcoming land use planning process at local level and the tools that will be used.

It is expected that the following topics will be presented and discussed:

- What are some of the climate change scenarios and pressures in Namibia and the regions
- What are the responses to climate change, with a focus on Adaptation
- What is land-use planning and how is it carried out in Namibia
- How can land-use planning be used in the context of climate change adaptation
- The process of the undertaking a local level land-use plan
- Stakeholder engagement and community participation with equitable representation, highlighting the need to involve vulnerable groups
- Facilitating assessment and planning tools (PRA)
- Verification of plans and initiating integrated management
- Identification by site of key stakeholders

At this workshop, each local level facilitator will be requested to give a brief description of their intervention areas to allow the thematic lead to prepare for the on-site activities.

Task 1.3: Local Level Preparations

In this task trained facilitators will inform key stakeholders like the Traditional Authorities about the project in general and start sensitizing them in terms of climate related changes experienced in the area and the relevance of local level land-use planning to adapt to the negative impacts of climate changes. The community has to be informed about the upcoming project and agree to participate in such program. Regional stakeholders like the Regional Council, line ministries, NGOs and other stakeholders known and this stage should be informed about the upcoming project and be requested to contribute. Framework document like Regional Integrated Land Use Plans or sector plans need to be obtained to achieve an integrated planning approach.

The facilitators will also start preparing for the 1st Workshop and ensure that community members, Traditional Authorities and relevant stakeholders are invited and well informed.

Phase 2: Assessment

Participatory Rural Appraisals (PRAs) at local level will be used to inform of current situation and future objectives (data collection). This will include major land-use categories, determine current resources and activities, potential future conflict among the categories, and build future land-use scenarios, producing a model that provides a spatial pattern of current and potential future land use, to inform an integrated planning process. It will

- identify climate change related issues on the ground but also best practices and lessons learnt from different stakeholders in that specific geographic area on how to adapt, since in some cases these practises are already being trialled and the experience from implementation will be utilised to enhance the planning process and ground the planning process in real application of climate change mitigation practices.
- Verify existing activities and practices being implemented by the different stakeholders as well as their needs. Within this context validate the existing assumptions regarding the status and needs of each site;
- Develop, redefine or reaffirm common vision for the area at local level (village, cluster of villages, conservancy etc.) whilst maintaining relevance at a regional and national level.

GIS based information, thematic maps etc can be provided as a backup information, but should be used with caution –on the one hand maps and technical input can be helpful for validating information, on the other hand often irritates and rather confuses people since they are not used to them. Generally it is recommended to use maps and GIS data as reference and for documentary purposes rather than a planning instrument. The following output is envisaged to be achieved:

Output 1.2: Current land use is assessed and verified using participatory methods; stakeholders and especially vulnerable and marginalised groups are involved in the process; A common vision for the area at local level whilst maintaining relevance at a regional and national level is developed, redefined or reaffirmed; alternative land management options are proposed for each site. In order to achieve this output, the following tasks and actions need to be implemented:

Task 2.1Local Level Workshop

The first local level workshops will introduce the overall project and outline the aims and objectives and needs to receive the buy-in of the community. Once this is completed a Participatory Rural Appraisal (PRA) format and will be used to analyse the current situation and comprise of the following components:

- Area definition
- A Stakeholder Analysis (Venn-diagram for an institutional analysis)
- Mapping of existing land uses within the area; this can be done using a completely participatory approach, drawing maps on the ground. Depending on the local situation, Google Earth maps, orthophoto or high resolution satellite images can be used to support the spatial referencing.
- Seasonal calendar
- Identification and mapping of existing projects within the area
- Identification and mapping of natural resources such as good grazing land, flooded areas, mineral potentials, wildlife potential etc. in the area
- Trend lines for relevant resources and availability
- Identification of “hot spots” where climate change vulnerabilities or conflicts exist. Discussion about the conflicts can be facilitated using

- Flow diagrams of, analysing causes and effects (which can later be used to identify potential solutions)
- Conflict onions

Figure 9: Local level workshops and planning

The baseline assessment is followed by:

- Visioning process to assess the objectives which the community and stakeholders would like this community to be in future (social, environment and economics); this process needs to be facilitated very carefully in order to ensure the output is reasonable and achievable; framework documents like regional land use plans to ensure compatibility and integration with such documents to be considered
- Identification of potential adaptation strategies within the area; if possible it can be attempted to evaluate alternative solutions to key conflicts using methods like ranking or matrix scoring or identifying solutions to root causes as outlined in the flow diagram

It is important in a participatory process to ensure that all participants are able to contribute to the sessions. Hence, using local language is critical. For the purpose of ownership, results like maps and posters have to remain with the communities. Therefore, the team needs to emphasise on documenting the results as precisely as possible, taking minutes of the discussion and photographs of any poster or map produced.

It is suggested to set up a small local task group of people representing different groups who, with the assistance of the facilitator, become the driver of this project in the community. This group can be comprised of organisations like conservancies and community forests committees, rangeland management committees etc who are already operating in the area. Although this is not a decision-making group, this is a step towards integrating the interest of all, to ensure the long-term sustainability and also the later implementation of the land use plan.

Task 2.2Verification:

The planning team, together with the local level facilitator will follow up immediately after the workshop with a verification process, whereby key sites will be visited and assessed and other representatives amongst key stakeholders interviewed - this is essentially a ground-truthing exercise. Tools to be used during this process are transect walks, key informant interviews, focal or user group discussions etc. If not used before, orthophotos in combination with GPS can be used to georeference the participatory maps that were produced.

It is recommended to use the principle of triangulation, referring to a form of "cross-checking" by varying the team composition, the sources of information and the techniques applied to ensure that the qualitative insights are cross-checked by different sources using different methods.

Phase 3: Analysis

This phase makes provision for the analysis and interpretation of data collected under phase 2. The following output is being envisaged:

Output 1.3: Digital spatial data to support the participatory process are available as far as needed; a diagnostic tool is available to assess the potential of proposed land; experts were considering their potential towards climate change adaptation; expert input was requested and needs consulted on additional land use options; Land use options are evaluated against criteria basis. In order to achieve this output, a number of tasks are to be implemented that include:

Task 3.1: GIS data collection:

Parallel to the participatory sessions, identification and collection of raster and vector data from different sources in order to compile a baseline data set for each area should be done to support the verification process but to a lesser extend pre-empty the planning process.

Producers of spatial data such as the Ministry of Lands and Resettlement and other Line Ministries such as Ministry of Environment and Tourism (MET), Ministry of Mines and Energy (MME), Ministry of Regional, Local Government and Housing and Rural Development (MRLGHRD) in Windhoek will be approached and requested to release their data. Additional project-relevant data sets particularly from spatial leads but also other implementing agencies, consulting companies and NGOs will be collected. Here existing sector and development plans are used as reference for project-relevant data requirements such as Conservancy plans and Livestock Management (CBRLM) project information.

The participatory maps that were developed or spatial information derived from site visits can be transferred into geo-referenced digital maps. The data can be transferred into orthophotos or topographic maps or GPS surveys can be conducted in order to localise precisely areas of relevance or key structures that the local population points out. By entering this information into the GIS system, the information can also be considered for regional planning.

Task 3.2 Diagnostic tool

The aim of the land use planning is to promote the implementation of climate smart land use options. While there is some generic knowledge about the level of resilience certain land uses provide, the situation on the ground is pivotal to decide whether a land use option is feasible or not. The diagnostic tool is a framework which allows the proposed climate smart land use options to be analysed regarding their feasibility to a specific site in a two-step process: a screening of all options with a preliminary ranking to extract the more viable options, and a SWOT analysis of the prioritized options with a final ranking as output.

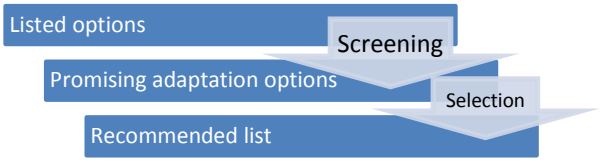


Figure 10: Diagram showing the screening process

Both steps of the diagnostic tool will involve the evaluation of five criteria:

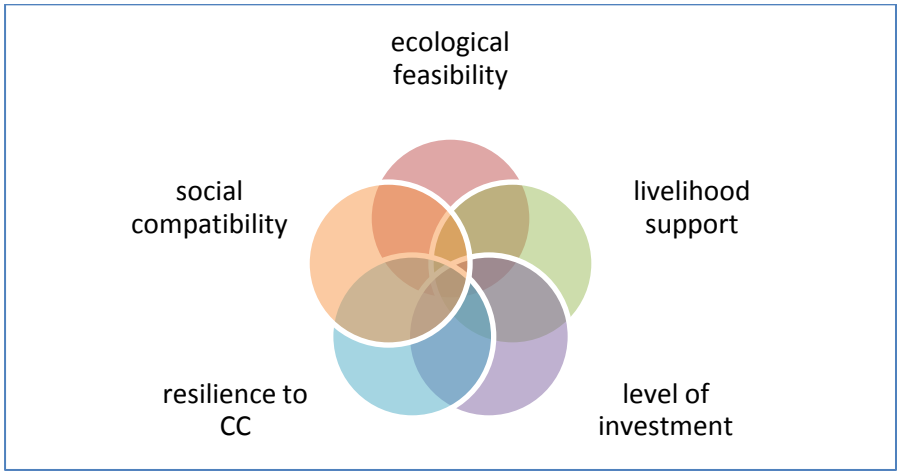


Figure 11: Criteria for diagnostic tool

The five criteria are:

- The ecological feasibility of the land use option against the resource base and the current land use and related environmental issues;
- The technical and financial investment required to initiate the land use, contribution of community (commitment)
- Social compatibility or desire
- The level of resilience reflects the adaptive capacity towards future climate changes
- The economic level of support towards livelihood of local people (food security or marketability of product) and viability

The first step will be a numeric matrix that will be used for a first screening of the implications and the potential of each land use option. Whilst some options might be valid proposals, they might however not be viable in the context of this project. The outcome of this screening will be a list of most promising option, which will be scrutinized in a second step.

Table 5: Example of the results from the application of the diagnostic tool

Site No.	Site name	Land use option	Environmental or sustainability issues	Investment	Resilience to climate change	Social compatibility	Livelihood support
1	Ehirovipuka	Cattle farming	+	+			-
		DC harvesters	+	+-			+
		Chilli growers	+	-			+
		Conventional crop farming					
		Conservation agriculture					

This scrutinizing will be done using a SWOT analysis to validate the preliminary listing, by qualifying and quantifying the ranking.

The envisaged process would be a workshop of the spatial lead together with the local task force representing different user groups of the target area. This meeting would be organized and facilitated by the spatial lead responsible for each site. The information gathered during the assessment as well as additional information gathered as needed will be used as a baseline for the evaluation.

While the spatial lead and the local task force have in-depth knowledge of the area, it needs to be acknowledged that some additional information might have to be provided by experts, especially for those options that will be ranked high. Also the research and development component within the project will be requested to provide information to this process. The other options not considered viable in the context of the project will still be captured.

The major **outcome** of this will be a prioritized list of diversified climate smart local level land management options that wherever possible build on current practice and plans, considers current activities (best practices and lessons learnt), identifies gaps and highlights what needs to be done to steer and guide the implementation of each option. It is also recommended to indicate whether this is a trial or whether this is a tested option which is proposed for roll-out.

For every option, develop a baseline by quantifying what already exists on the ground at the outset of the intervention and set a target (with the relevant stakeholders) to achieve progress on this option within a specified time. This helps to motivate and direct implementers and to monitor and evaluate project implementation and impact.

This list could then be in the long term updated as the project implementation progresses based on lessons learnt.

Phase 4: Planning

This phase makes provision for the actual participatory planning at community level. The output to be achieved is:

Output 1.4: Land use plans (maps outlining zones and descriptions including use regulations) are established together with the communities and stakeholders; action plans for implementation are developed; responsibilities for implementation are allocated to consortium partners under EC guidance, etc. In order to achieve this output, the following tasks are to be implemented:

Task 4.1: Adaptation and Land-use Planning Workshop

After the application of the diagnostic tool and the consolidation of the recommendations, another participatory workshop will be held in the community by the thematic lead and the spatial lead (facilitator).

It is vital to ensure that the community is very well represented at this workshop, including vulnerable groups and minorities, but also decision-makers and relevant stakeholders. Again, the use of local language to ensure everybody is able to follow discussions and decisions taken is critical.

This workshop will in the first instance require presentations on the earlier discussions and findings, in order to allow all participants to be on the same (or at least similar) level of information, before commencing to the actual planning:

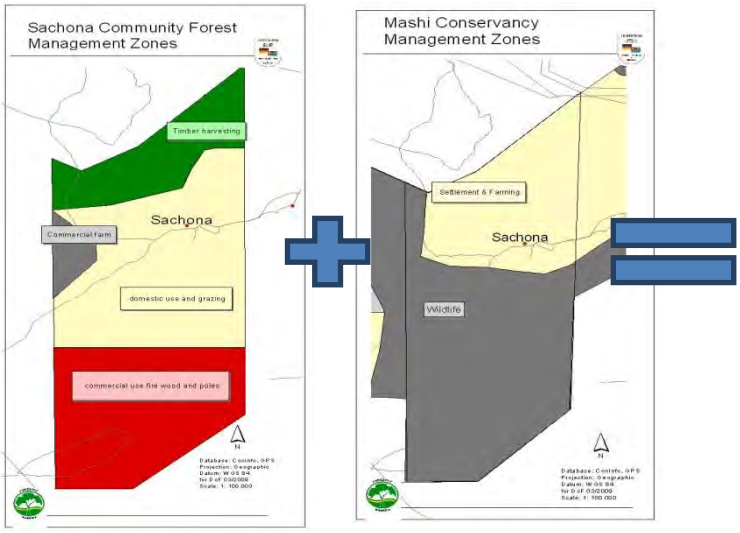
Presentations:

- Findings from the assessment workshops
    a. Resource and area/village mapping, to understand the spatial context of the key issues.
    b. Hot spots: locations with the most critical climate and land-use related potential and/or issues
    c. Vulnerability (including conflict) identification through a conflict onion, flow-diagram (with root causes and impacts) to understand the key issues in its complexity.
    d. Actor"s analysis to understand the players of the key issue.
    e. Vision developed or reaffirmed
- Presentation of the results of the diagnostic tool: the options suggested earlier by the community, analysed through the diagnostic tool by the spatial lead, the local task force and experts, will be presented; other options (all listed) or alternative suggestions may be raised by the communities if they do not agree with the analysis;
    - Discussion on the findings of the diagnostic tool; if needs be, re-do the ranking of the land use options using matrix scoring; the application is done using a participatory approach.

Develop an integrated land use plan

The identification of zones or areas and the land use option(s) recommended or allowed might be a serious negotiation process. It needs to be made very clear that a land use plan

- a land use plan is applicable to everybody in the community, hence all members must be allowed to contribute, all needs have to be considered as far as possible; especially needs of vulnerable groups and minorities must be respected
- a land use plan allows for a combination of different land use options; however land use conflicts should be avoided and to be discussed in the planning process to avoid future problems
- Overlapping land uses can be possible, but might require additional use regulations
- Certain land uses may be only feasible in restricted areas or in limited size
- A local land use plan must consider existing other framework documents like a regional land use plan, sector plans etc



Potential conflicts can be assessed using a conflict risk matrix

Conflict potential	Crop farming	Livestock farming	Game manage-ment	Tourism	Harvest woody products	Harvest NTFPs
Crop farming	None	Medium	High			
Livestock farming						
Game management				Low		
Tourism						
Harvest wood						
Harvest NTFPs						

Figure 12: Example of conflict risk matrix

- Develop descriptive explanation of the land use plan. Important is to use a consensus based strategy that allows all the community members at least to accept the final land use plan and make the implementation more likely and realistic. Where conflicts are likely to occur or are already known, following mitigation measures might be taken into consideration:
  a. Zonation description along traditional boundaries
  b. Use regulations and description of activities that are allowed/not allowed in a specific zone; "Timetable" for activities with temporal conflicts
  c. Monitoring of agreed measures and adapt if required
- Set up action plans for the implementation of the agreed measures

Task 4.2: Drafting land use plan:

The results of the land use planning workshop will have to be documented, maps and posters and the description of the land use plan developed. It is strongly recommended to prepare the documents in a way that minimizes the alienation of the decisions of the community and rather compromises on the accuracy.

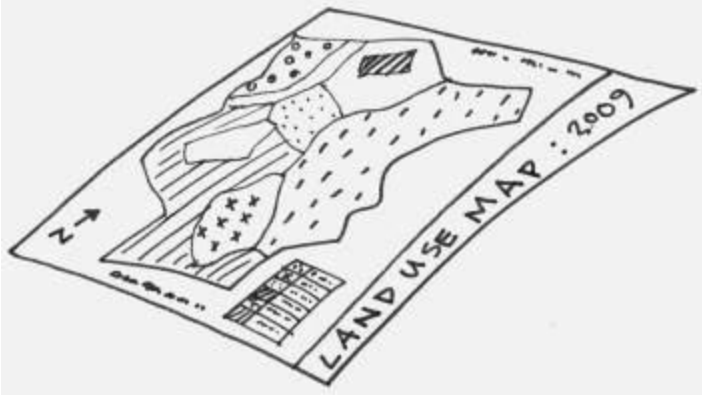


Figure 13: Maps form one outcome of the land use planning workshop at local level

Task 4.3: Presentation land use plan of draft:

The draft land use plan will be presented to the community and stakeholders for comments. The draft LUP will be discussed and amended accordingly with the necessary comments and recommendations.

Task 4.4: Closing workshop

A closing workshop with the handing over of the final land use plan to the local community will be convened. During this one day workshop it is critical to encourage ownership of the product by the local communities and the spatial lead in order to safeguard the implementation of the plan. The closing workshop should also plan and formalise the project processes that follow LLPP, i.e. which of the consortium partners will be tasked with what implementation, etc. and how this will be achieved (i.e. a project-internal planning exercise that links Component 1 to the next four Components of governance capacitation, implementation, R&D and training and knowledge management).

Table 6: Indicative work programme for Component 1

Output	Indicative Work Programme
Output 1.1: Communities are informed about causes and effects of climate changes on the land use and have an understanding of the impact on their livelihood	• Conduct planning amongst the core project team (task force) with the key objective of planning a facilitators" training, agreeing on key background data/information needs and preparing a draft schedule for site interventions • Facilitators to attend a 5-day workshop to be trained on climate change trends in Namibia, the upcoming land use planning process at local level and the tools that will be used. • Facilitators will start preparing for the 1st Workshop and ensure that community members, Traditional Authorities and relevant stakeholders are invited and well informed.
Output 1.2: Current land use is assessed and verified using participatory methods; stakeholders and especially vulnerable and marginalised groups are involved in the process; A common vision for the area at local level whilst maintaining relevance at a	• The local level workshops will introduce the overall project and outline the aims and objectives and needs to receive the buy-in of the community, followed by a Participatory Rural Appraisal (PRA) exercise to analyse the current situation. • The planning team, together with the local level facilitator will follow up

Output	Indicative Work Programme
regional and national level is developed, redefined or reaffirmed; alternative land management options are proposed for each site;	immediately after the workshop with a verification process, whereby key sites will be visited and assessed and other representatives amongst key stakeholders interviewed - this is essentially a ground-truthing exercise.
Output 1.3: digital spatial data to support the participatory process are available as far as needed; A diagnostic tool is available to assess the potential of proposed land; experts were considering their potential towards climate change adaptation; expert input was requested on a needs consulted on additional land use options; Land use options are evaluated against criteria basis	• Parallel to the participatory sessions, identification and collection of raster and vector data from different sources in order to compile a baseline data set for each area should be done to support the verification process but to a lesser extend pre-empting the planning process. • Apply a diagnostic tool is a framework which allows the proposed climate smart land use options to be analysed regarding their feasibility to a specific site.
Output 1.4 : Land use plans (maps outlining zones and descriptions including use regulations) are established together with the communities and stakeholders; action plans for implementation are developed; responsibilities for implementation are allocated to consortium partners under EC guidance, etc.	• After the application of the diagnostic tool and the consolidation of the recommendations, another participatory workshop will be held in the community by the thematic lead and the spatial lead (facilitator). • Drafting land use plan in a participatory manner • Presentation land use plan of draft to the communities and stakeholders • Conduct a closing workshop with the handing over of the final land use plan to the local community.

The activities and outputs of Components 2 through 5 are to a large extent dependent on the outcome of Component 1.

Component 2: Governance and Institutional structure

Local level institutions in each of the project areas are strengthened and their competence to govern and implement the local climate smart plans ensured. This component recognises the importance of strong local level institutions to lead the local decision making and implementation of local level plans and climate smart activities. At the same time these institutions need to be representative of the communities that they represent in terms of gender, language and cultural groups and youth.

This component is not a standalone activity, but rather goes hand in hand with component 1, and serves as a facilitating activity to address any challenges or barriers encountered in the course of developing the integrated land management plans, or equally in implementing such plans. CBNRM identifies governance capacities as a major challenge. This also limits the possibility of communities being able to adapt in a coordinated manner.

The outputs to be achieved are:

Output 2.1: *Appropriate local level CBOs are identified with proper representation in the community.*

This output makes provision for screening existing local level institutions at each of the 12 intervention sites, to determine their suitability to represent the community and take the lead in development and implementation of local level plans.

***Output 2.2**: Suitable platforms where the local level CBO is "in the drivers' seat" with relevant service providers willing and supportive in implementing climate smart local level plans, is created and operational.*

This output makes provision for regular meetings under the auspices of the local level CBOs and with the attendance and inputs from relevant selected service providers (e.g. GRN, NGOs and private sector) to plan local plans, to facilitate the implementation of these plans by various stakeholders and to serve as mechanism to monitor the implementation of these plans.

The major **outcome** of this result is that local level institutions are appropriate to deliver climate smart actions and participants are strong enough to implement the land management plan and to participate actively in decision-making processes.

***Output 2.3:** Capacity of local level community structures has been strengthened.*

Support, mentoring and where necessary training is provided to the CBOs responsible for managing and coordinating implementation of land use plans.

Table 7: Indicative work programme for Component 2

Output	Indicative Work Programme
Output 2.1: Appropriate local level CBOs have formed themselves to deliver on the management plan agreed to in Component 1	• Screen existing local level CBOs for suitability to develop and implement climate smart local level plans in terms of representation of the whole community and capacity to develop and implement plans
Output 2.2: Suitable platforms where the local level CBO is "in the drivers" seat" with relevant service providers willing and supportive in implementing climate smart local level plans, is created and operational.	• Support CBOs to hold regular meetings with relevant service providers • Support CBOs to develop implementation plans with the involvement of relevant service providers • Support CBOs to regularly reflect on the status of implementation of plans at local level, with the involvement of relevant stakeholders
Output 2.3: Capacity of local level community structures has been strengthened	• Support community structures to operate effectively and retains institutional knowledge.

Component 3: Climate smart local level plans implemented.

The proposed project is structured in a way that local level planning (Component 1) has come up with a list of feasible, integrated and climate-smart land use options, while identification and capacitation of local governance institutions (Component 2) has identified local institutions that can guide implementation as well as the assistance they might require in the implementation process. The combined experience and expertise of the Consortium partners is now harnessed to empower beneficiaries to achieve implementation of integrated and climate-smart land use plans (Component 3) under the guidance of/in cooperation with local governance institutions. If specific issues need to be addressed further before they can be resolved, Component 5 will research potential solutions and develop their implementation and integration into existing land use plans

and activities. Implementation will lean heavily on information management and training (Component 4) to enable local land users to carry on these activities independently and sustainably (i.e. post-project) and create the information bank needed to inform post-project activities.

It is expected that some of these technologies below or combinations thereof will be implemented in the different pilot sites, depending on the current situation and the outcome of the participatory local level planning. Considerable knowledge and experience exists amongst the partners in the implementation of these technologies, and the emphasis will be to use existing best practices and assist the communities in the pilot areas to adapt them to suit their specific circumstances and governance structures.

The specific technologies or approaches to be considered in each site will be determined through the integrated land-use planning process based on the combination of land uses considered most appropriate and beneficial for that particular site, to achieve the overall desired outcome: improved productivity and livelihoods in an environmentally sustainable and climate resilient manner. This is the specific output of the diagnostic tool described. In the event of limiting financial resources, prioritization will be made on the basis of the likely levels of positive impact. At the same time, when required, findings of this project will be used to channel or secure additional financing to address any gaps.

This component focuses on the implementation of practical and well-tested technologies within certain geographic areas including in the **fields** of (but not restricted to):

3.1. Rangeland Management and Cultivated Pastures

Rangeland condition, production and resilience in Namibia are seriously compromised and are expressed in the terms of bush encroachment, loss of perennial grasses and low animal productivity. The Namibian Government has developed a National Rangeland Management Policy and Strategy (NRMPS) and is currently in the process of fast-tracking its implementation. According to the NRMPS, the application of sound rangeland management practices should lead to an improved water cycle; an improved mineral cycle; enhanced biodiversity; improved productivity per hectare; reduced vulnerability of land users to seasonal variation and climate change; and improved wealth and quality of life of rangeland users over the long run.

The implementation of sound rangeland management practices varies considerably between different land use and tenure scenarios. In communal areas the approach and major activities will differ considerably from title deed individually owned commercial farmland.

A number of outputs as a result of these interventions are envisaged:

Potential Output 3.1.1. Locally developed and implemented rangeland management plans that are constantly monitored and adjusted to suit changing environmental circumstances. In order to achieve this output, a number of activities are to be implemented:

- Raise awareness amongst rangeland users and other role players about the importance of rangeland as the foundation for the livelihoods

- Expose rangeland users to planned grazing practices elsewhere in the country (multiple examples exist as a result of previous and on-going initiatives)
- Expose rangeland users to methods that deal with erosion control by communal farmers.
- Expose rangeland users to re-seeding of existing rangeland, bush thinning and other proven methods to increase production
- Conduct training and capacity building on ecological literacy that should enable the rangeland user and management to “read the land” and identify sound interventions to improve it.
- Form local-level grazing associations or groups that will lead the implementation of planned rangeland management in their areas
- Develop a locally-based rangeland management plan indicating the different grazing areas and the current and needed infra-structure (especially water resources) required to implement the plan
- Develop and implement shorter term action plans focusing on what needs to be done, who will do it when and what are the expected milestones to be achieved
- Provide continuous professional backstopping and support to local rangeland management groups during the implementation of the plans.
- Devise plans and activities to rehabilitate degraded rangeland to restore grazing capacity to former levels.

In the case of cultivated pasture, the following output is to be achieved:

Potential Output 3.1.2. Increased area under cultivated pastures that are sustainably used to augment fodder flow, build a fodder bank for emergencies, increase livestock productivity vertically and provide opportunities to restore rangeland condition by shifting utilisation pressure horizontally. In order to achieve this output, the following activities need to be pursued:

- Expose interested farmers and groups to established cultivated pastures elsewhere in the country
- Determine the suitability of the area for cultivated pastures e.g., soils and rainfall
- Identify pilot sites to screen the suitability of different species and cultivars
- Conduct initial screening of different grass species and cultivars to determine their suitability
- Investigate utilisation management, appropriate harvesting technologies and post-harvesting storage, marketing and transport.
- Document results and share best practices with interested farmers

- Provide in-depth training and professional guidance to those farmers and rangeland management groups that want to actively pursue cultivated pastures

3.2. Conservation Agriculture

Two thirds of the Namibian population live in rural areas and the majority depend on smallholder crop production as a means of livelihood and survival. Low production, crop failure and declining yields can often be attributed to inappropriate farming practises. The subsistence sector is also very vulnerable to climate change and a new way of farming is required to counter and reverse land degradation whilst increasing yield. Conservation Agriculture is one such approach and has been adopted by the MAWF as a major strategy to address climate change adaptation through the „Comprehensive Conservation Agriculture Programme for Namibia (2015 to 2019).

Conservation agriculture as used in the narrow sense in Namibia refers primarily to soil cultivation techniques that reduce annual tillage of the soil, breaks shallow hardpans and builds soil fertility over the longer term. In the wider sense, conservation agriculture includes all techniques that reduce vulnerability of crop farmers such as using more adapted cultivars, preserving land races, harvesting rainwater more efficiently, reducing post-harvest losses and improving storage and distribution technology. In addition, a reduction in slash and burn activities also indirectly contributes to mitigation.

Consortium partners have been involved with the development and practise of Namibia Specific Conservation Agriculture which involves ripper furrowing, constant traffic, fertilizer and manure and use of long season indigenous seed. Very good results have been obtained to date and there is a need for the up scaling of this approach. The following output is envisaged:

Potential Output 3.2.1 Number of ha supported with CA, increased number of farmers and increased area under CA techniques resulting in increased production per ha of staple crops – e.g. maize and *mahangu*. In order to achieve this output, the following activities are to be implemented:

- Increase awareness and knowledge of CA and the positive impacts
- Identification of farmers willing to adopt the practise
- Provision of support services to enable adoption
- Measurement of yield and analysis

Achievement of this output will lead to increased harvest of speciality crops that can now be processed into favourite “traditional” foods because there is a larger quantity available (e.g. vacuum-packed amaranth spinach, bottled chakalaka and sheeba sauces, etc.) to supply a rapidly urbanising population with traditional foodstuffs.

3.3. Livestock Production

Namibia is a livestock and meat exporting country with considerable experience in livestock production and marketing, especially amongst commercial title-deed farmers in the country. The same is unfortunately not true for the communal areas and special

challenges on resettlement farms make it very difficult for resettled farmers to optimise livestock production. Livestock production forms the backbone of many rural households in the communal areas and on resettlement farms. Livestock productivity and off-take is however very low compared to commercial farmers on title-deed farms. Reproduction rates (calving and lambing percentages) in communal areas are in general below 50% compared to 60-70% in commercial farming areas. Off-takes of below 10% in general exist compared to commercial farmers with off-take figures of 25-35%. High incidences of inbreeding and high prevalence of venereal diseases are some of the major reasons why reproduction rates are so low. Traditional and cultural perceptions on the value of livestock, poor access to proper markets and low quality animals are the major reasons why off-take and marketing of livestock in these areas are sub-optimal. By enhancing marketing and sales of livestock the adaptive capacity to respond to climatic and resource variation will be significantly enhanced.

A number of outputs are envisaged that include:

Potential Output 3.3.1. Reproduction rates increase from below 50% to 60-70%

Potential Output 3.3.2. Herd off-take increases from below 10% to 20-25

Potential Output 3.3.3. Directed breeding enhances intrinsic climate-smart characteristics in 80 herds spread across eight regions

Potential Output 3.3.4. Small butcheries add value to meat and service existing demand for such produce by supplying local school feeding schemes, hospitals, army and police bases, etc.

The following major activities are envisaged to be important in improving livestock production and off-take in communal areas and on resettlement farms:

- Address the poor quality of slaughter animals by promoting improved livestock husbandry techniques, especially in the fields of nutrition, health and handling.
- Improve access of farmers to improved genetic material (e.g. bulls and rams) through the development of a bull/ram exchange schemes with commercial counterparts
- Once restrictive marketing via the veterinary cordon fence is relieved, northern communal livestock farmers can profit from the unique genetic attributes of their indigenous livestock breeds by becoming stud breeders that further develop the intrinsic characteristics that make indigenous livestock breeds more adapted to hot, dry conditions than exotic breeds, more resistant to certain diseases and tolerant of parasites, as well as requiring less feed per metabolic mass due to improved coarse diet digestive mechanisms and superior diet selection that includes improved walking ability. Breeding climate-smart breeds would be an ultimate climate change adaptation factor.
- Rectify the sex ratio of livestock herds by promoting earlier marketing of castrated or inferior males and ensuring an adequate number of superior breeding males,

- Screen breeding males to enhance fertility and prevent the spread of venereal diseases
- Improve general herd health through the introduction of vaccination programmes and preventive health measures
- Illustrate the benefits of appropriate lick supplementation and improve access of farmers to licks and other livestock farming inputs
- Sensitise farmers on the requirement and functioning of markets and marketing institutions
- Improve access of farmers to timely marketing information e.g. prices
- Organise farmers into producers‟ and marketing organisations (e.g. cooperatives) to acquire inputs timeously and reduce marketing costs
- Initiate meat value chains that encourage off-take from the local herd and exploit local/regional marketing opportunities (e.g. small abattoirs and butcheries that supply local Army and Police bases with meat cuts and processed meats).

3.4. Forest and woodland management

The north-eastern parts of Namibia (included in the proposal) contain most of the woodland found in the country (apart from linear riverine forests, which occur country-wide) and are a unique resource that needs careful conservation and utilisation to be maintained at a high level of diversity, productivity and scenic beauty. Currently, authorities have imposed a blanket ban on wood harvesting (apart from firewood for domestic purposes) in the northern communal areas for fear of uncontrolled, destructive harvesting of this scarce resource and complete absence of re-planting. Harvesting methods designed to be in synch with natural replacement rates have to be devised during the local level planning phase of this intervention and implemented in a controlled manner as part of Component 3 to avoid over-harvesting. Natural forests have to be expanded by re-forestation and augmented with planted woodlots (“farming with trees”) to increase the amount of wood that can be harvested for specific purposes, e.g. low quality wood (e.g. from encroacher bush) for charcoal-making and high value wood (e.g. from indigenous timber tree species) for furniture and cabinet-making. This will require specific research and development (under Component 5). Planted wood avails a range of age-related products starting with fence droppers and advancing to poles, mine struts and, eventually, furniture logs with increasing age. Unwanted wood and by-products can feed the charcoal industry and local craft-making, thus promoting cultural tourism. In addition, dry woodlands in Namibia‟s north-east that are in pristine conditions offer a huge supply of traditional plant medicines, superb grazing (thus support expanded livestock production) and have a unique beauty that can serve as the basis of an eco-tourism industry. These opportunities need to be developed and utilisation structured in a manner that is acceptable both to local and national authorities, thus significantly increasing the contribution of wood products to the nation‟s wealth and the carbon sequestration capacity of the country.

Outputs may include:

Potential Output 3.4.1. Income and revenue from improved management of forests and woodlands achieved. In order to achieve this, the following activities need to be pursued:

- Gazetting more community forests in certain areas and expanding existing community forests by deliberate tree planting in others.
- Farm with trees by establishing planted woodlots to increase the amount of wood available for certain value chains while relieving pressure on naturally-regenerating forests.
- Develop various wood value chains based on sustainable harvesting that is acceptable to local and national authorities and attuned to the requirements of local land users and site characteristics.

Many of Namibia‟s trees are not suitable for timber production because of their size and growth form. A tree is considered to be suitable for the production of planks if its DBH is 45 cm or more. Apart from the fact that there are not many trees that meet the requirements for timber production, those that are there are scattered widely making the commercial harvesting challenging. Timber concessions were awarded to commercial logging companies but these have been stopped. The DoF imposed a ban on the harvesting of all timber (planks) for commercial use. The three main timber species in Namibia are Kiaat (*Pterocarpus angolensis),* Rosewood (*Guibourtia coleosperma)* and Zambezi teak (*Baikiaea plurijuga).*

The timber ban was lifted in 2015 and harvesting quotas (or block permits) will be issued only to registered CFs. These CBOs will need support in the sustainable management of these timber resources and especially with regard to optimising the associated utilisation and value added opportunities. Previous approaches to the utilization of timber quotas in CFs had high transaction costs and limited benefits to the members.

Of growing concern is the commercial harvesting and export of fire wood from Namibia, especially that of *Colophospermum mopane* which is highly sought after for barbeques. The commercial utilisation of these resources is benefiting only a few individual entrepreneurs and resulting in local residents no longer being able to access these resources for their own use.

Previous donor support to the Forestry sector has focused on resource inventories to inform forest management plans. Unfortunately there has not been consistent support for the implementation of these management plans and ensuring the associated benefits. This has resulted in apathy and disillusionment at community level. The ensuing lack of management capacity urgently needs to be addressed.

3.5. Indigenous Natural Products

In some of the target sites, the harvesting and processing of INPs is already taking place. INP provides cash benefits at household level thus diversifying income streams and enhancing household resilience to climate change. However, conflicting land-use practices, limit these activities. Examples of these are illegal fencing limiting access to the resources or burning practices removing the material before it can be harvested.

Integrated land use planning and the successful implementation thereof, could resolve many of these issues.

Thus far, INP is only harvested. What about planting thatch grasses in seasonally-submerged lowlands, cutting fence droppers and poles from planted woodlots, growing amaranth spinach on abandoned kraal sites, etc.?

The major output to be achieved through this intervention is:

Potential Output 3.5.1. Income and revenue from indigenous natural products are enhanced.

In order to achieve this output, the following activities need to be implemented:

- Increase number of conservancies/community forests that have negotiated and signed INP (Indigenous Natural Product) contracts which protect their indigenous knowledge and Access and Benefit Sharing rights.
- Establish NP sales points in conservancies/community forests to allow for local and immediate payment of harvesters
- Increase number of conservancy/community forest members trained and aware of harvesting techniques and quotas
- Increase number of harvesters earning an increased income through harvesting and selling of INPs has increased
- Promote value addition of INPs
- Identify two new INPs identified that could be sustainably harvested to provide benefits to harvesters. Based on results of participatory resource inventories, trial harvests, trial processing, sampling for market suitability, pricing and supply chain development and testing of various harvesting methods to ensure resource sustainability and quality of material, trial commercialisation of at least one of the two products conducted.

3.6. Wildlife Utilization (multi-species production systems)

In many areas (including many of the proposed sites), conservancies and related CBNRM activities make sterling efforts to increase the value of wildlife to local land users by improving natural resource management and community organisation. Often, it appears that the trickle-down effect of financial gain does not meet community expectations and requires re-investigation of existing conservancy structures to streamline their operation, costs and efficiency and increase profitability (Component 2: governance capacitation). In other areas, conservation efforts are increasing human-wildlife conflicts, which might be reduced by better land use zoning (Component 1: LLPP). Sometimes, it may be more desirable to contain wildlife in an exclusive reserve (in terms of land use, not accessibility) to enable farmers to farm the land in peace (e.g. free-roaming elephant are incompatible with smallholder crop production). Such contained animal populations have to be managed and their surplus growth removed to maintain feed supply vs. demand balance. In harsh, dry climates, game animal production is more efficient than livestock production and thus represents an ideal mechanism to adapt to climate change.

Modern agriculture inevitably changes the land (nature) and as communal areas are "modernised", hard decisions will increasingly have to be made where to preserve pristine nature and where to open up the land for agriculture. Harvesting indigenous natural products only is increasingly no longer adequate to meet the needs of a growing population and necessitates "artificial" wildlife farming (e.g. with fish and crocodiles) in formerly remote, rural areas (e.g. along the Kavango and Kwando rivers). While this relieves pressure on the natural resource and contributes to climate change mitigation, intensive farming enterprises are also prone to pollute a natural environment with escapee animals, animal and production waste and imported feeds. Climate-smart production facilities and operations will have to be developed that minimise environmental inputs while maximising production and exploiting tourism opportunities.

The sustainable consumptive and non-consumptive use of wildlife is adaptive, in providing income and livelihood diversification (tourism, hunting, meat) and reducing reliance on livestock which comes with cultural barriers. Wildlife are also a communal resource as opposed to livestock being private and often in the hands of few.

A major output could be:

Potential Output 3.6.1. Climate-smart wildlife production facilities and operations are developed that minimise environmental inputs while maximising production and exploiting tourism opportunities.

In order to achieve this output, the following major actions need to be implemented:

- Improve the organisational capacity of conservancy management committees, including poaching control and increased disbursement of proceeds.
- Create an "elephant reserve" for the free-roaming Mangetti elephants to remove them from expanding agricultural districts. Since elephants are a rapidly reproducing species with few natural enemies, populations have to be pegged to the area‟s carrying capacity and surplus individuals have to be culled. This could form the basis of a hunting enterprise to re-cycle elephant value locally.

3.7. Fire Management

Fire is an important ecological factor in the savannas and dry woodlands in which the proposal‟s sites are located. Anthropological fires in these biomes have always shaped the vegetation and where used by humans since time immemorial to create the type of landscape that suited their purpose. This means that local land users are part of the natural cycle of savannas and dry woodlands and fire management has to be included in local level land use plans. As land use management changes (as is the intent of this proposal), fire regimes should also be adapted. For example, it is better to burn forested areas regularly early in the dry season to avoid accumulation of shrubby undergrowth that can feed extremely hot fires later in the dry season that can kill mature timber trees ("fuel load management"). Conversely, where the aim is to have an open savanna dominated by good grazing grasses, it may be better to periodically burn late in the dry season to ensure a hot fire that kills encroaching bushes. In other cases where sound rangeland management is being practised and fuel load controlled by animals it may be

advisable to exclude fire as a management tool. The most appropriate fire management regime will become clear after the local level planning exercise (Component 1) but may require some research to answer questions about frequency, timing and impact (Component 5) before widespread implementation (Component 3). Once quantified, discussions with local land users need to be conducted and a fire regime recommended as to avoid over-burning or burning at the wrong time (Component 4). Ecologically sensible burning would contribute to successfully adapting to climate change, by enhancing a balanced bush/grass rangeland composition. If the fire management planned is properly "owned" by the community and supported by its governance structures, it can also be imposed by the local authority (Component 2) to the benefit of the community.

A potential output includes:

Potential Output 3.7.1. Communities are able to conduct appropriate fire management.

In order to achieve this, the following activities are pursued:

- Ascertain the place of fire and planned burning in the local land use plan and devise an appropriate fire management strategy
- Equip local communities and their governance structures to implement the fire management plan by training, education, strengthening local capacity to fight unwanted fires and control planned burns, etc.
- Conduct applied research on the effect of different fires on the targeted natural resource

3.8. Tourism

The proposal caters for a variety of tourism opportunities to be developed. Cultural tourism already exists and invites tourists to get to know more about the tradition and history of indigenous communities through the establishment of "cultural villages". These displays are often static and have to be activated to attract tourists. Perhaps "cultural routes" that takes the visitor to various points of interest are a more attractive proposition. Eco-tourism is already a huge industry in arid north-western and sub-humid north-eastern Namibia but can still be developed in north-central Namibia. Expanding community forests and creating special wildlife reserves can go a long way towards attracting eco-tourists, along with well-known attractants such a river cruises, guided birding and plant trails, etc. Since most eco-tourism activities do not consume large amounts of natural products but do require inputs of agricultural produce, they constitute an ideal adaptive response to climate change. Special wildlife reserves could also attract hunting tourists as wildlife populations have to be capped in smaller reserves to maintain the balance between feed supply and feed demand. This constitutes a type of "game ranching" that is more adaptive than conventional livestock ranching in arid, harsh environments.

The major output may include:

Potential Output 3.8.1. Income and revenue from tourism is enhanced.

In order to achieve this output, the following major activities are envisaged:

- Establish eco-tourism in the western Kavango based on the Kavango River and community forests and expand eco-tourism enterprises in Kunene, eastern Kavango and Zambezi regions.
- Establish a regular hunting enterprise (i.e. not concessional hunting) in special "elephant reserves" to cap fast-growing, fenced elephant populations

3.9 Fisheries (ranching).

Locating fish farms in north-central Namibia should be investigated if the need arises. Also, the much larger human population of north-central Namibia, traditionally consuming large quantities of fish and amphibians would offer improved marketing avenues for farmed fish products. Fish farming should be developed with a private sector operator and other additional funds to enable it to be established.

The focus is on using natural seasonal water bodies which is more adapted and less resource (input) intensive.

One output may include:

Potential Output 3.9.1. Income and revenue from commercial fish ranching is increased.

In order to achieve this output, the following activities need to done:

- Establish fish breeding ponds by lining fresh water oshanas with plastic sheeting and stocking them with mud-breeding species such as tilapia. Transfer fry into growing ponds in which a submerged net prevents access to bottom mud, thus preventing tilapias from breeding. They can now grow out to sizes determined by the stocking rate of the pond.
- Experiment with amphibians acceptable to local populations, e.g. captive-bred bullfrogs
- Develop a fish value chain that includes delivery of fresh and frozen fillet cuts to local restaurants and lodges.

3.10. Small-scale horticulture and small animal production

All of northern Namibia is suited to fruit and vegetable production, but requires regional specialisation to adapt to specific conditions. In arid north-western Namibia, for example, vegetables can only be grown under irrigation so should specialise in the production of small quantities of high-value crops. In the moister north-east, where rainfall and irrigation water is more plentiful, large-scale production of lesser-value crops would be feasible. A growing tourist industry in the north would require increasing quantities of high-value crops. By growing these in densely populated north-central Namibia or, in a special adaptation, in peri-urban areas would drastically reduce the farm-to-fork distance which would be a huge mitigating factor in climate change. Peri-urban farmers who develop a "feel" for vegetable production and have developed their own marketing channels can easily up-scale production by shifting vegetable growing from their urban backyard to their rural field. The same applies for the production of small animals like

poultry, meat pigeons and rabbits. Small-scale horticulture and small animal production can utilise many of the waste products produced in urban areas by converting them into animal feed (e.g. vegetable waste from wholesalers and restaurants) or compost (organic refuse). These small scale business opportunities should be run by private entrepreneurs and other funding sources obtained for their start-up capital for establishment. The development of small-scale horticulture and small animal production has cross linkages to the tourism sector, providing value chain opportunities.

An output could be:

Potential Output 3.10.1. Income and revenue from small-scale horticulture and small animal production is enhanced.

In order to achieve this output, the following activities need to be implemented:

- Establish small-scale vegetable and fruit growers who supply tourist establishments (e.g. lodges) in the tourism hot-spots of northern Namibia.
- Establish demonstration and training plots in peri-urban areas to train local people in small-scale horticulture and small animal production and encourage up-scaling to field scale once a producer reaches a "critical mass".
- Assist existing marketing institutions such as AMTA with transport arrangements to pick up fresh produce regularly from small growers, and targeted training and marketing information provided to small producers. Use modern digital and electronic pathways to transfer knowledge and information (akin to what the Kenyans are doing) in addition to traditional face-to-face and hands-on training.

3.11. Marketing (note that marketing of livestock is done under livestock production)

The north of Namibia is the most densely populated part of the country that has the largest demand for food products, yet its producers are currently not able to satisfy this huge market and most agricultural produce (other than staple grains) is imported from south of the veterinary cordon fence. Previous studies have shown that limited access to essential farming inputs, inadequate knowledge of the type and quality of produce required by the market, out-dated and inappropriate production methods, lack of marketing by producers, a dearth of updated marketing information (e.g. pricing, channels, etc.) and the near-complete absence of value addition to products prevents local producers from gaining from the existing demand. These shortcomings will be addressed by this proposal by organising farmers into cooperatives (for bulk purchases of inputs and marketing of products), providing updated marketing information and training in modern production, harvesting and distribution techniques and promoting the establishment of relevant value chains. It may even be necessary to lobby decision-makers to allocate preferential procurement quotas to local producers for a limited period of time to enable infant industries to acquire a critical mass. Consortium partners will work in close cooperation with industry development specialists in the Ministries of Trade, Industry and SME Development and Urban and Rural Development.

An output may include:

Potential Output 3.11.1. Marketing of produce produced from small-scale entrepreneurs is enhanced.

In order to achieve this output, the following activities need to be implemented:

- Establish a regional marketing information service linked to AMTA and similar marketing and trade agencies
- Conduct regular and systematic training in production, harvest, product quality, marketing requirements and basic value addition.
- Link supply to demand by identifying suitable producers and connecting them to existing channels and markets, in cooperation with line ministries and agencies responsible for local economic development.

The expected major **outcomes** of this result are that land based economic activities have enhanced people‟s ability to adapt to a changing environment. Best practices are adapted to suit local circumstances to enhance the resilience and productivity of natural resources and improve the livelihoods of people dependent on these resources. Value addition along the whole value change is enhanced, creating jobs and feeding more people into the formal economy.

3.12. Other activities that may be identified

In the event that any additional land use or technology is identified in the process of Components 1 or 3, its appropriateness and applicability will be assessed using the same criteria as other potential activities.

Table 8: Indicative work programme for Component 3

Output	Indicative Work Programme
Output 3.1.1. Locally developed and implemented rangeland management plans that are constantly monitored and adjusted to suit changing environmental circumstances.	• Raise awareness amongst rangeland users and other role players about the importance of rangeland as the foundation for the livelihoods • Expose rangeland users to planned grazing practices elsewhere in the country (multiple examples exist as a result of previous and on-going initiatives) • Expose rangeland users to methods that deal with erosion control by communal farmers. • Expose rangeland users to re-seeding of existing rangeland, bush thinning and other proven methods to increase production • Conduct training and capacity building on ecological literacy that should enable the rangeland user and management to “read the land” and identify sound interventions to improve it. • Form local-level grazing associations or groups that will lead the implementation of planned rangeland management in their areas • Develop a locally-based rangeland management plan indicating the different grazing areas and the current and needed infra-structure (especially water resources) required to implement the plan • Develop and implement shorter term action plans focusing on what needs

Output	Indicative Work Programme
	to be done, who will do it when and what are the expected milestones to be achieved • Provide continuous professional backstopping and support to local rangeland management groups during the implementation of the plans. • Devise plans and activities to rehabilitate degraded rangeland to restore grazing capacity to former levels.
Output 3.1.2. Increased area under cultivated pastures that are sustainably used to augment fodder flow, build a fodder bank for emergencies, increase livestock productivity vertically and provide opportunities to restore rangeland condition by shifting utilisation pressure horizontally.	• Expose interested farmers and groups to established cultivated pastures elsewhere in the country • Determine the suitability of the area for cultivated pastures e.g., soils and rainfall • Identify pilot sites to screen the suitability of different species and cultivars • Conduct initial screening of different grass species and cultivars to determine their suitability • Investigate utilisation management, appropriate harvesting technologies and post-harvesting storage, marketing and transport. • Document results and share best practices with interested farmers • Provide in-depth training and professional guidance to those farmers and rangeland management groups that want to actively pursue cultivated pastures
Output 3.2.1 Number of ha supported with CA, increased number of farmers and increased area under CA techniques resulting in increased production per ha of staple crops – e.g. maize and mahangu.	• Increase awareness and knowledge of CA and the positive impacts • Identification of farmers willing to adopt the practise • Provision of support services to enable adoption • Measurement of yield and analysis
Output 3.3.1. Reproduction rates increase from below 50% to 60-70% Output 3.3.2. Herd off-take increases from below 10% to 20-25 Output 3.3.3. Directed breeding enhances intrinsic climate-smart characteristics in 80 herds spread across eight regions Output 3.3.4. Small butcheries add value to meat and service existing demand for such produce by supplying local school feeding schemes, hospitals, army and police bases, etc.	• Address the poor quality of slaughter animals by promoting improved livestock husbandry techniques, especially in the fields of nutrition, health and handling. • Improve access of farmers to improved genetic material (e.g. bulls and rams) through the development of a bull/ram exchange schemes with commercial counterparts • Once restrictive marketing via the veterinary cordon fence is relieved, northern communal livestock farmers can profit from the unique genetic attributes of their indigenous livestock breeds by becoming stud breeders that further develop the intrinsic characteristics that make indigenous livestock breeds more adapted to hot, dry conditions than exotic breeds, more resistant to certain diseases and tolerant of parasites, as well as requiring less feed per metabolic mass due to improved coarse diet digestive mechanisms and superior diet selection that includes improved walking ability. Breeding climate-smart breeds would be an ultimate climate change adaptation factor. • Rectify the sex ratio of livestock herds by promoting earlier marketing of castrated or inferior males and ensuring an adequate number of superior breeding males, • Screen breeding males to enhance fertility and prevent the spread of venereal diseases • Improve general herd health through the introduction of vaccination programmes and preventive health measures • Illustrate the benefits of appropriate lick supplementation and improve access of farmers to licks and other livestock farming inputs

Output	Indicative Work Programme
	• Sensitise farmers on the requirement and functioning of markets and marketing institutions • Improve access of farmers to timely marketing information e.g. prices • Organise farmers into producers" and marketing organisations (e.g. cooperatives) to acquire inputs timeously and reduce marketing costs • Initiate meat value chains that encourage off-take from the local herd and exploit local/regional marketing opportunities (e.g. small abattoirs and butcheries that supply local Army and Police bases with meat cuts and processed meats).
Output 3.4.1. Income and revenue from improved management of forests and woodlands achieved.	• Gazetting more community forests in certain areas and expanding existing community forests by deliberate tree planting in others. • Farm with trees by establishing planted woodlots to increase the amount of wood available for certain value chains while relieving pressure on naturally-regenerating forests. • Develop various wood value chains based on sustainable harvesting that is acceptable to local and national authorities and attuned to the requirements of local land users and site characteristics.
Output 3.5.1. Income and revenue from indigenous natural products are enhanced.	• Increase number of conservancies/community forests that have negotiated and signed INP (Indigenous Natural Product) contracts which protect their indigenous knowledge and Access and Benefit Sharing rights. • Establish NP sales points in conservancies/community forests to allow for local and immediate payment of harvesters • Increase number of conservancy/community forest members trained and aware of harvesting techniques and quotas • Increase number of harvesters earning an increased income through harvesting and selling of INPs has increased • Promote value addition of INPs • Identify two new INPs identified that could be sustainably harvested to provide benefits to harvesters. Based on results of participatory resource inventories, trial harvests, trial processing, sampling for market suitability, pricing and supply chain development and testing of various harvesting methods to ensure resource sustainability and quality of material, trial commercialisation of at least one of the two products conducted.
Output 3.6.1. Climate-smart wildlife production facilities and operations are developed that minimise environmental inputs while maximising production and exploiting tourism opportunities.	• Improve the organisational capacity of conservancy management committees, including poaching control and increased disbursement of proceeds. • Create an "elephant reserve" for the free-roaming Mangetti elephants to remove them from expanding agricultural districts. Since elephants are a rapidly reproducing species with few natural enemies, populations have to be pegged to the area"s carrying capacity and surplus individuals have to be culled. This could form the basis of a hunting enterprise to re-cycle elephant value locally.
Output 3.7.1. Communities are able to conduct appropriate fire management.	• Ascertain the place of fire and planned burning in the local land use plan and devise an appropriate fire management strategy • Equip local communities and their governance structures to implement the fire management plan by training, education, strengthening local capacity to fight unwanted fires and control planned burns, etc. • Conduct applied research on the effect of different fires on the targeted natural resource
Output 3.8.1. Income and	• Establish eco-tourism in the western Kavango based on the Kavango river

Output	Indicative Work Programme
revenue from tourism is enhanced.	and community forests and expand eco-tourism enterprises in Kunene, eastern Kavango and Zambezi regions. • Establish a regular hunting enterprise (i.e. not concessional hunting) in special “elephant reserves” to cap fast-growing, fenced elephant populations • Facilitate tourism JV negotiations • Develop locally-owned and managed tourism products (e.g. caving expeditions in Okongoro, birding safaris in Mudumu North Complex) • Develop compliance monitoring tools for all tourism enterprises • Provide regular field-based monitoring and support visits to assist with financial management and other aspects of enterprise management
Output 3.9.1. Income and revenue from commercial fish ranching is increased.	• Establish fish breeding ponds by lining fresh water oshanas with plastic sheeting and stocking them with mud-breeding species such as tilapia. Transfer fry into growing ponds in which a submerged net prevents access to bottom mud, thus preventing tilapias from breeding. They can now grow out to sizes determined by the stocking rate of the pond. • Experiment with amphibians acceptable to local populations, e.g. captive-bred bullfrogs • Develop a fish value chain that includes delivery of fresh and frozen fillet cuts to local restaurants and lodges.
Output 3.10.1. Income and revenue from small-scale horticulture and small animal production is enhanced.	• Establish small-scale vegetable and fruit growers who supply tourist establishments (e.g. lodges) in the tourism hot-spots of northern Namibia. • Establish demonstration and training plots in peri-urban areas to train local people in small-scale horticulture and small animal production and encourage up-scaling to field scale once a producer reaches a “critical mass”. • Assist existing marketing institutions such as AMTA with transport arrangements to pick up fresh produce regularly from small growers, and targeted training and marketing information provided to small producers. Use modern digital and electronic pathways to transfer knowledge and information (akin to what the Kenyans are doing) in addition to traditional face-to-face and hands-on training.
Output 3.11.1. Marketing of produce produced from small-scale entrepreneurs is enhanced.	• Establish a regional marketing information service linked to AMTA and similar marketing and trade agencies • Conduct regular and systematic training in production, harvest, product quality, marketing requirements and basic value addition. • Link supply to demand by identifying suitable producers and connecting them to existing channels and markets, in cooperation with line ministries and agencies responsible for local economic development.

Component 4: Learning and knowledge management.

This component highlights the importance of documenting and sharing new knowledge as it is developed with land users, farmers, decision-makers and other stakeholders in order to replicate best practices elsewhere. A number of outputs need to be achieved:

Output 4.1. Best practices and lessons learnt are documented

In order to achieve output 4.1, a number of activities need to be implemented, that include:

- Identify best practices and lessons learnt in each of the 12 project sites
- Document best practices and lessons learnt

Output 4.2. Best practices and lessons learnt are widely shared

In achieving output 4.2, the following activities need to be implemented:

- Expose new communities and areas to best practices through excursions
- Publish best practices in scientific an popular media
- Present best practices to decision-makers at higher levels

Output 4.3. Strategy for out- and up-scaling is in place

In pursuit of achieving output 4.3., the following activities need to be implemented:

- Develop complete strategy for up and out-scaling of best practices
- Promote linkages and lesson learning between target sites and neighbouring areas to ensure up-scaling/out-scaling of successes at national level
- Mainstream strategy into that of relevant line Ministries
- Solicit funding to continue with implementation

The **outcome** of this thematic area is that best practices are adequately documented and communicated at various levels and that strategies are in place for their up-scaling and out-scaling to other areas. The diversity of strong established Namibian-based partners in this consortium provides a significant advantage as a catalyst for up-scaling and out-scaling of best practices into other projects and areas.

Table 9: Indicative work programme for Component 4

Output	Indicative Work Programme
Output 4.1 Best practices and lessons learnt are documented	• Identify best practices and lessons learnt in each of the 12 project sites • Document best practices and lessons learnt
Output 4.2 Best practices and lessons learnt are widely shared	• Expose new communities and areas to best practices through excursions • Publish best practices in scientific an popular media • Present best practices to decision-makers at higher levels
Output 4.3. Strategy for out- and up-scaling is in place	• Develop complete strategy for up and out-scaling of best practices • Promote linkages and lesson learning between target sites and neighbouring areas to ensure up-scaling/out-scaling of successes at national level • Mainstream strategy into that of relevant line Ministries • Solicit funding to continue with implementation

Component 5: Research and Development

This Component makes provision for research and development of new technologies to be tested and adapted to local circumstances. The research and development needs would have been identified in the course of Component 1 – development of an integrated land management plan, or during implementation of such plan.

Some of the outputs may include:

Output 5.1. Development/adaptation of smart technology

Major activities include:

- Adapted research into growing local fodder crops (grasses, legumes)
- Research into rehabilitation of degraded rangeland, per biotope/AEZ
- Research into combating desertification in arid areas
- Assessing the economic viability of current community forestry strategies and identifying alternative economic approaches
- Research into re-foresting dry woodland in the north-east
- Research trials into the use of indigenous species for live fencing

The **outcome** of this thematic area is that new technologies are developed and/or adapted and tested for wider use by natural resource managers and users, and that applied research informs and contributes to improved productivity.

Table 10: Indicative work programme for Component 5

Output	Indicative Work Programme
Output 5.1. development and adaptation of smart technology	The research needs will be identified in the course of the project implementation, and activities may include • Adapted research into growing local fodder crops (grasses, legumes) • Research into rehabilitation of degraded rangeland, per biotope/AEZ • Research into combating desertification in arid areas • Assessing the economic viability of current community forestry strategies and identifying alternative economic approaches • Research into re-foresting dry woodland in the north-east • Research trials into the use of indigenous species for live fencing

The overarching program aims to benefit the country by creating the framework for a more climate resilient, diversified land use approach that leads to sustainable economic growth at local, regional and national level. Successes and lessons learnt can be expanded into other areas. Improved productivity and efficiency will lead to opportunities for value addition, which in turn increases the uptake of previously vulnerable subsistence communities into the formal economy. By using a market driven value chain approach to land use planning, the private sector economic growth engine can be used as a catalyst to draw in the primary producer level.

B. Economic, Social and Environmental Benefits

At site specific levels, the livelihoods of participating people will be enhanced through diversification and improved productivity, thus becoming less vulnerable to the adverse impacts of seasonal variation and climate change. The state of rangeland and ecosystems will be improved, increasing productivity and resilience.

For the purpose of the adaptation fund proposal, the consortium partners have identified twelve specific target areas. These then become the specific beneficiary groups. Selection of the majority of these sites has been based on building on existing interventions by one or more of the partners, as an entry point, meaning that beneficiary communities are already engaged in one way or another. In addition, consideration was given to include varied land tenure systems and different regions, to provide diversity and relevance for expansion within the greater program.

The project aims at empowering beneficiaries to choose the best combination of land-uses (and technologies) that will result in the most optimal and sustainable economic outputs within existing environmental parameters, and to develop the mechanisms to implement integrated land management, and related value-addition activities to maximise local level economic benefits. During the integrated planning phase, opportunities for improved productivity and value addition will be identified.

The diagnostic tool is a framework which allows the proposed climate smart land use options to be analysed regarding their feasibility to a specific site in a two-step process: a screening of all options with a preliminary ranking to extract the more viable options, and a SWOT analysis of the prioritized options with a final ranking as output.

Implementation of plans will then support introducing new technologies for increased productivity, and the development of value-addition business opportunities. Stimulating people‟s ability to generate income increases their purchasing power, which in turn creates a market for more services and products.

Ultimately the measure of success will be increased productivity stimulating increased incomes/profits to beneficiaries that leads to improved livelihoods at household level, in turn resulting in improved nutrition, health, education and living condition status for family/community members.

With the understanding that a healthy environment is more resilient to the impacts of climate variability, as well as the foundation for optimized sustained production, all efforts will be made to support and promote land practices that both restore and maintain natural ecological processes, protect the soil and water resources, and support the maintenance and sustainable use of natural resources.

C. Cost-effectiveness of the proposed project

The project proposes an integrated set of measures that are embedded in local processes and institutions, and that seek to deliver cost-effective co-benefits to vulnerable communities across multiple sectors. The approach to the project is informed by five principles, which are the source of its cost-effectiveness and sustainability. The approach: i) is holistic and integrated; ii) is participatory and gender-sensitive; iii) integrates local knowledge; iv) builds on existing initiatives; and v) is deliberately designed to be replicable and scalable. These principles are elaborated on below. The rationale is that by designing the project so that it is implemented according to these principles, it will inherently be cost-effective.

Holistic and integrated approach

The proposed project aims at using a multi-sectoral integrated approach to achieve the desired outcome that Namibia‟s land is better utilised through integrated planning and management, for enhanced sustainability, resilience, and productivity. Current land use practices in many parts of Namibia are not sustainable, while a major challenge has been that the various sectors are currently somewhat compartmentalized if not in isolation. This has led to overlapping and conflicting land use. Since climate change impacts are multi-facetted, it is necessary to consider all aspects that are affected in order to gear towards adaptation and higher resilience of communities.

Many target areas and communities have, over the years, been served by many different interventions that often did not build on what was achieved before, or started off at a tangent to the current or previous direction. Lack of coordination between the various interventions over time and lack of integrating previous outcomes into future interventions lead to duplication, increasing cost, and repetitions, decreasing new or valuable output. One of the major advantages of the proposed Multi-sectorial integrated planning involving a large array of different Support institutions is that it identifies real priorities within the target community and avoids duplication of infra-structure development and implemented activities by individual sector oriented approaches. This on its own will largely contribute to a more cost-effective implementation of local level plans). Advancing in a certain direction that was indicated by a previous intervention and pulling all available information on this direction together with result in synergies and increased output per costs incurred.

Integrated land use planning is the principle way to make the most effective and efficient use of land and natural resources, to link social and economic development with environmental protection, to minimise land-related conflicts and to achieve the objectives of sustainable development. The core of the integrated approach is the coordination of sector planning and management activities that relate to the various aspects of land use and land resources. Land resources are used for a variety of purposes; as these interact and may compete with one another, it is necessary to plan and manage all uses in an integrated manner.

The aim is to achieve both a horizontal and a vertical integration:

- Horizontal integration means that all actors and factors at the same level need to be considered, in the context of this project the local level. This means, Traditional Authorities the communities at large, with a special focus on women but also vulnerable groups are involved in the process of assessing their needs, plan for adaptation and eventually take ownership for the implementation. The spatial lead ensures that all other relevant stakeholders like line ministries (MET, MAWF, MURD), the Regional Council, CMC and VDCs are informed and involved in the process in order to ensure the implementation receives a broad support.
- Vertical integration means to consider the existing framework documents like Integrated Regional Land Use plans, Sector plans etc. to ensure that relevance at regional and national level is maintained.

The integrated and holistic approach chosen for this project aims at:

- maximising the benefits for local people by creating synergetic effects between sector-focused interventions, and
- improving the cost effectiveness of the proposed intervention by avoiding replication, “re-inventing the wheel” in a specific area and duplicating what was achieved at another time, thus stretching the available funding to achieve more with less.

Participatory and gender-sensitive approach

Since the project aims at increasing the resilience of communities, the level of intervention is pre-defined as the local level. Participation is the best way to come up with sensible interventions that improve resilience of land use systems, efficiency and profitability of production processes and the only way to create ownership among the people on the ground, who after all, have to support, implement and literally live with the land use plans. A feeling of ownership enhances sustained activity after project end, ensuring that what money has been spent during the intervention itself will still create positive benfits for a long time after project closure.

Participatory land use planning aims at achieving the highest level of involvement of local people in order to ensure that people have a greater voice in planning and decision-making, become empowered, and develop ownership for planning and implementing activities and to sustainably manage their land and the natural resources they rely on. In order to involve the local population to the highest extent in the analysis and planning process, participatory rural appraisal (PRA)-tools are used in participatory land use planning processes. Participatory methods put major emphasis on giving women a voice. Since the activities and tasks of men and women are traditionally quite different, it is very important to consider the different opinions in a gender segregated manner. Experience in African development has shown that women tend to prioritise better, use project funds more for the purpose they were intended for and get side-tracked less often, thus enhancing effectiveness of spending. Participation also provides for including specifically vulnerable groups and minorities and to assess their needs and ideas for their future in this area.

Throughout the project, the concept aims at maximising the involvement of the local people and allows for a very high level of participation, from the assessment of land uses, to the discussion of high potential adaptation mechanism, the land use planning exercises and eventually the implementation thereof. Empowering local people by using a bottom-up and gender-sensitive approach is critical for the project to be to be able to take their own decisions for their future and their livelihood.

The participatory approach is the only option to ensure sustainability and long-term impact and an invaluable aid to improved cost-effectiveness.

Integrating local knowledge

Making use of local knowledge and the analysis of the needs and interests of different land use stakeholders are key principles in participatory land use planning processes. The main source of information is the knowledge and the ideas of the communities; participatory methods go as far as saying that spatial information does not necessarily have to be spatially accurate, as long as all members and stakeholders agree on their extent, using traditional knowledge and descriptions.

In the past, traditional knowledge has been considered to be out-dated but it has often been overlooked that traditional land management was often inclusive and sustainable; hence this is highly valuable information to develop or re-invigorate adaptive methods of climate smart land management. Integrating local knowledge is a good start to keeping costs down as local people often know better what makes sense and might work and what not, although this obviously has to be balanced with modern advancements.

Often also perceived as to be very inaccurate and non-scientific, traditional knowledge can be combined with the technical know-how of land use planning and mapping professionals whenever this is appropriate. Over the last decades approaches on how to join these two forms of knowledge have been successfully developed and tested in different contexts and have proven very cost-effective, for example.

Information derived from stakeholders can be complemented with information from statistics and technical field surveys (for example regarding soil qualities, carrying capacities or utilisation potentials of forests), which can confirm existing potentials or other aspects of planning. An intervention relying only on traditional knowledge will run the danger of stagnation while one not considering local knowledge will not be properly grounded and has slim chances of success. Only a combination of the two approaches ensures that all relevant knowledge is captured and put to good use, the essence of financial efficiency.

Building on existing systems and initiatives

Building on previous development work and guiding it strategically in a comprehensive, meaningful direction is the foundation of the proposed intervention. So much work has already been done in Namibia‟s communal areas to uplift the rural poor and improve environmental sustainability, but a lot of the beneficial effects have not been realised due to the fragmentation and isolation of the individual efforts. Pulling it all together is thus not only cost-efficient but also shortens time to expected benefit, reduces effort involved

to achieve it, increases sustainability and builds momentum that leads to self-sustainability.

The project aims to be a driver for improved coordination and synergy, avoiding duplication of efforts and complementing existing interventions through a sharing of knowledge and expertise. Rather than develop new initiatives from scratch, the project will build on, strengthen and scale-up relevant existing initiatives to facilitate adaptation. All intervention sites of this project have established systems in place, however on different levels of support and performance, which is reflected in the site description and the ranking. The spatial lead partners for the different areas have over time, developed tremendous knowledge on each site, and supported these communities. It needs to be understood that communities require long-term support, both technical and financial, to be able to run a certain level of self-governance. Hence it is important to continue the support and appreciate existing running projects, which, even if not perfect, keep up the spirit of the community towards community-based natural resource management up and show-case that there are ways to diversify livelihood approaches to reduce vulnerability.

Replicability and scalability

Planning for climate change adaptation is an objective which has not been touched thus far in Namibia. Hence, this project will be a pilot in this capacity.

The sites of the project are very diverse, scattered all over Namibia and with very different precondition, will require tailor-made solutions. After all, local level land use planning and implementation is a very individual process. However, there will be a number of lessons learnt for future climate change adaptation projects available: Models for local level land use plans for most regions of Namibia will be available. Whilst it will not be possible to copy and paste them, it will give a guideline and demonstrate to other communities what can be done, and this will improve cost-effectiveness in future and shorten development time. The list of prioritised land use options, despite being developed very site specific, can be used as a baseline for sites with similar pre-conditions in a region and might require only minor adaption. The general process of climate smart land use planning and implementation will be much clearer and will have improved so that replications can be based on the lessons learnt during this project. Just as this financial benefit at not having to start at “zero” will be passed on to future interventions, the proposed intervention will benefit from feeding on previous efforts and successes, as explained before.

The scalability to other communal areas may be somewhat limited, since the level of intervention is defined to be the local level. However, it is obvious that the size of the areas of intervention differ. It is expected that the project will be able to recommend an optimum size of intervention for a local level land management. Within a farming area, however, implementation may be easily up-scalable from the pilot area as conditions around it are quite similar. Any possibility at up-scaling will be sought out as it improves the cost-effectiveness of the intervention.

Alternative options

Three alternative options were considered in the project design process, as follows:

- to set up the project with a sector focus and partner with Ministry of Agriculture, Water and Forestry in facilitating climate smart land management;
- to adopt an top-down planning approach, rather than an building on participation and local traditional knowledge and ownership; or
- to take up new communities instead of building on existing interventions, institutions and programmes of work

These alternatives are discussed more fully below:

Sector focus: the majority of households in the communal areas rely on subsistence farming for a livelihood, on most cases being crop farming and livestock farming. Since the MAWF is supporting communities through its extension work, it would have been one option to strengthen this sector specifically. However, this option would have left out the chances to re-consider if the current land management is making the best of use of the existing resources and to address local conflicts and areas of high vulnerability when it comes to negative impacts of climate changes. A sector based approach also does not allow communities to open up to assess their land management at large and through evaluation alternative options, diversify their livelihood from other sources than subsistence farming. Many of the target communities have started benefitting from CBNRM programs directly by setting aside areas for tourism and generate income from this.

Climate change is caused by multiple factors and impacts on many sectors; investing in a single sector (even if it was a sector other than agriculture) would be an appropriate tool to address the problem is its whole dimension and could also result in mal-adaptation whereby project interventions build climate resilience in one area whilst compromising or eroding it in another.

In order to create synergies from climate smart land management, it is vital to follow a multiple stakeholder approach. While the importance of MAWF in the pilot areas is acknowledged, channelling the proposed intervention through their structures would have reduced the financial benefits considerably as their overheads are enormous and expanded the time to implementation significantly, seriously eroding cost-efficiency.

Top-down planning approach: Land use planning can be done on all levels of intervention, and it is a much discussed paradigm on which level to start. Regional Land use Plans are only available in parts, and a National Land use plan is non-existent thus far. Hence, it could have been an option to start with a national land use plan in order to set a nationwide framework for climate smart land management. However, this would have be a process which is at this time far away from people in the communities and not target oriented. Top-down approaches follow more technocratic instead of participatory approaches. Communities would not be capacitated through knowledge to develop alternative solutions to what they are currently experiencing on a daily basis. It would furthermore side-line women and vulnerable groups.

Technocratic approaches do not allow local people to take ownership of their decisions for their land related future livelihood but rather creates high expectations towards outsiders to come and solve local problems. Eventually a top-down approach would

mean to plan to fail in the long-term. This approach has obvious financial disadvantages and was rejected out of hand.

New target communities: working with new communities would have provided a chance to other people to benefit from projects, and not only those who are already receiving support. However, this would require a much wider set of activities to identify target areas and start building a relation with those new communities, which is a lengthy and time-intense process and is very costly. Based on experience, it needs to be taken into account that not all communities are able or willing to cooperate, so when starting to work with new communities, a certain level of failure to cooperate needs be condoned. It is questionable if the target to implement climate smart land management in new communities can be achieved in the limited time frame of a project which would put the whole project at risk.

Working with existing sites means that with relatively little investment, many beneficiaries can be accommodated under this project and major impacts can be created. Working in areas previously exposed to project interventions and where the population has been primed to the project intervention approach increases the chance of success by completing what other did not (yet) achieve and has obvious cost advantages.

D. Consistency with national sustainable development strategies

Namibia accords high priority to environmental protection for sustainable development and recognises that environmental management is both an enabler and driver of economic development. The Namibian Constitution states that we must maintain our ecosystems, essential ecological processes and biological diversity of Namibia, and utilize our living natural resources in a sustainable manner for the benefit of all Namibians, both present and future.

In 2004, Namibia adopted Vision 2030, a document that outlines the country's development programmes and strategies to achieve its national objectives. Vision 2030 aims to transform Namibia into a healthy and food-secure nation, where people enjoy high standards of living, a good quality of life and have access to quality education, health and other vital services. Vision 2030 provides the basis for sound land management practices, identifying as important in production systems and natural resources the issues of: tenure (people‟s rights, responsibilities and authority over land and natural resources); achieving sustainability in the land and agriculture sectors; the need for diversified livelihoods; and optimising Namibia‟s comparative advantage in the areas of wildlife and tourism. Vision 2030 recognises that environmental manifestations of land degradation in Namibia – soil erosion, bush encroachment and soil salination – are causes of economic loss and escalating poverty, through declining agricultural production and loss of food security, and that ultimately degradation occurs as a result of incorrect policies, incentives and regulations that encourage inappropriate land management practices. Twenty strategies are listed under the land and agricultural production section of Vision 2030, including statements such as “creating economically and ecologically rational land-use plans to ensure that land is used optimally and not just

for direct-use activities like agriculture", "developing effective and sustainable uses of land and natural resources which do not threaten their future productivity, by – adopting more adaptive and responsive agricultural methods…."; "improving political will and good governance". The proposed program is thus well aligned to this overarching National development guide.

Vision 2030 is being implemented through successive 5-year National Development Plans (NDP), the latest being NDP4 which runs from 2012/13 to 2016/17. Whilst recognizing that there has been a positive trend in the growth trajectory since Independence, NDP4 highlights that such growth is below par compared to more dynamic and growing emerging market economies, and has not resulted in sufficient job and wealth creation. NDP4 identifies climate change as one of the contributing challenges. Tourism and Agriculture are selected as two of the four economic priority areas, and includes a specific reference to dealing with bush encroachment as a means of improving rangelands and livestock productivity.

Since independence in 1990, the Government of the Republic of Namibia has developed and implemented a number of natural resource based policies, supporting the underlying principles outlined in these key guiding documents, such as the Climate Change Policy; CBNRM policy; Rural Development Policy; the Comprehensive Conservation Agriculture Programme for Namibia 2015-2019; the National Rangeland Management Policy and Strategy (NRMPS, 2012). The NRMPS acknowledges that rangelands are deteriorating in Namibia‟s private, communal and protected areas, and that the long term effects of this degradation will result in the residents of land becoming poorer and more vulnerable to the negative impacts of climate change.

In addition, each site may have relevant sub-national, local or sectorial plans, as outlined in Table 11.

Table 11 List of site-specific relevant sub-national, local or sectorial plans

	Site	Relevant site specific sub-national, local, or sectorial plans
1	Ehirovipuka / Orupupa Conservancy area	• Conservancy management plan, including wildlife management and utilisation plan, zonation plan and grazing plans
2	Okongoro Conservancy (Ohengaipure)	• Conservancy management plan, including wildlife management and utilisation plan, zonation plan and grazing plans
3	Uukwaluudhi / Ongandjera Conservancies	• Conservancy management plan
4	King Nehale Conservancy area	• Conservancy management plan
5	Okongo SSCF area	• Part of the Local Level Participatory Planning intervention of the Ministry of Land Reform
6	Kahenge Community Forest area	• Community Forest management plan
7	George Mukoya Conservancy area	• Conservancy management plan • Part of Kavango Zambezi Transfrontier Conservation Area (KAZA Treaty)
8	N‡a Jaqna and Nyae Nyae Conservancy and Community forest area	• Conservancy management plan • Community Forest management plan • Part of Kavango Zambezi Transfrontier Conservation Area (KAZA Treaty)
9	Kwandu / Mudumu North complex	• Bwabwata and Mudumu National Park management plans • Part of Kavango Zambezi Transfrontier Conservation Area (KAZA Treaty) • OKACOM Agreement (1994) Agreement between the Governments of the Republic of Angola, the Republic of Botswana and the Republic of Namibia on the Establishment of a Permanent Okavango River Basin Water Commission (OKACOM) Windhoek, 15 September 1994 • Conservancy Wildlife Management and Utilisation Plan, Conservancy Zonation Plan • Zambezi Region Land-Use Plan • Mudumu North Complex Management Plan
10	Farm Unit Resettlement	• Resettlement agreement with Government
11	Gibeon Constituency (Gründorn, Asab and Amalia)	
12	Klein Karas Cooperative (Grünau)	• Klein Karas Cooperative agreement

The proposed project outlined in this concept note aims at using a multi-sectoral integrated approach to land use planning and management to achieve the desired outcomes of these guiding and policy documents in a coordinated manner, and to entrench best practises for sound climate change mitigation.

Table 12: Project complementarity with existing national/subnational development policies/strategies

Instrument and Description	Project relevance
Vision 2030	• Aims to transform Namibia into a healthy and food-secure nation; • Provides the basis for sound land management practices, identifying as important in production systems and natural resources the issues of: tenure (people"s rights, responsibilities and authority over land and natural resources); achieving sustainability in the land and agriculture sectors; the need for diversified livelihoods; and optimising Namibia"s comparative advantage in the areas of wildlife and tourism. • Recognises that environmental manifestations of land degradation in Namibia – soil erosion, bush encroachment and soil salination – are causes of economic loss and escalating poverty, through declining agricultural production and loss of food security, and that ultimately degradation occurs as a result of incorrect policies, incentives and regulations that encourage inappropriate land management practices. • Includes strategies including statements such as "creating economically and ecologically rational land-use plans to ensure that land is used optimally and not just for direct-use activities like agriculture", "developing effective and sustainable uses of land and natural resources which do not threaten their future productivity, by – adopting more adaptive and responsive agricultural methods…."; "improving political will and good governance".
National Development Plan 4 (2012/13–2016/17)	• Identifies climate change as a challenge to development • Selects Tourism and Agriculture as two of the four economic priority areas.
National Policy for Climate Change in Namibia	• Pursues constitutional obligations of the Government of the Republic of Namibia, for "the state to promote the welfare of its people and protection of Namibia"s environment for both present and future generations." • The goal is to contribute to the attainment of sustainable development in line with Namibia"s Vision 2030 through strengthening of national capacities to reduce climate change risk and build resilience for any climate change shocks.
CBNRM programme	• Is a joint venture between Government and nongovernment institutions, communities, community-based organisations and development partners • Aims to provide incentives to communities to manage and use wildlife and other natural resources in sustainable and productive ways by: • promoting wise and sustainable management of natural resources, and encouraging biodiversity conservation by creating the necessary conditions for sustainable use • devolving rights and responsibilities over wildlife and tourism to rural communities, thereby creating opportunities for enterprise development and income generation • encouraging and assisting communities and their local institutions to develop the skills and experience to sustainably develop and pro-actively pilot their own futures
Rural Development Policy	• aimed at improving the standard of living of people living in rural areas • through accelerating broad-based rural industrialisation and economic growth through enhanced rural infrastructure development, income-generation and employment creation • includes freehold and State-owned communal and resettlement land which supports activities ranging from capital-intensive commercial to low-input subsistence farming, as well as various forms of conservation.

Instrument and Description	Project relevance
Comprehensive Conservation Agriculture Programme for Namibia 2015-2019	• Recognises that the agriculture sector in Namibia needs to grow by 4% a year to meet the food requirements for the growing population. • However, the expansion of cultivated areas to compensate for low yields, the exploitation of low nutrients status soils without restoration of soil fertility, changing climatic patterns, including low and erratic rainfall, and the lack of well-adapted technologies have been identified as some of the major challenges of soil fertility management in Namibia. • The conservation and maintenance of soil fertility are essential to improve the efficiency of inputs used while achieving increased productivity. • Future food security relies not only on higher production and access to food but also on the need to address the destructive effects of agricultural production practices on the environment. • This will also increase the resilience of production practices to the effects of climate change.
National Rangeland Management Policy and Strategy	• The demand for food, and therefore for agricultural land, will rise sharply as the world"s population rises and people"s diets contain more protein. • Fertile soil is the basis for agricultural production. In the last 50 years 25% of all fertile soils have been lost and/or degraded, and intensive efforts will be needed to prevent this process speeding up. • Our rangeland, land and water are not limitless. • The importance of agriculture for many developing countries cannot be overemphasized. However it can only secure the economic basis for a growing population if landscapes / rangelands are sustainably managed.

E. Meeting national technical standards

A sustainable environment is essential to protect people from the short, medium and long term ravages of nature; man-made threats in nature; and the deterioration of the natural environment. Namibia faces a range of difficult environmental challenges including land degradation; water scarcity and pollution; deforestation; biodiversity loss; and climate change. The Namibian Constitution, many international treaties, as well as a multitude of statutory enactments and policies provide for the environmental protection in Namibia. The term environment denotes the entire range of living and non-living factors that influence life on earth, and their interactions, and environmental law can thus be defined as the group of norms, rules, procedures and institutional arrangements found in civil and common law, statutes and implementing regulations, case law, treaties and soft law instruments, which deal with or relate to protection, management and utilisation of the environment and natural resources for sustainable development and/or intergenerational equity[5].

The major environmental concerns considered in Namibia and its laws relate to:

[5]Ruppel, O.C. &Ruppel-Schlichting (Editors) (2013) Environmental Law and Policy in Namibia

- Land Degradation and Soil Erosion;
- Deforestation;
- Sustainable utilization of wildlife resources and the maintenance of biodiversity;
- Water Management;
- Climate Change;
- Waste and Pollution.

The Namibian Constitution lays the foundation for all policies and legislation in Namibia and contains three key environmental clauses relevant to sustainable use of natural resources:

- Article 100 of the Constitution vests all natural resources in the state, unless otherwise legally owned. Thus, unless legal ownership of natural resources in a specific locality is proven, such natural resources are owned by the state; the provision implies thus that natural resources can be legally owned as private property.
- Article 95(l) stipulates that the state shall actively promote and maintain the welfare of the people by adopting policies which include the maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilisation of living natural resources on a sustainable basis for the benefit of all Namibians. Through this particular Article, Namibia is obliged to protect its environment and to promote a sustainable use of its natural resources.
- Furthermore, Article 91(c) stipulates that one of the functions of the Ombudsman is the duty to investigate complaints concerning the over-utilisation of living natural resources, the irrational exploitation of non-renewable resources, the degradation and destruction of ecosystems and failure to protect the beauty and character of Namibia.

There are over 30 Acts and pieces of legislation in Namibia that deal with Environmental matters, but the two most pertinent to this project are:

- **Environmental Management Act No. 7 of 2007**
  The Act requires adherence to the principle of optimal sustainable yield in the exploitation of all natural resources. The Act gives effect to Article 95 (l) of the Namibian Constitution by establishing general principles for the management of the environment and natural resources. It promotes the coordinated and integrated management of the environment and sets out responsibilities in this regard. Furthermore, it intends to give statutory effect to Namibia‟s Environmental Assessment Policy; further, it enables the minister responsible for the environment to give effect to Namibia‟s obligations under international environmental conventions; and provides for associated matters. The Act promotes inter-generational equity in the utilisation of all natural resources.

Environmental impact assessments and consultations with communities and relevant regional and local authorities are provided for to monitor the development of projects that potentially have an impact on the environment.

- **Nature Conservation Ordinance No. 4 of 1975**
  This is one of the major biodiversity related laws in Namibia, and governs the conservation of wildlife, and protected areas. With the introduction of communal conservancies, amendments to the ordinance and its regulations were made and came into effect in 1996. The amendments were made to take into account the establishment of conservancies and Wildlife Councils. In terms of the amendment, rural communities have to form a conservancy in order to be able to acquire the use-right over wildlife. Wildlife conservancies are gaining importance granting communities custodianship of their natural resources particularly wildlife and fish.

  Although efforts are currently in progress to repeal this piece of legislation in its entirety, the Nature Conservation Ordinance is still one of the most comprehensive environment-related legal instruments in Namibia.

Others include the Soil Conservation Act No. 76 of 1969; the Water Act No. 54 of 1956; and the Water Management Act No. 24 of 2004.

Namibia thus has a strong legislative foundation for ensuring that development and activities take place in an environmentally sound manner, and this project will be conducted within this legal and regulatory framework.

The focus of this project is to promote a more sustainable land use management approach that restores and retains a healthy ecosystem that is inherently more resilient to the impacts of climate variability and change. For this reason, it is not anticipated that there will be any adverse environmental effects as a result of the implementation of this project.

In fact, the project will support and promote the principles of environmental management outlined in the Environmental Management Act of 2007, including (but not limited to):

- renewable resources must be used on a sustainable basis for the benefit of present and future generations;
- community involvement in natural resources management and the sharing of benefits arising from the use of the resources, must be promoted and facilitated;
- the participation of all interested and affected parties must be promoted and decisions must take into account the interest, needs and values of interested and affected parties;
- equitable access to environmental resources must be promoted and the functional integrity of ecological systems must be taken into account to ensure the sustainability of the systems and to prevent harmful effects;
- assessments must be undertaken for activities which may have a significant effects on the environment or the use of natural resources;

- sustainable development must be promoted in all aspects relating to the environment;
- Namibia‟s cultural and natural heritage including, its biological diversity, must be protected and respected for the benefit of present and future generations;
- the option that provides the most benefit or causes the least damage to the environment as a whole, at a cost acceptable to society, in the long term as well as in the short term must be adopted to reduce the generation of waste and polluting substances at source;
- the reduction, re-use and recycling of waste must be promoted.

Furthermore, the project does not make budget provision for any major developments that would require an EIA, although the planning process could conceivably result in recommendations for certain activities that under the regulations of the Environmental Management Act concerning the list of activities that may not be undertaken without environmental clearance certificate (as published in Government Gazette No. 4878, 6 February 2012) such as:

- The construction of resorts, lodges, hotels or other tourism and hospitality facilities;
- Construction of facilities for aquaculture production, including mariculture and algae farms where the structures are not situated within an aquaculture development zone declared in terms of the Aquaculture Act, 2002.
- Any water abstraction from a river that forms an international boundary.
- Irrigation schemes for agriculture excluding domestic irrigation.

In any such case, the recommendation for development will be accompanied by a pre-requisite for an EIA to be conducted.

As part of the planning and governance process, project interventions will be submitted for scrutiny by legal advisors (such as the Legal Assistance Centre) to ensure that all proposed activities are evaluated against and compliant with all applicable legislation, including any not referenced above. In addition, the same scrutiny will be applied to any new activity considered in the course of the project execution.

F. Duplication with other funding sources

There will be no duplication of funding and a clear financial trail and ring-fencing of funds will ensure this.

Wherever possible, synergies and leverage from this investment will be maximised to create the greatest impact. There are number of on-going and complimentary projects from which learning and experience can be gained which would make this project" interventions more effective. There are also on-going activities and established sites to which further support could be given to ensure sustainability and which could be used as learning sites for exposure and exchange visits.

The Steering Committee for this project will include all partners of this project, the NIE and DA. Representatives from the complimentary projects, as well as other key players (such as WWF) will be invited to become part of the Steering Committee. Thus the Steering Committee will serve to promote synergies between projects, and ensure that duplication of efforts is avoided over the course of the project. In addition, the Executing Entity undertakes, together with the Executive Committee, to keep abreast of new programmes and projects, and to promote synergies with these.

Complimentary projects are area dependent but include:

EU Climate Change Adaptation Projects

In 2014 the EU funded projects under the theme of climate change adaptation:

- Implementation of the National Rangeland Management Policy and Strategy (implemented by NAU)

  The policy was approved by government in 2012 and the multi-faceted programme will be implemented over a period of four years. It consists of a Rangeland Advisory Committee and a Rangeland Coordinating Unit, with the Namibian Rangeland and Bush Encroachment Forum as the overarching body.

- Rangeland and Marketing Development Support Project (implemented by Meatco Foundation and C.A.N.)

  The project aims to improve the active involvement of key regional players in all seven regions to climate adaption activities through implementation of regionally appropriate responses, improved uptake and application of best practice rangeland management policies, improved herd production, improved marketing options and more receptive sellers in at least 30 grazing areas. Other issues to be addressed include increased awareness of cropping best practices, the development of synergies with croplands and livestock, as well as local level land use planning, grass poaching, fire control and other key issues that affect livestock and rangelands.

- Livestock early warning system (implemented by Agri-Ecological Services and Agra ProVision)

The project objective is to enhance the ability of livestock farmers, support agencies and policy makers to make decisions based on timely and accurate information regarding the state and productivity of their rangelands to reduce vulnerability to droughts, or other adverse climatic conditions. The project will use a GIS and satellite imagery (remote sensing) based approach to monitor rangeland trends. The results from this system will then be shared with relevant stakeholders in a timely manner to support forage-related decision making.

Namparks Project

NamParks or the Namibian National Parks Programme is a programme of the Namibian Ministry of Environment and Tourism (MET), which was established in 2006 and is supported by the Federal Republic of Germany through KfW. It works in Bwabwata, Khaudum, Mudumu and Nkasa Rupara (formerly Mamili) national parks in north eastern Namibia. The parks are part of a larger conservation area, the Kavango and Zambezi Trans-frontier Conservation Area (KAZA TFCA). They contain biodiversity and habitat that are not found elsewhere in Namibia. They are also important for tourism.

The north eastern national parks are relatively new compared with other Namibian protected areas. Khaudum, Mudumu and Mamili (now Nkasa Rupara) national parks were created shortly before Namibia gained Independence from South Africa in 1990. Bwabwata National Park was created in 2007. It consists of the former Caprivi Game Park and Mahango Game Reserve. Bwabwata National Park has more than 5,500 park residents, mainly Khoe San or Bushmen. Large communities of mainly subsistence farmers surround the all of these parks.

The Namibian government has developed programmes to ensure that communities can manage and benefit from natural resources. Integrated park management builds on Namibia‟s Community-based Natural Resource Management (CBNRM) Programme. The NamParks Programme builds on the CBNRM Programme to include the management of national parks in land units. NamParks encourages biodiversity conservation and the wise use of natural resources. Large game migrates across Namibia between Botswana, Angola, Namibia and Zambia. Areas known as animal migration corridors are zoned so that animals do not destroy farmland. NamParks has concentrated on improved park planning, good park management and development, staff training and biodiversity protection. NamParks has encouraged strong partnerships with existing programmes and NGOs in support of common objectives

Community Forest Project II

The Project “Community Forestry in Namibia” (CFN) is implemented by the Directorate of Forestry (DoF) under the Ministry of Agriculture, Water and Forestry (MAWF) in co-operation with the German Development Service (DED) and the German Development

Bank (KfW). Community Forests empower local communities with forest management rights. The transfer of such rights by the Minister of the MAWF requires the fulfilment of conditions outlined in the Namibian Forest Act.

The CFN Project assists local communities to meet these conditions, e.g. to establish and train forest management bodies, to survey and map selected areas, to assess forest

resources, to develop forest management plans and use regulations and to establish community-based permit systems. Community Forests and Communal Conservancies are two core strategies of the Community-Based Natural Resource Management (CBNRM) program supported by the Namibian Government.

Whereas Conservancies focus on wildlife management and tourism promotion, Community Forests provide and secure rights for the management of woody and grazing resources. They can help to protect and improve wildlife habitats and attractive landscapes. As such, both components complement each other and can provide mutual benefits and improved sustainability if established in the same area

NAFOLA

Sustainable Management of Namibia‟s Forested Lands (NAFOLA) is a project that aims to reduce pressure on forest resources by facilitating the gazetting of Community Forests, and increasing the capacity for the uptake of improved agriculture, livestock and forestry management practices in the community forest areas.

The project‟s goal is to maintain current dry forests and the ecosystem goods and services they provide in 13 Community Forests covering over 500,000ha of forest lands, through wide scale adoption of SLM, SFM, and other improved technologies. It is anticipated that this will increase the productivity of dryland ecosystems while simultaneously reducing deforestation, securing the global environmental and national development benefits delivered by forest resources.

The project supports the generation and use of knowledge for integrated land use planning and policy reform through the implementation of forest valuations; which will be used to inform local and national dialogue processes, aimed at influencing policy alignment in favour of forest resources. The outcome will ensure that knowledge based land use planning forms the basis for improving dryland sustainable economic development in eleven CFs to be gazetted.

G. Learning and knowledge management

The implementation of this project will endeavour to build on existing knowledge and best practice and will be flexible enough to adjust and adapt as new and appropriate best practices become available. The first action in this regard will be to identify best practices within the current 14 project areas or even beyond and to screen those practices for application and roll-out elsewhere. This activity will be coordinated by the project executers (APV), in close collaboration with the spatial leads in the areas where best practices are currently being practiced. A logical next step will be to expose communities from other areas to these best practices through organising and facilitating learning excursions. A flexible and adapted monitoring, evaluation and adaptation (ME&A) management approach will ensure that regular assessments are done on the appropriateness of current activities and practices being implemented, and that adjustments are done as required ensuring that best practices are being implemented. This is an on-going process throughout and even beyond the project time frame.

The documentation and sharing of best practices at other levels is also envisaged. These best practices and lessons learnt should be shared with implementing agents (NGOs, private sector, government extension agents, etc.) as well as with policy makers at higher levels that include relevant line ministries and parliamentary committees. Furthermore, these best practices and lessons learnt need also be share at scientific level within and outside the country.

Component 4: “Learning and knowledge management” focuses specifically on learning as well as generating and managing knowledge, and will include the formulation of specific learning objectives and indicators. This knowledge will be shared as lessons learned and policy recommendations, to facilitate adaptive management, scaling up and replication of successful project interventions. The sharing of knowledge will also strengthen the ability of local government and vulnerable communities to respond to the impacts of climate variability and change.

For up-and out scaling of best practices efforts will be made to mainstream these from the beginning into the work plans and budgets of relevant line ministries. A detailed strategy will to be developed with the involvement of all stakeholders that clearly indicates what needs to be done, where and what will it cost.

Component 4 will aim to strengthen links between various stakeholders and the target communities, enable effective participation in the project, to capture learning and to support the sustaining, scaling up and replication of project successes, and will be implemented through a range of tools and media.

Output 4.1. “*Best practices and lessons learnt are documented*” focuses on documenting best practices identified and lessons learnt in a series of information and training materials that can be used to share with others. Demonstration sites of best practices will be identified, and used for practical exposure to beneficiaries.

Output 4.2. “*Best practices and lessons learnt are widely shared”* focuses on exposing new communities and areas to best practices, through excursions, mentoring and training. Best practice information materials will also be shared with stakeholders and decision makers.

Capacity building and training methods will be designed specifically for target audiences, including both informal and formal training and awareness-raising methods, appropriate to the educational levels and language capabilities of the target groups, particularly the community champions. Methods will also take into account differential access to media, including social media.

A range of informal capacity building initiatives will be undertaken to raise awareness and promote behaviour change in relation to climate change adaptation. Learning and knowledge management will be a continuous process that takes place throughout the project, through Components 1, 2 and 3, to allow stakeholders to participate in and contribute to plan development. Besides instilling a sense of ownership and accountability, which will enhance the sustainability of project interventions, this training will enhance the inclusion of local level knowledge into project outputs and lessons learned.

Training will focus initially on the pilot sites but ultimately will be shared with the wider community to increase the number of vulnerable people benefiting from the project.

The project will look at the use of low-cost technologies that can reach large number of people, such as the internet, social media and information portal management to communicate with stakeholders. Awareness raising and educational materials about climate change adaptation will be produced and disseminated, together will materials publicising the protocols, guidelines and lessons that emerge over the life of the project.

Output 4.3. "*Strategy for out- and up-scaling is in place"* aims to develop a complete strategy for the up and out-scaling of best practices; to promote linkages and lesson learning between target sites and neighbouring areas to ensure up-scaling/out-scaling of successes at national level; to mainstream the strategy into that of relevant line Ministries; and also serves to solicit funding to continue with implementation

The knowledge management strategy will include aspects of adaptive management, and a means to incorporate existing knowledge – that has been used to inform the design of the project – and knowledge generated by other sources into the project.

The outcome of the learning and knowledge management effort is to ensure that best practices are adequately documented and communicated at various levels and that strategies are in place for their up-scaling and out-scaling to other areas. The diversity of strong established Namibian-based partners in this consortium provides a significant advantage as a catalyst for up-scaling and out-scaling of best practices into other projects and areas.

Learning and knowledge management will thus be achieved through:

- Printed materials: that can be used at various levels to communicate best practices, approaches and lessons learnt. Lessons learned throughout the life of the project will be captured in publications, case studies and as policy recommendations should the need arise.
- Training sessions: for specific audiences on specific topics, as the need arises, to assist beneficiaries to implement techniques, technologies and the land management plans;
- Workshops - in each of the project sites and between communities and policy-makers, capturing lessons learned, and sharing tools emerging from the project with stakeholders beyond the project sites, so these may be integrated in approaches to climate change adaptation elsewhere.
- Media: Using the printed and audio media to raise awareness of the project and of issues that are cross cutting, and to raise awareness and interest in new techniques and technologies, and of successes.

H. Consultation

The fundamental premise of site selection is that partners have already engaged with beneficiaries in some way, a platform on which additional support and coordination will

be built. Each of the sites selected has, or is, receiving input from at least one of the project partners.

Table 13 Table outlining the level of current involvement at site level, and levels of consultation

Map ref.	Site name	Consultations and level of current engagement
1	Ehirovipuka / Orupupa Conservancy area	IRDNC has worked with these communities for more than two decades. IRDNC is locally recognized as these conservancy's main support NGO and has a long-established working relationship with elected committees, traditional leaders and community interest groups. IRDNC staff is based in the region and conduct technical support visits at least on a monthly basis, and participate in all major conservancy events, including AGMs. The focus of IRDNC's support has been on technical support for natural resource management, institutional capacity building and enterprise development, including INPs. During the final review of the GOPA CBRLM project the one issue raised consistently was the lack of a local level plan and the inability to enforce grazing plans. This applies to all sites. This was therefore included in the CAN project from Sept 2014 onwards. This applies to all sites 1 to 7 below.
2	Okongoro Conservancy (Ohengaipure)	IRDNC has worked with these communities for more than two decades. IRDNC is locally recognized as these conservancy's main support NGO and has a long-established working relationship with elected committees, traditional leaders and community interest groups. IRDNC staff is based in the region and conduct technical support visits at least on a monthly basis, and participate in all major conservancy events, including AGMs. The focus of IRDNC's support has been on technical support for natural resource management, institutional capacity building and enterprise development, including INPs. When root causes for land degradation were explored and discussed with community members they refer to unplanned settlements as one those contributing factors. Farmers were concerned with the practice of people setting up homestead wherever they wish without considering the implication on the best land use practice. Consultative processes are participatory and all inclusive. Vulnerable groups participate directly in all deliberations or are fairly represented within the community structures.
3	Uukwaluudhi / Ongandjera Conservancies area	As per site 1
4	King Nehale Conservancy area	As per site 1
5	Okongo SSCF area	As per site 1
6	Kahenge Community Forest area	As per site 1
7	George Mukoya Conservancy area	As per site 1

Map ref.	Site name	Consultations and level of current engagement
8	N‡a Jaqna and Nyae Nyae Conservancy and Community forest area	NNDFN has a mandate with each conservancy outlining the support to be provided and mutual expectations. NNDFN works with the governance structure of the conservancies but also with the Traditional Authorities when specifically requested and villages on agreed livelihood activities. All these groups are composed of indigenous San individuals who represent their communities; NNDFN also attends both Nyae Nyae and N‡a Jaqna's Annual General Meetings to present the activities underway and planned, and to get input from the broader community.
9	Kwandu / Mudumu North complex	IRDNC has worked with these communities for more than two decades. IRDNC is locally recognized as these conservancy's main support NGO and has a long-established working relationship with elected committees, traditional leaders and community interest groups. IRDNC staff is based in the region and conduct technical support visits at least on a monthly basis, and participate in all major conservancy events, including AGMs. The focus of IRDNC's support has been on technical support for natural resource management, institutional capacity building and enterprise development, including INPs.
10	Farm Unit Resettlement	Agra ProVision is providing mentoring services to the resettlement farmers in the Khomas region of Namibia, under the Farmer"s Support Project (FSP) of Agribank, funded by the GIZ. This relationship has been on-going for the past three years. The FSP project provides targeted one on one mentoring support to farmers – but does not provide a holistic integrated approach to land use and farming as a business. This project will thus complement the existing relationship with resettlement farmers to incorporate a business oriented, climate smart approach, and support to farmers to become profitable whilst safeguarding the rangeland for climate resilience.
11	Gibeon Constituency (Gründorn, Asab and Amalia)	The areas of Gründorn, Asab and Amalia have been supported by staff of Agra ProVision through the sustainable animal and rangeland development programme (SARDEP) and Namibia's programme to combat desertification (NAPCOD) in the past. These programmes only addressed technical issues in livestock and rangeland management. By involving them in this initiative in a more bottom-up and multi-sectorial approach, maximal use can be made of their current organisational capacity to really make a difference in their ability to adapt to the adverse impacts of climate change, in one of the more arid areas of Namibia.

Map ref.	Site name	Consultations and level of current engagement
12	Klein Karas Cooperative (Grünau)	This is a group resettlement scheme under the National land reform programme of the Ministry of Land Reform. This small community has shown a lot of commitment and initiative in previous development efforts undertaken by staff of Agra ProVision through the ephemeral river basin project. This initiative focused on building capacity of local institutions to properly manage their part of the fish river basin in southern Namibia. Again, this initiative was very sectorial and top-down and we believe by involving this community in a multi-sectorial bottom up approach, their ability to cope with the adverse effects of climate change will be enhanced and their livelihoods will be sufficiently diversified and supported.

During 2013 and 2014 various stakeholders from the livestock industry were consulted regarding the continuation of support of the Millennium Challenge Account programme. During this process it was clearly stated by farmers and other institutions that a holistic approach to resource management in the NCAs is required. It was made clear that the key livelihood activities of cropping and livestock production required joint planning and that scope existed for the application of climate smart actions to enable increased production per ha. During 2014 C.A.N. engaged in a partnership with 6 regional Livestock Marketing Committees to reach this end. Funds were secured with Meatco Foundation from the EU to continue the work started by MCA. C.A.N continues to provide technical and on-going field support to 30 areas in the NCA. The focal topics are rangeland, livestock, marketing and cropping and all sites overlap with the action of this proposal. C.A.N has offices and vehicles in all 7 regions. C.A.N.s implementation to date has focussed on improved crop farming (Namibia Specific Conservation Agriculture). During the 2014/2015 cropping season nearly 400 fields were prepared and improved yields were obtained in many cases – under very difficult rainfall conditions. A common message has been developed for rangeland, livestock and marketing but implementation has as yet not started in rangeland. The co-operatives will be leading the local level land use planning and have signed support letters in this regard.

IRDNC has already been providing training and technical support to the CBOs involved in the sites for which IRDNC will take the spatial lead. IRDNC has field-based staff in these areas that provide on-going support for a wide range of natural resource based activities. The activities proposed in this document have been formulated in response to issues raised by CBOs at bi-annual planning and review meetings as well as requests for support from individual CBOs. For example, IRDNC with DoF has just completed a one year study into the timber trade in Namibia. The need for support to the CFs for the management of their utilization of their small timber quotas is an outcome of this study. The recent KAZA stakeholder consultation process in which IRDNC was involved, highlighted the need for strategies to mitigate human wildlife conflict in wildlife dispersal areas and one of the mitigation measures that was identified and needs investigation is that of live fencing using indigenous trees species.

IRDNC"s long term support to the institutional development of CBOs by providing training as well as technical support means that IRDNC is well placed to identify the current needs as well as provide appropriate interventions when funding resources become available. IRDNC already has field-based staff in place so new support measures could be quickly implemented.

All of IRDNC"s activities consider the importance of gender balance. Although this has always been a consideration, the implementation of the MCA-N activities with their focus on gender has entrenched gender awareness not only in the IRDNC staff members but also in the CBO management structures. All IRDNC reporting processes record gender data pertaining to any activity with is supported by IRDNC.

Agra ProVision is involved in the Ministry of Land Reform Local Level Participatory Planning in a number of localities, including Okongo, Ongangera, Zambezi and Omaheke/Otjozondjupa regions. Agra ProVision has also been closely involved in the Farmers Support Project that provides support to resettlement farmers, with specific focus on those in the Khomas region, although training has been provided to resettlement farmers from all regions.

In addition, at a governance level, the concept of the project has been shared with key authorities, and letters of support obtained, as per Annex 3. These are of particular importance as the Namibian system works from the grassroots up and culminates in an authority such as a conservancy committee or a regional council which contributes shapes and approves activities. Meetings were held with the authorities, committees or council, where it was resolved that the proposed intervention was acceptable. Following the targeted meeting, the committees/councils consulted their members (which would include the specific site population) following which the letters of support were endorsed. The backing of the local/traditional/regional authorities in Communal areas is critical, and without it our involvement would lack credibility.

I. Justification for funding

This intervention strongly supports Namibia"s National Climate Change Strategy and Action Plan in promoting Adaptation under Theme A1 (Food Security and Sustainable Resource Base) by seeking to directly address issues within the following strategic aims;

- Strategic Aim 5: Best sustainable Land management and suitable land-use practices are tested and implemented at national and **local** level.
- Strategic Aim 8: Conservation Measures to utilise sustainable forest resources for food security are in place and implemented at **community** level, building climate resilience
- Strategic Aim 9: Encouraging approaches that lead to sustainable management of fisheries and marine resources

- Strategic Aim 12; Conservation, utilisation and development of biological resources and maintenance of resilient ecosystems to ensure climate resilience and environmental sustainability.

The project will also contribute towards other strategic aims and agendas (cross-cutting issues) whilst being cognisant of gender issues. The guiding ethos will be in line with the national strategy in ensuring that the participation, planning and roll out of activities are carried out meaningfully by both men and women, and are also sensitive to the needs and aspirations of the elderly and the youth.

Given the focus of the project it will also carry significant relevance for, and be in a position to, contribute towards the third National Action Programme for Namibia to Implement the United Nations Convention to Combat Desertification and the Second National Biodiversity Strategy and Action Plan.

Component 1: Integrated land management planning at local level.

Baseline

Land management in many parts of Namibia is not sustainable and both manmade challenges like overgrazing and but also climate related challenges like to draughts etc are omnipresent. At this stage, Regional land use plans are only available for few regions and few local level land use plans are in place. At all levels, the various sectors are currently somewhat compartmentalized and operate in isolation.

Communities are under pressure to sustain their livelihood, which is in most cases based on utilising natural resources. This has put the natural resources under pressure. While communities strive to make a living, overlapping, conflicting and competing land uses occur and create issues on the ground. The absence of local land use plans often causes an exponentiation of the problem: especially marginalised groups are getting side lined, as they are less competitive than influential people. This has been the case in various areas, where well-off people put up fences which prohibit other people to access what is supposed to be communal area. The remaining areas are put under even higher pressure and a downward spiral of resource depletion is triggered.

With project scenario

Since climate change impacts are multi-facetted, it is necessary to consider all aspects that are affected in order to gear towards adaptation and higher resilience of communities. Integrated land use planning is the principle way to make the most effective and efficient use of land and natural resources, to link social and economic development with environmental protection, to minimise land-related conflicts and to achieve the objectives of sustainable development. The integrated and holistic approach chosen for this program aims at coordinating sector planning and management activities that relate to the various aspects of land use and land resources and hence maximising the benefits for local people by creating synergetic effects between sector-focused interventions.

The local level land use plans will aim at optimising the actual land use, resolving conflicts which arise between competing uses and between the needs of different

interest groups, choosing climate smart land use options that best meet identified needs, rehabilitating and conserving natural resources, supporting the general development process, raising awareness concerning environmental problems and processes among the population and authorities. Making use of multiple land use options in an area will diversify the livelihood of local people. Creating alternatives on how to make a living increases the resilience of communities and helps adapt to climate changes. Participatory approaches ensure that the local communities will be empowered to take decisions according to their wishes and needs and implement the land use plans at the local level, together with the spatial lead.

Component 2: Governance and Institutional structure

Baseline

As outlined in Table 1, the general assessment of Governance and Institutional structures at the selected sites ranges between not being present, to being present but requiring operational improvements. In essence, the current structures are not strong enough to support an integrated and sustainable land management approach at local level, and may therefore become barriers to development and change. In communal areas, there are challenges over security of land tenure.

With project scenario

The project will identify and address governance matters that would become barriers to the implementation of integrated land management plans, and find ways to address or overcome these barriers. It is not the intention to undertake general reviews of governance structures or legal matters per se, but to keep interventions targeted on facilitating the integrated land management for optimum productivity and sustainability.

Thus, with the project, beneficiaries and communities will be empowered to function within the existing governance and legal structures.

Component 3: Climate smart local level plans implemented.

Baseline

All actions in the NCAs are being conducted either in a conservancy or community forest and some areas include areas demarcated for small scale commercial farming. In all cases however planning at the farm level or producer level is lacking for the key resources of livestock and cropping. Conservancies have developed resource use plans at a broad scale, but the implementation and enforcement of these plans has been challenging. Plans do exist for some high value plant resources and harvesting is underway. In many cases conservancies and community forests are being registered using the same boundaries and governance structures. Control of wood products has also proved challenging.

With project scenario

With the support of MLR for this action it is expected that large scale plans can be formalised and merged with more local level plans. Some form of nested land rights or similar will be investigated which merge various existing structure plans with the needs of

local producer plans. The nesting of these plans within one another with linkages developed to enable synergy will enable resources at the local level to be planned (grazing and cropping) and production increased whilst meeting the needs of broader plans for resources that are planned at a larger scale.

Component 4: Learning and knowledge management.

Baseline

Considerable experience and knowledge exist amongst partners regarding best practices in different areas e.g. planned grazing in communal areas, improved livestock production amongst commercial farmers, community-based natural resource management in communal conservancies, community-based forest management in a number of areas, to mention a few. These best practices are however not always widely shared with other development agents, especially if these development agents are from different sectors (e.g. agriculture). Similarly, best practices are being implemented in a number of sites with reasonable success, but the adaptation thereof is often limited to a number of "islands of success" that were driven by the one or other donor-supported initiative in the past. Very often the sustainability and out-scaling of these programmes are very low after the end of the donor-driven initiative and very little of that is being mainstreamed into more permanent institutions like line ministries. These best practices are often presented and hailed as "cutting edge" and "innovative" (e.g. CBRNM) at international forums, without being recognised and widely implemented within Namibia.

With project scenario

This project brings together expertise (with their best practices) from different sectors (e.g. environment and agriculture) and from different backgrounds (e.g. communal and commercial areas) into one forum where these best practices will be widely shared amongst themselves. This will result into a much higher awareness of best practices amongst the project partners. Current best practices will be screened and their suitability for adaptation in other project areas will be assessed. At the same time exposure of targeted communities to relevant best practices will be facilitated. This will speed up the process of adaptation since it will not be needed to "re-invent the wheel" as it often happens at the start of new initiatives.

Involving all relevant partners, including extension agents from line ministries, from the beginning, will go a long way towards mainstreaming these best practices into their long term programmes, plans and budgets. Involvement of these extension agents at field level alone will however not be sufficient. Advocacy to and buy-in from government at the highest level (e.g. parliament, cabinet and ministerial level) is a pre-requisite for this mainstreaming process. This is way advocacy and sharing of best practices at these levels is a priority within this project. The development and approval of a detailed roll-out plan at the end of the project period is a major output of this initiative, provided that all relevant stakeholders are part of the process from the beginning and it forms an integral part of government‟s future projects, plans and budgets.

Component 5: Research and Development

Baseline

This component makes provision for research and development of new technologies to be tested and adapted to local circumstances. Currently farmers are very vulnerable to seasonal variation in rainfall and it is anticipated that it will further increase with the impact of climate change. Currently very little information exists on which farmers can make timely decisions to mitigate the impact of a severe seasonal variation in rainfall. This results into slow responses from both individual farmers and government creating a situation where too many livestock are kept for too long on the poor resource base instead of getting rid of them when they are still in good condition and can fetch reasonable prices. Government support in the form of incentives to move cattle off degraded rangeland usually also come towards the end of the dry period when animals are already dying or body condition is very bad and markets pay low prices, due to both oversupply of animals and poor animal condition. This creates a situation that can be considered “subsidising poor management” since those farmers that did respond early enough to the reduced rainfall and fodder situation, usually don‟t directly benefit from government incentives.

Rangeland condition and productivity is very poor in large tracks of the country, making recovery through normal succession processes very slow and in some cases impossible. Soil condition and fertility seems to be very low and seed banks of perennial grasses are in some places depleted. This situation requires external input like the provision of cultivated pastures to provide in the short term fodder needs of livestock to sustain production, while the more timely process of improvement of rangeland through succession, is on-going.

The basics of commercial livestock production in Namibia is to produce as much as possible good quality fodder from the available rainfall and then to convert this fodder as effectively as possible into a good quality product that can be sold at the best possible price for maximum profit. Central to this process is to use adapted livestock that are functionally efficient and can best convert this fodder into product. Currently livestock farmers make use of a large variety of cattle breeds with varying adaptability and functionality and not all of them are genetically able to effectively convert grass into beef under extensive rangeland conditions. Research in this regard is considered paramount to ensure that the right genetics are identified at an early stage to ensure that well adapted and functional efficient cattle are kept within a highly variable environment.

The prevalence and impact of diseases, mainly venereal diseases, on the reproduction of livestock in Namibia cannot be over emphasised. Reproduction rates of cattle in communal areas are far below 50% and in commercial farming areas have dropped significantly from 80%+ a decade or so ago to as low as 60% and below nowadays, seriously challenging the financial viability of cattle production.

Dry land crop production forms the mainstay of household food security for the majority of rural households in especially the northern communal areas of Namibia. Crop yields are mostly however far below potential and in many years very little crops can be planted due to late onsets of the rainy season, therefore seriously challenging household food

security of many households. There is a need to investigate and test alternative crop production methods where maximum use of available soil moisture is promoted to ensure maximum yields. Namibia-specific conservation agriculture technologies need to be developed and used on a wider scale as is currently the case.

With project scenario

The outcome of this component is that new technologies are developed and/or adapted and tested for wider use by natural resource managers and users, and that applied research informs and contributes to improved productivity. Rangeland monitoring and early warning systems need to be developed, tested and implemented as widely as possible. This will enable farmers to take timely management decisions, especially in dry years, and provide guidance to government to direct incentives in a timely manner to the right people to mitigate the impact of seasonal droughts.

Planting of cultivated pastures will not only stabilise fodder availability in years of sub-optimal rainfall, but will also provide the needed catalysts for recovery of rangeland through the implementation of sound rangeland management practices. Being able to identify the best suited genetics at an early stage will also go a long way towards selecting cattle that are well adapted and functionally efficient to effectively convert fodder into high quality products for maximum profit. Identifying the scope and impact of especially venereal diseases in livestock and developing and implementing appropriate responses, will significantly contribute towards increased reproduction rates and will enhance the financial viability of livestock production. The testing and adaptation of Namibia-specific conservation agriculture technologies will ensure increased yields, even in years of sub-optimal rainfall, and will significantly contribute towards household food security of the majority of rural households in Namibia.

J. Sustainability of the project

The integrated value chain approach proposed is designed specifically to create the mechanism to ensure that developments are business oriented and financially viable, in order to make them self-sustaining. As an example, the regional livestock marketing co-operatives supported by CAN are envisaged to become sustainable business entities dealing with the full chain of production of livestock as well as forging overlaps with key resources such as cropping and wildlife. Empowering these entities to form partnerships in the region will provide long term sustainability. Eventually, an intervention will be accepted only if it makes sense and contributes to the triple bottom line of financial viability, environmental sustainability and social acceptability.

Using a project approach, with a diversity of partners also facilitates the uptake and application of successes to other localities. The project will also serve as a platform from which financing for additional local level interventions can be secured to expand the footprint of integrated climate smart land management towards a more climate resilient Namibia.

Table 14: Sustainability measure per project output

Project component	Expected concrete outputs	How the outputs will be continued	Envisaged involved entities and their roles
Component 1: Integrated land management planning at local level.	Output 1.1: Communities are informed about causes and effects of climate changes on the land use and have an understanding of the impact on their livelihood	• Raising awareness will help communities to understand root causes and effects; this will create knowledge and capacity and the wish to change and take own decisions on improved land management	• Learning between target communities and their peers will take place through various local platforms – including local co-operatives, conservancies, community forests etc. The MET is the designated lead body on Climate Change in Namibia and is ultimately responsible for awareness- raising beyond the life of this project.
	Output 1.2: Current land use is assessed and verified using participatory methods; stakeholders and especially vulnerable and marginalised groups are involved in the process; A common vision for the area at local level whilst maintaining relevance at a regional and national level is developed, redefined or reaffirmed; alternative land management options are proposed for each site;	• Exercises are done in a participatory way to create ownership among communities; technology use is minimized; products remain with the communities; local task force is set up to ensure community is driver of the process	• The land-use assessments and visioning processes will be completed for the target sites and land management options will have been implemented by the end of the project period. Expansion of the approach beyond the project sites will depend on the level of community buy-in – neighbouring landholders could replicate the land-use assessments and visioning processes by learning from their peers and requesting minimum support from support agencies.

Project component	Expected concrete outputs	How the outputs will be continued	Envisaged involved entities and their roles
	Output 1.3: Digital spatial data to support the participatory process are available as far as needed; A diagnostic tool is available to assess the potential of proposed land; experts are considering their potential towards climate change adaptation; expert input has been requested on a needs-basis and consulted on additional land use options; Land use options are evaluated against criteria basis	• Diagnostic tool provides for a reality-check for all land options; evaluation criteria consider all sustainability pillars (economic, ecological and social/cultural) ; ranking is done using triangulation (local knowledge, spatial lead, experts)	• This output will be completed by the end of the project. However, the tool will be made available to all Namibian agencies interested in applying it beyond the project area.
	Output 1.4 : Land use plans (maps outlining zones and descriptions including use regulations) are established together with the communities and stakeholders; action plans for implementation are developed; responsibilities for implementation are allocated to consortium partners under EC guidance, etc.	• Results are produced in a participatory way by the communities to create a maximum of ownership while using a minimum of technology; products remain with the communities; action plan contains roles and responsibilities and puts implementation to a large extent on the shoulders of the community	• Land-use plans will be completed and implemented by end of the project. Implementing agencies will ensure that approach is shared with line Ministries and other local institutions in order to enable application beyond this project.

Project component	Expected concrete outputs	How the outputs will be continued	Envisaged involved entities and their roles
Component 2: Governance and Institutional structure	Output 2.1: Appropriate local level CBOs are identified with proper representation in the community.	• By ensuring involvement and ownership of process by beneficiaries, the structures will be in place to ensure continuation beyond the timeframe of the project	• Several of the implementing partners are NGOs with long-term commitments and track record to serving the targeted communities (IRDNC, NDT, NNF and NNDFN). Others have demonstrated over the past decade, their long-term vision for work in the agricultural sector (Agra ProVision AgriConsult, CAN). Given their track record and the well-entrenched civil society movements in Namibia, it is anticipated that these Namibian agencies will continue to invest in supporting governance in the target sites well beyond the life of this project.
	Output 2.2: Suitable platforms where the local level CBO is "in the drivers‟ seat" with relevant service providers willing and supportive in implementing climate smart local level plans, is created and operational.	• Local-level representative platforms will be established where no platforms exist. In other context where CBOs structures are in place (e.g. conservancy associations etc.) these will be used to „drive‟ local level plans. Platforms are to be based on local norms and needs – in order that there may be incentives for CBOs to maintain them beyond this project.	• CBOs will be enabled to continue to use local-level representative platforms independently of support agencies; it is anticipated that the platforms will also become useful mechanisms for community mobilisation and organisation, both for the implementation of this project and for other local development agendas.
Component 3: Climate smart local level plans implemented.	Output 3.1.1. Locally developed and implemented rangeland management plans that are constantly monitored and adjusted to suit changing environmental circumstances.	• Rangeland management plans and the monitoring thereof will be as user-friendly and low-tech as possible, in order that CBOs can continue to apply adaptive management principles to adapt them long beyond the life of this project.	• CBOs and grazing committees will continue to implement and monitor their rangeland management plans.

Project component	Expected concrete outputs	How the outputs will be continued	Envisaged involved entities and their roles
	Output 3.1.2. Increased area under cultivated pastures that are sustainably used to augment fodder flow, build a fodder bank for emergencies, increase livestock productivity vertically and provide opportunities to restore rangeland condition by shifting utilisation pressure horizontally.	• Improved rangeland condition is anticipated after three years of intervention, and this is expected to provide the incentive for local farmers to continue applying sound livestock management practices.	• Local farmers will require a minimum level of technical support from the partner agencies and from the Ministry of Agriculture in order to maintain sound livestock and rangeland management practices.
	Output 3.2.1 Number of ha supported with CA, increased number of farmers and increased area under CA techniques resulting in increased production per ha of staple crops – e.g. maize and mahango.	• Increased yields are expected to provide the incentives for target farmers to continue to apply CA techniques.	• In the event that higher yields alone do not incentivise farmers to continue with CA, C.A.N. is committed to continue long-term to expand and entrench CA in Namibia.
	Output 3.3.1. Reproduction rates increase from below 50% to 60-70% Output 3.3.2. Herd off-take increases from below 10% to 20-25 Output 3.3.3. Directed breeding enhances intrinsic climate-smart characteristics in 80 herds spread across eight regions Output 3.3.4. Small butcheries add value to meat and service existing demand for such produce by supplying local school feeding schemes, hospitals, army and police bases, etc.	• Farmers are likely to continue with sound management techniques based on the increase in their livestock productivity, Small butcheries should be market-driven and not dependent on any future donor support.	• Ensuring that livestock management practices are fully entrenched, and that value-addition is fully functional and viable, may require some longer-term „dripping tap" support from Ministry of Agriculture, Agra Provision and its partner organisations. Namibia"s strong agricultural support sector – including Meatco – is mandated to provide the long-term support required to ensure sustainability.

Project component	Expected concrete outputs	How the outputs will be continued	Envisaged involved entities and their roles
	Output 3.4.1. Income and revenue from improved management of forests and woodlands achieved.	• Community forest management committees will be equipped to manage revenue from their timber and non-timber forest resources. Importantly, the project will also empower CBO members to hold their committees accountable for the use of communal income through their Annual General Meetings and other constitutional obligations.	• IRDNC, NDT and NNDFN are committed to long-term community forest support in their target sites. The Directorate of Forestry is the responsible government department responsible to ensure that community forests are viable in the long-term.
	Output 3.5.1. Income and revenue from indigenous natural products are enhanced.	• This project is a critical step in establishing a larger and more sustainable market for indigenous natural products (INPs) – By the end of the project target communities will have diversified their livelihood activities through INPs. Over the longer term (i.e. beyond the lifetime of the AF project), the target communities will have negotiated and signed contracts which protect indigenous knowledge and Access & Benefit Sharing rights, and the number of harvesters equipped to continue to engage with the private sector independently will be significantly increased	• Support agencies for INPs are likely to remain active in their provision of support to INP harvesters; but the level of support required will be significantly reduced as harvesters develop the business acumen to deal with the private sector directly.

Project component	Expected concrete outputs	How the outputs will be continued	Envisaged involved entities and their roles
	Output 3.6.1. Climate-smart wildlife production facilities and operations are developed that minimise environmental inputs while maximising production and exploiting tourism opportunities.	• The market for trophy hunting and wildlife products is expected to drive viability of this sector – there will continue to be some level of high-level expertise required to support re-negotiation of hunting agreements, but there is a well-established NGO network that could be engaged early in the project life and requested to provide technical support in the long-term.	• Support NGOs, such as WWF in Namibia and NACSO (Namibian Association of CBNRM Support Organisations), will be approached to request their support to continue providing some „dripping tap" support to the wildlife-based economy.
	Output 3.7.1.Communities are able to conduct appropriate fire management.	• Fire management will be completely integrated into the routine activities of CBOs to ensure long-term sustainability.	• Once CBOs have developed their fire management plans and received some initial assistance from support agencies, they will be responsible to ensure that their fire management plans are carried out independently of donor support.
	Output 3.8.1. Income and revenue from tourism is enhanced.	• Tourism enterprises will be established, with a particular focus on securing joint venture partnerships between CBOs and the private sector, in order to ensure long-term sustainability with regards to management and marketing capacity.	• Four of the project partners (IRDNC, NDT, NNDFN and NNF) are members of NACSO and have as their mandate the long-term support to CBNRM, including tourism development, and are committed to assist with follow-up tourism support where required.
	Output 3.9.1. Income and revenue from commercial fish ranching is increased.	• Once fish ranches are operational, which will be achieved during the life of the project, the ranchers will be connected to local buyers.	• There is a significant market for fresh fish in Namibia; thereby ensuring financial viability.

Project component	Expected concrete outputs	How the outputs will be continued	Envisaged involved entities and their roles
	Output 3.10.1. Income and revenue from small-scale horticulture and small animal production is enhanced.	• Farmers supported with small-scale horticulture and animal production will be introduced to market-based partnerships to ensure sustainability.	• AMTA and private sector (tourism facilities and local supermarkets) will be engaged early in the project life to ensure their support for local produce.
	Output 3.11.1. Marketing of produce produced from small-scale entrepreneurs is enhanced.	• As per 3.10.1 above	• As per 3.10.1 above
Component 4: Learning and knowledge management.	Output 4.1 Best practices and lessons learnt are documented	• Recording the lessons learnt and successes ensures that these materials are available for future applications	• Local lesson learning platforms will be informed of project outcomes and lessons learned so that they can be applied to other initiatives at national and regional levels.
	Output 4.2 Best practices and lessons learnt are widely shared	• Learning materials are widely available and accessible, increasing the likelihood that they will be referred to and adopted	• Partner agencies will take responsibility for distribution of learning materials, and implementation of lessons learned in their operations.
	Output 4.3. Strategy for out- and up-scaling is in place	• A strategy paves the way for activities beyond the timeframe of the programme	• All partner agencies are well-established Namibian institutions with strong linkages to other partner organisations, companies and government. They are well-positioned to either take on the out- and up-scaling themselves or to develop strategies with other agencies.
Component 5: Research and Development	Output 5.1. development and adaptation of smart technology	• Technologies that are proven to improve productivity and profits to beneficiaries are likely to be adopted over the long term	• The private sector and CBOs are likely to adopt smart technologies that improve production with some minimal facilitation.

PART III: IMPLEMENTATION ARRANGEMENTS

A. Arrangements for project implementation

There are nine participating partners as outlined in Table 7. The partners are individual institutions or organisations currently involved in natural resource management and who will be involved in the implementation of one or more components of the project.

In some cases, similar roles are played by different partners, according to fields of expertise or area of focus of specific organizations. Nonetheless, responsibilities are clearly defined, with recognized Thematic and Spatial Leads supporting the EE to oversee the implementation process. Coordination and efficient delivery of activities will be ensured through the proposed management structures, including the Executive and Steering committees. Figure 8 depicts the organizational arrangement for the coordination and implementation of the project. The Executing Entity, Agra ProVision will provide secretariat services for the steering and executive committees and will be responsible for financial management and reporting to the NIE. The Executive Committee comprises of all the partner institutions directly involved in the implementation of projects or components of projects (Table 10). Their responsibility is to oversee the implementation of the project with decision-making powers. The Steering Committee is comprised of institutions within the natural resources industry including partners and others as may be invited in an advisory or observer capacity. The steering committee is the coordinating body at technical level and provides advice to the executive committee and includes the DRFN as National Implementing Entity and the Ministry of Environment and Tourism as Designated Authority, but also as many other relevant stakeholder institutions as possible, to create a platform for coordination and synergies with other programmes and projects.

Table 15: Partners in the consortium and their roles (in alphabetical order)

No.	Institution	Role in project
1.	Agra Provision (APV)	• Executing Entity of the project • Thematic lead for Learning and Knowledge management; Research and Development • Spatial lead in PCLD designated area in Omaheke region; resettlement farms in the Khomas region and in the communal areas of the Gibeon constituency in the Hardap region
2.	Agri-Ecological Services (AES)	• Spatial GIS based data analysis and support • Rangeland specialist
3.	AgriConsult Namibia (ACN)	• Livestock, game and rangeland specialist • Support to Learning and Knowledge Management, Research and Development • Communication and extension specialist
4.	Conservation Agriculture Namibia (CAN)	• Spatial lead in four north central regions and two Kavango regions and co lead in Kunene in its target sites which overlap with IRDNC.

No.	Institution	Role in project
5.	Integrated Rural Development and Nature Conservation (IRDNC)	• Spatial lead in the eastern floodplains of Zambezi region and in the project sites in Kunene region
6.	Meatco Foundation (MF)	• Support functions in four north central regions, two Kavango regions, Omaheke, Kunene and Khomas regions
7.	Namibia Development Trust (NDT)	• Support functions in governance and institutional support process • Support functions in Gibeon constituency in Erongo region and in four regions of North Central Namibia
8.	Namibia Nature Foundation (NNF)	• Thematic lead in integrated land management planning at local level • Support functions for interventions in Omaheke, Otjozondjupa, Zambezi, Kavango and Khomas regions • Support EE in field-based Monitoring and Evaluation
9.	Nyae NyaeDevelopment Foundation of Namibia (NNDFN)	• Spatial lead in N≠a Jaqna Conservancy and Nyae Nyae Conservancy and Community Forest

Figure 14: Schematic showing the institutional and implementation arrangements

Executing Entity

Agra ProVision (a Division of Agra Limited) has been assigned as the Executing Entity (EE) for the project, with the overall responsibility for project implementation over the five year period, and hence accountable for both project and financial management.

The Agra company originates from a cooperative that was formed in 1975, the Boere Koöperatief Beperk (BKB), which in itself was a combination of two earlier South African co-operatives – the Farmers‟ Co-operative Union (FCU), which was founded in 1946, and the Boeresaamwerk Bpk which started its operations in Namibia in 1949. BKB was still controlled by South Africans, although Namibians were represented on the board of directors. The desire for an independent control by farmers and the agricultural community over Namibian operations resulted in the foundation of an independent co-operative for Namibians. Thus Agra (Co-op) Ltd. took over the operations of BKB on 1 July 1980 forming the first Namibian agricultural co-operative. After 33 years of building a successful business, Agra (Co-op) converted from a cooperative to a public company having share capital under the Companies Act of 1974 and as amended in 2003, Section 64 (registration number: 100406). Agra Limited was registered on 1 February 2013 as a public non-listed company, in order to adapt to the ever-evolving trends in agricultural and business world. A broader capital base provides Agra with the facilitation of investment and working capital in order to upgrade its infrastructure, expand its branches and business portfolio. Agra is thus a well-established Namibian company, with sound financial and project management expertise, and an excellent accounting record.

As the Executing Entity, Agra ProVision will sign the grant agreement with the NIE and will be accountable to the NIE for the disbursement of funds and the achievement of project objectives and outcomes according to the approved work plan. The main functions will be:

- Coordinating activities to ensure the delivery of agreed outcomes;
- Ensuring compliance with NIE and AF requirements, including effective procurement, administration, reporting, disbursement and financial management procedures;
- Fiduciary responsibilities of the project
- Facilitating, monitoring and reporting on the procurement of inputs and delivery of outputs;
- Managing relationships with a range of partners and stakeholders, in support of the project;
- Approval of Terms of Reference for consultants and tender documents for sub-contracted inputs;
- Reporting to the NIE on project delivery and impact;
- Monitoring compliance with the AF ESP
- Providing secretarial services and support to the Executive Committee

In order to fulfil these activities, the Executing Entity will make available, on a part-time basis, the following positions/functions:

- Project Management;
- Accountant;
- Procurement and logistics support;
- Secretarial services.

These functions will draw from existing staff. Project implementation will be managed through the Executive Committee.

Contracts will be entered into between the Executing Entity and each of the partner institutions that will define the scope of work as well as the agreed deliverables, responsibilities, reporting, financial and procurement mechanisms, which will be discussed, developed and approved by the Executive Committee.

The EE (or EE project manager) will liaise closely with the NIE, particularly as regards Monitoring and Evaluation (M&E), as well as the tracking and management and/or mitigation of risks. Arrangements will be made that the Project Manager of the EE will spend some time at the NIE for induction and orientation as to NIE/AF procedures.

As the NIE, DRFN is responsible for ensuring the proper management of funds received for the programme, and for the delivery of results against those funds. The EE will thus function effectively under DRFN"s supervision and report to DRFN.

Executive Committee

The Executive Committee is comprised of the nine partner institutions (Table 8), and is responsible for overseeing the implementation of the project. The Executive Committee is the decision making body. Members of the EC are involved in different components of the project:

- **Component 1: Integrated land management planning at local level**

  Namibia Nature Foundation is the component lead, and will work closely with spatial leads at each of the sites to undertake activities.

- **Component 2: Governance and institutional setups are strengthened through the planning and implementation process**

  Although indicated as a distinct component, this topic is cross cutting across all activities, and serves to ensure that activities and outcomes are not negatively impeded by any governance or institutional barrier. All partners are thus involved in this component.

- **Component 3: Implementation of climate smart local level plans**

  Based on the outcome of Component 1, spatial leads as identified in Table 8, will take the lead in coordinating activities at individual sites.

Table 16: List of intervention areas, indicating spatial lead partners

Region	Site number	Area	Spatial lead
Kunene	1	Ehirovipuka / Orupupa Conservancy area	IRDNC
	2	Okongoro Conservancy (Ohengaipure)	IRDNC
Omusati	3	Uukwaluudhi Conservancy and Tsandi area	CAN
Oshikoto	4	King Nehale Conservancy area	CAN
Ohangwena	5	Okongo SSCF area	CAN
Kavango West	6	Kahenge Community Forest area	CAN
Kavango East	7	George Mukoya Conservancy area	CAN
Otjozondjupa	8	N‡a Jaqna and Nyae Nyae Conservancy and Community forest area	NNDFN
Zambezi	9	Kwandu / Mudumu North complex	IRDNC
Khomas	10	Farm Unit Resettlement (four farms)	APV
Hardap	11	Gibeon Constituency (Gründorn, Asab and Amalia)	APV
Karas	12	Klein Karas Cooperative (Grünau)	APV

- **Component 4: Learning and knowledge management**

  This cross-cutting theme will be coordinated by Agra ProVision

- **Component 5: Research and Development**

  Agra ProVision takes the coordinating role for the component on research and development. This component serves primarily to identify research topics and help mobilize funding to undertake relevant research.

The EC may create sub-committees to facilitate operations.

EC meetings will be convened on a bi-monthly basis, or according to needs.

EC has to decide the directions taken with implementing climate-smart options identified during Component 1 of the proposal, considering the competence of local governance structures (Component 2), who will be responsible for implementation (Component 3) and how it will be done in principle. These decisions and their implementation will have to be reviewed annually as part of the proposal‟s M&E plan.

Steering Committee

The Steering Committee is comprised of the members of the Executive Committee, and other institutions that will be invited to form part of the Steering Committee in order to promote collaboration and synergies, and avoid duplication of efforts. The NIE and DA will form part of the Steering Committee.

The Steering Committee acts as the sounding board to the Executive Committee, providing direction and advice, and fulfils the function of a stakeholder forum. In fact, it is the vision that the Steering Committee should grow to offer a platform for coordination of land-based activities and interventions on a National scale.

Steering Committee meetings will be convened on a bi-annual basis, or as the need may arise.

National Implementing Entity (NIE)

The Desert Research Foundation of Namibia (DRFN) is accredited as the NIE for Namibia, and is contracted by the AF to execute an oversight role for project/programme implementation in Namibia.

The NIE bears full responsibility for overall project management, monitoring and evaluation, including all financial, monitoring and reporting responsibilities associated with the project. Some specific roles and responsibilities of the NIE include, *inter alia*:

- Advise and oversee project implementation
- Liaise with and report to AF
- Establish protocols for progress reporting and risk assessment by the EE
- Facilitate formal scheduled project evaluations
- Ensure compliance with the ESP of the AF, and other essential operational frameworks
- Disburse funds to the EE and monitor expenditure

The EE, through the Executive Committee, will inform the NIE on project performance through submission of quarterly reports. The EE and NIE will meet to discuss these reports within one week after the reporting period. The two entities will endeavour to maintain effective communication flow and will undertake *ad hoc* consultations as a routine operational procedure.

The NIE will provide periodic monitoring services through site visits according to a predetermined schedule.

Inception workshop

On approval of the project by the Adaptation Fund, an inception workshop that includes the partners and relevant stakeholders such as the NIE and MA will be convened to discuss in detail the modalities for operationalizing and managing the project. The topics to be covered at the inception workshop will include (but not necessarily be restricted to):

- Detail the roles, support services and complementary responsibilities of the various players, including the EE, NIE and project implementing partners;
- Discuss and agree on the terms of reference for the Executive and Steering Committees, and schedule the first meetings.
- Discuss and clarify the roles, functions and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms
- Schedule meetings for organisational decision-making structures
- Discuss the terms of reference for project staff (if needed)

- Establish the templates for quarterly reporting
- Provide an overview of reporting and M&E requirements, including all reporting required for securing next tranche
- Review and agree on the indicators, targets, measures and their means of verification, and recheck assumptions and risks
- Discuss financial reporting procedures and obligations, and arrangements for annual audit
- Agree to and schedule the M&E work plan and budget
- Based on the project results framework, finalise the first annual work plan
-

Following the inception workshop, a report will be compiled, including all guidelines agreed to.

B. Financial and project risk management

Financial management and procurement rules will be based primarily on the policies of the Executing Entity, Agra ProVision. These will be discussed in detail during the Inception Workshop, and a guiding document will be developed to form part of the management mechanisms for the project. Any directives from the NIE, or agreements reached during the inception workshop will be considered and incorporated into the standard operating procedures for the project, and annexed to the signed agreement with partner institutions.

Financial and project risks and associated management measures will be assessed as an on-going process throughout the project. Financial issues will form a standing item on the agenda of the Executive Committee meetings.

DRFN will have an overarching role as the NIE in overseeing and ensuring financial and programme risk management. These risks, and associated mitigation/management measures, will be assessed on an on-going basis. The risks, their potential impacts, and proposed responses in mitigation/management are outlined in Table 17.

Table 17: Assessment of potential risks, and their mitigations measures

	Description of Risk	Risk Level	Mitigation measure
Financial	Exchange rate fluctuations between the USD and N$ could significantly change the funds available for project implementation	Moderate	• Monitor exchange rates and keep Executive Committee informed; • Adopt an early adaptive management approach should a negative exchange rate fluctuation negatively affect funds available for project; • Engage with NIE should budget reallocations become necessary
	Local inflation rates	Medium	• Close monitoring of inflation rates and price escalations , accommodating these in budget reallocations, communication between all programme partners, guidance provided from the NIE in this regard
	Delays in fund disbursement result in delays in project implementation	Low	• The EE will work closely with the NIE to ensure timely disbursement of funds; • The EE, together with the Executive Committee will define the disbursement procedures, to ensure a streamlined process • Disbursements will be carefully controlled to be within the relevant budget limits, to ensure that other budget lines and activities are not negatively affected.
	Ineffective Financial Management Systems	Low	• Financial Management Systems streamlined and compatible. Experienced and skilled staff involved. Part-time contract of Financial Support staff reviewed and adjusted regarding number of days, functions and deliverables. NIE and auditors to provide timely advice and ensure efficient use of funds
	Misappropriation of resources	Moderate	• Through transparent and thorough financial management, and collective accountability, misappropriation of resources by partners or beneficiaries will be avoided. Each executing partner will sign an agreement with the Executing Entity.
Project	Failure to achieve milestones and provide deliverables on time	Low	• Close engagement between NIE and EE. Quarterly reports and consultations would flag issues of concern in advance, which could then be addressed in a timely manner
	The political climate and national policy directives remains conducive and supportive of the project objectives	Low	• Improving productivity and livelihoods remains a high priority for Namibian Government, and this focus is unlikely to change over the next five years; • The project supports the ideals of Namibia"s Vision 2030; • The participatory approach at ground level and through the Steering Committee will help maintain local and strategic level support for the interventions.
	Insecurity of land tenure at local level	Moderate	• Governance matters, including security of tenure, will be a cross cutting theme that will be considered at every point of the project, with measures taken to address barriers to achieving the objectives of the project.

	Description of Risk	Risk Level	Mitigation measure
	The local communities are not sufficiently incentivized by direct benefits and are thus reluctant to cooperate to achieve the medium and long term objectives.	Moderate	• A participatory approach is used to ensure a high level of involvement of the local communities. In addition, the project contemplates interventions with communities who have already have a relationship with the project partners.
	Policy makers and politicians prioritize economic benefits over sustainable and resilient ecosystems.	Low	• The project will demonstrate cost-effective and economically sound models of adaptation and generate local demand, through communication strategies, to influence policy
Institutional	Staff turnover within the NIE, EE or any of the Partner organizations results in a lack of continuity in project interventions	Moderate	• By the involvement of nine partners, and regular coordination meetings, it is likely that it would be possible to co-opt similar competence in the course of project implementation, or to replace a non-performing consortium member
	Poor coordination with other climate change projects in the focal areas limits the potential to learn from and build on the experiences of related projects.	Low	• The steering committee provides the platform for coordination with other projects and programs
	Project governance structures fail to perform efficiently and effectively.	Low	• Structured governance and implementation arrangements will ensure that roles and responsibilities by the EE, project partners and NIE are clear and will be carried out efficiently and effectively.
	Duplication/Inadequate coordination with climate change projects	Low	• Regular participation at SC meetings will ensure relevance and compatibility with other initiatives
	Inability of partners to deliver	Low	• ToR for all key programme partners will be discussed and agreed at inception. All partners selected based on good track-records for delivery and in-house competency
	The number of partners and different levels of stakeholders involved slow down decision-making and potentially project implementation.	Low	• The project coordination will be based on participatory decision-making mechanisms in order to facilitate consensus, provide early detection of potential sources of conflict and promote constructive dialogue.

C. Environmental and social risk management

The Environmental and Social Policy of the Adaptation Fund is consistent with Namibian environmental and social policies and laws, in aiming to ensure that activities do not result in unnecessary environmental and social harms. The objectives of this project are specifically to support activities that results in a land use/management regime that increases the productivity and benefits earned by the beneficiary land users, whilst restoring and/or maintaining a healthy ecosystem base to act as a natural buffer to the impacts of climate variability and climate change.

The focus of the project lies in changing the way people do things at ground level, creating a framework for integrated land-use management that results in improved benefits to the local population and to the environment, and the introduction and use of an adaptive management approach at local level, to help communities deal with changing climate conditions, both in the short and long term. The project targets twelve sites, within a range of land tenure systems and environmental and climatic conditions, aiming to identify best practices that can be carefully recorded and applied at other sites. It is not anticipated that activities would result in adverse environmental or social impacts. However, should any adverse effect occur, it is likely to be restricted to a specific site, be small in scale, and reversible. The project is thus categorized as "Category B".

In order to ensure that no adverse environmental and social impacts are generated, all activities will be screened for such by the Steering and Executive Committees, and project reporting processes will have a focus on detection of environmental and / or social risks. If such risks are detected, plans will be made to address or mitigate for the specific risk.

Due consideration will be given to the specific areas identified in the Environmental and Social Policy of the Adaptation Fund, as outlined in Table 13.

The environmental and social management system developed by the NIE will apply to any activity or component that was not identified at the proposal stage to the level where adequate and comprehensive environmental and risk assessment was possible, such as activities identified in the course of Component 1 (integrated land use planning), or resulting from Component 5 (research and development). The ESMS includes:

a) *Screening*

   This process identifies any potential adverse impacts and risks of an activity or intervention – including compliance with domestic and international laws, and the 14 other environmental and social principles that are part of the ESP (Table 18)

b) *Impact assessment*

   The environmental impact assessment considers the magnitude of the risks and potential adverse impacts, and how to mitigate them. The impact assessment will lead to a categorization of the activity/project.

Should any risks arise during the course of implementation; these will be considered by the Project Manager and appropriately addressed by the EE, in consultation with the Executive Committee and especially the NIE, which is charged with the overall responsibility in this regard. In the event that unforeseen risks recur, an environmental and/or social risk management plan will be developed. Programme funds, upon agreement by the Executive Committee and in consultation with the NIE, may be redirected to risk management activities. In such cases, it will need to be clearly demonstrated and motivated that these additional costs can be provided from within the programme budget, and a request for approval will be submitted to the NIE. Punitive measures (e.g. withholding funds) will be taken against partners that fail to employ

actions to address overt risks or repeated negative scenarios, particularly if some support to improve response capacity has been provided by the EE.

Table 18: An overview of the possible risks addressed in the AF Environmental and Social Policy, and their relevance to this project, and possible mitigation measures where required.

	Description of possible risk	Risk Level	Relevance and mitigation measures
Social	Compliance with the Law	Low	Namibia has a sound legal basis for environment and social issues. A compilation of relevant laws will be produced to ensure compliance, which will be monitored through the Steering and Executive committees.
	Marginalized and Vulnerable Groups	Low	All members within a beneficiary community will be considered and involved in the interventions.
	Access and Equity	Medium	The project will adopt an approach that capacitates vulnerable communities to enable active participation in the project. This will include ensuring fair and equitable access to project benefits to all participants, including marginalized and vulnerable groups.
	Human rights	Low	The project will respect and promote all fundamental human rights and freedoms, as enshrined in the Namibian Constitution, including but not limited to: • Protection of life • Protection of liberty • Respect for human dignity • Freedom from slavery and forced labour • Equality and freedom from discrimination • Children"s rights • Property • Culture • Education
	Gender Equity and Women"s Empowerment	Low	The Namibian Constitution provides a strong backdrop for gender equality. It is one of the few constitutions in the world that uses gender-neutral language throughout, and it explicitly forbids discrimination on the basis of gender. It provides for equality in all aspects of marriage, and gives special emphasis to the women in the provision which authorises affirmative action. Furthermore, it explicitly states that customary law survives only to the extent that it does not conflict with the Constitution, meaning that customary law may not entail any form of gender discrimination. In the Communal Land Reform Act (11 of 2005), men and women are equally eligible for rights to customary land, and the treatment of widows and widowers is identical. The law which provides a procedure for official recognition of traditional authorities requires that they "promote affirmative action amongst the members of that community", particularly "by promoting women to positions of leadership." Namibia is a signatory to the UN Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) and

	Description of possible risk	Risk Level	Relevance and mitigation measures
			the UN Convention on the Rights of the Child, with no reservations.
	Core Labour Rights	Low	The project will meet the applicable core labour standards identified within Namibia"sLabour Act (15 of 2004)
	Indigenous Peoples	Low	The project will not contravene the rights and responsibilities set forth in the United Nations Declaration on the Rights of Indigenous Peoples.
	Involuntary Resettlement	Low	No involuntary resettlement will occur as a result of the project interventions, and no activities that could require compensation are envisaged.
Environmental	Protection of Natural Habitats	Low	The Environmental Management Act (Act 7 of 2007), and the Public and Environment Health Act (1 of 2015), deal with various aspects of public and environmental health. A primary objective of the project is to ensure the sustainable use natural resources, and the restoration of degraded to a healthy state that is more resilient to climatic variation, as a means of adaptation to climate change.
	Conservation of Biological Diversity	Medium	Project interventions are aimed at restoring and enabling improved management of natural habitats, thereby supporting the conservation of biological resources.
	Climate Change	Low	The project will build resilience to climate change by promoting a land use approach that is sustainable and that maximizes the benefits and reduces negative impacts. Furthermore the project will not result in an increase in greenhouse gases or any other drivers of climate change.
	Pollution Prevention and Resource Efficiency	Low	The project will not produce excessive waste, or release pollutants, and will seek to optimize material resource use for maximum benefit, and to promote the use of renewable energy resources.
	Public Health	Low	No negative impact on public health is expected, and in fact, improving production and incomes is expected to improve beneficiaries" health through improved nutrition.
	Physical and Cultural Heritage	Low	The project adopts an inclusive approach that embraces the cultural diversity as an asset. Important cultural sites become assets for tourism, as an example.
	Lands and Soil Conservation	Low	The project seeks to conserve land and soil through improved rangeland management and natural resource utilization practices, thus protecting land and soil from threats caused by degradation, denudation, encroachment, erosion etc. through the promotion of agricultural techniques that conserve topsoil.

Grievance procedures

During project inception workshops and Component 1 meetings and workshops, stakeholders and beneficiaries will be informed that any concerns relating to the design or management of the project, including social and environmental risks, should be raised

with the EE. Where these are not adequately addressed, these may be escalated to the project Executing and/or Steering Committee and if necessary to the NIE.

D. Monitoring and evaluation

An inception workshop will launch implementation of the programme. This event will bring together all key partners with definitive roles, as well as other stakeholders. At this workshop the programme outline and activities will be presented and verification of baselines that underpin the M&E plan will be undertaken. This will ensure full understanding and ownership of the programme by all partners. The ToRs of the Executive Committee and Steering Committee will be confirmed and a meeting schedule created. At this time, the NIE will provide clear guidelines as procedures that will apply to implementation of programme activities. It is advised that the NIE develops a manual in this regard. An inception workshop report will serve as a record of decisions.

Based on the outputs and activities of the log frame, and the inception meeting, a Monitoring and Evaluation plan will be developed which includes indicators at both process and impact levels. The M&E plan will be approved by the Executive Committee. Individual component and spatial leaders will be responsible for incorporating the collection of relevant agreed data, and reporting on the agreed indicators on a regular basis, and data will be compiled by the EE. The exact data and mechanisms for reporting will be agreed and outlined within the M&E plan. The M&E plan will be overseen by the EE, who will regularly report to the Executive Committee. The M&E monitoring is covered under the Execution costs, where provision has been made for professional time and travel for the purpose.

Monitoring and Evaluation (M&E) will be carried out concurrently with project execution. Quarterly technical reports will be collated from each site to a format that would enable efficient target tracking. The bi-annual technical report consists of a review of these site implementation reports by component and spatial leads and their own field monitoring reports to ensure technical compatibility. The Annual Progress Review will be coordinated and produced by the EE, with inputs and guidance from the Executive Committee. The data for monitoring will consist of financial, procurement and physical progress reports as well as compliance with the requirements of the environmental and social assessment and management frameworks, along with financial audit reports.

Quantitative targets will be supplemented with narrative reports.

Monitoring and Evaluation will be designed in a way that it complies with formal guidelines, protocols and toolkits issued by the Adaptation Fund, NIE and government of Namibia‟s regulations and procedures.

The key components of the M&E Framework will be as follows (Table 19):

Defining the baseline - this will be done to establish the benchmarks to be monitored and evaluated during the implementation of the project activities. The baseline data will be compiled from existing knowledge and/or surveys conducted at site level for the

purpose. In particular, baseline data collected will include gender disaggregation, and output targets will then be identified in relation to the baseline. Modalities for collecting specific baseline data may vary from site to site, according to local conditions, but the data itself will be standardized for the purpose of compilation and comparison.

The establishment of the benchmarks will be undertaken in a participatory manner with implementing partners so as to develop a common understanding on how to assess the progress of the project activities based on the baseline information. The implementing agencies and the partners, with support from NIE will do continuous monitoring of the project and semi and annual reporting on the project progress.

Monitoring - regular monitoring will be conducted by the EE as well as implementing partners, and will form part of the reporting mechanisms. Additional spot checks or surveys may be undertaken by technical support staff. Monitoring will include reviewing and responding to issues raised through the Community Feedback Mechanism, thus strengthening the project‟s accountability to its beneficiaries. Participatory monitoring will take place building the capacity of the community to hold actors to account for project plans.

Reporting– Overall programme progress will be monitored through quarterly reports submitted to the NIE by the EE with contributions collated from all partners. A template for routine reporting will be developed by the PM in close consultation with the NIE and with due consideration given to the requirements of the AF. The EE, supported by NIE, will monitor that the required competencies are available in the EE and additional skills developed or sourced, if required, and within budgetary frameworks.

Quarterly reporting will include a component on forecasting for the next quarter. These forecasts will underpin the disbursement of funds for projected activities, and should also include due consideration to risks. Once scrutinised by the EE, these requests will be submitted to the NIE for approval. The EE and NIE will meet to discuss these reports within one week after the reporting period.

Reports will align with the agreed annual workplan and will include qualitative, quantitative and financial information, as well as projections for the next quarter. The EE will develop a quarterly reporting template that will be used internally and also by programme partners.

Annual reporting templates will be developed by the NIE and disseminated by the EE. The Project manager will be responsible to collate and submit annual programme implementation/progress reports to the NIE, in order to track progress according to programme objectives and outcomes. This annual report will also include: i) lessons learnt; ii) a breakdown of direct beneficiaries in terms of gender and minority group membership; iii) knowledge management; iv) skills transfer accounting; and v) a financial/expenditure report.

M&E measures and trends will form part of the reporting framework to the NIE as per the agreed periods. In particular, the reports will involve getting feedbacks from communities, stakeholders, observations and secondary data reviews in relation to baseline data. The information will be consolidated on a quarterly and annual basis and presented to the project Executive Committee and Steering Committee for consideration

and review. Lessons learnt, recommendations and good practices will be used to review and recast progress against set goals, objectives and targets, and to institute adaptive management measures as may be required.

Mid-term project Evaluation - The project will undergo an independent Mid-Term Evaluation (MTE) at the mid-point of project implementation. The MTE will determine progress made toward the achievement of outcomes and will identify corrective actions if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; and will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. The scheduling of this process will be agreed by all programme partners and endorsed by the Executive Committee. The ToR for this review will be developed by the NIE, who will also provide the funding for the review.

Terminal evaluation - An independent terminal evaluation end of project evaluation will be undertaken to measure the overall achievements against the baseline survey and a report compiled for presentation as close of project report.

The costs of the Monitoring and Evaluation plan coordination form part of the Executing Entity budget. External independent evaluations are budgeted for by the NIE.

Section II.B elaborates how the programme will provide environmental and social benefits and how it will avoid or mitigate negative impacts in accordance with the AF ESP. It is clearly understood from these guidelines that the onus for mitigating or managing impacts and risks lies with the NIE. Even though no environmental or social risks have been identified, management or mitigation of such risks, should they arise, will be dealt with promptly in consultation with the NIE.

Table 19 Monitoring and Evaluation time plan

Task	Responsible parties	Time frame
Field data collection (quantitative and qualitative)	Component and spatial leads	Monthly over project period
Quarterly reports	Agra ProVision and executing partners	At end of each quarter
Annual progress reports	Agra ProVision and executing partners	At end of each year
Meetings of the Executive Committee	Agra ProVision and executing partners	Every 2 months
Meetings of the Steering Committee	Agra ProVision; executing partners and other members	Every 6 months
Mid-term Evaluation MTE	Recruited external evaluation team	Month 30 of the project
Final Report	Agra ProVision and executing partners	End of project
Financial Audit	Agra ProVision and executing partners	End of project
Final Evaluation (FE)	Agra ProVision and executing partners	After project conclusion

The NIE will provide periodic monitoring services through site visits according to a predetermined schedule. Account audits will be undertaken annually as part of the financial management procedures of both the EE and the NIE. The Financial Year of the

EE extends from August to July, whilst that of the NIE extends from January to December. Final audits will be undertaken at programme completion.

A terminal report will be prepared by the EE according to a template provided by the NIE. This will be: i) a comprehensive stock-taking of achievements; ii) analysis of shortcomings, if relevant; iii) lessons learnt; iv) best practice guidelines; v) suggested future actions; and vi) sustainability recommendations.

Table 20 Break-down of NIE fee utilisation in the supervision of the M&E function*

M&E activity by NIE	NIE budget (USD)	Timeframe
Inception Workshop and report (Start of project implementation)	10 835	Workshop: Jan 2016. Report: Feb 2016
Community inception meetings	18 501	First project semester
Verification of baselines	6 020	As required
Community meetings	25 263	Quarterly
Progress reports & meetings	24 079	Quarterly
Project meetings	12 039	Quarterly
Annual performance reports	15 049	Feb annually
Annual financial audit of EE	0	Annually
Annual financial audit of NIE	14 313	Annually
Mid-term review	14 767	Apr 2019
Terminal review	14 767	Apr 2021
Project completion report	7 224	Jun 2021
Terminal financial audit	7 156	Jun 2012
Site visits	201 132	Three times per annum
Continuous routine monitoring	18 059	Ongoing
Documentation and archiving	3 010	Ongoing
Public information	28 250	Ongoing
Checking of tendering process	6 020	Ongoing
All	**426 484**	

- Excludes staff costs for invoice verification and disbursements; project closure; feedback to DRFN management and Board, as well as office services and supplies.

E. Results framework

Overall Goal Livelihoods of people directly or indirectly dependent on land are improved and their vulnerability to the impact of seasonal variation and climate change is reduced				
Objectively verifiable indicators of achievement	**Sources and means of verification**	**Frequency**	**Baseline**	**Important Assumptions**
Income of more than 50% of participating households from implementation of integrated climate smart management has increased with 30% over baseline	• Site monitoring modalities • Survey reports	• Continued monitoring; verification at the mid-term review and project closure	• The baseline for each site will be determined during year 1	

Project Purpose Namibia"s land is better utilised through integrated planning and management, for enhanced sustainability, resilience, and productivity				
Objectively verifiable indicators of achievement	**Sources and means of verification**	**Frequency**	**Baseline**	**Important Assumptions**
Condition and resilience of rangeland, forests and woodlands in 80% of the participating pilot sites is improved by end of project	• Local level monitoring methodology	• Continued monitoring; verification at the mid-term review and project closure	• The baseline for each site will be determined during year 1	

Project Purpose Namibia's land is better utilised through integrated planning and management, for enhanced sustainability, resilience, and productivity				
Objectively verifiable indicators of achievement	**Sources and means of verification**	**Frequency**	**Baseline**	**Important Assumptions**
Income and income from land-based economic activities in 80% of participating pilot sites is increased by 30% by end of project	• Site monitoring modalities • Survey reports	• Annual data collection at beneficiary household level	• The baseline for each site will be determined during year 1	

Outcome 1 Communities and stakeholders are empowered to, and have changed their land management approach, adopting their own integrated climate smart land use management plans which optimize productivity and income.				
Objectively verifiable indicators of achievement	**Sources and means of verification**	**Frequency**	**Baseline**	**Important Assumptions**
All 12 participating communities have locally developed and approved land management plans in place	• Diagnostic tool has been used • Land use plan in place	• Monthly monitoring of interventions	*0/12*	*Uncontrolled disease outbreaks such as foot and mouth disease do not occur in the project sites during the project period*
Integrated management plans are implemented and assessed and revisited on an annual basis, using an adaptive management approach.	• Records of meetings • Annually revised management plans	• Annually	*0/12*	

Outcome 2 Capacitated community structures at local level are operational and able to independently implement their land use plans, now and beyond the project period				
Objectively verifiable indicators of achievement	**Sources and means of verification**	**Frequency**	**Baseline**	**Important Assumptions**
Appropriate local level CBOs have formed themselves to deliver on the management plan agreed to in outcome 1	• Meeting records • Action plans	• Annually	*0/12*	
Committee structures are inclusive of women and youth (beyond the baseline)	• Committee structures	• Annually	*National average in CBNRM:* *30% women in conservancy committees* *15% women chairpersons of conservancy committees* *Baseline for youth will be determined in year 1.*	

Outcome 3 Beneficiary communities have improved the productivity of the land and diversity of income streams to create a more climate resilient local economy				
Objectively verifiable indicators of achievement	**Sources and means of verification**	**Frequency**	**Baseline**	**Important Assumptions**
Income levels to beneficiary households has increased by 30% over the baseline	• Site level monitoring	• Annually	*Baseline to be determined in year 1, and recorded according to:* • N$/female-headed household • N$/child-headed household • N$/male-headed household	
Productivity of arable and rangeland areas has increased by 30% over the baseline	• Site level monitoring • Reports	• Annually	*Baseline to be determined in year 1, and recorded in terms of N$ / ha.*	
Food security of beneficiary households has improved by 30% over the baseline	• Site level monitoring • Reports • Surveys	• Annually	*Baseline to be determined in year 1, using **household hunger scale** methodology, and recorded according to:* • Female-headed household • Child-headed household • Male-headed household	

Outcome 3 Beneficiary communities have improved the productivity of the land and diversity of income streams to create a more climate resilient local economy				
Objectively verifiable indicators of achievement	**Sources and means of verification**	**Frequency**	**Baseline**	**Important Assumptions**
Soil and rangeland quality have improved by 30% over the baseline	• Local level monitoring methodology	• Bi-annual LLM assessments	Baseline for each site to be determined in year 1	
The recorded incidence of illegal use of natural resources has declined by 30% over the baseline	• Records from regulatory authorities • Reports	• Continuous monitoring with annual compilation	Baseline for each site to be determined in year 1	

Outcome 4 Beneficiaries have ready access to information on best practices, and have applied those relevant to their situation				
Objectively verifiable indicators of achievement	**Sources and means of verification**	**Frequency**	**Baseline**	**Important Assumptions**
Best practices and lessons learnt are documented by end of project period (year 5)	• Register of materials • Information materials • Reports	Progress monitored continuously	*0* *To be recorded in a gender disaggregated manner*	

Outcome 4 Beneficiaries have ready access to information on best practices, and have applied those relevant to their situation				
Objectively verifiable indicators of achievement	**Sources and means of verification**	**Frequency**	**Baseline**	**Important Assumptions**
Best practices and lessons learnt are widely shared by end of project period (year 5)	• Meeting and training records of attendance		*0* *To be recorded in a gender disaggregated manner*	
Strategy for out- and up-scaling is in place by end of project period (year 5)	• Strategy available	End of project	*Not available*	

Outcome 5 Research and development has identified techniques and technologies to overcome challenges to productivity and climate resilience. Land productivity per ha has increased through the application of appropriate technologies and habitat is rehabilitated for improved climate resilience.				
Objectively verifiable indicators of achievement	**Sources and means of verification**	**Frequency**	**Baseline**	**Important Assumptions**
• Smart technologies are developed and implemented above the baseline in at least 75% of sites by the end of project period (year 5)	*Project documents*	• Annual	*0*	

F. Alignment with AF results framework

Project Objective(s)	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
Livelihoods of people directly or indirectly dependent on land are improved and their vulnerability to the impact of seasonal variation and climate change is reduced	• Income of more than 50% of participating households from implementation of climate smart agriculture technologies has increased with 20% over baseline	Outcome 1: Reduced exposure at national level to climate-related hazards and threats Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level	1.1. No. and type of projects that conduct and update risk and vulnerability assessments 2.1. No. and type of targeted institutions with increased capacity to minimize exposure to climate variability risks 2.2. Number of people with reduced risk to extreme weather events 3.1. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses 3.2. Modification in behaviour	6 000 000

Project Objective(s)	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
			of targeted population	
Namibia"s land is better utilised through integrated planning and management, for enhanced sustainability, resilience, and productivity	• Condition and resilience of rangeland, forests and woodlands in 80% of the participating pilot sites is improved with 50% by end of project • Income and profit from land-based economic activities in 80% of participating pilot sites is increased by 20% by end of project	Outcome 4: Increased adaptive capacity within relevant development and natural resource sectors Outcome 5: Increased ecosystem resilience in response to climate change and variability-induced stress Outcome 6: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	4.1. Development sectors' services responsive to evolving needs from changing and variable climate 4.2. Physical infrastructure improved to withstand climate change and variability-induced stress 5. Ecosystem services and natural assets maintained or improved under climate change and variability-induced stress 6.1 Percentage of households and communities having more secure (increased) access to livelihood assets 6.2. Percentage of targeted	

Project Objective(s)	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
			population with sustained climate-resilient livelihoods	

Project Outcome(s)	Project Outcome Indicator(s)	Fund Output	Fund Output Indicator	Grant Amount (USD)
Component 1 Communities and stakeholders have taken ownership for the implementation of their integrated land management plans. *Result 1: Participatory Local level integrated land-use plans are developed in each of the project areas involving key stakeholders*	All 12 participating communities are informed about causes and effects of climate changes on the land use and have an understanding of the impact on their livelihood by year 1. Current land use in all 12 participating communities is assessed and verified using participatory methods by end of year 1 Important stakeholders and especially vulnerable and marginalised groups are involved in the process in all 12 participating communities by end of year 1 A common vision for the 12 areas at local level whilst maintaining relevance at a regional and national level is developed, redefined or reaffirmed; alternative land management options are proposed for each site by end of year 1 Digital spatial data to support the participatory process are available as far as needed for each of the 12	Output 1: Risk and vulnerability assessments conducted and updated at a national level Output 2.2: Targeted population groups covered by adequate risk reduction systems Output 3: Targeted population groups participating in adaptation and risk reduction awareness activities	1.1 No. and type of projects that conduct and update risk and vulnerability assessments 2.2.1. Percentage of population covered by adequate risk-reduction systems 2.2.2. No. of people affected by climate variability 3.1. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses 3.2. Modification in behaviour of targeted population 3.1.1 No. and type of risk reduction actions or strategies introduced at local level	736 680

Project Outcome(s)	Project Outcome Indicator(s)	Fund Output	Fund Output Indicator	Grant Amount (USD)
	participating sites by end of year 1 A diagnostic tool is available to assess the potential of proposed land; experts were considering their potential towards climate change adaptation; expert input was requested on a needs consulted on additional land use options; Land use options are evaluated against criteria basis in each of the 12 participating communities by end of year 1 Land use plans (maps outlining zones and descriptions including use regulations) are established together with the 12 participating communities and stakeholders; action plans for implementation are developed; responsibilities for implementation are allocated to consortium partners under EC guidance, etc. by the end of year 1			
Component 2 Capacitated community structures at local level are able to independently implement their land use plans, now and beyond the project period *Result 2: Local level institutions dealing directly with CSLL plans in each of*	Appropriate local level CBOs are identified with proper representation in the in each of the 12 participating communities by end of year 1. Suitable platforms where the local level CBO is "in the drivers" seat" with relevant service providers willing and supportive in implementing climate smart local level plans, is created and operational in each of the 12 participating communities by end of year 1.	Output 3**:** Targeted population groups participating in adaptation and risk reduction awareness activities Output 4**:** Vulnerable physical, natural, and social assets strengthened in response to climate change impacts, including variability	3.1.1 No. and type of risk reduction actions or strategies introduced at local level 4.1. Development sectors' services responsive to evolving needs from changing and variable climate	250 230

Project Outcome(s)	Project Outcome Indicator(s)	Fund Output	Fund Output Indicator	Grant Amount (USD)
the project areas are strengthened and their competence to implement CSLL strategies is improved				
Component 3 Priority aspects of 12 climate smart local level plans from target areas are implemented. *Result 3: Climate smart local level plans are implemented in each of the project areas*	Locally developed and implemented rangeland management plans that are constantly monitored and adjusted to suit changing environmental circumstances are implemented in 80% of relevant participating communities by end of project (year 5). Area under cultivated pastures that are sustainably used to augment fodder flow, build a fodder bank for emergencies, increase livestock productivity vertically and provide opportunities to restore rangeland condition by shifting utilisation pressure horizontally has doubled in all relevant participatory communities by end of project (year 5).. Number of ha supported with CA has doubled in all relevant participating communities by end of project (year 5) Increased number of farmers applying CA in relevant participating communities has increased by end of project (year 5) and increased area under CA techniques resulting in increased production per ha of staple crops – e.g. maize and mahangu. Reproduction rates of livestock in 80%	Output 2.1: Strengthened capacity of national and regional centres and networks to respond rapidly to extreme weather events Output 2.2: Targeted population groups covered by adequate risk reduction systems Output 3: Targeted population groups participating in adaptation and risk reduction awareness activities Output 4: Vulnerable physical, natural, and social assets strengthened in response to climate change impacts, including variability Output 5: Vulnerable physical, natural, and social assets strengthened in response to climate change impacts, including variability Output 6: Targeted individual and community livelihood strategies	2.2. Number of people with reduced risk to extreme weather events 2.2.1. Percentage of population covered by adequate risk-reduction systems 2.2.2. No. of people affected by climate variability 3.1.1 No. and type of risk reduction actions or strategies introduced at local level 4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by asset types) 5.1. No. and type of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type of assets) 6.1.1.No. and type of adaptation assets (physical as well as knowledge) created in	3 016 776

Project Outcome(s)	Project Outcome Indicator(s)	Fund Output	Fund Output Indicator	Grant Amount (USD)
	of relevant participating communities have increase from below 50% to 60-70% by end of project period (year 5) Herd off-take increases from below 10% to 20-25 in 80% of all relevant participating communities by end of project period (year 5). Directed breeding enhances intrinsic climate-smart characteristics in 80% of participating livestock herds spread across eight regions by end of project period (year 5). Small butcheries add value to meat and service existing demand for such produce by supplying local school feeding schemes, hospitals, army and police bases, etc. by end of project period (year 5) Income and revenue from improved management of forests and woodlands increased with 50% in all relevant participating communities by end of project period (year 5).-Income and revenue from indigenous natural products increased with 50% in all relevant participatory communities by end of project period (year 5) Climate-smart wildlife production facilities and operations are developed that minimise environmental inputs while maximising production and exploiting tourism opportunities in each	strengthened in relation to climate change impacts, including variability Output 7: Improved integration of climate-resilience strategies into country development plans	support of individual- or community-livelihood strategies 6.1.2. Type of income sources for households generated under climate change scenario	

Project Outcome(s)	Project Outcome Indicator(s)	Fund Output	Fund Output Indicator	Grant Amount (USD)
	of the relevant participating communities by end of project period (year 5) Communities are able to conduct appropriate fire management. Income and revenue from tourism is enhanced. Income and revenue from commercial fish ranching is increased. Income and revenue from small-scale horticulture and small animal production is enhanced. Marketing of produce produced from small-scale entrepreneurs is enhanced.			
Component 4 Land-users have concrete understanding of best practice on farming and land use techniques *Result 4: New knowledge and best practices are documented and widely shared with land users, farmers, decision-makers and other stakeholders*	Best practices and lessons learnt are documented by end of project period (year 5) Best practices and lessons learnt are widely shared by end of project period (year 5) Strategy for out- and up-scaling is in place by end of project period (year 5)	Output 2.1: Strengthened capacity of national and regional centres and networks to respond rapidly to extreme weather events Output 2.2: Targeted population groups covered by adequate risk reduction systems Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level Output 3: Targeted	2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events 2.1.2. Capacity of staff to respond to, and mitigate impacts of, climate-related events from targeted institutions increased 3.1. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses 3.2. Modification in behaviour	500 461

Project Outcome(s)	Project Outcome Indicator(s)	Fund Output	Fund Output Indicator	Grant Amount (USD)
		population groups participating in adaptation and risk reduction awareness activities	of targeted population 3.1.2 No. of news outlets in the local press and media that have covered the topic	
Component 5 Relevant research questions regarding climate smart natural resource use answered and incorporated into land use management plans Result 5: *New technologies are developed, adapted and tested for wider use by natural resource managers and users*	Smart technologies are developed and in the process of implementation by the end of project period (year 5)	Outcome 4: Increased adaptive capacity within relevant development and natural resource sectors Output 4: Vulnerable physical, natural, and social assets strengthened in response to climate change impacts, including variability Output 5: Vulnerable physical, natural, and social assets strengthened in response to climate change impacts, including variability Output 6: Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	4.1. Development sectors' services responsive to evolving needs from changing and variable climate 4.2. Physical infrastructure improved to withstand climate change and variability-induced stress 4.1.1. No. and type of health or social infrastructure developed or modified to respond to new conditions resulting from climate variability and change (by type) 4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by asset types) 5.1. No. and type of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type of assets)	500 461

G. Budget

Table 20: Overall budget breakdown according to components and across implementation years

	Total Amount (USD)	Year 1	Year 2	Year 3	Year 4	Year 5
Components						
1. Integrated land management planning at local level	**736 680**	368 340	368 340	-	-	-
2. Governance and Institutional structure	**250 230**	200 184	50 046	-	-	-
3. Implementation of climate smart local level plans	**3 016 776**	150 839	754 194	754 194	754 194	603 355
4. Learning and knowledge management	**500 461**	50 046	100 092	100 092	150 138	100 092
5. Research and development	**500 461**	100 092	100 092	100 092	100 092	100 092
6. Project Activities Cost (A)	**5 004 608**	869 501	1 372 764	954 378	1 004 424	803 539
7. Project Execution Cost (B)	**525 346**	89 540	94 162	106 413	105 497	129 734
8. Total Project Cost (A+B)	**5 529 954**	959 041	1 466 926	1 060 791	1 109 921	933 273
9. Project Management Fee (C)	**470 046**					
10. Total Financing requested (A+B+C)	**6 000 000**					

Table 21 Detailed project budget

		Cost (US$)	Adaptation Fund outcome /output reference
Component 1	**Integrated land-use planning at local level** *Component 1 assumes a guided and participatory approach to build the capacity of beneficiaries for climate smart thinking and decision making related to land use practices*	**736 680**	
Phase 1	**Preparation phase** *This phase includes the inception project planning, including planning amongst the core project tea; preparation for and implementation of the facilitators workshop; and preparations for the local level interventions*	130 766	Outcome 1 Output 1
Phase 2	**Current land use is assessed and verified using participatory approach** *In a participatory manner, current land use practices will be collated and verified.*	217 944	Outcome 1 Output 1
Phase 3	**Analysis and interpretation of data** *Information on current land uses is compiled and available on a GIS platform as a planning tool*	72 648	Outcome 1 Output 1
Phase 4	**Participatory planning at community level** *Adaptation and land-use planning workshops* *Land use plans established and work plans for implementation developed*	305 122	Outcome 3 Output 3
	Acquisition of facilitation Materials & Camping Equipment *Materials required in order to be able to provide training and operate in the regions*	10 200	Outcome 3 Output 3
Component 2	**Governance and Institutional structure** *Supporting beneficiaries to develop appropriate structures at local level for inclusive and coordinated management and decision making, working within the existing governance and institutional environment*	**250 230**	

		Cost (US$)	Adaptation Fund outcome /output reference
	CBO screening and institutional gap analysis *In parallel with activities in Component 1, a screening and institutional gap analysis will be undertaken to identify the strengths and weaknesses of current structures to coordinate an integrated land management plan. Recommendations will be made for further action.*	25 023	Outcome 2 Output 2.1
	Gender and youth inclusion *An assessment of community structures will be undertaken to determine the baseline for inclusiveness (including women, youth and any other disadvantaged group), and*	30 028	Outcome 3 Output 3
	Consultants for specific policy and legal studies *Provides for in depth studies and interventions on specific governance and institutional barriers identified in the course of developing the Integrated land management plans and their implementation*	87 581	Outcome 2 Output 2.1
	Institutional capacity building *Providing capacity building support to local level CBOs identified to develop, manage and coordinate the implementation of integrated plans and action plans. These structures will be determined in an inclusive manner, and individuals may require specific support*	37 535	Outcome 2 Output 2.1
	Training *Provides for specific training, for example in financial management, planning, business development, to CBOs*	50 046	Outcome 3 Output 3
	Legal advisory services *Consultations with legal experts on specific matters, such as establishing resource rights at specific localities, assist with dispute resolutions, etc.*	20 018	Outcome 7 Output 7
Component 3	**Implementation of climate smart local level plans** *Supporting beneficiaries to implement their own plans, with a view to improved productivity and income, within the constraints of the environment and climate variability and change.*	**3 016 776**	

	Cost (US$)	Adaptation Fund outcome /output reference
Targeted training *Training needs will have been identified in the process of developing the integrated land management plans. Targeted training will be provided to beneficiaries accordingly, focussed on providing the knowledge and expertise required to implement the action plan*	430 436	Outcome 3 Output 3
Mentoring of beneficiaries to achieve increased productivity *On-going mentoring support will be provided to beneficiaries at ground level, to ensure maximum productivity. This includes for example in the fields conservation agriculture for Dryland cropping; livestock production; rangeland management; other agriculture production; sustainable utilization of natural resources; value addition activities.*	626 088	Outcome 3 Output 3
Local level peer-to-peer support *Promoting and supporting peer-to-peer support at local level ensures that the transfer of skills and technologies are promoted and grass-root level, ensuring long term sustainability and up-take.*	234 783	Outcome 3 Output 3
Market engagement and value chain development *Focus on identifying potential markets and opportunities for value addition, enhancing livelihood resilience to climate change*	352 175	Outcome 6 Output 6
Monitoring and data collection to inform adaptive management *Developing and institutionalizing the capture of key data to enable beneficiaries to monitor change and progress towards achievement of goals, and to undertake adaptive management as a means of supporting a more resilient land management model.*	136 957	Outcome 3 Output 3

		Cost (US$)	Adaptation Fund outcome /output reference
	Acquisition of equipment needed to support implementation of land management plans *Certain technologies and climate smart techniques will require investment to implement effectively. Under this component equipment such as tractors and rip-furrowers for Conservation Agriculture; infrastructure for improved livestock production such as mangas, fencing, water infrastructure, solar pumps will be procured. Equipment to deal will challenges such as bush-encroachment*	878 894	Outcome 5 Output 5
	Acquisition of inputs needed to support implementation of land management plans *Inputs to support improved technologies and to deal with challenges will be provided – such as materials and labour for erosion control; inputs for conservation agriculture and over-seeding activities; improved animal husbandry inputs.*	181 356	Outcome 2 Output 2.1
	Quarterly CBO meetings *Support and attendance at regular CBO meetings, to build capacity and institutionalize the process of implementation and adaptive management of integrated land management plans*	78 261	Outcome 2 Output 2.1
	Annual review of integrated land management plan and action plan, using adaptive management approach *An annual review of plans, action plans will be supported in each of the sites in years 2-5, in order to support and embed/institutionalize the process.*	97 826	Outcome 3 Output 3
Component 4	**Learning and knowledge management**	**500 461**	
	Compiling of materials and communication (consultant) *Collecting relevant information, writing content, developing design of content appropriate to audience*	88 718	Outcome 3 Output 3
	Printing and distributing of information materials *Printing and distribution costs of information materials*	64 896	Outcome 3 Output 3

		Cost (US$)	Adaptation Fund outcome /output reference
	Media and publicity *Includes costs of publicity and media for awareness creation*	25 000	Outcome 3 Output 3
	Equipment, supplies and technical support for training activities *Acquisition of equipment, supplies and technical support such as training aids for training activities at each of the 12 sites.*	32 550	Outcome 3 Output 3
	Facilitation of continuous improvement process *This is a continuous process to ensure that new climate smart approaches are adopted. It includes primarily practical exposure, the development of best practice demonstration and use of such sites for exposure and learning experiences to beneficiaries. Involving beneficiaries in market research and identification of value chain and value addition opportunities; business planning etc.*	289 297	Outcome 2 Output 2.1 Output 2.2
Component 5	**Research and development**	**500 461**	
	Research projects identified during Components 1-3 developed and costed *Once research needs have been identified, defined research projects and protocols will be developed and costed.*	26 788	Outcome 4 Output 4
	Co-financing secured as necessary for research projects *The financing under this project for research and development is limited, so resources will be used to help secure co-financing for research and technology development*	17 858	Outcome 4 Output 4
	Acquisition of equipment and inputs needed to support research activities *Equipment and inputs as may be required to undertake specific research projects*	54 000	Outcome 4 Output 4
	Research commissioned and executed *Professional and technician fees for undertaking research activities*	312 523	Outcome 4 Output 4
	Research findings shared with beneficiaries *Compilation of research outcomes written up and shared with beneficiaries as appropriate, and incorporated into land management plans and activities*	22 323	Outcome 5 Output 5

	Cost (US$)	Adaptation Fund outcome /output reference
Support to implement new technologies *Capacity building and mentoring at site level to adopt recommendations from research and development activities*	66 969	

Table 22: Budget breakdown for the Execution Costs

	Unit measure	Units	TOTAL Amount (USD)	Units	YEAR 1 Amount (USD)	Units	YEAR 2 Amount (USD)	Units	YEAR 3 Amount (USD)	Units	YEAR 4 Amount (USD)	Units	YEAR 5 Amount (USD)
Total			**525346**		**89540**		**94162**		**106413**		**105497**		**129734**
Personnel costs			**415437**		**69600**		**73776**		**84944**		**82895**		**104222**
Project management	Per day	360	202877	72	36000	72	38160	72	40450	72	42877	72	45391
Accountant	Per day	180	71027	36	12600	36	13356	36	14157	36	15007	36	15907
Secretarial support	Per day	60	16911	12	3000	12	3180	12	3371	12	3573	12	3787
Monitoring and Evaluation	Per day	218	124621	36	18000	36	19080	48	26966	36	21438	62	39137
Administration			**12083**		**2200**		**2302**		**2410**		**2525**		**2646**
Reproduction of reports and documents		50	6765	10	1200	10	1272	10	1348	10	1429	10	1515
Communication		50	2819	10	500	10	530	10	562	10	596	10	631
Contingency			2500		500		500		500		500		500
Travel and accommodation			**54491**		**10500**		**9710**		**10292**		**10910**		**13079**
Per diems (camping)	Per night	134	5270	30	1050	26	965	26	1022	26	1084	26	1149
Per diems (accommodated)	Per night	150	2537	30	450	30	477	30	506	30	536	30	568
Accommodation	Per night	150	10147	30	1800	30	1908	30	2022	30	2144	30	2272
Travel	Per km	54000	36538	12000	7200	10000	6360	10000	6742	10000	7146	12000	9090
Meetings and workshops			**8117**		**1440**		**1526**		**1618**		**1715**		**1818**
Refreshments	Per person	1200	4735	240	840	240	890	240	944	240	1000	240	1060
Venue	Per meeting	60	3382	12	600	12	636	12	674	12	715	12	757
Equipment and supplies			**4468**		**800**		**848**		**899**		**953**		**968**
Stationery and office supplies		5	4468	1	800	1	848	1	899	1	953	1	968
Other costs / services			**30750**		**5000**		**6000**		**6250**		**6500**		**7000**
Auditing services		5	30750	1	5000	1	6000	1	6250	1	6500	1	7000

Table 23: Budget breakdown for the Implementing Entity

Fee category	Cost categories	Total (USD)
Management fees	Project management, finance administration and office administration	258 243
Operating expenditure	Travel, daily subsistence allowances and workshops associated with project oversight and governance	99 847
Office services and supplies	Municipal, telecommunication & internet services and office supplies	44 782
Auditing and consulting	External auditing, project evaluation and technical support	49 758
Knowledge dissemination	Sharing of information on project scope, experience, outputs, outcomes and impacts	17 416
Total		**470 046**

Table 24: Budget breakdown for Component 1 (over years 1 and 2)

				TOTAL		YEAR 1		YEAR 2
		Unit measure	Units	Amount (USD)	Units	Amount (USD)	Units	Amount (USD)
				736 680		**368 340**		**368 340**
Personnel costs				**433200**		**216600**		**2166000**
NNF	Component Management	Per day	120	60000	60	30000	60	30000
NNF	Senior Technical advisor	Per day	216	108000	108	54000	108	54000
NNF	Technical assistance	Per day	336	84000	168	42000	168	42000
NNF	GIS and specialist input	Per day	48	31200	24	15600	24	15600
Spatial Lead	Head spatial lead	Per day	120	60000	60	30000	60	30000
Spatial Lead	Local facilitation	Per day	600	90000	300	45000	300	45000
Travel and accommodation				**115680**		**57840**		**578400**
	Per diems (camping) - NNF	Per night	480	9600	240	4800	240	4800
	Per diems (camping) - Spatial leads	Per night	216	4320	108	2160	108	2160
	Per diems (accommodated)	Per night	0	-	0	-	-	-
	Accommodation - NNF	Per night	480	16800	240	8400	240	8400
	Travel - NNF	Per km	98400	59040	49200	29520	49200	29520
	Travel - Spatial leads	Per km	43200	25920	21600	12960	21600	12960
Meetings and workshops				**177600**		**88800**		**88800**
	Facilitators training (25 pax)	Per person	1800	144000	900	72000	900	72000
	With 40 pax	Per meeting	48	33600	24	16800	24	16800
Equipment and supplies				**10200**		**5100**		**5100**
NNF	Facilitation Materials & Camping Equipment	Per site	12	10200	6	5100	6	5100

H. Disbursement schedule

	Upon signature of agreement	End Year 1	End Year 2	End Year 3	End Year 4	Total ()
Scheduled Date	**Nov-15**	**Jan-17**	**Jan-18**	**Jan-19**	**Jan-20**	
Project Funds	869 501	1 372 764	954 378	1 004 424	803 540	5 004 608
Executing Entity	89 540	94 162	106 413	105 497	129 734	525 346
Implementing Entity Fee	89 199	89 199	99 151	89 199	103 298	470 046

PART IV: ENDORSEMENT BY GOVERNMENT AND CERTIFICATION BY THE IMPLEMENTING ENTITY

A. Record of endorsement on behalf of the government[1]

Mr. Teofilus Nghitila, *Environmental Commissioner,* *Ministry of Environment and Tourism,* *Namibia*	**Date:** *21 July 2015* ***Signature:***

MINISTRY OF ENVIRONMENT AND TOURISM
Pr/Bag 13306
Windhoek, Namibia
2015 -07- 24
Office of the
Environmental Commissioner

B. Implementing Entity certification

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans namely National Development Plan 4, National Policy on Climate Change for Namibia 2011 and National Climate Change Strategy and Action Plan 2013-2014 and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.	
S Aldrich Implementing Entity Coordinator	
Date: 23 July 2015	Tel.: +264811220671 E-mail: schreuderaldrich@hotmail.com
Project Contact Person: Dr M Schneider	
Tel. :+264812460379, or +26461377500 E-mail: martin.schneider@drfn.org.na	

Project title: Integrating climate smart land management options in Namibia: to enhance long term productivity, profitability and resilience.

Executing entity: Agra LTD via its Agra ProVision

[6] Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entities.

ADAPTATION FUND

Letter of Endorsement by Government

Ministry of Environment and Tourism

21 July 2015

To: The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: 202 522 3240/5

Subject: Endorsement for the project "Integrating climate smart land management options in Namibia: to enhance long term productivity, profitability and resilience"

In my capacity as Designated Authority for the Adaptation Fund in Namibia, I confirm that the above national project proposal is in accordance with the government's national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the Namibia.

Accordingly, I am pleased to endorse the above project proposal with support from the Adaptation Fund. If approved, the project will be implemented by the Desert Research Foundation of Namibia (DRFN) and executed by Agra LTD via its Agra ProVision.

Sincerely,

MINISTRY OF ENVIRONMENT AND TOURISM
P/Bag 13306
Windhoek, Namibia
2015 -07- 24
Office of the Environmental Commissioner

Teofilus Nghitila
Environmental Commissioner

ANNEXES

Annex 1 Letters of Support

REPUBLIC OF NAMIBIA
MINISTRY OF LANDS AND RESETTLEMENT

Tel: (+264 61) 296 5000
Fax: (+264 61) 228 240
Enquiries: Esther Lusepani
Cell: 0811294577

Dr. Robert Mugabe Av. No 55
P/Bag 13343
Windhoek

21 July 2015

To whom it may concern

SUBJECT: SUPPORT FOR THE PROPOSAL TO THE ADAPTATION FUND NAMIBIA BY AGRA AND CAN CONSORTIUM

This letter serves to confirm in-principle support to the proposal submitted to the Adaptation Fund Namibia, entitled "*Integrating climate smart land management options in Namibia: to enhance long term productivity, profitability and resilience*". The proposal is submitted by a consortium consisting of AGRA (Provision); Agri-Ecological Services (AES; AgriConsult Namibia (ACN); Conservation Agriculture Namibia (CAN); Integrated Rural Development and Nature Conservation (IRDNC); Meatco Foundation (MF); Namibia Development Trust (NDT); Namibia Nature Foundation (NNF) and Nyae Nyae Development Foundation of Namibia (NNDFN).

Current land use practices in many parts of Namibia remain unsustainable, and the majority of Namibia's population are still reliant on subsistence cropping and livestock production, with a low uptake of improved technologies and practices; a poor diversity of income streams; and low levels of value addition taking place. This all means that people remain dependent on primary production and are thus highly susceptible to the impacts of climate variability and change. However, Namibia has a range of possible land-use and resource governance options at its disposal and diversification of land uses and income streams will undoubtedly be the enabler for a more climate resilient economy. Improving primary productivity opens the door for increased value addition, creating new jobs and income streams, thus reducing the vulnerability of people.

All official correspondence must be addressed to the Permanent Secretary

In recognition of the need for a more integrated, climate smart approach to land management a number of partners have recognized the advantages of joining forces and consolidating efforts under the framework of a broader programme that can act as the driver for improved coordination and synergy, complementing existing interventions through a sharing of knowledge and expertise. The project will work at local level and introduce best practices, techniques and technologies to achieve improved productivity with equal or even lesser inputs. Thus the project will act as a catalyst for change, embracing current programmes, projects and endeavours, to "*produce a combined effect greater than the sum of their separate effects*".

This project is well aligned to current initiatives and focus areas of the Ministry of Land Reform, and we believe will enhance existing National programmes, and contribute to National development objectives. The MLR already works closely with a number of the participating partners of the proposing consortium, and we believe that this project will help consolidate and strengthen these ties.

Yours Sincerely,

Ministry of Land Reform
Republic of Namibia
21 -07- 2015
Private Bag 13343
Windhoek
Office of the Permanent Secretary

Peter Amutenya
Permanent Secretary

Nico Natural Resource Management & Training
P.O. Box 105
Gibeon

Date: 15.06.2015

The General Manager
Agra ProVision
Windhoek
Namibia

Development of a Proposal to the Adaptation Fund Namibia: Integrating climate smart land management options in Namibia: to enhance long term productivity, profitability and resilience

Following examination of the concept document to the Adaption Fund Namibia regarding the development of a proposal for "integrating climate smart land management options in Namibia: to enhance long term productivity, profitability and resilience" we would like to confirm in principle our support for the initiative. Clearly our support is based on the information outlined in the concept document, and we are willing to participate in and provide support to the implementation of this programmed, should adequate funding be obtained.

Sincerely yours

S. Bock
.....
Sara Bock
COORDINATOR

N.F.L.S.
S Bock
Box 105 Gibeon
0814151092

Building of Ministry of Agriculture, Water & Forestry: Outapi

Po Box 1285, Outapi, Telephone 065-200001, Else Cell: 0812623341.

15 June 2015

The General Manager

Agra ProVision

Windhoek, Namibia

Development of a Proposal to the Adaptation Fund Namibia: Integrating climate smart land management options in Namibia: to enhance long term productivity, profitability and resilience

Following examination of the concept document to the Adaptation Fund Namibia regarding the development of a proposal for "Integrating climate smart land management options in Namibia: to enhance long term productivity, profitability and resilience" we would like to confirm in principle our support for the initiative. Clearly our support is based on the information outlined in the concept document, and we are willing to participate in and provide support to the implementation of this programme, should adequate funding be obtained.

Sincerely yours,

Mr. Opeipawa Shiyagaya

Omusati Regional Livestock Marketing Co-operative LTD, Chairperson

.....

Kavango Livestock Marketing Cooperative
Livestock Our livelihood
C.A.N

NDC building, Office no. 4Maria Mwengere Street P O Box 651, Rundu Tel: 066 267209 |Cell: 0812026552|0813869592|0813397592
Email: sirandaester@yahoo.com|karupu.paulus@gmail.com|nico.mushongo@gmail.com

15 June 2015

The General Manager
Agra ProVision
Windhoek, Namibia

Development of a Proposal to the Adaptation Fund Namibia: Integrating climate smart land management options in Namibia: to enhance long term productivity, profitability and resilience

Following examination of the concept document to the Adaptation Fund Namibia regarding the development of a proposal for "Integrating climate smart land management options in Namibia: to enhance long term productivity, profitability and resilience" we would like to confirm in principle our support for the initiative. Clearly our support is based on the information outlined in the concept document, and we are willing to participate in and provide support to the implementation of this programme, should adequate funding be obtained.

Sincerely yours

Mr. Robert Mupiri
Kavango Livestock Marketing Co-operative LTD, Chairperson

.....

Kavango Livestock Marketing Cooperative
KLMC / Kavango Region
2015 -06- 15
PO Box 651, Rundu
Tel / Fax: 066 - 267 209

ZAKUMUKA PRODUCERS
COOPERATIVE LTD

P O Box 100 Opuwo, Namibia • Telefax: +264 - 65 - 273607 • E-mail: kavekomike@iway.na / kavekomike@gmail.com

15 June 2015

The General Manager

Agra ProVision

Windhoek, Namibia

Development of a Proposal to the Adaptation Fund Namibia: Integrating climate smart land management options in Namibia: to enhance long term productivity, profitability and resilience

Following examination of the concept document to the Adaptation Fund Namibia regarding the development of a proposal for "Integrating climate smart land management options in Namibia: to enhance long term productivity, profitability and resilience" we would like to confirm in principle our support for the initiative. Clearly our support is based on the information outlined in the concept document, and we are willing to participate in and provide support to the implementation of this programme, should adequate funding be obtained.

Sincerely yours

Mr. Weich Mupya

Zakumuka Producers Co-operative LTD, Chairperson

pp.....

ZAKUMUKA PRODUCER
COOPERATIVE L.T.D.
15 JUN 2015
PO Box 100, Opuwo
Tel: +264-65-273607
Fax: +264-65-273607

Oshikoto Livestock Marketing Co-operative Ltd

We Value & Respect Our Farmers

C.A.N.

Ministry of Agriculture, Onayena ADC, Office no. 5, P O Box 3388, Ondangwa Tel: 0601102422 | Cell: 0812894806 | 0812039909 | 0814511350
Email: shekupe@hotmail.com | jonaskapanga@yahoo.com |

15 June 2015

The General Manager

Agra ProVision

Windhoek, Namibia

Development of a Proposal to the Adaptation Fund Namibia: Integrating climate smart land management options in Namibia: to enhance long term productivity, profitability and resilience

Following examination of the concept document to the Adaptation Fund Namibia regarding the development of a proposal for "Integrating climate smart land management options in Namibia: to enhance long term productivity, profitability and resilience" we would like to confirm in principle our support for the initiative. Clearly our support is based on the information outlined in the concept document, and we are willing to participate in and provide support to the implementation of this programme, should adequate funding be obtained.

Sincerely yours

Mr. Sakeus Inyemba

Oshikoto Livestock Marketing Co-operative LTD, Chairperson

.....

OSHIKOTO LIVESTOCK MARKETING COOPERATIVE LTD
2015 -- 15
P.O Box 3388
ONDANGWA

KAVANGO REGIONAL COUNCIL

Tel : 066-266000/266003
Fax : 066- 256208
E-mail : *shkantema@kavangorc.gov.na*
Anita-hausiku@kavangorc.gov.na

Private Bag 2124
RUNDU

Namibia

Ref. No.:
Enquiries: ***Mr. S.H. Kantema***

03 June 2015

The General Manager
Agra Provision
Windhoek
Namibia

DEVELOPMENT OF A PROPOSAL TO THE ADAPTATION FUND NAMIBIA: INTEGRATING CLIMATE SMART LAND MANAGEMENT OPTIONS IN NAMIBIA: TO ENHANCE LONG TERM PRODUCTIVITY, PROFITABILITY AND RESILIENCE

Following examination of the concept document to the adaptation fund Namibia regarding the development of a proposal for "Integrating climate smart land management options in Namibia: to enhance long term productivity and resilience," we would like to confirm in principle our support for the initiative, clearly our support is based on the information outlined in the concept document, and we are willing to participate in and provide moral support to the implementation of this programme, should adequate funding is obtained.

Your sincerely

.....
Sebastian. H. Kantema
Chief Regional Officer

KAVANGO REGIONAL COUNCIL
CHIEF REGIONAL OFFICER
2015 -06- 03
P/BAG 2124, RUNDU

Nkurenkuru Town Council
Tel: +264 66 258089 Fax +264 (0)66 258000/+264 66 258091
E-mail: nkutown@iway.na, P. O. Box 6004 Nkurenkuru Namibia

Enquiries: C. Kakuru

11 June 2015

To: The General Manager
Agra ProVision
Windhoek, Namibia

Dear Sir/Madam

Re: Development of a Proposal to the Adaptation Fund Namibia: Integrating climate smart land management options in Namibia: to enhance long term productivity, profitability and resilience

Following examination of the concept document to the Adaptation Fund Namibia regarding the development of a proposal for "Integrating climate smart land management options in Namibia: to enhance long term productivity, profitability and resilience" we would like to confirm in principle our support for the initiative.

Clearly our support is based on the information outlined in the concept document, and we are willing to participate if support is provided for the implementation of this programme.

Should you have any query, please do not hesitate to contact the Local Economic Development Officer.

Sincerely Yours,

11/06/2015

Sindimba P.S
Chief Executive Officer
Nkurenkuru Town Council

NKURENKURU TOWN COUNCIL
Office of the Chief Executive Officer
11 JUN 2015
Tel: 066-258089 Fax: 066-258091
P.O. Box 6004
NKURENKURU, NAMIBIA

KLEIN KARAS COOPERATIVE

P.O. BOX 32 TELNO: 0816097973 12 JUNE 2015

GRUNAU

The General Manager
Agra Provision
Windhoek, Namibia

Development of a Proposal to the Adaption Fund Namibia: Integrating climate smart land management options in Namibia: to enhance long term productivity, profitability and resilience

Following examination of the concept document to the Adaptation Fund Namibia regarding the development of a proposal for "integrating climate smart land management options in Namibia: to enhance long term productivity, profitability and resilience" we would like to confirm in principle our support for the initiative. Clearly our support is based on the information outline I the concept document, and we are willing to participate in and provide support to the implementation of this programme, should adequate funding be obtained.

Sincerely yours

.....

Mr.J.P. Markus

Chairman

Klein-Karas Co-Operative Ltd
P.O. Box 48
Tel: 063-172102
Grünau
Republic of Namibia

Klein-Karas Co-Operative Ltd
P.O. Box 48
Tel: 063-172102
Grünau
Republic of Namibia

KUNENE REGIONAL COUNCIL

Tel: +264-65-273953
P/Bag 502
Fax: +264-65-273077/234
Opuwo

Enquiries: *Ms.R.R.Brandt* 13 August 2015

To: The General Manager
Agra Provision
Windhoek

Dear Sir

SUBJECT: DEVELOPMENT OF A PROPOSAL TO THE ADAPTATION FUND NAMIBIA: INTERGRATING CLIMATE SMART LAND MANAGEMENT OPTIONS IN NAMIBIA: TO ENHANCE LONG TERM PRODUCTIVITY, PROFITABILITY AND RESILIENCE

1. Kunene Regional Council; following examination of the concept document to the Adaptation Fund Namibia regarding the development of a proposal for "Integrating climate smart land management options in Namibia: to enhance long term productivity, profitability and resilience" we would like to confirm in principle our support for the initiative.

2. Clearly our support is based on the information outlined in the concept document; and we are willing to participate in and provide support to the implementation of this programme, should adequate funding be obtained.

Your cooperation is highly appreciated.

Sincerely,

GEORGE P. KAMSEB
CHIEF REGIONAL OFFICER

KUNENE REGIONAL COUNCIL
PRIVATE BAG 502
2015 -08- 13
TEL: 065-273950
FAX: 065-273077

Annex 2 The State of Community Conservation in Namibia: 2013 Annual Report

community conservation namibia

PEOPLE

the state of

community conservation in Namibia

PLACES

a review of communal conservancies
community forests and other CBNRM initiatives

WILDLIFE

2013
annual report

acknowledgements

The annual Community Conservation Report is very much a collaborative effort. Conservancies and other community conservation organisations gather data throughout the year for their own management applications. This data is supplied to the NACSO working groups to enable evaluation and reporting on programme achievements and challenges at a national level. Although they are far too numerous to mention individually, all community conservation organisations and their staff are gratefully acknowledged for their contribution to this report. We would also like to thank all enterprises, NGOs and individuals who provided additional data and information.

Vital contributions during the compilation of the report were made by Jon Barnes, Chris Brown, Dave Cole, Victorine Che-Thoerner, Sandra Cregan, Anna Davis, Ronnie Dempers, Helge Denker, Lara Diez, Richard Diggle, Annatjie du Preez, Steve Felton, Irene Förtsch, Vincent Guillemin, Andreas Haingura, Lawrie Harper-Simmonds, Clinton Hay, John Hazam, Alice Jarvis, Brian Jones, John Kasaona, Ingelore Katjingisiua, Kennedy Kaurivi, Maxi Louis, Hiskia Mbura, Greenwell Matongo, Aisha Lee Nakibuule, Usiel Ndjavera, Colin Nott, Karen Nott, Theofelus Ntinda, Karine Nuulimba, Raymond Peters, Willem Ponahazo, Tony Robertson, Daniel Scholler, Patricia Skyer, Greg Stuart-Hill, Georgina Swartz, Jo Tagg, Chris Thompson, Sylvia Thompson, Chris Thouless, Dennis Tweddle, Annie Symonds, Wendy Viall, Dave Ward and Chris Weaver.

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Ministry of Environment & Tourism

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the state of community conservation in Namibia

a review of communal conservancies, community forests and other CBNRM initiatives

Doro !nawas Conservancy

community conservation in Namibia...

... means practising legally-entrenched community-based natural resource management under the guidance of a formal, national-level CBNRM programme. Communal conservancies, community forests and other community conservation organisations are officially registered entities with legal rights to manage the natural resources under their defined jurisdiction. Rural Namibians are empowered to govern their own environmental affairs, and the generated returns flow directly to communities.

PLACES WILDLIFE PEOPLE

the state of community conservation in Namibia

a review of communal conservancies
community forests and other CBNRM initiatives

2013 annual report

contents

Game guard Andreas Namace, Nyae Nyae Conservancy

preface

Fifteen years since the registration of the first conservancy and thirty years since the appointment of the first community game guard

Nyae Nyae was the first communal conservancy registered in Namibia. That was in February 1998. In June of the same year, the registration of Salambala, ≠Khoadi-//Hôas and Torra followed. Even the optimists of those ground-breaking days are unlikely to have imagined that only 15 years later, 79 conservancies would be registered, covering almost 20 percent of Namibia and half of all communal land.

The rapid growth of the programme in itself speaks volumes for the success of devolving rights and responsibilities over natural resources to rural communities. Community-based natural resource management (CBNRM) principles have a wide range of applications, and are being used to manage wildlife, indigenous plants, freshwater fisheries, rangeland areas and other communal resources. A new 'Nuts & Bolts' section has been added to this report under the title 'The CBNRM Toolbox' to provide an overview of these universal principles and their practical applications.

The Namibian version of CBNRM or community-based conservation has passed many milestones: 30 years ago, in 1983, the first community game guards were appointed by local headmen in response to drastic wildlife declines. The conservancy legislation, which grew out of this and subsequent initiatives, was passed in 1996. With the legislation in place, it took two years for the first conservancy to be registered. Another 25 conservancies were then registered within the next five years, and this figure doubled again in just three more years. The programme was growing at a pace that began to outstrip the ability of support organisations to keep up. While leaps are still taking place (ten conservancies were registered in 2012), the rapid growth of conservancy registration has started to slow – only two were registered during 2013, enabling some consolidation. Community forest registration, on the other hand, jumped from 13 to 32 in 2013, with many more community forests in the process of formation. This is partly explained by the more lengthy registration process, which means that a larger number of forests tend to be registered at distinct intervals.

The annual Community Conservation Report (formerly known as the State of Conservancies or SOC Report) has been published each year for a decade. Flipping through early reports reveals how far the programme has come, and how many individual success stories can be told. 'What's the story?' sections have been added to each chapter to highlight some of the successes and challenges of the last fifteen years. The new sections also give insights into specific developments during 2013, and will provide annual reflections from here on. The main text explaining the internal workings of the programme remains largely unchanged, as these principles need continual reinforcing.

The number of conservancies and community forests, the areas they cover and the people they embrace provide impressive figures. Yet it is what happens in these areas that is important. Despite all the milestones and successes, community conservation is still misunderstood and poorly recognised in many spheres. The approaches and activities of different government ministries continue to be counterproductive, in some instances creating direct threats to achievements. Private sector recognition of conservancies, and equitable engagement with them, remains inadequate or non-existent in some sectors. At the same time, many internal issues remain within conservancies and other community conservation organisations themselves, even amongst the well-established. Weak governance, mismanagement of funds and poor management of the natural resource base persist as challenges.

While there are still many internal barriers, threats and weaknesses, the programme has achieved widespread international recognition for its overall results in improving both the state of the environment and people's lives. Since the registration of the first conservancy, the CBNRM programme has received two Gift to the Earth Awards, WWF's highest recognition of global environmental contributions. This is commemorated in its own Info Section opening this report.

Despite widespread acclaim, there are also external threats to success, most notably the escalating international poaching crisis, which is having profound impacts on rhinos, elephants and other wildlife everywhere. As a side effect of urgent international calls to combat wildlife crime, the controlled legal use of healthy wildlife populations is facing ill-conceived and escalating pressure. These and other issues are touched upon in the relevant chapters. A view to the future is provided in 'Working for a common vision', which also includes a focus on one of our biggest and most pressing global challenges, climate change – and how community conservation can help to counter its effects. Successes and challenges, and the innovation and adaptation that can turn the latter into the former, are the themes of this report.

Chief Emeka Anyaoku and President Hifikepunye Pohamba

info: a gift to the Earth

global recognition for an immense contribution


Conservancy representatives Servior Mukengere and Maleska Harases

Conservation achievements of global significance are recognised by WWF as 'Gifts to the Earth'. Namibia has twice been recognised for such a contribution – through community conservation: in 1998, when the first conservancies were registered, and again in 2013, when the programme had grown to 79 registered conservancies. Chief Emeka Anyaoku, former President of WWF-International, presented the 2013 award to the Namibian President, His Excellency Hifikepunye Pohamba. While President Pohamba accepted the award, he did so on behalf of the people who made the programme possible, especially the community game guards working in the field. The award was presented at the opening of the tenth Adventure Travel World Summit in Windhoek. The summit is organised annually by the Adventure Travel Trade Association and was held in Africa for the first time – again in recognition of Namibia's exemplary conservation commitment, and the role of responsible tourism in this effort.

the Gift to the Earth Award...

'A Gift to the Earth is a public celebration by WWF of a conservation action by a government, a company, an organization, or an individual which is both a demonstration of environmental leadership and a globally significant contribution to the protection of the living world.'

The Gift to the Earth Award is WWF's highest accolade, applauding conservation work of outstanding merit. WWF is one of the largest conservation organisations in the world, with offices in more than 80 countries, and has been supporting Namibia's community conservation programme since 1993. Chosen from amongst the countless positive initiatives taking place around the world, Namibia's community conservation programme stands out as an inspiring conservation success.

The award draws global attention to the achievements of the recipient. It helps to motivate further action and support, and facilitates broad government endorsement of conservation initiatives. The 2013 award to Namibia was the 112th Gift to the Earth awarded since its inception in 1996.

The award highlights both the environmental leadership and the inspiring conservation achievement contributing to the protection of the living world. The Gift to the Earth is represented by a certificate signed by the WWF International Director General or WWF International President, and is presented by a senior WWF official at a public event to profile the achievement.

to live with wildlife...

... means striving for balanced land use and a healthy environment.
Game does not need to be eradicated from a landscape because it may pose a threat to crops or livestock.
Wildlife can create a great range of returns that far exceed its costs. Game — and all natural resource use — can be integrated with other rural livelihood activities for the benefit of the people and the land...

Community conservation is about managing natural resources sustainably to generate returns for rural people. Conservancies, community forests and other community conservation initiatives create the necessary legal framework for this. By choosing to live with wildlife, rural communities are broadening their livelihood options as well as enabling a healthier environment. Through wise and sustainable management and use, the resources are conserved for future generations while providing significant returns today.

ii.

living with wildlife

an introduction to community conservation in Namibia

a little history... The earliest community-based conservation initiatives in Namibia, which grew into what is today the national CBNRM programme, started before independence, when the first community game guards were appointed by local headmen in an attempt to reverse wildlife declines. At the time, people living in communal areas had few rights to use wildlife. Wild animals were seen as little more than a threat to crops, livestock and infrastructure, as well as community safety. Ground-breaking legislation passed in the mid-nineties laid the foundation for a new approach to natural resource use. By forming legally-recognised community conservation organisations such as conservancies and community forests, people in communal areas can now actively manage – and generate returns from – natural resources in their area. This continues to encourage wildlife recoveries and environmental restoration. While community conservation organisations are resource management units, they are defined by social ties, uniting groups of people with the common goal of managing their resources. The first conservancies were registered in 1998, and the first community forests in 2006.

What's the story?

behind living with wildlife

recognising waypoints of success and threat for community conservation

a look at progress and challenges and what they mean for people and wildlife in communal areas

Waitress Esme Eises, Doro Nawas Lodge, Doro !nawas Conservancy

From humble beginnings...

Success is often based on simplicity. In the case of community conservation, the simple concept of giving rural people responsibilities and rights over natural resources proved to be a remarkable catalyst for change and development. When local headmen appointed the first community game guards in Namibia in the 1980s with the support of a small group of pioneering conservationists, they were reacting to a poaching crisis, rather than purposefully planting the seeds for a natural resource revolution.

Success often starts small. If the principle is worthy, it may build momentum and gather the needed force for widespread impacts. Once the small community game guard system in the north-west had achieved its initial goal of stopping poaching, changing attitudes and the momentous transformation of national independence provided fertile ground for the development of a much more deep-rooted movement.

Success usually requires collaboration. Over the last thirty years, countless people have contributed to the growth and success of community conservation in Namibia at various levels and in various ways. The pioneers planted the seeds. Government staff developed the legislation that created the necessary legal framework, and continue to implement and support the tenets of the programme. International donors provided long-term funding to enable an ongoing commitment and solid foundations. NGO staff extended support in a myriad of forms from the outset, working with communities, private enterprises and government staff in the field, with ministries and other national stakeholders in the towns, and donor agencies across the globe. Private sector involvement has grown from a few ground-breaking partnerships to a much more wide-spread engagement. Traditional authorities have given their full support in most regions. Conservancy committees and staff, and in particular the community game guards who monitor and protect the game, all worked hard to manage, learn and improve, adapting and refining approaches, structures and systems to bring the programme this far. And the people living with the wildlife from day to day, the communal farmers across Namibia, are continuing to make the most overlooked contribution: facing the perpetual dangers and costs of elephants and lions and crocodiles and hippos and more – often with very limited returns.

All the people and organisations who were and are a part of this movement are far too numerous to mention, yet the positive story told by this report – of improved rural lives and sustainable resource management – is a testimony to them all.

What started as a small group of people willing to commit all manner of resources to help local communities reverse wildlife declines has grown into an impressive and effective national support structure working in close collaboration with government under the umbrella of the Namibian Association of CBNRM Support Organisations, NACSO. Integrated Rural Development and Nature Conservation deserves specific mention, because IRDNC was there in the very beginning, and already in its name embodies the concept that is still the essence of the programme. WWF, through the Living in a Finite Environment (Life) Programme, secured long-term USAID funding for CBNRM support and implementation, which facilitated development during the early nineties and consolidated progress for 15 years. WWF continues to provide a wide range of technical support and funding, which recently received a significant boost through funds from the Millennium Challenge Account Namibia, coordinated by the Conservancy Development Support Services consortium. The Namibia Nature Foundation has made significant contributions to CBNRM since its formation and remains one of the central support organisations. A number of other NGOs provided important input and have become an integral part of the NACSO 'family'.

Today, numerous NGOs and individual consultants are NACSO members and provide CBNRM extension services (see the full list of NACSO members on page 84). While Namibia's community conservation pioneers actually worked against the government structures of the time – the Apartheid regime and its dividing principles – CBNRM became a government programme soon after independence and continues to unite communities, the private sector, support organisations and government through the common cause of environmental conservation and rural development.

... to international acclaim...

For three decades, Namibia has been redefining conservation paradigms. When working with and putting trust in local communities was the last thing on the minds of conventional conservationists operating by the credo of keeping the wildlife in and the people out of national parks, rural Namibians appointed community game guards and drastically reduced poaching in communal areas – enabling a balance between wildlife and people *outside parks*. When most governments tightly controlled natural resource use in communal areas, giving only very limited rights and benefits to local communities, Namibia established conservancies that give *all the rights and the returns* to the people. When community conservation and state protected areas were still seen as very distinct sectors by most, Namibia enabled *economic returns for park neighbours* through an innovative concession policy that provides communities with tourism rights *in national parks*. And today, when Western preservationists are pushing for bans on all consumptive use of wildlife (motivated by drastic wildlife declines in many parts of the world, and especially across much of Africa), Namibia continues to promote a system of *sustainable use* that creates the incentives to conserve wildlife in communal areas as well as on private farmland, generating funds for natural resource management and allowing rural people to *keep the wildlife on the land*.

These and other ground-breaking measures have earned Namibia international acclaim as a leader in conservation. Numerous awards have recognised innovative approaches and conservation successes at national and individual levels. (see 'Local and international awards', page 89). Delegations from more than 20 countries have visited Namibia to learn from our experiences, coming from as far and wide as Mongolia, the United States, Kenya and Cambodia. The main focus of the exchanges has been on achieving conservation of natural resources outside national parks by providing returns for the people living with the resources.

Over the years, community conservation in Namibia has become much broader than wildlife and conservancies. The launch of the national CBNRM policy during 2013 recognised this and provides guidance to the community-based management of a wide spectrum of natural resources. Namibia now protects natural habitats and the species that live there across basically half the country. Seventeen percent of Namibia's land surface, as well as a large marine area, are proclaimed as national parks (up from 12 percent at independence). During the last 15 years of CBNRM, huge and contiguous community conservation areas have been added to this, which now far exceed the state protected areas network. Clearly, Namibia has developed a culture of living with wildlife.

...and back again?

Yet all the success and the growth do not mean that Namibian CBNRM is immune to threats. In some ways, it actually feels as though the programme is coming full circle. Community conservation in Namibia started as a response to rampant poaching. After a quarter of a century of consolidating an excellent conservation and development approach, of building community resource management structures and restoring game populations, wildlife in Namibia's communal areas seemed relatively secure. Within the space of only five years, all has changed. Poaching across Africa is at unprecedented levels – of impact and ruthlessness. Not only the economically valuable species are affected. Most wildlife, and the community conservation structures which manage and conserve it, are at risk.

While the number of rhino poached in Namibia during 2013 was very low compared to neighbouring countries, with only four animals recorded as killed countrywide, commercial poaching is on the increase and of grave concern. Elephant poaching in the Zambezi Region showed a sharp increase. Worse, the carcasses of poached elephants were laced with poison to kill vultures that would circle overhead and give away the perpetrator's location – catastrophic incidents that killed hundreds of vultures and unknown numbers of other scavengers. The poisoning of waterholes to kill elephants has been used as a poaching method in other countries, and affected even mores species. Ruthlessness and greed seem to know no bounds.

The poaching is an opportunistic response to a growing demand in Asian markets, driven by a complex set of cultural, economic and social factors. Extensive, well-organised and well-funded crime syndicates have built up international networks over several years. They are destabilising communities – and communal conservation structures – by infiltrating and bribing, and by inciting deceit and criminality. The value of illicit game products is so high that wildlife crime is extremely alluring – a risk that appears worth taking – even for those who get the least money in the chain while taking the highest risks.

Shocked by the current carnage, the international community has rallied to combat wildlife crime. Politicians and celebrities, conservation organisations and animal rights movements, concerned global citizens and the media all across the world have expressed their shock and outrage. The degree of modern environmental interest and concern is very positive, providing hope that it may be possible to address not only poaching, but a great variety of global environmental maladies.

Unfortunately, indiscriminate international calls to 'stop the slaughter' and 'save the last rhinos and elephants' are having an ill-fated side effect: people unable to make a distinction between poaching and the well-controlled legal use of wildlife – that is an integral part of land management outside national parks – are calling to stop all killing of wild animals. This is inadvertently threatening the very ability of rural Namibians to combat poaching: without the cash income that has funded community conservation structures for the last 15 years, most of the around 530 game guards will not be paid and will not be able to continue working.

The concept of living with wildlife emphasises a balance between different livelihood activities. If wildlife can not be used, it has no value for the land holders and will be replaced by livestock or other enterprises. We will be right back where we started in the 1980s – when local people had no rights over wildlife and rampant poaching decimated game populations. We once again need real innovation to counter these interlinked threats.

Free-roaming black rhinos in communal areas – they symbolise the beginnings of CBNRM in Namibia and are emblematic of the country's conservation success – which could be jeopardised by interlinked external threats.

Erongo-Kunene Community Conservation Area

Community conservation

at a glance

At the end of 2013 there were...

- 79 registered communal conservancies
- 1 community conservation association in a national park (Kyaramacan Asssociation, managed like a conservancy)
- 15 concessions in national parks or on other state land being held by 20 conservancies (some shared concessions)
- 32 registered community forests
- 66 community rangeland management areas
- and 3 community fish reserves

in Namibia

What's being achieved?

Community conservation...

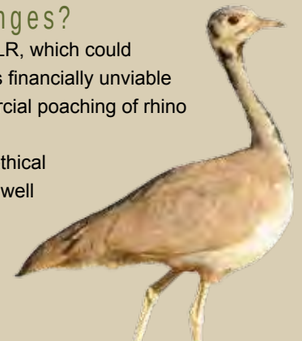
- covers over 163,396 km², which is about 53.4% of all communal land with about 175,000 residents
- of this area, conservancies manage 160,244 km², which is about 19.4% of Namibia
- community forests cover 30,827 km², 90% of it overlapping with conservancies
- community rangeland management areas cover 4,004 km², much of it overlapping with conservancies
- from the beginning of 1991 to the end of 2013, community conservation contributed about N$ 3.92 billion to Namibia's net national income
- during 2013, community conservation generated about N$ 72.2 million in returns for local communities
- community conservation facilitated 6,472 jobs in 2013
- 65 conservancies had a total of 167 enterprises based on natural resources in 2013
- community conservation supports wildlife recoveries and environmental restoration
- Namibia's elephant population grew from around 7,500 to around 20,000 between 1995 and 2013
- Namibia has an expanding free-roaming lion population outside national parks

New in 2013:

- 2 new conservancies and 19 new community forests were registered
- The national CBNRM policy was launched

The biggest challenges?

- the levy imposed by the MLR, which could render joint-venture lodges financially unviable
- the increase in the commercial poaching of rhino and elephant
- pressure based on urban ethical ideals to ban the legal and well controlled sustainable use of wildlife



people, places and wildlife...

Namibia's communal areas offer an enchanting mix of...

people

vibrant cultures and dynamic communities committed to sustainability – people united through community conservation share a common vision for managing their area and its resources

places

vast, diverse and spectacular landscapes – dunes, mountains, grasslands, rivers, woodlands... healthy environments diversify opportunities and drive economic growth

and wildlife

a suite of natural resources – charismatic, free-roaming game, spectacular birdlife, diverse plant resources, fabulous fish... natural resources generate a variety of returns for local people

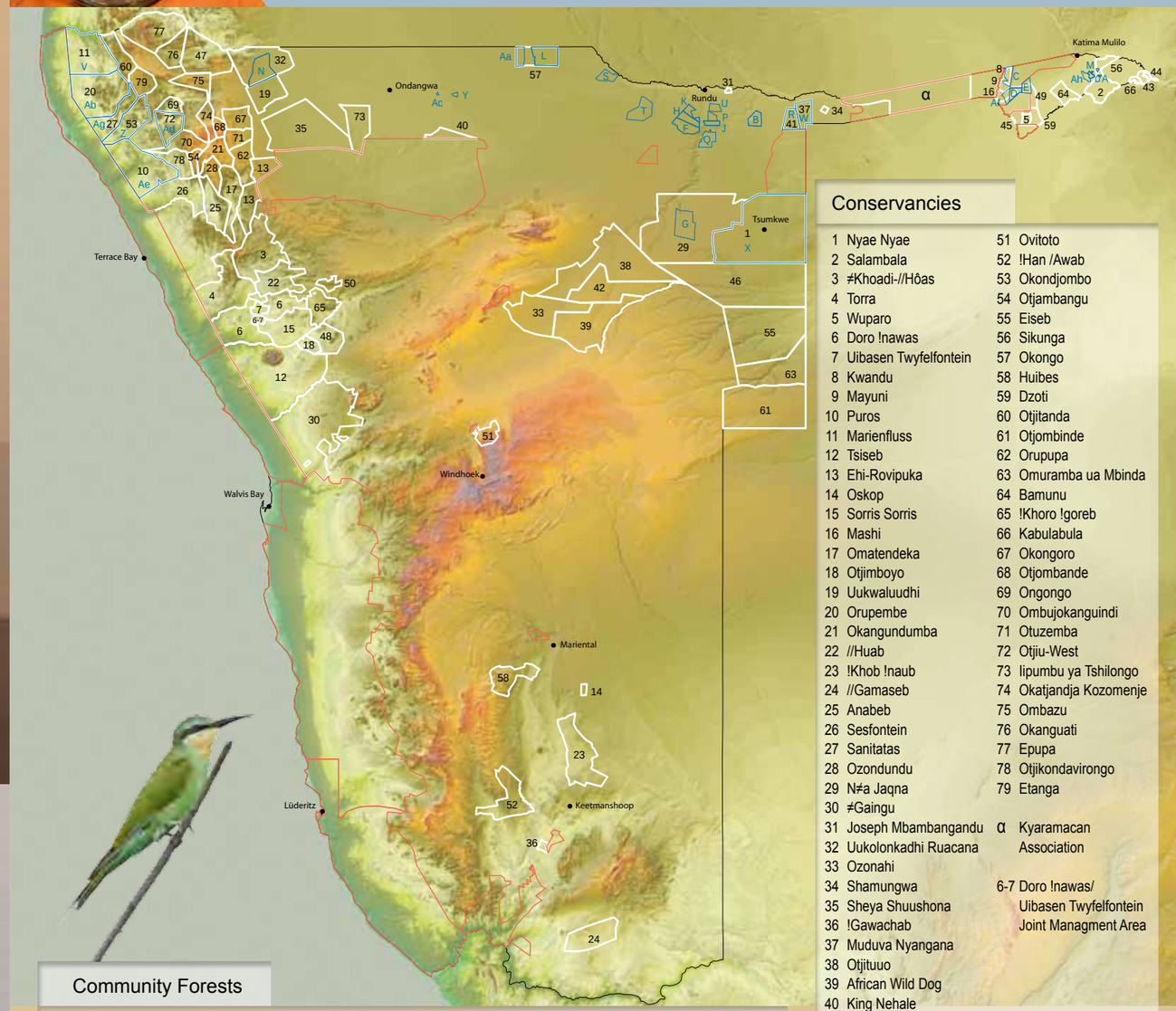
Communal areas represent over 40 percent of Namibia and harbour a wealth of resources. This is land that was set aside for livelihood use by local communities, owned by the state but governed by local people. It is therefore local communities, rather than outsiders, who should rightfully be the main beneficiaries of resource use in these areas.

Community conservation is renewing a sense of ownership over resources and through this is reinforcing a vital sense of responsibility; it is also cultivating community cohesion and pride in cultural heritage.

Puros Conservancy

FIGURE 1. The distribution of conservancies and community forests across Namibia

At the end of 2013, there were 79 registered communal conservancies, one community conservation association in a national park (structured much like a conservancy) and 32 registered community forests in Namibia, covering at least 163,396 km^2. [The lists below follow the chronological sequence of registration]



Conservancies

1	Nyae Nyae	51	Ovitoto
2	Salambala	52	!Han /Awab
3	≠Khoadi-//Hôas	53	Okondjombo
4	Torra	54	Otjambangu
5	Wuparo	55	Eiseb
6	Doro !nawas	56	Sikunga
7	Uibasen Twyfelfontein	57	Okongo
8	Kwandu	58	Huibes
9	Mayuni	59	Dzoti
10	Puros	60	Otjitanda
11	Marienfluss	61	Otjombinde
12	Tsiseb	62	Orupupa
13	Ehi-Rovipuka	63	Omuramba ua Mbinda
14	Oskop	64	Bamunu
15	Sorris Sorris	65	!Khoro !goreb
16	Mashi	66	Kabulabula
17	Omatendeka	67	Okongoro
18	Otjimboyo	68	Otjombande
19	Uukwaluudhi	69	Ongongo
20	Orupembe	70	Ombujokanguindi
21	Okangundumba	71	Otuzemba
22	//Huab	72	Otjiu-West
23	!Khob !naub	73	Iipumbu ya Tshilongo
24	//Gamaseb	74	Okatjandja Kozomenje
25	Anabeb	75	Ombazu
26	Sesfontein	76	Okanguati
27	Sanitatas	77	Epupa
28	Ozondundu	78	Otjikondavirongo
29	N≠a Jaqna	79	Etanga
30	≠Gaingu		
31	Joseph Mbambangandu	α	Kyaramacan Association
32	Uukolonkadhi Ruacana		
33	Ozonahi		
34	Shamungwa	6-7	Doro !nawas/ Uibasen Twyfelfontein Joint Managment Area
35	Sheya Shuushona		
36	!Gawachab		
37	Muduva Nyangana		
38	Otjituuo		
39	African Wild Dog		
40	King Nehale		
41	George Mukoya		
42	Okamatapati		
43	Kasika		
44	Impalila		
45	Balyerwa		
46	Ondjou		
47	Kunene River		
48	Ohungu		
49	Sobbe		
50	//Audi		

Community Forests

A	Bukalo	L	Okongo	W	Muduva Nyangana	Ag	Sanitatas
B	Hans Kanyinga	M	Sikanjabuka	X	Nyae Nyae	Ah	Zilitene
C	Kwandu	N	Uukolonkadhi	Y	Ohepi		
D	Lubuta	P	Cuma	Z	Okondjombo		
E	Masida	Q	Gcwatjinga	Aa	Omufitu Wekuta		
F	Mbeyo	R	George Mukoya	Ab	Orupembe		
G	Mkata	S	Kahenge	Ac	Oshaampula		
H	Ncamagoro	T	Katope	Ad	Otjiu-West		
J	Ncaute	U	Likwaterera	Ae	Puros		
K	Ncumcara	V	Marienfluss	Af	Sachona		

THE TERMINOLOGY OF INCOME, BENEFITS AND RETURNS

Understanding the complexity of CBNRM returns can be difficult. For clarity, the following terms are consistently used in this report:

INCOME – indicates cash income received as payment for goods or services, either by organisations or individuals.

BENEFITS – indicates benefits distributed by a conservancy as dividends, or by the private sector as fringe benefits and donations; these can go to communities or individual households. Benefits can be divided into three types:

- **in-kind benefits** include meat distribution, fringe benefits from tourism employment such as staff housing, etc.
- **cash benefits** are cash dividends paid to conservancy members from conservancy income
- **social benefits** are investments in community initiatives such as education facilities, health services, etc.

RETURNS - combine income and benefits and indicate overall returns, either to individuals, communities or conservancies.

building foundations
for sustainable resource management

Prior to independence, without the existence of formal management structures and lacking ownership over resources, communities undertook few coordinated natural resource management activities. This resulted in fragmentation, neglect and over-exploitation. Today, community conservation not only monitors and manages resource use, it also provides legitimate structures that enable communities to engage in an equitable manner with the tourism and trophy hunting industries, as well as with a suite of other private sector, government and donor stakeholders. Legally recognised entities have empowered communities to stand up for their rights. **Chapter 1** portrays the details of community conservation governance.

Charismatic wildlife in spectacular settings - wildlife is central to unlocking natural resource potential.

managing a broad spectrum of communal resources

Modern approaches have not only returned the rights to the people and the wildlife to the land, but are enabling an increasing range of returns from natural resources, which were unheard of only a few decades ago. This success is based on community empowerment, as well as innovative systems and tools that enable effective management and sustainable use of natural resources. **Chapter 2** illustrates the details and successes of community-based natural resource management activities.

improving rural lives

Many conservancies are showing that community conservation can generate a broad range of community and individual returns (Figure 2) while covering its operational costs from own income. Community conservation is funding rural development projects and empowering communities, while individual households are benefiting through job creation and new income opportunities, as well as in-kind benefits and improved access to a range of services. Details are provided in **Chapter 3.**

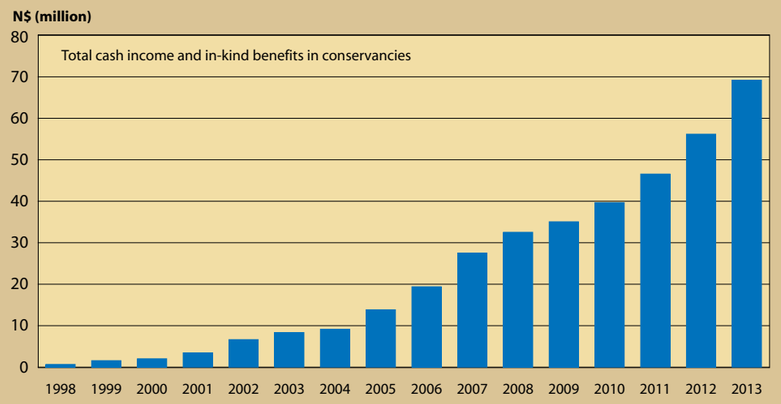


FIGURE 2.
Total returns to conservancies and members
The total cash income and in-kind benefits generated in conservancies grew from less than N$ 1 million in 1998 to more than N$ 68 million in 2013. This includes all directly measurable income and in-kind benefits being generated, and can be divided into cash income to conservancies (mostly through partnerships with private sector operators), cash income to residents (mostly through employment and the sale of products), as well as in-kind benefits to residents (mostly the distribution of harvested game meat).

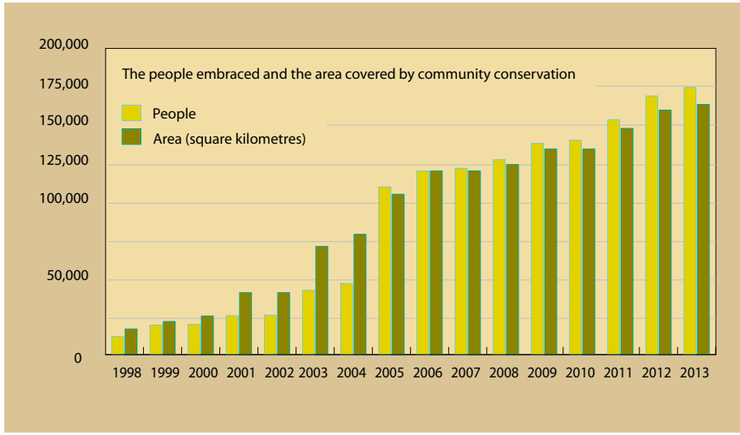


FIGURE 3.
Community conservation cover
The area covered by conservancies and community forests has rapidly grown to 163,396 km^2, which is 53.4% of all communal land. Community conservation is embracing a growing number of communal area residents. At the end of 2013, there were approximately 175,000 people living in conservancies. This figure has been adjusted and updated using new methods to evaluate Namibia Population and Housing Census data for 2001 and 2011. More information is provided on page 62 in Chapter 3.

embracing people, places and wildlife

Community conservation embraces a large number of Namibia's communal area residents and covers a vast portion of communal land (Figure 3). It also creates important linkages with state protected areas and initiatives on freehold land (Figure 4). By joining huge contiguous areas where wildlife can roam free at a landscape level, community conservation is enabling environmental restoration, healthy game populations, and diverse community returns. Through this, the true potential of Namibia's spectacular places can be realised.

entrenching a proven model

Community conservation has shown that it can improve rural lives while contributing to biodiversity conservation, and is recognised as a national development strategy. The movement is still young and growing rapidly, and continues to require broad support. Yet community conservation can become fully sustainable and largely self-financing in the foreseeable future, if appropriate resources can continue to be invested to entrench governance foundations, optimise returns, and mitigate threats and barriers.

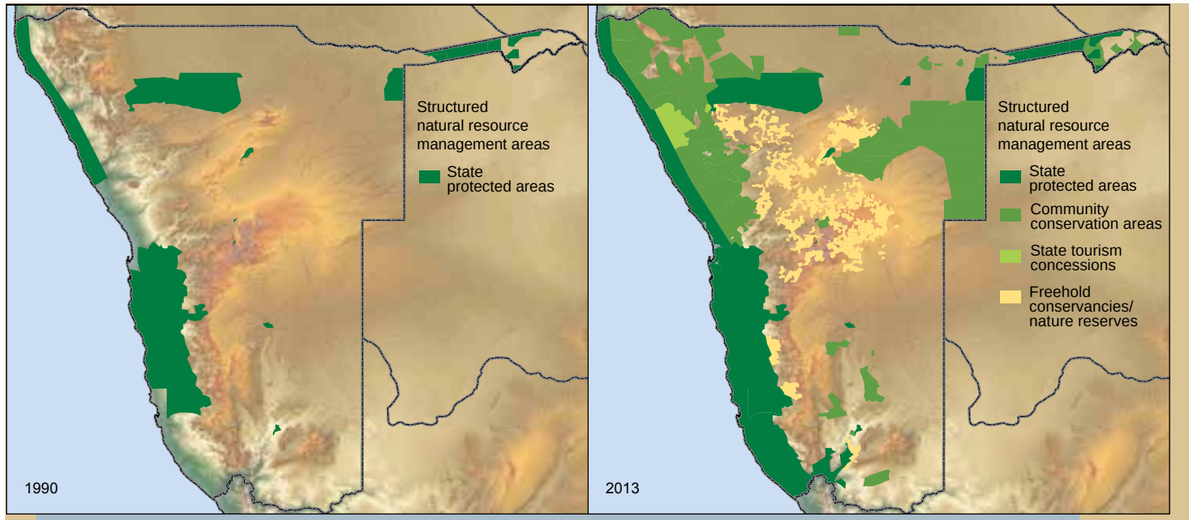
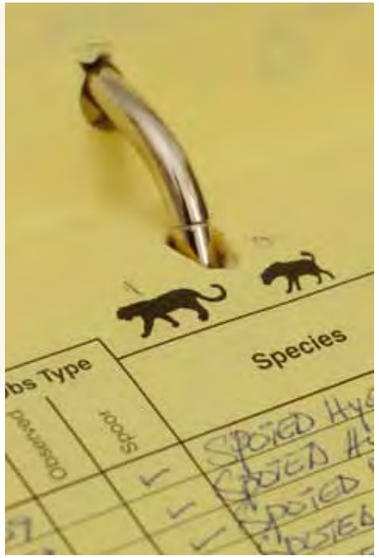


FIGURE 4. **The expansion of structured natural resource management across Namibia**
At the end of 2013, land under structured natural resource management covered 43.5% of Namibia. At independence in 1990, there were no registered community conservation areas, freehold conservancies did not exist, and a mere 12% of land was under recognised conservation management.

vital components of successful community conservation...

- communities have legally-entrenched rights to manage natural resources
- activities are guided by national policies and legislation
- management areas are clearly defined and legally registered
- jurisdiction over resources is clearly defined
- the sustainable use of natural resources to generate returns for communities is strongly encouraged
- all resource use is guided by a system of monitoring, annually adjusted quotas, permits and controls
- returns flow directly to the community conservation organisations and local communities
- tangible returns provide strong incentives for the wise management and conservation of resources
- communities are empowered to make decisions, engage in partnerships and practise responsible management



nuts & bolts: the CBNRM toolbox

community conservation principles for a broad range of applications

the power of CBNRM

Community conservation creates democratic, community-based governance structures that can achieve community empowerment and equity, manage communal resources, generate collective returns, counter common threats, achieve joint development and facilitate individual growth. These overarching themes are relevant to an extremely wide range of practical activities and sectors, not just natural resources. This section lists some of the applications relevant to people and communal resources in rural areas.

Key activities:

- create community awareness of common goals
- involve entire community in decision-making
- democratically elect leadership
- employ competent staff for day-to-day management of resources and finances
- create strong partnerships
- enable equitable access to resources
- set clear guidelines for sustainable resource use
- ensure equitable distribution of returns
- monitor resources, generated returns and distributed benefits
- monitor threats and adapt to change

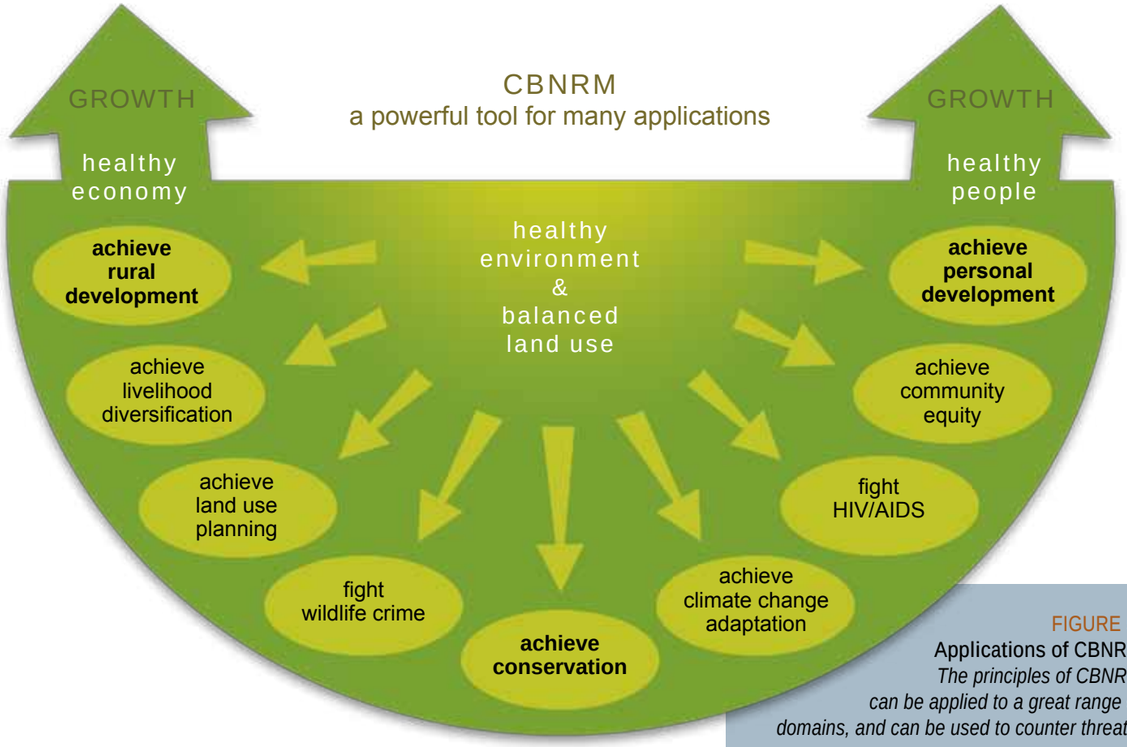


FIGURE 5.
Applications of CBNRM
The principles of CBNRM can be applied to a great range of domains, and can be used to counter threats.

for the people, CBNRM can

- empower local communities
- devolve management to grass-root level
- strengthen rural democracy
- promote social and gender equality
- fight HIV/AIDS and other threats
- build individual capacities
- enhance social cohesion
- safeguard cultural heritage
- improve socio-economic status
- increase household resilience

for the economy, CBNRM can

- ensure equitable natural resource returns
- diversify livelihood options
- create new business opportunities
- facilitate job creation in numerous sectors
- strengthen economic resilience
- increase economic diversity
- reduce costs and increase returns
- attract investment
- enable community-private sector partnerships
- achieve broad economic development

for the environment, CBNRM can

- manage wildlife and other natural resources
- restore species diversity
- facilitate ecosystem health
- achieve land use planning
- integrate different land and resource uses
- enable most productive mix of land uses
- increase tolerance of problematic species
- mitigate human-wildlife conflicts
- generate funds for conservation activities
- combat wildlife crime and other threats

the three pillars of community conservation in Namibia...

institutional development
- good governance creates the basis for resource management and the capture and distribution of returns

natural resource management
- innovative resource management enables biodiversity conservation and sustainable use

business, enterprises and livelihoods
- market-based approaches enable a wide range of community returns

1. building foundations

a democratic resource management model

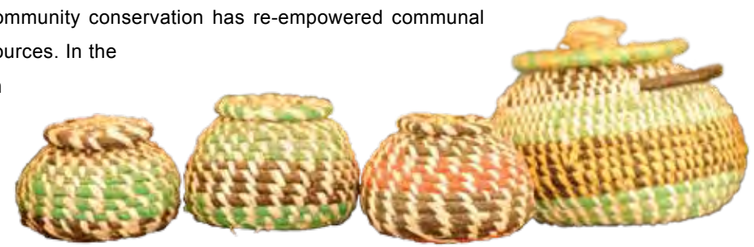

Event Book Audit, Sobbe Conservancy

to build foundations...

... means creating structures that enable wise and effective governance, and that empower rural people to control their environmental policies, actions, affairs and resources for a common, sustainable good...


Administrator Masweta Heinrich, Nyae Nyae Conservancy

creating effective management structures... At a larger scale, resources can only be used sustainably if effective management structures exist to guide their use. On privately-owned land, these structures are created by the owner of the land and its resources. The progressive legal framework that allowed private land owners in Namibia to generate returns from wildlife was already created in 1967. This gave wildlife an economic value and led to large-scale wildlife recoveries. Until independence, all control over natural resources in communal areas rested with the state, with the result that no formal structures for natural resource management existed at a local level. Rural communities felt disenfranchised and the lack of a sense of ownership over resources led to indiscriminate exploitation and neglect. Community conservation has re-empowered communal area residents to manage their natural resources. In the process, an impressive framework has been created for sustainable and equitable resource management.



Conservancies, community forests and other legally-recognised community conservation initiatives create effective formal structures for managing communal resources. This is in itself one of the greatest achievements of the CBNRM programme. A broad governance foundation is being created, which empowers local communities, generates significant returns for them and makes a vital contribution to coordinated land use management in Namibia.

What's the story?

behind building foundations

milestones along the road to accountable governance in communal conservancies

a look at issues and developments, and what they mean for governance structures in communal conservancies

Book keeper Landine Guim, ≠Khoadi-//Hôas Conservancy

a story of empowerment...

Soon after independence, staff of what was then the Ministry of Wildlife, Conservation and Tourism teamed up with NGO staff working in rural development and conservation to hold extensive consultations with local communities in communal lands. The aim of the dialogue was to gather input from rural people on how they would like to approach the management of natural resources in their areas. This constellation of collaboration linking government, NGOs and local communities has continued to the present day, strengthened significantly over the years by increasing private sector involvement. The main cornerstone of Namibia's community conservation continuity, though, has been the involvement of rural people from the very outset. By enabling communities to help formulate the legislation that would affect them and their communal resources, what is now the Ministry of Environment and Tourism set a clear sign at the inception of the CBNRM programme that this movement was by the people for the people.

The foundations of community conservation in Namibia certainly go deep. The first layers were created before independence, when rural people realised that change was up to them. Going beyond just community involvement, empowerment has been a key aspect. Rural Namibians have been empowered to shape their own destiny by being able to actively use the resources around them – based on stringent guidelines of sustainability. Care for the environment, including the sustainable use of natural resources for the benefit of present and future Namibians, was already enshrined in the national constitution, as a young, independent nation embarked on a positive course of development. Subsequent changes to outdated laws and policies set the framework for community-based conservation. Once the legislation enabling registration was in place and the first conservancies were gazetted, conservancy formation began to snowball, driven by demand.

Nyae Nyae Conservancy is the oldest, as well as the second largest conservancy in Namibia. Its registration at the beginning of 1998 was preceded by many years of NGO support. The Nyae Nyae Development Foundation is itself one of the oldest support NGOs in the country, having evolved out of an organisation started in 1981. The foundation has provided technical support and funding to the Nyae Nyae community ever since.

The registration of ≠Khoadi-//Hôas was initiated by the dynamic local farming community through the Grootberg Farmers' Union. The farmers' association was already formed in 1990. As a well-established entity, the association could fulfil the registration requirements with limited help from external support organisations. The integration of farming activities and wildlife management in ≠Khoadi-//Hôas Conservancy is an ideal basis for balanced land use, as it enables cooperation and parity.

Conservancy formation is certainly not always a simple endeavour. In fact, it has often involved significant conflict. Conservancies are self-defining social entities – groups of people who agree to work together to manage their communal resources. The process of community mobilisation and consensus is a lengthy one, driven by the activists within the community. Reaching agreement with neighbours over defined borders often involves confrontation and conflict resolution. Struggles for power on conservancy committees amongst aspiring community members are widespread. Attempts at personal enrichment are not uncommon. Yet all of these are very human traits and struggles. Overcoming them represents necessary milestones along the road to equitable governance. The process of conservancy formation and management has in fact significantly strengthened rural democracy and has empowered formerly marginalised groups to be a part of decision-making. Importantly, through conservancies, the structures and systems have been put in place to deal with and resolve all such issues, and facilitate equitable resource use.

The first conservancies received very focussed support that built individual and collective governance capacities. These conservancies were able to rapidly establish both management systems and income streams, and soon became largely self-sufficient. As the number of conservancies quickly increased, the ability of support organisations to continue to provide such focussed assistance was overstretched. Many of the 79 conservancies registered at the end of 2013 still need to significantly strengthen their governance structures.

enabling business...

Walking into the office of ≠Khoadi-//Hôas Conservancy feels like walking into the office of a well-run small business in any town. Friendly staff members in crisp uniforms are ready to respond to queries or requests. Management files line wooden shelves, and information posters and photos fill the walls. There is a meeting table surrounded by chairs and several desks have computer work stations. The place seems well-established – and it is. The fifteen-year anniversary is a milestone any business can be proud of. In many ways, a conservancy is just that – a business venture in communal land use. Although its key function is actually to *enable* business, by managing the resources that a variety of sectors – tourism, hunting, indigenous plant use, crafts, fisheries and more – are based on. Conservancies do not necessarily need to run any of the business ventures that use the resources themselves. In fact, these are often best controlled and carried out by private sector operators with the necessary know-how and market linkages, and by conservancy members specialising in a particular resource use.

Through equitable engagement with private sector hunting and tourism operators, based on contracts that stipulate the roles and responsibilities of both parties, conservancies facilitate jobs for residents, generate income to run the conservancy (i.e. manage the resources), and help build local capacities. Residents

can then grow into the intricacies of running a tourism or hunting business over time, and avoid doing damage to Namibia's overall image with sub-standard products or services. Conservancies also support the related craft sector and help to create market linkages for the producers – the conservancy members.

Due to their successes in managing wildlife, many conservancies are beginning to manage related resources such as fish and indigenous plants. These fall under the mandates of separate ministries and were initially seen as distinct sectors. Efforts to integrate the use of all communal natural resources have resulted in most of the newly-registered community forests having identical borders and joint management structures with conservancies. Community forests continue to operate in accordance with the relevant legislation of the Directorate of Forestry within the Ministry of Agriculture, Water and Forestry. Both the plant and wildlife resources of an area are simply being managed by the same community-based organisation. Similar principles apply to fisheries in the Zambezi Region, which are being informally managed by conservancies, in this case in liaison and with the support of the Ministry of Fisheries and Marine Resources. Community conservation organisations simply enable economic development by managing – and ensuring equitable access to – communal natural resources, whatever they may be.

promoting wise governance...

Conservancies are run autonomously by local communities. As is the case in any organisation, their success is based on the capacity, motivation and integrity of the individuals that run them, on the effectiveness of the management systems they use, and on the value of the resources available in their area. The communities who hold committees and staff accountable for their actions also play a vital role. Such democratic governance structures are a new concept for many rural communities, and conservancy committees, staff members and residents all need to grow into their responsibilities. This may be a lengthy learning process, which initially requires considerable external support.

When the management of a conservancy falters – for whatever reason – this often causes the unfounded accusation that the entire conservancy concept is destined to fail, because communities are just not capable of good management. Yet accountability and wise management can be issues anywhere in the world, not just in community-based organisations.

A particular problem that has plagued conservancies is the draining of institutional memory during conservancy committee changes. At least a partial solution is to employ competent management staff, and more and more conservancies are taking this approach. Committees usually consists of community members of good standing, who may have the respect of the people, but few of the specialised skills to manage either finances or natural resources. The day-to-day running of conservancy affairs is thus best handled by competent, paid staff. The committee takes on the function of supervising and guiding staff, promoting community interests and assisting with private sector liaison. The conservancy members are the shareholders of the organisation and receive a variety of dividends.

Unfortunately, many talented young people spend only a few years as conservancy employees, before moving on to jobs with better prospects, often in urban centres and government positions. Conservancies have become an obvious career springboard for rural aspirants. This is a positive stepping stone for individuals, yet continues to erode local capacities. As the economies of rural areas are strengthened through community conservation, job opportunities and career options will continue to improve and more and more qualified people are likely to stay.

Traditional authority involvement remains a vital component of wise conservancy governance. During the early days of CBNRM, traditional authorities appointed game guards, intervened in poaching cases and made other resource management decisions. While conservancies have taken over these roles, close liaison with traditional authorities remains crucial to overall community consensus.

The MET created the basic legislative framework for conservancy governance, continues to monitor individual performance and provides diverse support, and is at times called on to resolve conflicts. Forty-seven conservancies now have management plans in place, 44 presented annual financial reports and 51 held an AGM during 2013. That leaves more than 20 conservancies still needing targeted support.

In collaboration with the MET, NACSO members have been providing much of this support for the last 15 years. Funding from the Millennium Challenge Account Namibia has recently provided a significant boost to strengthen conservancy governance capacities, but will be phased out during 2014. New conservancies are still being formed and many others continue to require assistance. Perhaps the private sector can play a supporting role in the future.

Managing the Mashi Crafts Trading Post – community conservation creates equitable management structures that allow individual producers to benefit from joint marketing and sales.

Manager Bester Mutanincwa, Mashi Crafts Trading Post

Conservancy governance

at a glance

At the end of 2013 there were...

- 47 management plans in place
- 32 sustainable business and financial plans in place
- 44 annual financial reports presented
- 51 annual general meetings held
- 12% female chairpersons
- 49% female treasurers/financial managers
- 30% female management committee members
- and 26% female staff members

in communal conservancies in Namibia

What's being achieved?

Community conservation means...

- contributing to improved democracy in rural areas
- empowering individuals, including women, to actively participate in decision-making
- employing staff to manage a broad range of resources
- working according to management and benefit distribution plans
- unlocking human potential by providing access to diverse training and capacity building
- enabling controlled tourism development and trophy hunting activities
- covering an increasing portion of operational costs through own income
- linking into regional conservation structures

New in 2013:

- introduction of conservancy audits for all high-earning conservancies
- systematic conservancy governance support, with focus on AGMs and staff policies

The biggest challenges?

- meeting the governance training needs of the large number of conservancies and community forests
- ensuring effective cooperation between conservancy committees and staff
- addressing the loss of institutional capacity and memory during conservancy committee changes
- increasing the ability of conservancies to manage their contractual responsibilities towards the private sector
- managing competing expectations from stakeholders seeking access to returns from natural resource use

Manager Hilga /Gawises, ≠Khoadi-//Hôas Conservancy

Well-established management in ≠Khoadi-//Hôas Conservancy – after more than a decade of registration, many conservancies have well-trained staff, efficient offices and own vehicles.

good governance
is at the core

Community conservation is governed by local communities that work together to collectively manage the natural resources of their area. All members of the community are empowered to have a democratic voice in the management of the resources and the distribution of the generated returns. Since the inception of the community conservation movement, an impressive range of CBNRM governance structures and management systems have been developed and tailored to meet local needs. Communities have gained the rights to manage and benefit from natural resources. With these rights comes the responsibility to manage the resources sustainably, as well as the responsibility to ensure the equitable distribution of returns. This chapter illustrates governance structures and how they are being applied, evaluated and integrated.

FIGURE 6.
The relationship between governance, resources and returns
At the core of successful community conservation is governance. Without good governance, effective resource management is not possible, and without effective resource management, returns cannot be maximised.

Power to the people

Through community conservation, rural people have been empowered to formally engage with stakeholders at all levels. They can engage with business partners to optimise the generation of returns, with government to address issues, and with support organisations to solicit technical support and funding. Ultimately, however, good governance depends on the capabilities and the commitment of the people to effectively use the management systems and tools available to them to ensure good governance and thus a healthy natural resource base and a wide range of returns. At the core of successful community conservation is good governance and at the core of good governance are the people (Figure 6).

The freedom of choice

A central aspect of community conservation is the right of choice. Communities choose whether to form a conservancy or not, communities forming a conservancy are self-defining, and conservancies can choose how to use wildlife and what partnerships to engage in. The same principles apply to other sectors such as community forestry. The community conservation approach simply allows rural communities to add natural resource use to their existing livelihood activities.

Managing complexity

Conservancies and community forests are responsible for managing natural resources across huge areas. They also need to manage a broad range of business interests linked to the resources, as well as community needs related to income generation and benefit distribution. These are complex tasks requiring different skill sets. Natural resource management at such a scale requires an excellent understanding of environmental dynamics; managing an array of business interests calls for a mix of financial, management and marketing skills; job creation and equitable benefit distribution require a sound socio-economic understanding. This demands training, and continued access to targeted training is a core aspect of community conservation success.

Managing the resource base

The most important function of community conservation is to manage natural resources in a sustainable and equitable way. In open and dynamic systems such as communal conservancies, this depends on access to good information about the resources and effective ways to use the information. Natural resource management in conservancies is based on a wealth of data gathered through a variety of monitoring activities including the Event Book. The processed data is accessible in the form of a range of management tools. This information flow enables informed management that is responsive to needs (Figure 7). The suite of natural resource management systems and tools that have been made available through community conservation is portrayed in **Chapter 2**.

Managing the returns

The second most important function of community conservation, and generally the most closely scrutinised, is to generate returns. Through effective governance, communities need to optimise the natural resource potential of their area and effectively capture its returns using market-based approaches, and to ensure the equitable distribution of those returns to the community. Effective systems and tools again enable community conservation organisations to achieve this. The main governance structures and systems are presented in this chapter, while approaches to generate returns, as well as how they are being used, are described in **Chapter 3**.

understanding
the legal framework

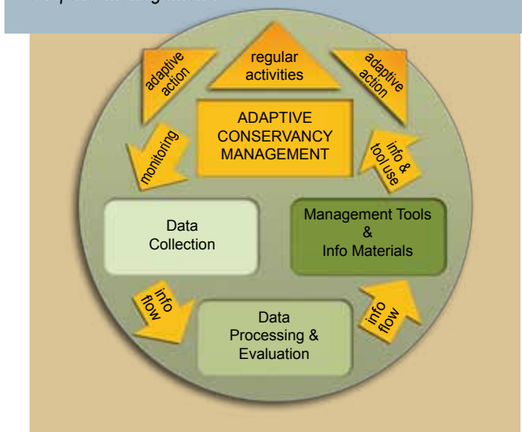
Conservancies

The Nature Conservation Amendment Act of 1996 devolved wildlife use, and the management of related tourism and hunting activities, to communal area residents through the establishment of conservancies. Communities register resource areas with approved boundaries with the Ministry of Environment and Tourism (MET). Registration requirements include a legal constitution providing for the sustainable use of game, a defined membership and a committee representative of members. All adult residents may become members of the conservancy. Conservancies must operate according to a wildlife management plan, as well as a plan for the equitable distribution of returns. At a regional level, conservancies are forming regional associations to coordinate regional activities. The MET provides support to a variety of activities and must ensure that conservancies remain compliant with legislation.

Community forests

The use of all indigenous plant resources is regulated by the Directorate of Forestry within the Ministry of Agriculture, Water and Forestry. The Forestry Act of 2001 and the Forestry Amendment Act of 2005 enable the registration of community forests through a written agreement between the Directorate and a committee elected by a community with traditional rights over a defined area of land. The agreement is based on an approved management plan that outlines the use of resources. All residents of community forests have equal access to the forest and the use of its produce. Community forests have the right to control the use of all forest produce, as well as grazing, cropping and the building of infrastructure within the classified forest.

FIGURE 7.
The conservancy information cycle
The effective collection, evaluation and dissemination of information is a core component of the programme and enables informed, adaptive management.



Forests as fire management areas

The Ministry of Agriculture, Water and Forestry may declare a community forest as a fire management area, in which case the management committee of the forest takes on the responsibility of a fire management committee to implement an approved fire management plan.

Conservation complexes

A number of conservancies and community forests are forming joint management complexes to enable more effective management of resources and activities at a larger landscape level. The Mudumu North Complex, the Khaudum North Complex and the Greater Waterberg Complex are examples. The institutional structures consist of representatives from the MET, conservancies, community forests and the private sector. The forums also have representation from supporting sectors such as agriculture, police, defence force, local government, water affairs, traditional authority and NGOs.

Transboundary contributions

At a still larger scale, community conservation supports international conservation connectivity. The Kavango Zambezi Transfrontier Conservation Area, KAZA, is a joint management initiative between Angola, Botswana, Namibia, Zambia and Zimbabwe, which links state protected areas and communal lands across the five countries. Namibia's community conservation structures enable wildlife movement across communal land and facilitate improved coordination of activities in these areas.

Community fish reserves

The Ministry of Fisheries and Marine Resources regulates the use of all inland fisheries resources. A legal framework is being developed to enable communities to register rights and management authority over these resources. In the absence of clear legislation, several conservancies are supporting the management of fisheries in the Zambezi Region (formerly Caprivi).

Community water management

Under the mandate of the Ministry of Agriculture, Water and Forestry, the Water Resources Management Act of 2004 provides the legal framework for communities to manage their water supply. Water point user associations embrace all users of a particular water point and are managed by water point committees elected from amongst the members. At a higher level, groups of water point user associations form local water user associations to coordinate the activities and management of their water points and protect rural water supply schemes. Both types of association are registered as non-profit organisations after approval of their constitution by the Minister. At the scale of water catchment areas, basin management committees provide a framework for integrated management.

Other community conservation initiatives

Further CBNRM initiatives include community rangeland management and conservation agriculture. Neither of these has legally-entrenched governance structures and both are managed at area or site level by participants. Both fall under the mandate of the Ministry of Agriculture, Water and Forestry. Conservancies are supporting these initiatives in many areas.

A local woman managing Damaraland Camp in Torra Conservancy – socio-economic empowerment and greater gender equality are two important results of community conservation.

Manager Helen /Awa-Eises, Damaraland Camp, Torra Conservancy

Institutional development status category	Status in 2013	No. of conservancies reporting on status category	Percentage of category total
Registered conservancies (incl. Kyaramacan Ass.)	80	80	100%
Conservancies generating returns	65	80	81%
covering operational costs from own income	36	51	65%
distributing cash or in-kind benefits to members, or investing in community projects	38	51	75%
Conservancy management committee members	914	67	100%
female management committee members	270	67	30%
female chairpersons	8	67	12%
female treasurers/financial managers	33	67	49%
Conservancy staff members	656	67	100%
female staff members	172	67	26%
Conservancies with Management Plans	47	67	70%
Sustainable Business and Financial Plans	32	67	48%
Conservancy AGMs held	51	67	76%
financial reports presented at AGM	44	67	66%
financial reports approved at AGM	42	67	63%
budgets approved at AGM	33	67	49%
Conservancies that are members of a regional conservancy association	50	67	75%

TABLE 1.
Institutional development in conservancies in 2013
The information shows that more and more conservancies are becoming well-established, and many have strong female participation. A substantial number of conservancies that used to be dependent to some degree on grant aid are now covering their operational costs from own income, with many also distributing benefits to members or investing in community projects. The Kyaramacan Association is included as a registered 'conservancy'.

expanding the capacity for good governance

Management structures

Most community conservation initiatives have broadly similar structures, based on a defined resource area, a constitution, an elected committee, and annual general meetings of the members. A variety of management plans usually guide activities related to natural resources, zonation and land-use, sustainable business and financial management, and the distribution of returns.

In the interest of the people

Good governance depends on the people doing the governing. It is crucial that community conservation organisations are run in the interests of their members rather than of a small elite. Democratic governance means that members participate in the most important decisions such as approving budgets and the distribution of returns. Committees need to be accountable to the members who elect them and there needs to be good, transparent financial management. Democratic governance also means that when committees are not accountable or transparent, members are able to remedy the situation.

Guided by the constitution

The affairs of most community conservation organisations are guided by their constitutions. The constitution is an important tool for good governance, as it provides the foundation for ensuring accountability and transparency in decision-making.

Committee and staff

Community conservation organisations are headed by committees, elected to manage the natural assets of the community, the relationships with business partners, and the income and expenditure of the organisation. Based on funding capacities, the committee employs staff and supervises their activities. Natural resource management forms the core of community conservation functions. Typical employees include managers, game guards, resource monitors, field officers and administrative staff.

The membership

At the heart of community conservation is the relationship between the members and their elected management committee. Ideally, members are able to actively participate in the affairs of the organisation by providing input at village meetings and AGMs.

The AGM

Annual general meetings provide a vital platform for establishing democratic governance in community conservation organisations. At AGMs, management committee elections are held, annual budgets and financial statements are approved by members, issues are discussed and decisions are taken. The AGM fosters a positive relationship with members, facilitates accountability, and helps to avoid mismanagement, elite capture and corruption. The AGM must be held in compliance with the constitution.

Training and certification

Access to training, formal certification and technical support are vital aspects of consolidating governance foundations. A range of formal CBNRM training modules were formulated in 2011 to create an effective training framework for conservancies.

Empowerment and gender equality

The increased capacity of rural communities to govern themselves and take control of their resources is a major success of community conservation. Previously disenfranchised Namibians are making financial decisions, voting for office bearers and engaging with private sector partners, local and regional authorities and central government. Positions of responsibility are being filled in the tourism and hunting industries, and in a range of conservation roles. The provision of student bursaries from CBNRM income seeks to further increase the range of skills available to rural communities.

There has been a broad increase in the number of women participating in CBNRM governance. This is likely to have a beneficial impact on the overall position of women in rural areas. Progress on gender issues is linked to cultural norms. The community conservation movement embraces a broad spectrum of cultures, and different traditional values have various implications for gender balance.

HIV/AIDS mainstreaming

From 2000 onwards, HIV/AIDS has been mainstreamed into all conservancy training programmes to emphasise the importance of fighting the epidemic. The holistic approach highlights the links between HIV prevention and the maintenance of conservancy-based livelihoods, and leverages existing governance structures in conservancies to engage in culturally appropriate prevention activities and behaviour-change communication. Surveys indicate that the initiative has helped to significantly reduce the primary behavioural determinant of the disease's spread in Africa: men having more than one sexual partner. This strong programme impact has important implications for reducing infections in rural areas of Namibia.

monitoring performance to improve governance

In the same way that resources need to be monitored to enable their effective management, governance can only be successful if it is monitored and evaluated. Some of the performance monitoring systems being used by conservancies are still evolving, yet an impressive array has been implemented. They are owned by the conservancies and designed to display data visually to allow all audiences to understand performance, trends and impacts. Data is limited to indicators with local relevance.

Institutional Development

Information showing the status of institutional development is collected on an annual basis. Data includes the level of involvement of conservancy members in decision-making and benefit distribution. Conservancies use the information to evaluate and improve their governance, and support organisations are able to provide targeted assistance. Table 1 summarises 2013 data.

Natural Resource Management

A simple tool is used to portray the natural resource management performance of conservancies. This provides two outputs: maps illustrating the comparative performance of conservancies (Figure 8), and a performance profile for each conservancy. The maps identify those conservancies most requiring support, while the conservancy performance profile enables weaknesses to be quickly addressed, and support providers to more objectively target their interventions.

Businesses, Enterprises and Livelihoods

Systems have been set up to capture key economic returns and livelihood performance data for conservancies. This information is critical in evaluating the financial performance of conservancies, to show members how they are benefiting, and to illustrate what contributions are being made by CBNRM to the national economy. Much of this data is presented in **Chapter 3**.

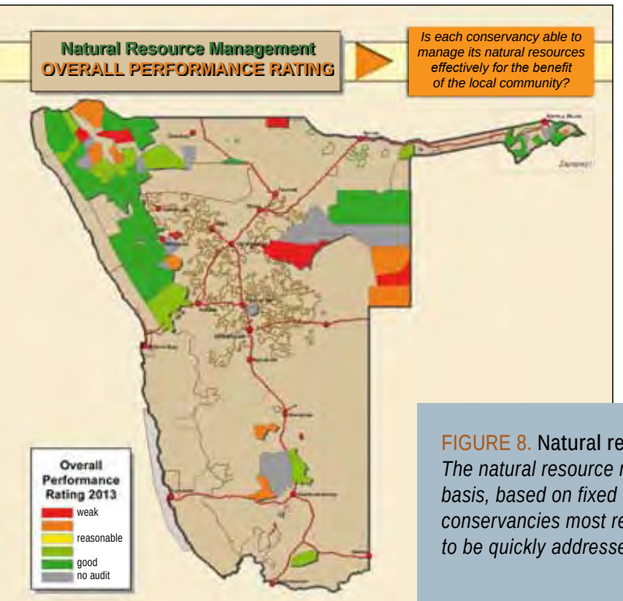


FIGURE 8. Natural resource management performance ratings
The natural resource management performance of each conservancy is reviewed on an annual basis, based on fixed criteria. Maps illustrate comparative performance and identify those conservancies most requiring support, while performance profiles enable areas of weaknesses to be quickly addressed, and support providers to more objectively target their interventions.

working with related governance structures

Traditional Authorities

Traditional authorities play a very important role in communal areas. In most conservancies, the active involvement of traditional authority representatives ensures a positive relationship. Where this is not the case, conflicts often arise over resources and returns. The Forestry Act stipulates that a community forest may only be registered with the consent of the traditional authority, facilitating collaboration from the outset.

Regional Councils

All community conservation organisations must comply with a variety of government regulations. By ensuring good communication with regional councils, community conservation organisations enable improved coordination of activities and land use planning.

Regional Land Boards

Regional land boards of the Ministry of Lands and Resettlement play an important role in land use allocation and regulation. Active collaboration with land boards avoids conflicts and improves land use planning.

coordinating national level support

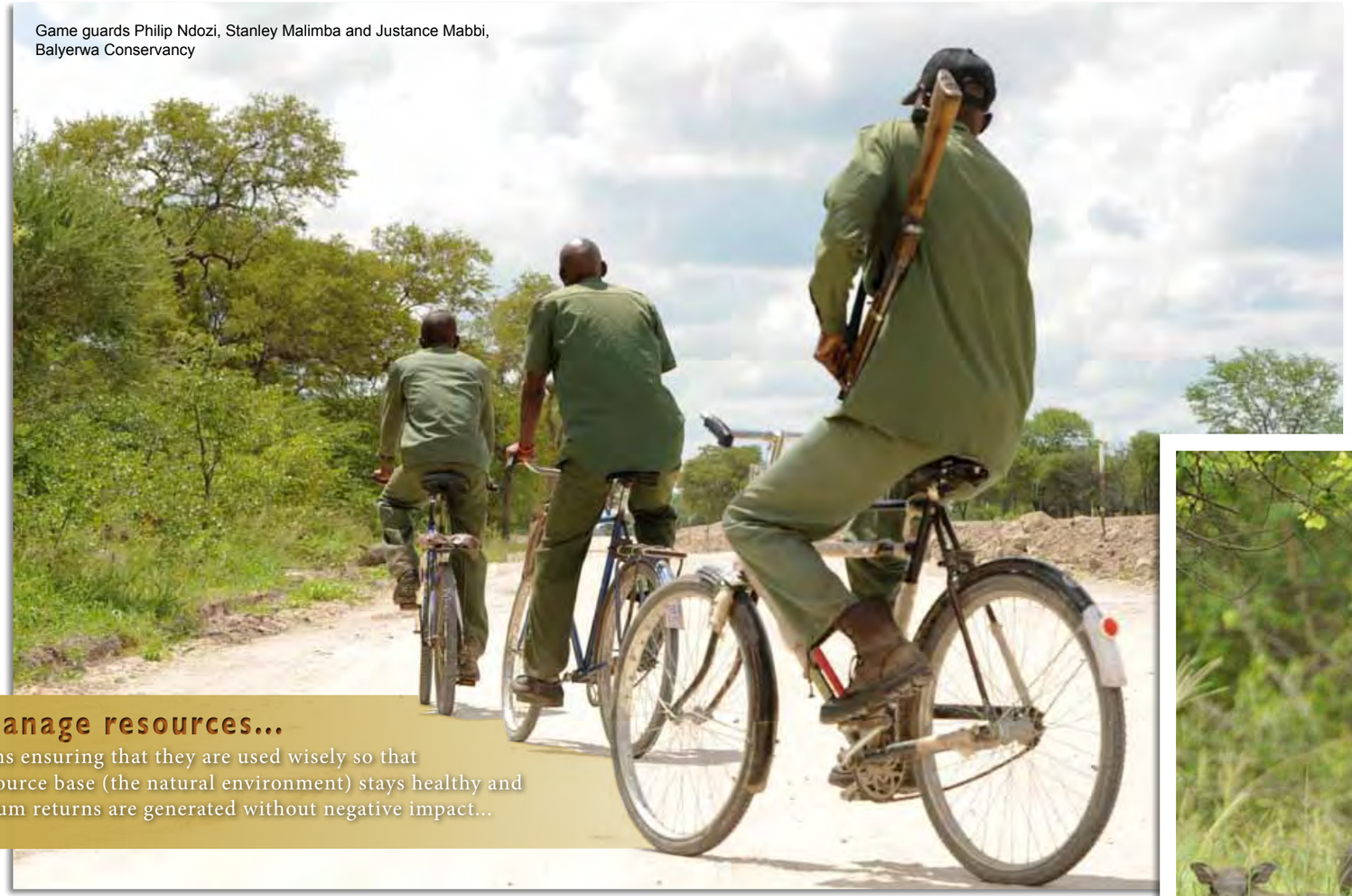
A broad support network for CBNRM initiatives is provided through the members of the Namibian Association of CBNRM Support Organisations (NACSO). NACSO embraces a variety of NGOs and individual members, who provide a great range of technical and funding support to community conservation. NACSO acts mainly as a platform facilitating communication, collaboration and coordination amongst its members and the broader CBNRM stakeholder community. The association is headed by a small secretariat, while three dedicated working groups provide technical advice and support the coordination of activities. The Institutional Development Working Group (IDWG), the Natural Resources Working Group (NRWG) and the Business, Enterprises and Livelihoods Working Group (BELWG) are flexible constellations of key stakeholders that pool experience and resources to provide effective support. A list with contact details of conservancies, community forests, line ministries, NACSO members and private sector partners is provided on pages 82-86.

[more info: **www.nacso.org.na**]

Growing crops for the tourism industry in Salambala Conservancy – communities have been empowered to formally engage with stakeholders at various levels, from private sector operators to government ministers.

Vegetable farmers Priscah Matengu and Weston Mwape, Salambala Conservancy

Game guards Philip Ndozi, Stanley Malimba and Justance Mabbi, Balyerwa Conservancy



to manage resources...

... means ensuring that they are used wisely so that the resource base (the natural environment) stays healthy and maximum returns are generated without negative impact...

2. managing resources

for the benefit of the people and the land

Zambezi Community Conservation Area

applying innovation... Market-based conservation emphasises direct linkages between conservation results and economic returns. Natural resources are actively used in innovative, sustainable and equitable ways to enable rural people to capitalise on Namibia's global comparative advantages – its environment, its cultural resources and its service industries. Strong incentives are created that facilitate biodiversity conservation. Traditional knowledge and skills are paired with modern technologies and approaches to enable adaptive management and innovative resource use. A wealth of information gathered through a variety of monitoring mechanisms is processed to provide powerful management systems and tools. These are managed by the communities, ensuring ownership and relevance. Rural communities are empowered to manage their natural resources to generate significant returns while at the same time ensuring the long-term health of the resource base – the natural environment.

Modern approaches and technologies introduced by community conservation are enhancing the value of natural resources and improving their use. Innovative systems are being applied to unlock the full potential of natural resources as a driver of rural economic growth and development. Simultaneously, this encourages environmental restoration and biodiversity conservation, and is linking individual entities into vast conservation landscapes where wildlife can roam for the benefit of the people.

What's the story?

behind managing resources

resource monitoring is still the core of natural resource management

a look at the evolution of natural resource management in communal conservancies

Fish guards Albert Likondo, Bernard Sikwana and Lawrence Kamwi, Sikunga Conservancy

the humble game guard...

It all started with the humble game guard. The man (or woman) out in the bush, who knows the land and the animals and the plants – and is prepared to go out every day to look after them. Having people out there in the veld, monitoring, managing and protecting the game wasn't just the start of community conservation in Namibia – it continues to be the basis for natural resource management today. Yet game guards are all too often overlooked, while NGO staff and conservancy committees and chairmen are celebrated, both locally and internationally, for the achievements of the programme.

Jackson Kavetu has been working in community conservation for almost a quarter of a century. He was appointed as a game guard by the traditional authority with support from the field NGO Integrated Rural Development and Nature Conservation just after Namibia's independence, long before any conservancy was registered. Jackson has been a champion for the growth of community-based conservation in his area. He has helped the Ehi-Rovipuka Conservancy develop out of the simple game guard concept that he embodies. When the conservancy was registered in 2001, the indispensable practice of game monitoring was already well-established here.

The community game guards appointed during the pioneering days of the movement had no specialised tools, systems or technologies. They received minimum wages and basic rations, and worked according to a simple mandate – to help stop poaching. And they did. They had the backing of the traditional leadership and the support of a small group of dedicated conservationists. They worked within their own communities and convinced people of the value of wildlife, which they began to see as their own.

Today, the around 530 game guards working in conservancies across the country have a whole suite of responsibilities – as well as excellent systems and tools to help fulfil them. Game guards are called on regularly to deal with human-wildlife conflict situations; they assist with game utilisation; they combat poaching and other legal infringements; many need to maintain conservancy infrastructure and help respond to fire, flooding or drought. Their knowledge of the conservancy and its habitats and species needs to be excellent – they are the ones who provide the information to manage the natural resources of their area in a sustainable manner.

Jackson Kavetu still works in Ehi-Rovipuka, but has recently specialised as a predator monitor. Flanked by Etosha National Park and the Hobatere Tourism Concession Area, the Ehi-Rovipuka community is troubled by regular conflicts with lions and other large predators. Support from the NGO AfriCat is enabling Ehi-Rovipuka to manage predators more effectively, which, amongst preventative measures, again includes focussed monitoring as a central component. Jackson's long years of experience make him ideal for the task.

Game guards can be found in diverse settings across Namibia: three men on bicycles, somewhere on a small road in the hinterland of the Zambezi Region, on their way home after a morning of wildlife monitoring in Balyerwa Conservancy. A lone man kneeling on the ground under a leadwood tree in Ehi-Rovipuka Conservancy, recording data in his Event Book. Three men in a boat out on the Zambezi River, checking that fishing nets conform to legal specifications. A man and a woman on a donkey cart in the mopane scrub of ≠Khoadi-//Hôas Conservancy, on their way to check conservancy infrastructure...

Everywhere, game guards are expanding their portfolio of work. Several conservancies in the Zambezi Region now employ fish guards as well as game guards, who work together in a close symbiosis. Fisheries is a key livelihood sector in eastern Zambezi, and a decline in fish catches and sizes motivated community-based management systems, which are already showing positive results. Community fish reserves protect important breeding grounds, while fish guards confiscate illegal nets and create community awareness.

Dedicated rhino rangers are supporting the fight against commercial poaching in north-western Namibia. The monitoring of vegetation and rangeland condition is a part of game guard work in an increasing number of conservancies. As conservancies become more established, needs and priorities evolve. In response, both practical activities and the management systems that guide them continue to be adapted.

the systems that work...

Thirty years after the appointment of the first community game guards, a network of dedicated conservation staff has spread across more than half of all communal lands or about one fifth of the country, monitoring and managing wildlife – and an increasing suite of other resources. In each area, the way game guards carry out their work has evolved to fit local conditions and needs. Yet everywhere it is based on the same overall systems and principles.

Each game guard maintains an Event Book – the yellow booklet used for entering wildlife data and other natural resource information, as well as related events such as conflict incidents, rainfall or poaching. The booklet is the primary module of the highly successful Event Book Monitoring System (more detail on page 44) that also includes annual game counts, which game guards carry out in collaboration with MET and NGO staff. The monitoring is just the first step in the conservancy information cycle (more detail on page 29) that enables the information gathered by game guards to be used for effective and adaptive management.

The Event Book is implemented as part of the conservancy formation process, and is now used in 78 conservancies. Annual game counts are more difficult to implement, requiring different methodologies to suit varying landscapes, habitats and species, and are currently carried out in 52 conservancies. Some conservancies still need to build the capacities to do

game counts, while others currently do not have sufficient game numbers to justify an annual count.

Game utilisation needs stringent controls to ensure sustainability. Rigorous game monitoring, a meticulous quota setting process, strict controls over actual use, and ongoing adaptation to fluctuating circumstances in a dynamic environment form the basis of the sustainable use of wildlife in conservancies. During 2013, 58 conservancies harvested game for their own use, while 44 managed trophy hunting concessions and 18 managed shoot-and-sell game harvesting. Regular quota setting meetings are currently held in 66 conservancies.

The interpretation of available information is as important as data collection – data is worth nothing if it is not used. The Con.Info Data Base enables access to most historical conservancy data, including information on governance, natural resources and CBNRM returns. The data base has been significantly refined over the last few years and forms the hub of the conservancy information cycle. While monitoring data is already aggregated in the field by the conservancies themselves, national level interpretation enables the incorporation of landscape-level trends. The Natural Resources Working Group now collates the data into annual conservancy reporting materials, which are used by the conservancies to guide management decisions, and by the MET and support organisations to direct interventions and assistance.

cooperation and adaptation...

From the start of the programme, community conservation has been based on cooperation and adaptation. Game guards collaborate with the local communities in whose interest they are working. Conservancies collaborate with the Ministry of Environment and Tourism as part of the MET's national mandate to conserve biodiversity. Work with NGOs and natural resource management specialists provides targeted technical support and funding assistance to strengthen management systems and adapt to evolving needs and circumstances.

While many established conservancies are today able to carry out most of their resource management activities on their own, the MET continues to provide support and is assisted by NGOs and independent consultants. Over the years, the Natural Resources Working Group has become an increasingly important service provider. The NRWG offers a wide range of support, including specific technical assistance to the Event Book System and annual game counts, such as producing and distributing the required materials and helping with logistics. The NRWG also supports the quota setting process and helps conservancies to establish fair partnerships with hunting operators.

Adaptation has been crucial during the growth of community conservation. Throughout the 30 years of CBNRM implementation, many things have changed. National independence was the most momentous change, empowering communities and altering the way the nation manages its natural assets. Over the last 25 years, the human population in communal areas has grown tremendously, putting increasing pressure on the land and its resources. Economic growth has opened up new opportunities, but there have also been significant fluctuations in sectors such as tourism and agriculture. And the environment itself continues to change, partly due to human influences, partly due to natural cycles, and increasingly due to the effects of climate change.

The ability to adapt as circumstances change is thus a vital aspect of good resource management. Conservancies have needed to continually adapt resource use in attempts to balance the needs of growing populations of both people and animals – and the intensified land use that has come with this. To add complexity, the available natural resources continually fluctuate, as wildlife moves in search of food, or plant harvests vary according to the abundance of rain.

Game guards in ≠Khoadi-//Hôas – a network of dedicated conservation staff has spread across the communal lands of Namibia to manage and protect wildlife. Activities are tailored to suit local conditions and needs.

Game guards Emil /Goagoseb and Maleska Harases, ≠Khoadi-//Hôas Conservancy

Usage quotas and control mechanisms have thus been refined and adapted, especially for activities such as shoot-and-sell harvesting, which can have major impacts on populations. Human-wildlife conflict is another area that requires continual adaptation. Interestingly, even though elephants, lions and other predators have increased significantly in many areas, the average number of conflict incidents per conservancy has remained relatively stable for all types of conflict. Clearly, the efforts of conservancies to mitigate conflicts are showing some results.

As both external influences and internal complexities continue to increase, conservancies and communities will need to keep adapting – and collaborating. They may need to strike new alliances, as current support structures can no longer meet all needs. While donor funding is likely to decrease, partnerships with the private sector may need to become stronger. Yet even though the world keeps changing, and technology is transforming the way we deal with almost everything, boots on the ground – the humble game guard out in the field – is likely to remain the core of natural resource management for some time to come.

Natural resource management

at a glance

At the end of 2013 there were...

- 78 conservancies using the Event Book monitoring tool (incl. unregistered conservancies & Kyaramacan Ass.)
- 52 conservancies conducting an annual game count
- 4 national parks undertaking collaborative monitoring with conservancies
- 38 conservancies directly involved in tourism activities
- 66 conservancies holding quota setting meetings
- 58 conservancies doing own-use harvesting
- 44 conservancies with trophy hunting concessions
- 18 conservancies with shoot & sell harvesting contracts
- 56 conservancies with a wildlife management plan
- 54 conservancies with a zonation plan
- 531 game guards working in conservancies (incl. unregistered conservancies & Kyaramacan Ass.)

What's being achieved?

Community conservation means...

- combatting poaching and other illegal activities
- mitigating human-wildlife conflict and limiting losses incurred through living with wildlife
- zoning areas for different land uses to reduce conflicts
- enabling wildlife recoveries, effective natural resource management and environmental restoration
- working with neighbours to promote a large landscape approach to natural resource management
- black rhinos occur in 15 conservancies
- elephants occur in 46 conservancies
- lions occur in 24 conservancies
- species that had become locally extinct in the Zambezi Region, such as eland, giraffe and blue wildebeest, are thriving after re-introductions
- the North West Game Count is the largest annual, road-based game count in the world

New in 2013:

- development of a game guard certification system
- introduction of new wildlife harvesting control mechanisms

The biggest challenges?

- managing human-wildlife conflict
- achieving recognition of the vital role of community game guards
- ensuring that wildlife harvesting is well-controlled and sustainable
- minimising impacts and optimising returns from consumptive game use

Trackers Pieter Bo, /Kaece //Xari and Robert !Kung, Nyae Nyae Conservancy

Hunting staff in Nyae Nyae Conservancy – if wildlife cannot be used to generate income for conservation activities and provide jobs and other benefits, it is unlikely to be conserved outside national parks.

promoting market-based conservation

Innovative approaches are required to effectively manage wildlife and other natural resources outside state protected areas, where local communities live. Especially in communal areas, where people use a variety of livelihood strategies, success depends on the returns gained from natural resource use. Market-based conservation creates the necessary linkages between conservation goals and the economic value of natural resources in order to deliver significant economic returns and in-kind benefits while safeguarding the environment. This chapter portrays the main resources being managed, and the systems being used to manage them.

resources and approaches

All natural resources are interlinked within the diversity of life. While different government structures have been developed to manage wildlife, plant and fish resources, it is possible for communities to integrate these and other sectors to avoid conflicts, and ensure cohesive overall land use and resource management.

Charismatic African wildlife

Wildlife is one of the greatest resources of Africa. Tourists come to Namibia firstly to see wildlife in the stunning, unfenced settings our country offers. Healthy populations of charismatic wildlife such as the Big Five– elephant, rhino, buffalo, leopard and lion – create a tourism value that is not easily surpassed by other land uses. Adding other rare and valuable species such as cheetah, wild dog, roan and sable, as well as classic tourism favourites such as zebra, giraffe, hippo, crocodile and antelope to the list further increases that value. The effective management of this immeasurable resource lies at the heart of community conservation. Conservancy management has facilitated large-scale wildlife recoveries and enables the protection of valuable species, which is allowing wildlife values to be realised. All wildlife use is regulated through a system of annually reviewed quotas, permits and reporting.

Flourishing indigenous flora

Known mostly for its stunning desert scenery, Namibia is not perceived as a country of forests, yet forest resources form an extremely valuable asset for many rural communities. The use of a great variety of non-timber plant resources from all parts of the country is underlining the value of our indigenous flora. Woodlands in the north and north-east harbour a variety of valuable trees such as kiaat and Zambezi teak with commercial timber value, and burkea and ushivi, used for construction. The growing range of veld products includes devil's claw tubers, omumbiri (commiphora wildii) resin, Kalahari melon seed, thatching grass, as well as marula, baobab, *Ximenia* and *Sarcocaulon* fruits. Harvesting is regulated through a licensing system and plant product user groups have formed to coordinate harvesting and marketing activities.

International corporations are searching the globe for new biological ingredients for their products, an activity called bio-prospecting. While this is likely to open further opportunities within the plant sector, bio-prospecting needs to be carefully controlled. Namibia is taking steps to safeguard its resources from uncontrolled exploitation.

Fabulous fish

Namibia's northern rivers harbour excellent fish resources, including fine food fish as well as sport angling favourites such as tigerfish, catfish and bream. Inland fisheries are an important resource for communities. Fish productivity in rivers can be optimised by creating community fish reserves that facilitate undisturbed breeding. Although netting is generally not allowed within the reserves, communities enjoy increased fish harvests in adjacent areas, as healthy populations of large fish disperse. This is also beneficial to sport angling offered by tourism lodges, which may practise catch-and-release. In the absence of a clear legal framework empowering local communities to manage fish resources, conservancies are assisting in the issuing of fishing licenses.

Healthy rangeland

Healthy rangeland is a vital communal resource, forming the basis of domestic stock as well as wildlife production. Community rangeland management is a holistic approach that combines cutting edge rangeland science with traditional herding and animal husbandry techniques to ensure that sustainable rangeland practices are implemented. Grazing activities in rangeland areas are managed in a collaborative effort by participating farmers.

Productive soils

Conservation agriculture is a simple method designed to optimise crop yields in areas of relatively low or erratic rainfall and poor soils. The method applies various techniques to improve soil quality and optimise the use of rainwater. It produces good harvests from small areas, can increase yields without fertiliser by over 60% and increases harvesting chances in years of erratic rainfall. Conservation agriculture is being implemented by more and more communal farmers.

Vital water

Water is the basis of all life. In a dry country like Namibia, water management is particularly crucial. Especially at the level of water basin management, important collaboration can take place amongst the various land use sectors to ensure healthy water supplies.

The value of diversity and endemism

The conservation of biodiversity is a key objective of community conservation. The most notable biodiversity 'hot spots' are in the north-east of Namibia. By contrast, concentrations of endemic species are greatest in the dry central and western parts. Endemics are species that have a distribution largely or completely confined to Namibia, and our country has a special responsibility for their conservation. Through sustainable management of natural resources, conservancies and community forests are making valuable contributions to the conservation of both biodiversity and endemism (Figure 9).

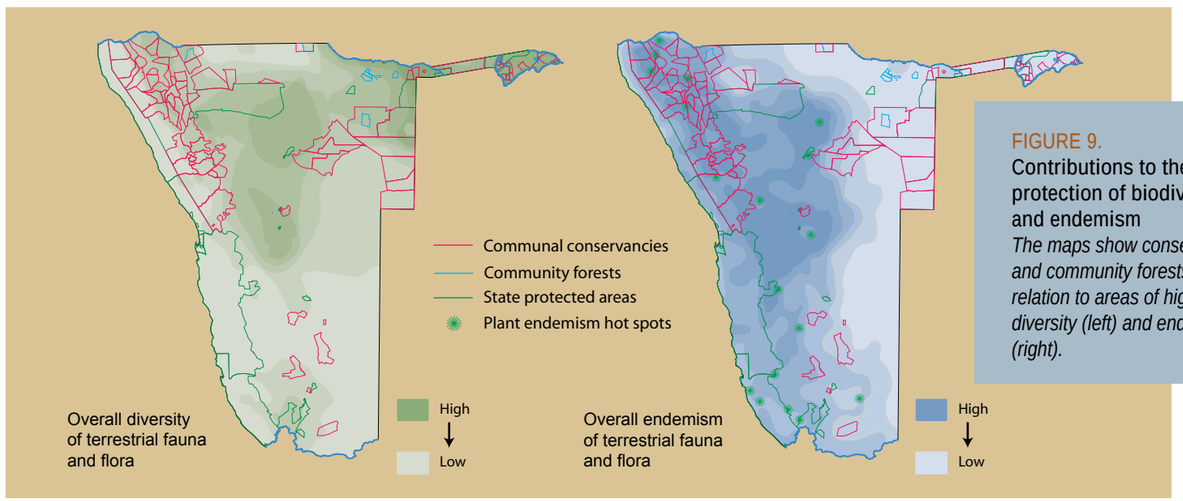


FIGURE 9.
Contributions to the protection of biodiversity and endemism
The maps show conservancies and community forests in relation to areas of high bio-diversity (left) and endemism (right).

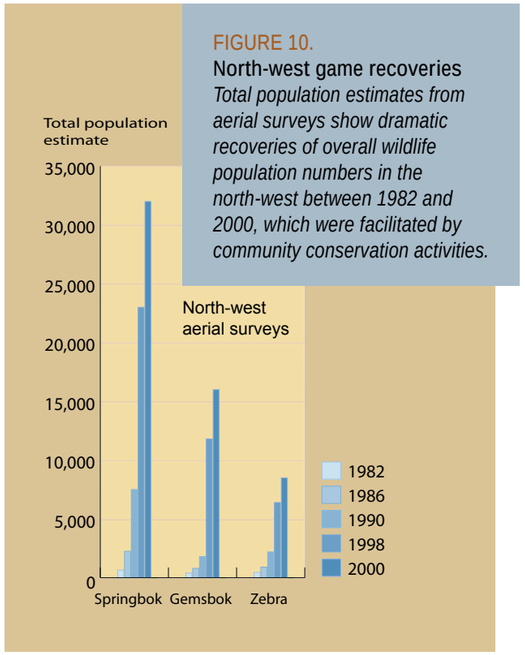


FIGURE 10.
North-west game recoveries
Total population estimates from aerial surveys show dramatic recoveries of overall wildlife population numbers in the north-west between 1982 and 2000, which were facilitated by community conservation activities.

healthy wildlife populations

Remarkable wildlife recoveries

Conservancy efforts to minimise poaching and ensure sustainable use have been rewarded by remarkable wildlife recoveries. This is most evident in the north-west, where wildlife had been reduced to small numbers through poaching and drought by the early 1980's. It is estimated that there were only 250 elephants and 65 black rhinos in the north-west at this time, and populations of other large mammals had been reduced by 60 to 90 percent since the early 1970s. Data from species experts shows that the number of rhinos and elephants has increased substantially since then. Aerial surveys indicate that springbok, gemsbok and mountain zebra populations increased over 10 times between 1982 and the year 2000 (Figure 10).

The game is free to move

Data from the annual North-West Game Count indicates clear fluctuations in the average number of animals seen per 100 kilometres driven (Figure 11). Game movement and range expansion into inaccessible terrain currently not being surveyed, and into areas outside the survey zone, appear to be the main explanation for the fluctuations. Limitations in the accuracy of the census methods may also play a role. Finding ways to cover more of the inaccessible terrain currently excluded from the counts and expanding the census to cover adjacent areas would provide a more accurate picture. Additional monitoring that provides more information on seasonal migrations of springbok and gemsbok would also help to answer some of the current questions. Importantly, while they are fluctuating, the estimated numbers of all species remain at or above the estimates recorded through the aerial surveys at the end of the recovery period.

Maintaining healthy populations

It is unrealistic to expect game populations in communal areas to continue to increase indefinitely to the kind of abundance found in national parks. Communal lands are not parks, but areas where local communities engage in a variety of livelihood activities. In community conservation areas, people have agreed to include natural resource management in the range of activities being practised. Land use priorities are shifting to a healthy diversity where wildlife is not only tolerated, but communities are investing their own funds into conservation activities. Wildlife is managed in accordance with a community's land use priorities, based on monitoring and offtake quotas.

Resource monitoring

GAME COUNTS

Most conservancies conduct periodic game censuses. The biggest of these is the North-West Game Count, conducted annually since 1999 (Figure 11). The count includes all the conservancies and tourism concessions outside of national parks in the north-west and is the largest annual, road-based game count in the world. It covers an area of around seven million hectares and is undertaken as a joint exercise between conservancy members and staff, and MET and NGO staff. The same methodology has been expanded to conservancies and protected areas in the south of Namibia. Conservancies in other parts of the country also carry out annual game counts, but the methods differ to accommodate local conditions. Conservancies in the east perform an annual moonlight waterhole count, while conservancies in the north-east undertake counts on foot along fixed routes. All census methods are intended to contribute to and work synergistically with other existing census methods, such as the aerial censuses conducted by the MET.

AERIAL CENSUSES

Regular aerial censuses have been undertaken by the MET in different parts of Namibia. These confirm wildlife increases in both the north-west and north-east.

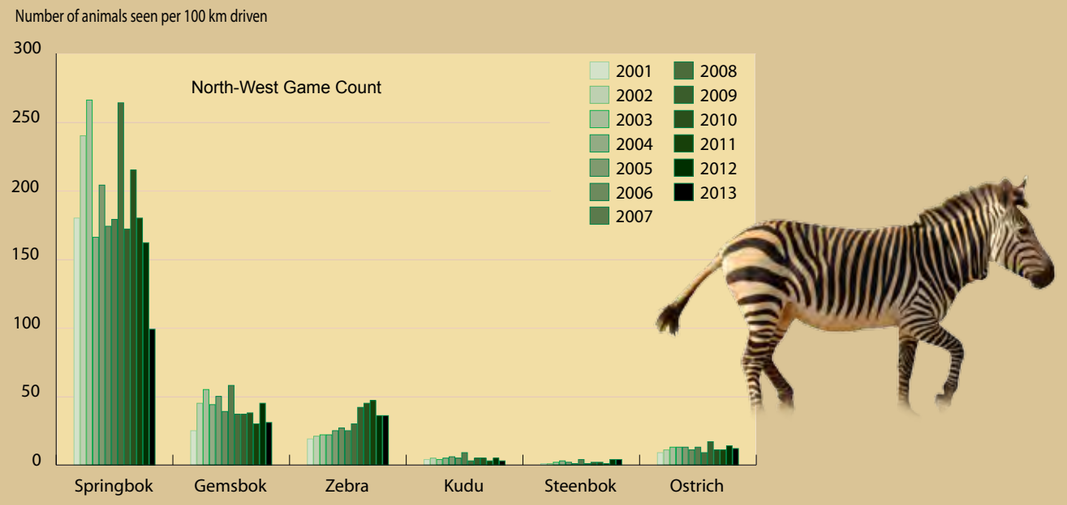


FIGURE 11. Annual North-West Game Count – sightings per 100 kilometres
Data from the annual North-West Game Count shows the average number of animals seen per 100 kilometres driven during the count. This provides population trends over time. The sharp downward trend in sightings of springbok is likely to be due to a combination of factors. These include low rainfall during the last two rainy seasons, which resulted in a significant increase in recorded mortalities during 2013. Harvest quotas have increased over the last decade, but remain below the estimated growth rate of the population as seen on the count, and are unlikely to be the main cause of the decline. Movement in and out of the count area is also a considerable factor in population fluctuations. Importantly, the estimated numbers from the counts remain near the estimated overall population figures at the end of the recovery period recorded through the aerial surveys.

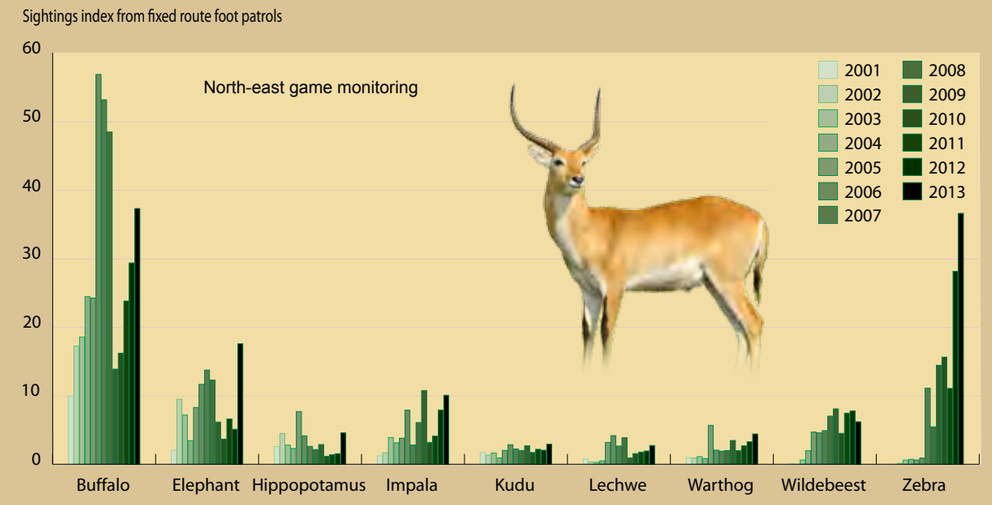


FIGURE 12. North-east game monitoring – sightings on fixed-route foot patrols
Important wildlife recoveries have occurred in the Zambezi Region. These have been largely due to breeding, reduced poaching, introductions, and influx from Botswana. Although poaching had declined substantially over the last 15 years, there has been a recent sharp increase in ivory poaching, which is of great concern. The graph gives an index of sightings during regular fixed-route foot patrols in seven long-established conservancies (Impalila, Kasika, Kwandu, Mayuni and Wuparo). Again, wildlife movement in and out of the area (including trans-boundary movements to and from neighbouring countries, which has been actively recorded for some species through remote tracking) is the main explanation for the significant annual fluctuations.

The data also underlines the value of using different counting methods to gain a better understanding of wildlife dynamics.

THE EVENT BOOK

The Event Book is a highly successful management tool initiated in the year 2000. It has been continuously refined and is used by almost all registered conservancies, while being systematically introduced to upcoming conservancies during their formation. The simple but rigorous tool promotes conservancy involvement in the design, planning and implementation of natural resource monitoring. Each conservancy decides which resources it needs to monitor, bearing in mind issues on which conservancies are obliged to report to the MET. The resources or themes identified may include human-wildlife conflict, poaching, rainfall, rangeland condition, predators and fire. The suite of resources being monitored is increasing and includes plants, fish, honey and even livestock. For each topic there is a complete system that begins with systematic data collection, goes through monthly reporting and includes long-term reporting.

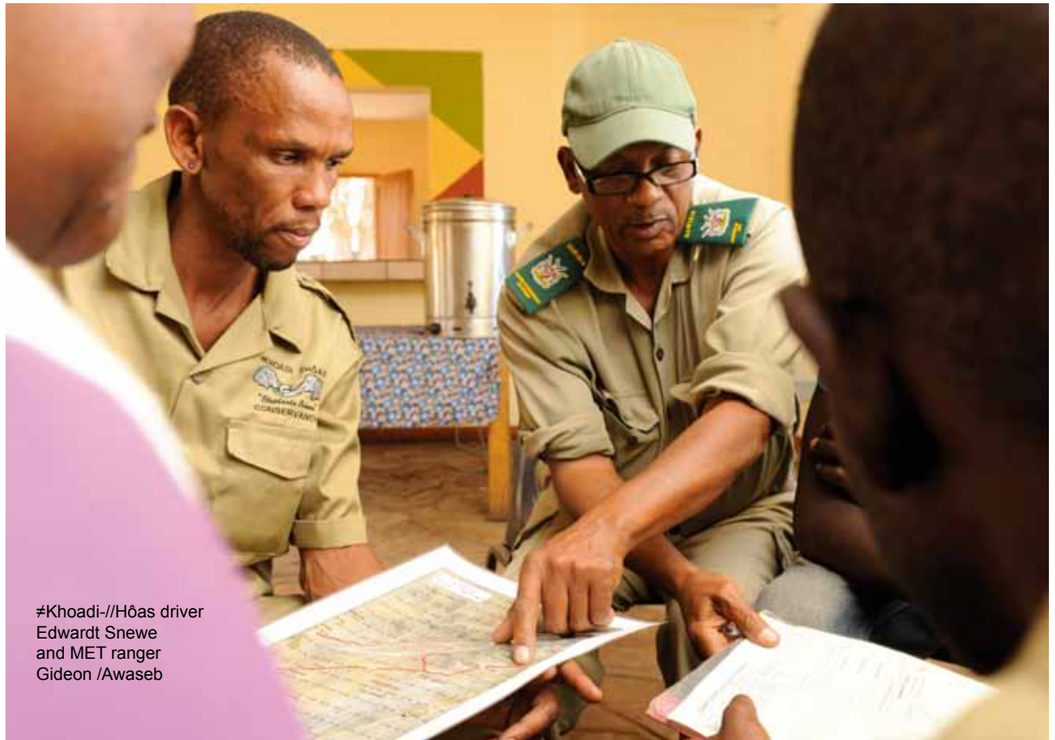
Every year, an annual audit of the system is conducted where all data is collated into a conservancy's annual natural resource report, which the conservancy uses as an important management tool. The report is also sent to the MET and provided to NACSO to update its databases, and is used in national data and trend analyses.

The Event Book concept has been adapted to monitor conservancy enterprises and other economic activities. Due to its almost universal application, the system has been 'exported' to state and private sector parks in Namibia, as well as other countries in Africa and Asia.

Defining and tracking wildlife status

Once initial wildlife recoveries from population lows have been achieved, the management focus changes to maintaining game populations between lower and upper thresholds. Maintaining numbers above the lower threshold ensures that the species is able to recover from external impacts (drought, disease, predation, utilisation, poaching). Keeping numbers below the upper threshold enables viable off-takes and ensures that the population stays in balance with its habitat and other land uses. Tracking population trends with the expectation that wildlife numbers should always increase is not an appropriate approach in the longer term. More sophisticated monitoring tools now define the 'species richness' and 'population health' of game in conservancies. Using game count data and information from a wide variety of other sources, wildlife experts compile 'species richness' lists for each conservancy. These show the present diversity of species in the conservancy relative to past diversity. The population health of each species is also scored, and from the two sets of information maps are generated to portray wildlife status in conservancies (Figure 13).

Game count planning in ≠Khoadi-//Hôas Conservancy – meticulous monitoring is a core component of effective natural resource management and is carried out as a collaborative effort between conservancies and ministry staff.



≠Khoadi-//Hôas driver Edwardt Snewe and MET ranger Gideon /Awaseb

more innovative tools

Staffing

Community conservation is by the people for the people. Community participation has grown ever since local leaders first appointed community game guards to look after wildlife in the north-west in the early 1980s. Adequate staffing is a vital component of effective resource management, and an increasing number of people are formally employed by conservancies.

Mapping

A mapping service was developed to enable conservancies, the MET and support NGOs to generate detailed conservancy maps for registration, planning, management, monitoring and communication. Boundaries are established and mapped first, which is important in publicly proclaiming the existence of a conservancy. Detailed maps show important features for planning and monitoring purposes. The entire process is participatory, with community members being trained to gather data that result in maps with local relevance and ownership.

Zoning

Land use planning has to consider both the needs of farmers to grow crops and rear livestock, and of wildlife to move across the landscape. Zoning conservancies for different land uses can significantly reduce conflicts, while wildlife corridors allow movement between seasonal ranges, reducing local pressure. Many conservancies have zoned their areas, but are constrained by the fact that they do not have legal powers to enforce the zones. Conservancies are working with traditional leaders and regional land boards to make zonation more enforceable.

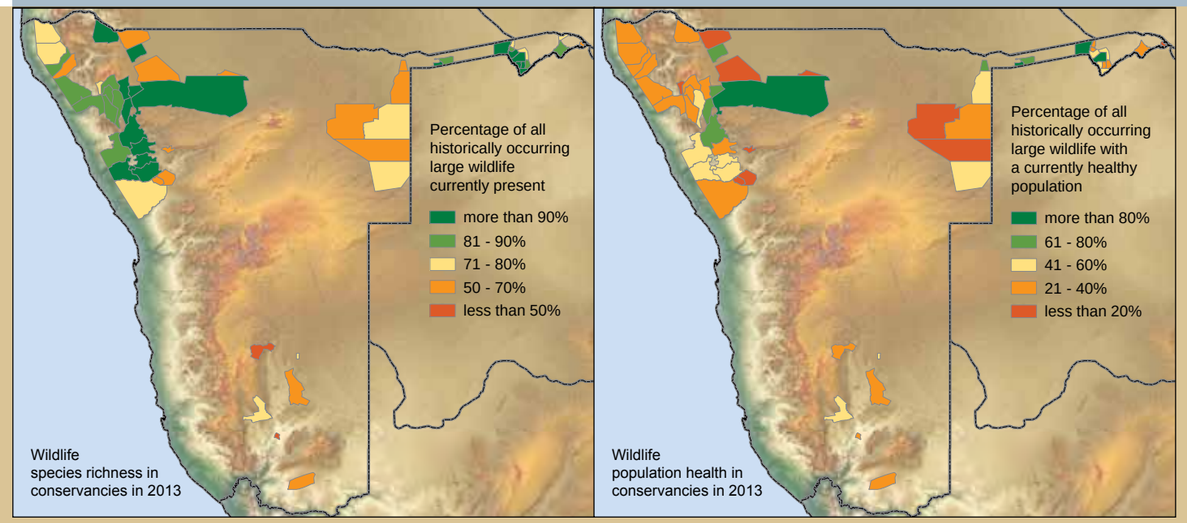
Quota setting

All consumptive use of wildlife in conservancies is controlled through annual quotas that define the number of animals that may be used. The system has been in place since 1998 and is coordinated by the MET with support from NGOs. Annual quota setting meetings take into account both local knowledge and collected information, including game census and Event Book data, harvest returns and desired stocking rates. The meetings allow discussion, review a community's vision for each species and encourage input from private sector operators in the area. The community agrees on quotas for own-use meat harvesting, trophy hunting, shoot-and-sell meat harvesting or live-capture-and-sale. Conservancies then request the quotas from the MET, and these are scrutinised in Windhoek before being approved or amended.

Game use rates and population numbers

Harvest rates require careful consideration based on sound scientific methods. Depending on environmental conditions, springbok populations can, for example, grow by up to 40% per year, while gemsbok and zebra populations may grow by 20%. Harvest rates of less than 20% per year for these species are thus unlikely to reduce overall populations under normal conditions. Game use data shows that harvest rates remain below estimated growth rates, even as a percentage of the animals actually seen during game counts. It is impossible to see all animals during a count, and compared to likely population estimates, harvest rates are minimal.

FIGURE 13. Species richness and population health of wildlife in conservancies: *The* wildlife species richness *map (left) indicates the percentage of all large wildlife species that historically occurred, which are currently present in a particular conservancy. The* wildlife population health *(right) indicates the percentage of all large wildlife species that historically occurred, which currently have a healthy population in a particular conservancy. Etosha, Mamili, Mudumu and the core areas of Bwabwata National Park are included on the maps for comparison.*



boosting wildlife numbers

Targeted reintroductions of game, which boost natural increases to help rapidly rebuild the wildlife base, are allowing natural resource returns to be realised more quickly. Whilst the bulk of the species being moved are common game such as springbok, gemsbok, kudu and eland, the introductions have also included highly valuable animals such as sable, black-faced impala, giraffe and black rhino (Table 2). The game has been moved from areas where there is an oversupply of animals to areas where populations are low.

Reclaiming range

The range of several species that had become locally extinct, namely giraffe, black-faced impala, Burchell's zebra, blue wildebeest, eland, sable and black rhino, has been re-established through translocations by the MET. Conservancy formation has helped to reinstate the range of these species. A number of conservancies are now officially recognised as rhino custodians. The fact that communities are trusted by the Namibian government to be custodians of highly endangered and valuable species is testimony to the conservation performance of conservancies. Namibia is the only country in the world where black rhinos are being translocated out of national parks into communal areas.

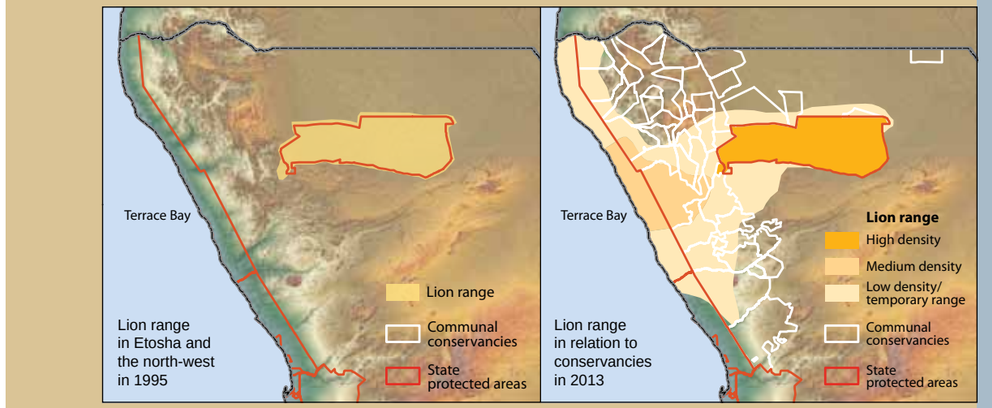
predator management

The status of large predators can be a useful indicator of the health of wildlife populations. The remarkable recovery of the iconic desert-adapted lions in the north-west in both numbers and range after years of vehement persecution is a clear indication of the health of the prey base, as well as of a greater commitment by local communities to tolerate potential 'problem animals' that have great value (Figure 14). The perceived threat posed by lions continues to be disproportional to damage caused by this species, perhaps because it is also feared as a threat to human life (Figure 15). Yet the expansion of the population is being tolerated, and is facilitated by community conservation.

Population trends of other large predators in north-western conservancies have generally been stable or increasing. In the Zambezi Region, where game count trend data are less reliable due to methodological difficulties, sighting trends of predators are important indicators for trends in prey species. The numbers of all predators occurring in communal areas remain well above pre-conservancy levels.

TABLE 2.
Translocations of wildlife into conservancies
Between 1999 and 2013, a total of 10,568 animals of 15 different species were translocated to 31 registered conservancies and four conservancy complexes. The total value of the translocated animals (excluding black rhino) is in excess of N$ 30 million.

Species	1999-2001	2002-2004	2005-2007	2008-2010	2011	2012	2013	Grand Total
Ostrich	-	11	-	-	-	-		11
Springbok	181	550	-	880	-	196		1,807
Common impala	171	69	68	198	-	296		802
Black-faced impala	-	31	162	663	-	-		856
Hartebeest	315	254	-	499	53	43		1,164
Sable	-	-	37	-	-	-		37
Gemsbok	177	251	-	849	-	203		1,480
Blue wildebeest	33	129	116	48	-	269		595
Waterbuck	-	-	-	26	99	95	244	464
Kudu	215	106	83	360	-	88	49	901
Eland	83	193	185	289	50	110	252	1162
Burchell's zebra	1	31	50	192	-	93		367
Hartmann's zebra	-	-	197	147	-	202		546
Giraffe	-	10	48	102	132	40		332
Black Rhino	-	4	10	30	-	-	-	44
Grand Total	1,176	1,639	956	4,283	334	1,635	545	10,568



Adapted from data available on www.desertlion.info

FIGURE 14.
Lion range expansion
Numbers of the iconic 'desert' lions have increased dramatically from a low of around 25 individuals in 1995 to around 150 in 2013. The maps show the equally dramatic range expansion over this period. Lions are once again wandering along the misty shores of the Skeleton Coast, creating a spectacular tourism attraction. Although some lions are killed each year, the fact that people are generally tolerating their presence shows a clear conservation commitment.

The value of wildlife – while they can cause severe problems for communal farmers, species such as rhino, elephant and lion add great value to tourism and hunting products and generate significant returns that offset losses. Ruthless commercial poaching is now threatening community gains and years of conservation work.

managing
human-wildlife conflict

Perceptions of the problem

Wildlife is generating increasing cash income and in-kind benefits for rural communities, yet it regularly comes into conflict with farming activities. Perceptions of the conflicts are often skewed or exaggerated. The widespread belief that human-wildlife conflict continues to increase is wrong. Total recorded incidents are increasing, because the number of conservancies is increasing, yet the average number of incidents per conservancy remains generally stable (Table 3). Data shows which species are causing most problems in which areas, and illustrates a disproportionate control of certain species, which are perceived to be the biggest threat, even though the data indicates otherwise (Figure 15).

National guidelines

The MET launched the Human-wildlife Conflict Policy in 2009 to provide national guidelines for conflict mitigation. The policy makes clear that wildlife is just that – wild, and a part of the natural environment. Although government coordinates its protection, it cannot be held responsible for damage caused by wildlife. The policy sets out a framework for managing wildlife conflicts, where possible, at local community level. Two key strategies seek to mitigate the costs of living with wildlife. The first is prevention – practical steps for keeping wildlife away from crops and livestock. The second is the Human-wildlife Self Reliance Scheme, which involves payments to those who have suffered losses.

Self-insurance

Prior to the launch of the MET Policy, conservancies in the Zambezi and Kunene Regions had already implemented the Human Animal Conflict Conservancy Self Insurance Scheme (HACCSIS). Through this, losses to conservancy members were offset. Conservancies paid a major portion of the claims from own income, matched by donor funding, and took the lead in running the scheme.

Strict conditions for offsets

The Human-wildlife Self Reliance Scheme makes payments under strict conditions. Incidents must be reported within 24 hours and verified by the MET or a conservancy game guard. Payments will only be made if reasonable precautions were taken. Initial funding for the scheme was provided through the Game Products Trust Fund of the MET. All conservancies received a start-up fund, to which they are expected to add own funding. A portion of the income from problem animals that need to be destroyed flows back to the Game Products Trust Fund.

Avoiding conflicts

Conservancies, the MET and NGOs continue to develop innovative mitigation measures. Chilli is used as a deterrent to keep elephants away from crops, crocodile fences provide safe access to water, predator-secure enclosures protect livestock, and physical barriers protect water infrastructure from elephants. Appropriate land-use planning and zoning are key elements in avoiding conflicts, while generating tangible returns from wildlife is vital in promoting community willingness to live with wildlife and to accept the challenges associated with this.

Safe swimming behind a crocodile fence in Kwandu Conservancy – the impacts of human-wildlife conflict on individual households can be severe, yet perceptions of the overall scale of the problem are often skewed.

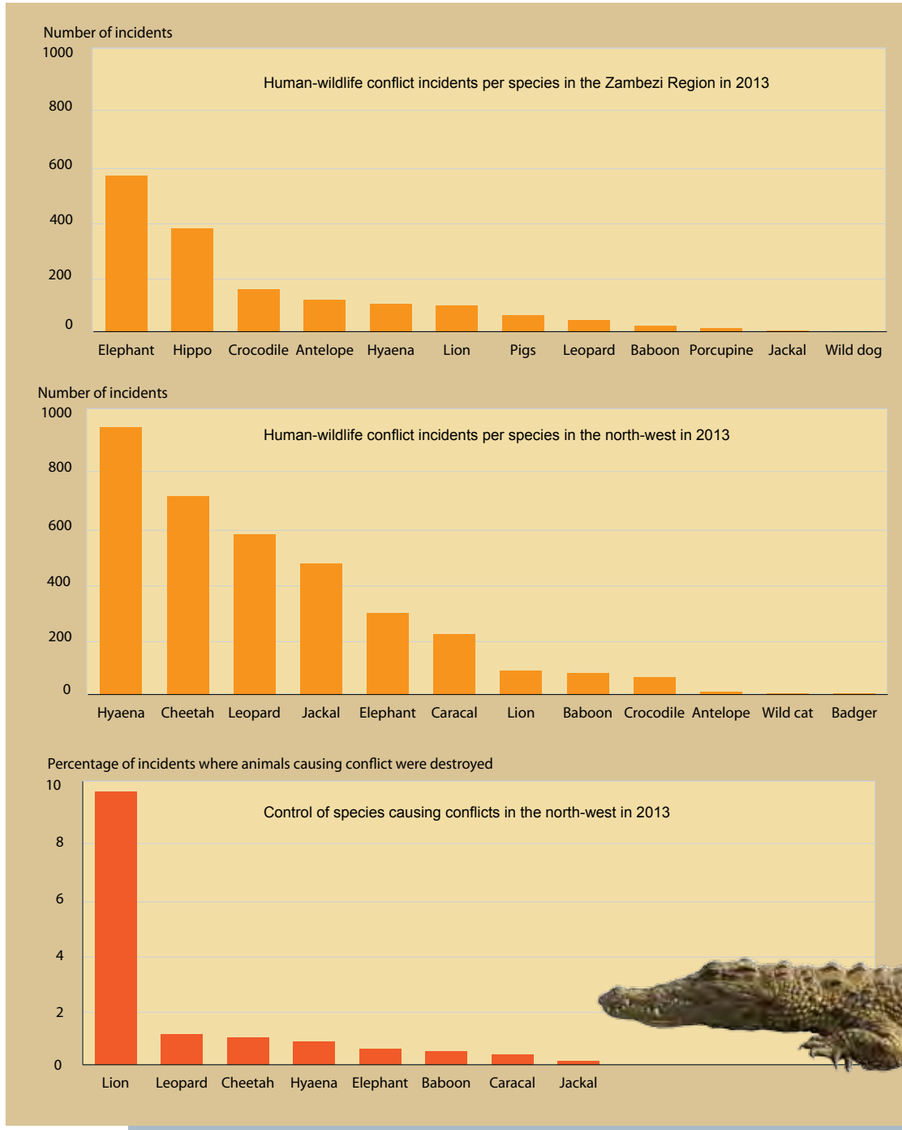


FIGURE 15.
Conflict species...
The orange graphs indicate the number of incidents per species causing conflicts in the Zambezi Region (top) and the north-west (centre) during 2013.

... and their control
The red graph (bottom) indicates the level of control of species causing conflicts in the north-west during 2013, shown as the number of animals destroyed as a percentage of the number of conflict incidents recorded for that species. That close to 10% of conflict lions were destroyed, while lions caused the fewest incidents of all larger land predators, reflects the much higher risks that lions pose, both to people and to large and valuable livestock. It may also indicate skewed perceptions, often influenced by misinformation and fear.

TABLE 3. Human-wildlife conflict incidents across all registered conservancies
The steady increase in the total number of human-wildlife conflict incidents in conservancies is partly due to the increase in the number of conservancies. While the annual average of total incidents per conservancy has remained relatively stable, substantial fluctuations occur in individual conflict categories. Attacks on both people and livestock were at a high during 2013.

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total conflict incidents from all conservancies	3,019	2,936	4,282	5,713	5,640	7,095	7,659	7,772	7,298	7,279	9,228
Number of conservancies	29	31	44	50	50	53	59	59	66	77	79
Average no. of human attacks per conservancy	0.6	0.5	0.3	0.2	0.3	0.5	0.4	0.4	0.1	0.3	0.6
Average no. of livestock attacks per conservancy	59.8	54.3	60.4	63.5	63.2	82.7	82.6	83.7	74.7	66.0	94.7
Average no. of crop damage incidents per cons.	37.9	35.0	33.4	47.0	43.4	46.7	44.4	45.1	34.4	26.1	18.9
Average no. of other damage incidents per cons.	5.9	5.0	3.2	3.6	5.8	3.9	2.4	2.5	1.3	2.1	2.5
Average total incidents per conservancy	104	95	97	114	113	134	130	132	111	95	117

encompassing vast landscapes

Each year, the area embraced by community conservation continues to expand, increasing the number of people who benefit from natural resource use, as well as expanding the national conservation network. Whilst the level of conservation management differs within the various areas, all endorse the principle of sustainability and the elimination of illegal and destructive use of natural resources. This landscape connectivity spreading across Namibia is vital in ensuring environmental resilience and countering the impacts of climate change. The developments must be considered as a huge success in Namibia's efforts to fulfil its constitutional commitment to safeguard the environment while at the same time achieving economic growth and rural development. CBNRM is recognised by the Namibian government as contributing to a range of national development goals, including several for the environment (Table 4).

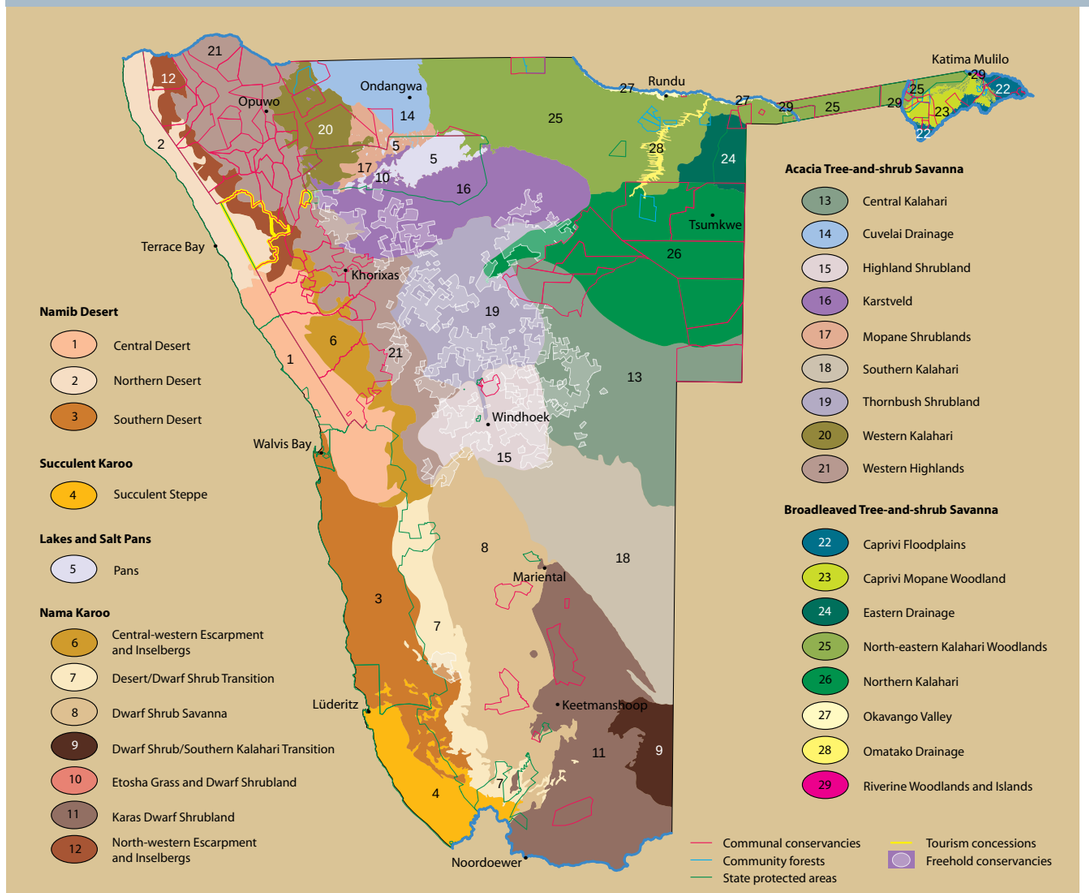
Protecting biomes and habitats

Community conservation embraces increasing portions of Namibia's major biomes, vegetation types and wetland habitats (Figure 16 and Table 5). For many of the categories, conservancies provide the largest portion of protection. Although riverine habitats are spatially small in the context of the entire country, their importance is magnified because they cross arid terrain and provide vital refugia for wildlife. Conservancies in north-western Namibia provide critical protection of these habitats, but they are less well protected in the wetter eastern regions of Kavango and Zambezi. This is due to the tendency for roads and associated settlements to have developed along river courses.

TABLE 4.
CBNRM contributions to National Development Plan 4 aims related to the environment
CBNRM contributes to National Development Plan aims for the environment in a variety of ways, most of which are discussed in more detail in the text and illustrations of this chapter.

National Development Plan 4	CBNRM contribution
What we cherish as a nation: pages 3-5	
Upholding the Constitution and good governance • "... we continue to improve on issues relating to equity in access to productive resources, and in reducing environmental degradation ..."	• is firmly grounded in article 95 of the Constitution • promotes equal access to natural resources through formal management structures and participatory processes (79 conservancies, 32 community forests,66 community rangeland management sites etc.) • reduces environmental degradation through structured natural resource management and use activities
Environment and climate change • "We expect all elements of society ... to support a precautionary approach to environmental challenges and alterations of the natural world contributing to climate change ... [and to] undertake initiatives to promote greater environmental responsibility…"	• emphasises a precautionary approach through natural resource monitoring, evaluation and quotas • creates landscape-level connectivity which mitigates the effects of climate change on wildlife and other resources • reduces pressure on individual resources through land-use diversification • promotes environmental responsibility through community-owned structures and activities
Sustainable development • "We fully embrace ... development that meets the needs of the present without limiting the ability of future generations to meet their own needs ... we encourage people ... to take responsibility for their own development ... to promote development activities that address the actual needs of the people, and require increasing community contributions to development services and infrastructure."	• enables sustainable use of natural resources through formal management structures, benefiting present generations while conserving resources for future generations • encourages a sense of ownership over natural resources and responsibility for development • addresses the needs of the people and increases community contributions through community participation in activities and decision-making
Basic Enablers:	
Environmental management – pages 35 & 39 • "The environmental challenges in Namibia include freshwater scarcity, land degradation, deforestation ... and vulnerability to climate change ..." • "The environmental strategy during NDP4 and beyond will include … the development of an integrated (including spacial) planning ... [and] the implementation of the CBNRM programme …"	• facilitates the reduction and reversal of land degradation and deforestation through mandated, structured and sustainable natural resource management • facilitates wise use of freshwater resources through community water associations • facilitates integrated land-use planning through formal management structures and collaboration with other community, government and private sector stakeholders • facilitates the implementation of CBNRM programme aims

FIGURE 16 AND TABLE 5.
Contributions to the protection of Namibia's major biomes, vegetation types and wetlands
The map shows communal conservancies, community forests, state protected areas, tourism concessions and freehold conservancies in relation to Namibia's main vegetation types and major biomes. The table indicates the portions of particular habitats and biomes covered by each conservation category, as well as the total percentage of the area covered and receiving protection through this.



Habitat, biome or area	Communal conservancies	Community forests outside conservancies	Concession areas	Freehold conservancies	State protected areas	Total coverage
Lakes & dams	15.6%	-	-	1.4%	12.6%	29.6%
Oshanas & flood plains	28.7%	-	-	-	8.6%	37.3%
Pans	3.1%	-	-	-	77.8%	80.9%
Perennial rivers	32.9%	-	-	-	20.8%	53.7%
Ephemeral rivers	25.3%	-	1.6%	6.8%	11.1%	44.8%
Nama Karoo	14.6%	-	1.4%	1.0%	5.0%	22.0%
Namib Desert	13.9%	-	3.2%	0.6%	75.7%	93.4%
Succulent Karoo	-	-	-	-	90.5%	90.5%
Acacia Savanna	19.1%	-	0.2%	13.4%	4.5%	37.2%
Broad-leafed Savanna	32.6%	2%	-	1.9%	8.8%	45.3%
Total area of Namibia	19.4%	0.4%	0.8%	6.1%	16.8%	43.5%

collaborative conservation

In several areas, adjacent community conservation areas and national parks are working together in joint management forums that allow collaborative landscape level management and planning. The advantages of such collaboration include more effective management of mobile wildlife populations, improved monitoring and land-use planning, and more effective anti-poaching activities and fire management. Such approaches are also more cost effective and facilitate the availability of needed capacities and resources. Importantly, the complexes provide the impetus for the implementation of zonation that sets aside areas for wildlife and wildlife-based enterprises. The complexes remove barriers to connectivity and generate economies of scale for both investments and enterprise opportunities. The Mudumu North Complex, Khaudum North Complex and Greater Waterberg Complex are examples of such collaboration.

Joining the parts

Many conservancies adjoin other conservation areas, creating immense contiguous areas under sustainable resource management (Figure 18 and Table 6). The largest contiguous area is created in the arid north-west, where conservancies and tourism concession areas now form the entire eastern boundary of the Skeleton Coast Park and create a broad link to Etosha National Park through adjacent conservancies. This is particularly important here, as animals need to be able to move in response to climatic conditions to maintain productive populations.

Parks and neighbours

A common challenge facing protected areas is the zone along park borders, where the land uses of park neighbours may conflict with a park's conservation objectives. An effective way to deal with this is for protected areas to create direct economic returns from wildlife and tourism for neighbouring communities. Progressive concession legislation is including communities in possible revenue streams from state protected areas. In several cases conservancies have received rights to manage concessions in adjacent parks, with some of the generated revenue going directly to the conservancies and their members. The percentage of park boundaries in communal areas shared with community conservation areas has increased dramatically since the start of the CBNRM programme (Figure 17).

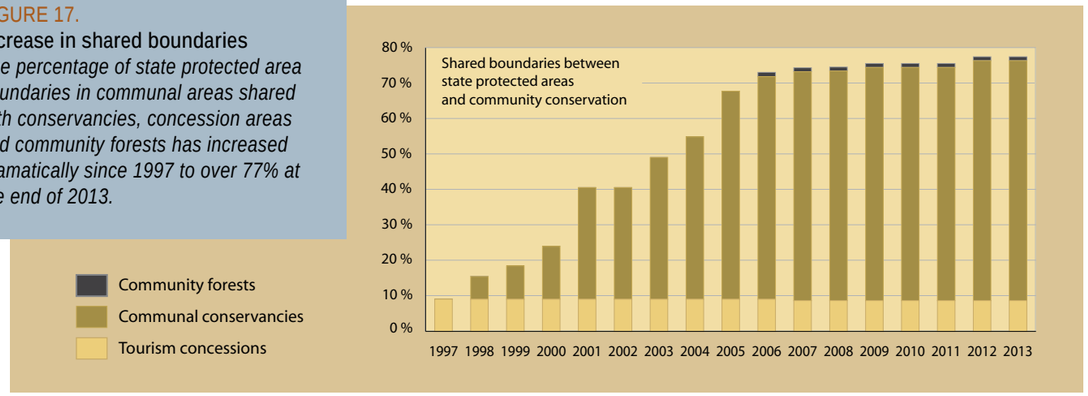
Across borders

The Kavango Zambezi Transfrontier Conservation Area is creating a framework for connectivity at a much larger regional level, linking conservation areas in Angola, Botswana, Namibia, Zambia and Zimbabwe. The Zambezi Region lies at the very heart of KAZA. Being a narrow strip of land intersected by rivers, it creates natural transfrontier migration and habitat corridors for a wide range of species. One of the main objectives of KAZA is to ensure connectivity between state protected areas by creating movement corridors for wildlife across communal land. Community conservation in Zambezi thus plays a direct role in the long term success of KAZA and also reduces local wildlife pressure by enabling the free movement of animals across the region and facilitating dispersal into neighbouring countries.

Working together to count game in Sanitatas Conservancy – collaboration between government agencies, community conservation organisations, NGOs and private sector partners enables effective landscape level management.


Game count teams, North-West Game Count

FIGURE 17.
Increase in shared boundaries
The percentage of state protected area boundaries in communal areas shared with conservancies, concession areas and community forests has increased dramatically since 1997 to over 77% at the end of 2013.



the scale of community conservation...

160,244 square kilometres of land had been gazetted in 79 communal conservancies at the end of 2013. This represents 52.4% of all communal land in Namibia and 19.4% of Namibia's total land area. At the same time, 32 community forests covering an area of 30,827 square kilometres had been gazetted. Of these, 21 have some overlap with conservancies. It is thus not possible to simply add the two land areas together to arrive at a total figure for the communal area under sustainable management. Taking this into consideration, the overall surface covered by community conservation at the end of 2013 was 163,396 square kilometres. In combination with the 16.8% covered by state protected areas, 0.8% by tourism concessions and another 6.1% in freehold conservancies, this brought the total land surface in Namibia covered by sustainable resource management and biodiversity objectives to 43.5% at the end of 2013.

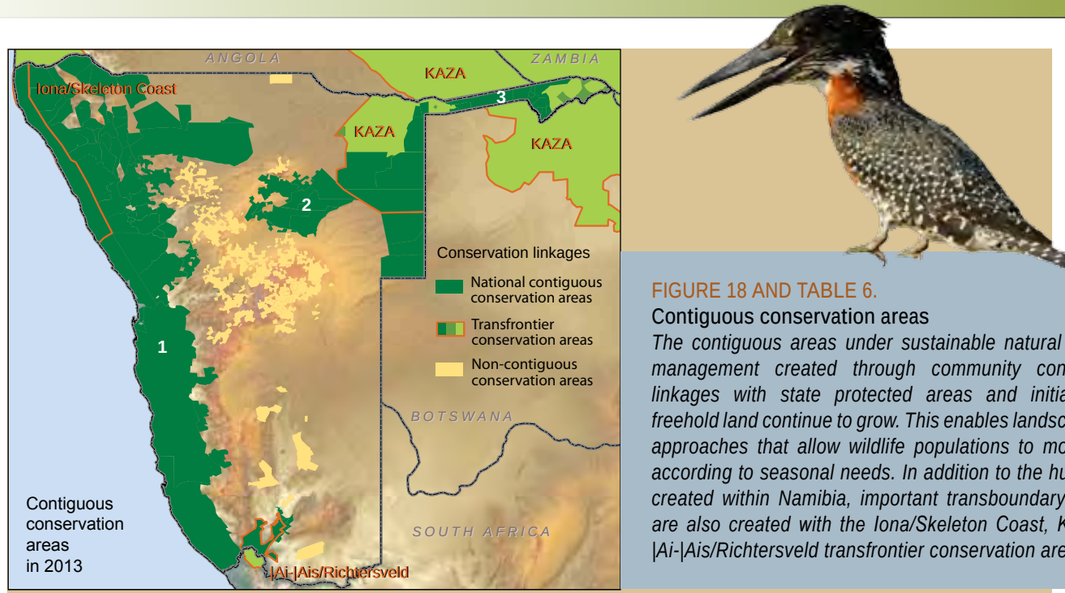


FIGURE 18 AND TABLE 6.
Contiguous conservation areas
The contiguous areas under sustainable natural resource management created through community conservation linkages with state protected areas and initiatives on freehold land continue to grow. This enables landscape-level approaches that allow wildlife populations to move freely according to seasonal needs. In addition to the huge areas created within Namibia, important transboundary linkages are also created with the Iona/Skeleton Coast, KAZA and |Ai-|Ais/Richtersveld transfrontier conservation areas.

Contiguous area (excludes transfrontier linkages)	State protected areas	Community conservation/concessions	Freehold conservancies	Private reserves	Total km²
1. Coastal parks, Ai-Ais & Etosha NP	124,869	92,762	7,210	2,886	227,727
2. Waterberg, Khaudum NP	4,238	59,943	7,314	0	71,495
3. Bwabwata, Mudumu, Mamili	7,330	1,956	0	0	9,286
Total area	136,437	152,686	14,524	2,886	306,533

Waitress Beauty Mbala, Camp Chobe
Salambala Conservancy

to improve lives...
... means facilitating economic opportunities and empowering people to make their own choices from amongst a range of livelihood options that enable a healthy and dignified existence...

3. improving lives

diversifying the rural economy

Manager and guide Kapoi Kasaona,
Palmwag Lodge

Community conservation is changing the face of rural Namibia. People have increasing access to a suite of new livelihood options based on wildlife, indigenous plants, fish and a variety of other natural resources. New job opportunities and benefit streams are being created, strengthening the economies of communal areas. Communities are able to integrate livestock herding, crop production, natural resource management and other activities into a balanced overall land use.

diversifying options and increasing opportunities... returns from wildlife and other natural resources generated through community conservation have proven to be substantial. The variety of opportunities and direct rewards being created add a new dimension to community empowerment that traditional forms of land use are not able to deliver on their own. This is particularly valuable in communal areas where human development needs are high and the chances of making a reliable living from traditional land uses are limited by low and erratic rainfall, infertile soils and limited access to markets and services. By diversifying land use and livelihood options and choosing a balanced mix of activities, communities can optimise the potential of their land and its resources. This reduces susceptibility to the impacts of climate change and other threats. Cultural and social benefits include empowerment, fostering community cohesion and keeping communities in touch with the resources that their ancestors valued.

What's the story?

behind improving lives

appreciating the importance of diverse income streams in communal areas

a look at natural resource returns and what they mean for people living with wildlife in communal areas

Namushasha Cultural Centre, Mashi Conservancy

stories of personal growth...

There is real pride and dedication – an enthusiasm for life itself – in the face of Helen, a manager at Wilderness Safaris' Damaraland Camp in Torra Conservancy. Well-educated, well-dressed, articulate in several languages, self-confident and thoughtful, Helen does not embody the expected image of the average rural Namibian woman. Life in remote communal areas is generally hard. Access to good education is limited, job opportunities even more so. Rainfall is erratic and farming potential is marginal. Infrastructure is often poor, while service centres are distant and difficult to reach. Yet these areas are often extremely rich in indigenous natural resources, which can open up a whole new world of opportunities.

The same qualities that make Helen remarkable can be found in Bester, who runs the Mashi Crafts Trading Post, or Kapoi, who works as a manager and guide in the Palmwag Tourism Concession, or Lawrence, a former fisherman who now works as a fish guard in Sikunga Conservancy, or Hilga, who manages the ≠Khoadi-//Hôas Conservancy, or Beauty, a waitress at Camp Chobe in Salambala Conservancy. That sense of self-esteem and well-being is there in the radiant smiles of Cordelia and Lennety, who are facilitating a better future for children at the Shufu Community Kindergarten through the support of Nkasa Lupala Tented Lodge in Wuparo Conservancy. It is there in the fire-lit face of a mother at the Living Hunter's Museum in Nyae Nyae Conservancy, whose child may grow up with honest pride in a culture that, without conservancies and related developments, might have been lost. And while the Namushasha Cultural Centre is still a young enterprise finding its feet with the support of Gondwana Namibia, that same cultural pride is evident in the young women playing a game of *Mancala ('African Chess')*.

In their own words, and each with their individual nuances and distinctions, these and countless other rural Namibians all tell the story of a life changed for the better through the effects of community conservation. They are inspiring life stories, of personal growth and individual empowerment, each of them a chronicle of triumph based on the concept of living with wildlife, of living a better life in a healthier environment.

These success stories cannot be attributed to tourism development alone, or to the returns from the sustainable use of wildlife, or to craft sales, or any one sector or influence. They have all been made possible through an interlinked combination of influences, catalysed by community conservation. Community empowerment led to conservancy formation, which in turn enables equitable resource use and fair partnerships between communities and private operators, creating a diversified rural economy and opportunities for personal growth.

The stories without doubt represent only a very small percentage of the around 175,000 residents of conservancies. Poverty remains widespread. Rural lives in communal areas remain tough. Conservancies cannot create an instant utopia out of a difficult existence. But they are making a real difference. They are changing individual lives for the better. Many of them.

Let's think back to what was there before, or ahead to what would be there tomorrow, without conservancies: In the 1980s and early 1990s, there were no community-managed hunting concessions. Today, these pay for a large percentage of the running costs and game guard salaries in 44 conservancies. Twenty years ago, tourism development was limited to a few isolated lodges based on a 'permission to occupy' granted by central government for a nominal fee. Equitable sharing of tourism returns was non-existent. There were no agreements to ensure local employment and capacity building. Now there are 39 joint-venture lodges and 29 SMEs generating significant returns from tourism.

If hunting were to be banned in Namibia, if the levy being imposed by the Ministry of Lands and Resettlement would make joint-venture lodges financially unviable, or if other threats jeopardised conservancies, we would be on our way back to a landscape without wildlife – because it would have no value for communal farmers.

Community conservation has created the framework that enables the positive changes to individual lives. The degree of change depends on the breadth of private sector engagement (which is still limited), on the willingness of government to ensure policy integration and remove investment barriers (which are still huge), and on the ability of communities to work together to ensure the sustainable management of their natural resources and the equitable distribution of the returns.

30 years of changing lives...

Modern CBNRM has been improving lives in Namibia for thirty years. The first returns from a structured agreement between a private sector tourism initiative and a local community were initiated by CBNRM doyen Garth Owen-Smith during the pioneering days of the community game guard system in the Puros area in 1987. The success of these early partnership experiments between communities and private industry provided a conceptual basis for the first joint-venture lodge negotiations in Namibia, that took place before the official registration of the first conservancy.

The Ward 11 Residents Trust was established in the Bergsig area with the support of IRDNC in the early 1990s. During 1995, negotiations with Wilderness Safaris led to a formal agreement between the operator and the community, and the subsequent establishment of Damaraland Camp, which opened in 1996. This was the first joint-venture lodge agreement in Namibia. The Ward 11 Residents Trust was registered as Torra Conservancy in 1998.

Since then, several dozen lodges have been established in conservancies, based on a variety of agreements. Some lodges are largely or completely community owned, but are run as joint-ventures by private sector operators to ensure the high standard of services expected by the tourism industry. Some operators agree to only the necessary minimum of

engagement. And a few still bypass conservancies completely and make direct deals with individual land holders or members of the traditional authority. In general, though, the joint-venture sector is growing rapidly, inhibited mostly by investment barriers related to land tenure in communal areas, and by the often time-consuming process of working with communities.

While tourism creates most of the jobs, it is the hunting concessions that generally generate the larger share of cash income to cover conservancy running costs. Trophy hunting requires only minimal infrastructure and can be carried out in areas that have little tourism value. This has enabled communities to enter into concession agreements immediately after registration and has helped conservancies to become financially established.

Three of the first four conservancies registered were able to generate immediate income from either tourism or hunting or both, and all have grown into well-established organisations. While more than a third of all registered conservancies currently generate no financial returns, this is largely due to their recent registration. The number of conservancies generating returns is constantly increasing, as are the amounts they generate. Some of the more recently-registered conservancies still need to consolidate the governance structures that will enable them to enter into agreements with the private sector and generate returns.

There has been notable growth in the number and diversity of tourism enterprises. Cultural tourism, long neglected in Namibia, is making important contributions to livelihoods, to the quality of visitor experiences, and to the restoration of cultural pride and heritage. The craft sector has also shown tremendous growth and makes similar individual and cultural contributions.

Over the years, conservancies have become important employers in their own right – they are currently employing more people than joint-venture lodges do. Game guards make up over 80 percent of the full-time employees. They manage the assets upon which all natural resource sectors are based, fulfilling the often-overlooked primary function of conservancies.

A 2008 survey estimated that over 2,700 fishermen were using the Zambezi River system in Namibia. About 60 percent of these were estimated to fish full-time, making this perhaps the most important CBNRM sector in Namibia. While conservancies are managing some fish resources, the portion of fisheries falling within conservancies is currently not quantified. Harvesting of indigenous plant resources generates returns for a similar number of people. Most of the returns are highly seasonal, yet provide important cash to supplement other activities. Wildlife harvesting, while it does not create nearly as many jobs as other sectors, provides a very direct benefit to households by supplying game meat to people.

There is still plenty of room to increase equitable natural resource returns and positive results for communities and conservation. Conservancies can improve their management of the resources, while broader engagement by private industry is possible in all sectors. The mobile tourism industry, especially, makes only isolated contributions in return for the privilege of accessing attractive communal resources.

After 15 years of registration, Nyae Nyae, ≠Khoadi-//Hôas, Torra and Salambala all rely on a combination of hunting and tourism returns, complemented by other sectors. The contribution of each sector varies according to its potential in a particular area. The notion that hunting should over time be replaced by tourism is counter-productive to the CBNRM concept, which seeks to use as broad a range of resources as possible, in order to diversify livelihoods, strengthen economic resilience, optimise land use and conserve habitats and species. All sectors can contribute to this goal in some way.

Happy children in Wuparo – the diversity of community conservation contributions has facilitated a wide range of individual and community returns, including investment in education and health infrastructure in conservancies .

growth, diversity and equity...

In a landscape of limited opportunities, fixed employment in a flourishing sector really changes things. It not only generates cash income for households, it catapults rural people into a new world of personal growth, more typically found in urban areas. On-the-job training and exposure to external stimuli widens horizons and unlocks personal potential. Combined with this is the satisfaction that comes from working in, and in many ways for, one's own community to improve not only one's own life, but also the lives of others.

The tourism industry is particularly effective in achieving such growth. Lodge employees usually receive extensive training and are exposed to new cultures and spheres by working with foreign visitors. While the number of lodges in communal areas is still low compared to accommodation available on private land, innovations such as the National Policy on Tourism and Wildlife Concessions on State Land have significantly strengthened tourism in communal areas. Granting concession rights in national parks and state tourism concession areas to neighbouring conservancies has reconnected communities with resources they had historical access to, strengthening collaboration with the parks and generating important returns.

Kindergarten teachers Cordelia Saruo and Lennety Mulatehi, Shufu Community Kindergarten, Wuparo Conservancy

CBNRM returns

at a glance

At the end of 2013 there were...

- 39 joint-venture tourism enterprises with 640 full time and 46 part time employees
- 44 trophy hunting concessions with 134 full time and 129 part time employees
- 29 small/medium enterprises (mostly tourism/crafts) with 142 full time and 40 part time employees
- 647 full time and 88 part time conservancy employees
- 914 conservancy representatives receiving allowances
- 2,762 indigenous plant product harvesters
- and 930 craft producers

in communal conservancies in Namibia
(part time employment includes seasonal labour)

What's being achieved?

Community conservation...

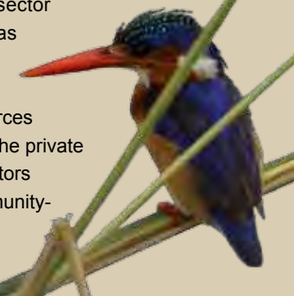
- generated total cash income and in-kind benefits to rural communities of over N$ 72,158,768 in 2013
- of this, trophy hunting generated N$ 20,882,315 in fees for conservancies
- tourism generated N$ 9,568,742 in fees for conservancies
- indigenous plants generated N$ 215,556 in fees for conservancies
- conservancy residents earned a total cash income of N$ 23,982,130 from enterprise wages (mostly tourism) and N$ 11,031,642 from conservancy wages
- conservancy residents earned a total cash income of N$ 2,440,318 from indigenous plants and N$ 1,162,764 from crafts
- 542,280 kg of game meat worth N$ 9,761,040 was distributed to conservancy residents
- N$ 5,648,705 in cash benefits was distributed to conservancy residents
- thatching grass generated N$ 2,745,947 for communities
- craft sales outside conservancies generated N$ 1,211,406

New in 2013:

- substantial development and expansion of joint-venture lodges and signing of new concession agreements
- hosting the Adventure Travel World Summit in Namibia

The biggest challenges?

- removing barriers to private sector investment in communal areas
- developing revenue streams in areas with low tourism potential or few natural resources
- increasing engagement with the private sector, e.g. with mobile operators
- improving the quality of community-run tourism enterprises



Living Hunter's Museum,
Nyae Nyae Conservancy

A living culture in Nyae Nyae Conservancy – community conservation is reinforcing traditional cultural values and real pride in cultural heritage through traditional resource uses and cultural tourism.

improving the livelihoods of rural people

Achieving aims

Since its inception, the community conservation movement has increasingly delivered on one of its central aims: to improve the lives of rural people through the sustainable use of natural resources. The movement is generating increasing returns for people in communal areas, where economic opportunities were historically very limited. One of the most effective strategies for living in drylands and marginal areas is to diversify incomes. Natural resource use is a livelihood diversification. The aim is not to displace other activities, but to apply the most productive mix of land and resource uses.

A productive mix of activities

Livelihoods in communal areas are usually composed of a mix of agricultural activities supplemented by cash income from wages, trade and pensions. Community conservation is significantly expanding this range by creating new jobs in tourism, hunting and conservation activities, providing a variety of in-kind benefits including game meat, improved access to transport, education, health and training, and by generating cash income for community conservation entities to cover their operational costs and fund social projects.

A growing diversity

While most community conservation returns have been generated within conservancies, there is a growing diversity of natural resource sectors that are generating income and benefits for communal area residents. The value of natural resources is increasing, as innovative approaches are being applied, international recognition of their potential grows, and market linkages are improving. This chapter portrays the returns currently being generated and how they can be further expanded.

appreciating potential differences

Significant differences exist between conservancies. There are vast differences in size (the biggest conservancies are more than 200 times as large as the smallest), as well as in the number of residents (ranging from several hundred to more than 30,000). Topography, rainfall and natural habitat, proximity to urban centres, land-use activities and other factors all influence the quantity and quality of natural resources available in a given area. There are big differences in the degrees of conservancy development, based on when a conservancy was registered, the level of commitment of the people involved, the availability of transport, electricity and water infrastructure, and the amount of support received.

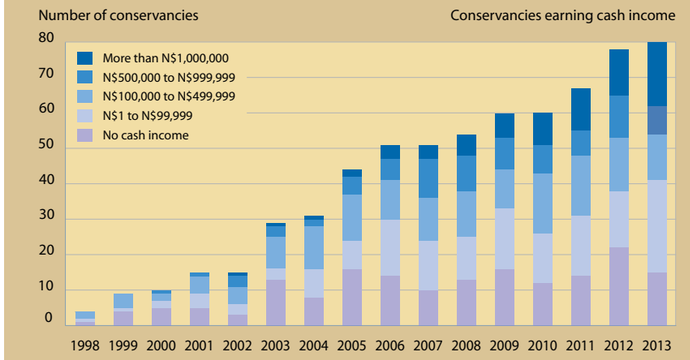


FIGURE 19.
The earning power of conservancies
The graph shows the number of conservancies earning cash, divided into incremental categories (includes Kyaramacan Association). There are great differences in the potential of conservancies to generate cash income, influenced by location, diversity and abundance of resources, and other factors. Newly-registered conservancies may take some time to earn income, showing as clear fluctuations in the number of conservancies without cash income as new conservancies are registered.

Private sector involvement varies significantly from one area to the next, influenced by location, accessibility and tourism potential. All of these factors result in great differences in the potential to generate cash income and in-kind benefits. Figure 19 shows the differing earning power of conservancies. Clearly, conservancies should never be treated as if they were all the same. It is important to differentiate when evaluating the achievements of, or considering interventions in, conservancies. Nonetheless, all conservancies can empower communities to diversify their land-use options and provide important natural resource management services.

TABLE 7. The rise in returns generated through conservancies
Cash income to conservancies and members rose from less than N$ 1 million in 1998 to N$ 56.5 million this year. This increase is only partly due to the increasing number of conservancies (from 4 to 79 conservancies, and one community conservation association). It also reflects the increasing earning power of conservancies. Newly-formed conservancies may take time to establish partnerships with the private sector and begin generating income, yet the cash income and in-kind benefits generated by established conservancies continues to increase. This is shown by the increase in the average total cash income and in-kind benefits amongst those conservancies which are generating income and benefits. Cash income *includes fees paid to conservancies by tourism and hunting operators, as well as wages from these operations to residents.* In-kind benefits *include game meat and fringe benefits provided to employees by the private sector.*

Year	Total cash income to conservancies	Total cash income to conservancy members and communities	Total in-kind benefits to conservancy members	Total cash income and in-kind benefits	Number of conservancies (includes Kyaramacan Association)	Number of conservancies generating cash income or in-kind benefits	Average total cash income and in-kind benefits per conservancy generating cash income or in-kind benefits
1998	N$ 326,378	N$ 241,784	N$ 94,116	N$ 662,278	4	3	N$ 220,759
1999	662,119	302,073	607,408	1,571,600	9	5	314,320
2000	626,874	434,649	969,472	2,030,995	10	5	406,199
2001	1,439,342	1,267,361	746,364	3,453,067	15	10	345,307
2002	3,221,578	1,866,482	1,557,432	6,645,492	15	12	553,791
2003	4,252,319	3,009,586	1,095,060	8,356,965	29	16	522,310
2004	4,096,656	3,348,486	1,706,344	9,151,486	31	23	397,891
2005	5,177,658	5,038,348	3,627,797	13,843,803	44	28	494,422
2006	8,797,117	5,709,102	4,881,669	19,387,888	51	37	523,997
2007	11,770,975	8,822,708	6,893,694	27,487,377	51	41	670,424
2008	14,184,182	11,866,175	6,472,473	32,522,830	54	41	793,240
2009	12,937,296	13,096,682	9,022,128	35,056,106	60	44	796,730
2010	16,627,425	14,397,321	8,384,320	39,409,066	60	48	821,022
2011	21,617,169	14,885,926	10,056,965	46,560,060	67	53	878,492
2012	25,421,909	20,088,258	10,669,938	56,180,105	78	56	1,003,216
2013	31,605,606	24,896,342	11,699,468	68,201,416	80	65	1,049,253

Please Note: A detailed review of historical economic data for conservancies has led to the revision of most previously-published figures. The above table presents the corrected data, which will be used as the new baseline from now on.

TABLE 8. Living in conservancies

The size and population density of communal areas varies significantly across the different regions of Namibia, as does the diversity and abundance of natural resources in them. These and other factors influence the percentage of communal area residents living in conservancies. In the communal areas of some regions, the entire population lives in conservancies. In the north-central regions, more than 40,000 people live in conservancies, although this represents only around 5% of people in the densely populated area, many of whom live in urban centres. Other regions have only small communal areas, or none at all.

Region	Area covered by conservancies (km^2)	Number of people living in conservancies	Percentage of all communal area residents in region(s)
Erongo	17,289	6,332	55.8%
Hardap	1,424	802	10.5%
Karas	6,550	4,519	32.8%
Kavango (E & W)	1,196	4301	2%
Kunene	57,456	46,133	75.3%
Omaheke	18,404	6,558	21.9%
Omusati, Ohangwena, Oshana, Oshikoto,	13,095	42,696	5.2%
Otjozondjupa	41,059	35,124	100%
Zambezi	3,771	28,589	32.3%
Khomas	no conservancies	no conservancies	no communal areas
Total	160,244	174,693	13.6%

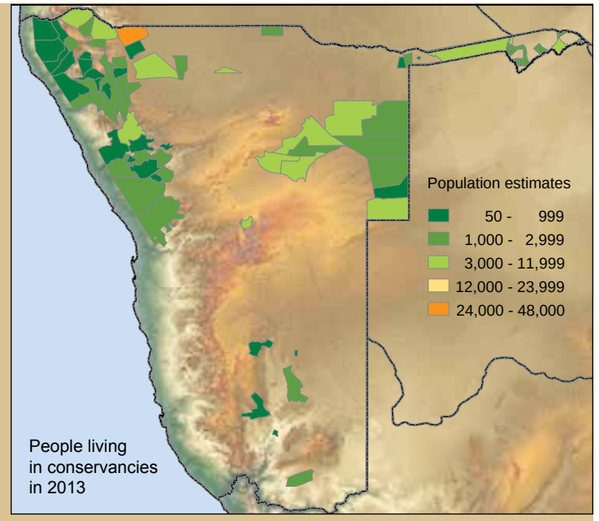


FIGURE 20. People in conservancies

The estimated number of people living in each of the registered conservancies of Namibia varies from less than 100 to over 32,000 people.

reaching the people

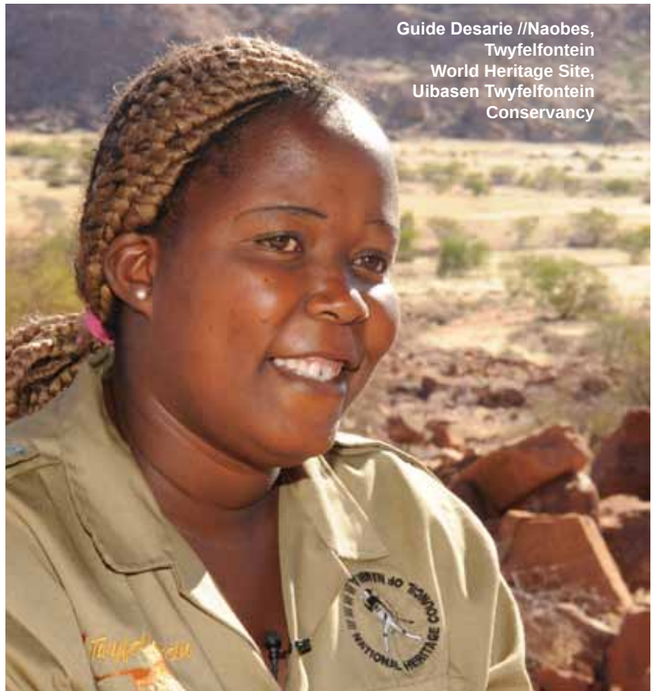
Different areas, different conditions

The communal areas of Namibia, like the conservancies in them, show great variations in size, population density and land-use activities. There are big differences in the number and size of urban areas, as well as in the levels of infrastructure development and the accessibility of outlying areas. The diversity and abundance of game and other natural resources varies significantly, influenced by differences in climate, topography, soils and water availability. This makes some communal areas more suitable to conservancy formation and CBNRM activities than others.

Challenging circumstances

Conservancy formation is challenging and may not necessarily be desirable in areas with a high population density and few wildlife resources, such as parts of the north-central regions. In such areas, it is very difficult to generate meaningful individual returns from natural resources for a high number of residents. In Kavango, as well as in parts of the north-central regions, large areas of communal land have been allocated as individual farms, excluding CBNRM initiatives. The arid communal areas of the south have scarce wildlife resources. Fewer conservancies have been registered in these regions than in the north-west and the parts of the north-east.

Guiding at Twyfelfontein – employment is one of the greatest returns facilitated by community conservation.



Guide Desarie //Naobes, Twyfelfontein World Heritage Site, Uibasen Twyfelfontein Conservancy

Embracing the population

All communal area residents of the Otjozondjupa Region live in conservancies. In Kunene, conservancies embrace over two thirds of all people in communal areas, and in Erongo more than half. The Karas, Zambezi and Omaheke Regions also have a large portion of communal area residents living in conservancies. These people do not all receive direct returns from natural resource use, yet the areas certainly benefit from improved resource management and communities benefit in a variety of ways. In conservancies with a small population and an abundance of natural resources, individual households receive significant returns each year. Population estimates are shown in Table 8 and Figure 20.

wildlife as a driver of economic growth

Wildlife is central to generating returns for conservancies. Game has a range of high-value uses and many species are able to breed quickly, allowing for rapid wildlife recoveries in areas with suitable habitat where game has become scarce. By turning wildlife use into a viable livelihood activity, and complementing it with other natural resource uses, community conservation can make a real difference in the lives of rural people, facilitated through effective overall management structures and improved access to markets. As private sector engagement in community conservation broadens, more opportunities continue to open up.

the complimentary roles of tourism and sustainable wildlife use

Generating the highest returns

The largest portions of conservancy returns come from tourism and sustainable wildlife use. The merits of hunting as a conservation tool compared to photographic tourism are often debated intensely. CBNRM emphasises the importance of using as broad a range of indigenous resources as possible to enhance their value and ensure their protection, as well as the protection of large areas of natural habitat. The Namibian model illustrates that it is extremely valuable to generate returns from both tourism and consumptive use. Optimum returns are facilitated through strategic partnerships with the private sector, which offers specialised skills and market linkages. Capacity building and skills transfer create further benefits. Communities have the opportunity to 'grow into' both sectors and over time run successful community-owned enterprises. Figure 21 compares the two sectors.

Figures include total returns/income/in-kind benefits from all forms of game harvesting.

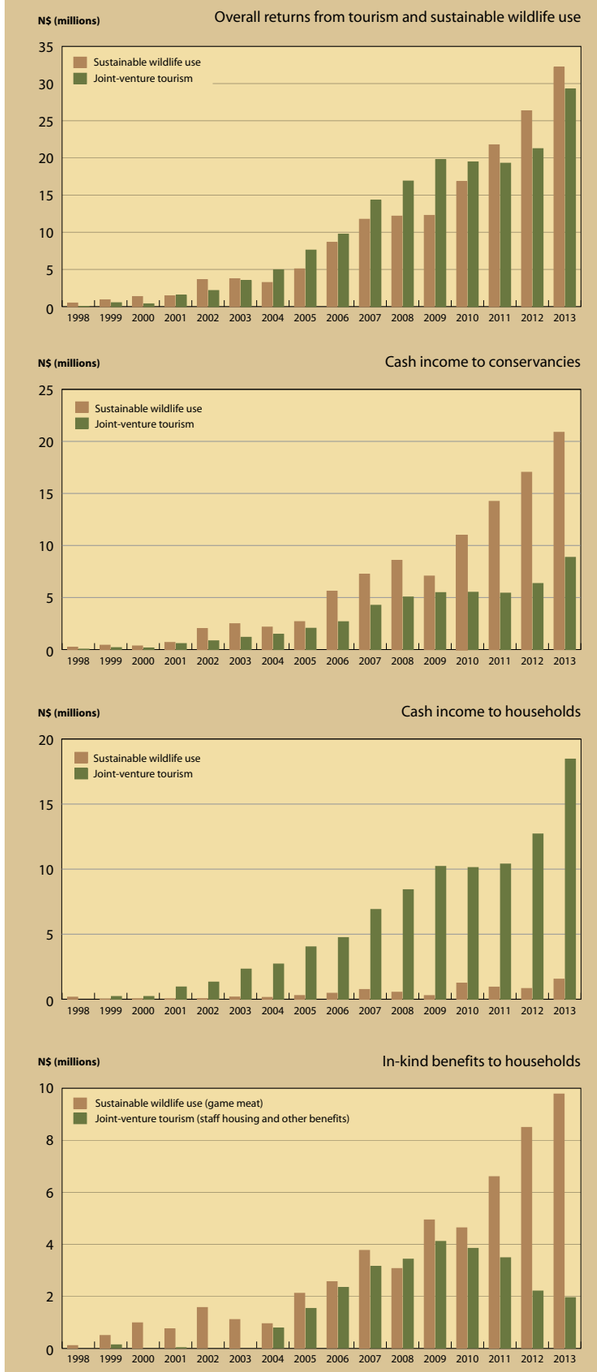


FIGURE 21. The complimentary roles of sustainable wildlife use and joint-venture tourism

While overall returns from the two sectors are similar, tourism provides significantly higher cash income to households in the form of wages, and hunting generates much higher cash income to conservancies to cover operational costs. Sustainable wildlife use provides a huge additional benefit in the form of game meat. Tourism also provides some in-kind benefits, although these have decreased due to the global economic recession.

Joint-ventures and other tourism activities

The first joint-venture lodge agreement in Namibia was signed in the north-west in 1995 (before the registration of the first conservancy) after the pioneering CBNRM activities of the late eighties and early nineties had laid the foundations for this. Dozens of stunning joint-venture lodges in spectacular settings now offer superb visitor experiences. A broad spectrum of arrangements between private sector operators and conservancies has developed, with innovative agreements continually striving to increase conservancy involvement and ownership.

Joint-venture tourism generates significant community conservation returns at a national level, although many areas have no tourism activities. Joint-venture lodges play a particularly important role in providing employment and household income, which consumptive wildlife use does not achieve. Tourism also creates a variety of in-kind benefits to employees, such as food and housing, access to transport, medical assistance, education materials, equipment and bursaries.

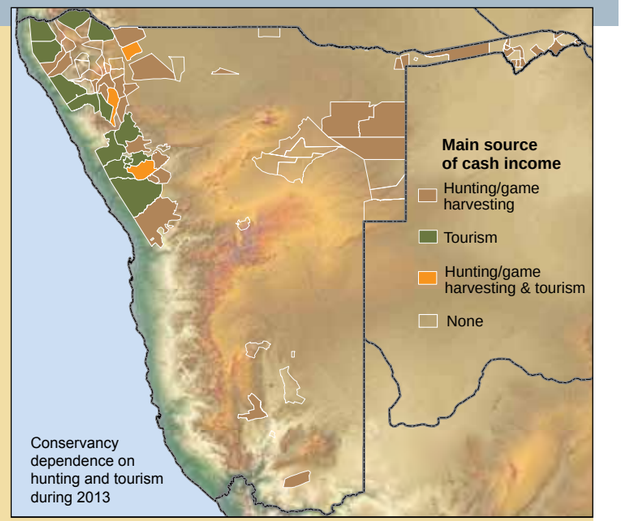
Numerous mobile operators based in urban centres market the superb attractions of communal areas as a core component of their product. This is especially true in the north-west, where desert-adapted wildlife in spectacular settings forms a primary attraction. As the tourism products focus mostly on local community resources, communities should benefit more directly from this sector.

A variety of community tourism enterprises, owned and operated by local communities, are offering exciting, authentic experiences such as living museums, craft centres and campsites to visitors. The enterprises provide important revenue and employment to community members, yet the potential of this sector can be further enhanced through targeted support.

[more info: **www.namibiawildlifesafaris.com**]

FIGURE 22. The right sector for the right place

The map portrays which conservancies depend mostly on tourism income to cover their running costs, and those that rely mostly on trophy hunting or other game harvesting. Hunting is clearly a vital source of cash income in a lot of areas, without which many conservancies would not have been able to form and could not exist. Trophy hunting concessions in communal areas increased from five in 1997 to 44 in 2013, which also indicates a widespread recovery of the wildlife base.



Trophy hunting and game harvesting

Trophy hunting concessions in Namibia's communal areas provide some of the greatest hunting experiences in Africa. Hunting is often wrongly criticised as having negative impacts on wildlife, but trophy hunting utilises such an insignificant percentage of the population (mostly old males) that it generally has no impact on overall populations. It is important to note that most conservancies (including three of the first four that were registered), would not have been viable and probably would not have been established without wildlife use through hunting to initially fund conservancy operations. Cash income from trophy hunting continues to provide critical finance to cover the costs of conservation activities.

Cash income and in-kind benefits from trophy hunting are generated shortly after the registration of a conservancy and the awarding of a trophy hunting contract, providing a timely reward to communities for their conservation efforts. Conservancies may take longer to receive cash income from joint-venture lodges due to more complex agreements, as well as much higher development costs. Joint-ventures have an indirect fee structure based on a percentage of turnover, while hunting fees are based on a direct price per animal. Importantly, hunting is possible in areas that have little or no tourism potential due to their location or lack of scenic interest. Figure 22 shows in which areas each sector generates most of the returns.

Other returns from trophy hunting include employment, training and the distribution of meat from hunted animals. Although meat is an in-kind benefit, it provides a very direct return. Apart from its nutritional value, game meat distribution strengthens local support for wildlife and conservancies, because people see the link between wildlife and conservation in the form of a tangible benefit. This is rated as a key benefit by most conservancy members, many of whom are poor and cannot afford to buy much meat.

Premium hunting is similar to trophy hunting, yet focusses only on the hunting experience. The visiting hunter does not take home a trophy and pays a much lower fee. Premium hunting is currently not practised widely, but offers great opportunities for growth.

Own-use harvesting of wildlife for meat is vital in reinforcing the importance of wildlife management as a central part of rural life. Own-use harvesting supplies meat for traditional authorities and cultural festivals, as well as individual households, thereby reinstating traditional community values associated with wildlife.

Shoot-and-sell harvesting allows conservancies to harvest meat from surplus wildlife stocks for sale to butcheries or individuals outside the conservancy, but needs to be carefully controlled to avoid negative impacts, as larger numbers are often harvested.

A rapid growth in wildlife numbers has allowed some conservancies to initiate live capture operations to sell wildlife to other conservancies or private landowners. The capture is handled by professionals and the cost thereof becomes part of the transaction between seller and buyer. In addition to generating income, the translocation of surplus wildlife into areas with low populations assists the rapid recovery of overall wildlife stocks in Namibia.

emphasising equitable resource use

It is sometimes argued that tourism and trophy hunting in communal areas could and did exist without conservancies, and that the returns being generated should not be attributed to conservancies. A number of lodges were established in communal areas well before conservancies were formed, and there were a few government-controlled trophy hunting concessions. But local communities generally had no democratic control over these activities and received minimal returns. All income from trophy hunting went to the hunting operator and government. Lodges employed few locals and at best made token payments to traditional authorities, without sharing generated revenue with communities — even though communal lands were set aside for livelihood use by rural people and the natural resources being used should have been under their control.

Conservancies have finally enabled *equitable* natural resource use, which did not exist prior to their formation. Joint-venture lodges are based on formal agreements, which oblige the lodges to share profits and employ and train local staff. The returns now go to conservancies and local communities. These changes *should* be attributed to the conservancies. Trophy hunting concessions in communal areas — with all revenue shared between hunting operators and conservancies — were made possible through the conservancy structure. Similar equitable resource use is also occurring in other sectors, and community conservation should be credited for this.

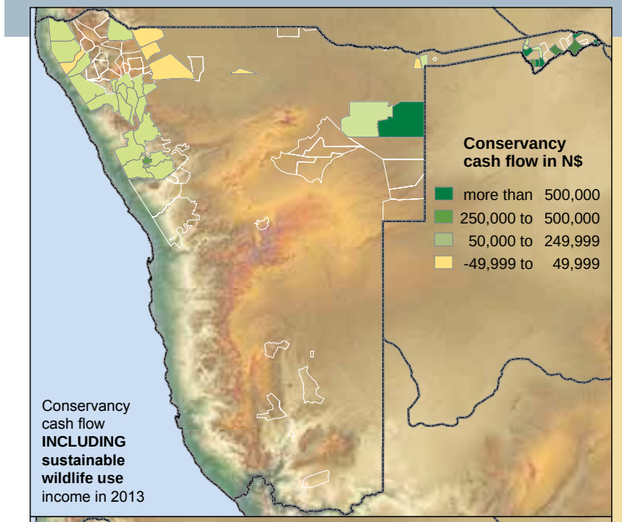
marketing Namibia

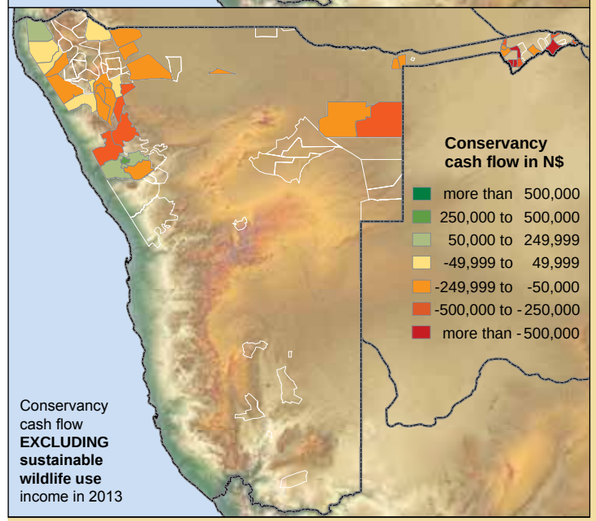
All of Namibia is benefiting from the country's status as a community conservation model, which is striving for a balance between conservation and community development. Tourism and hunting operators active in conservancies have a distinct marketing advantage in this regard, especially if they can show that they are contributing to the success through the equitable sharing of their income and by engaging with communities in development activities.


Game guard Jackson Kavetu, Ehi-Rovipuka Conservancy

FIGURE 23. The importance of sustainable wildlife use income

The maps illustrate the importance of cash income generated through sustainable wildlife use for selected conservancies providing financial statements (top). The loss of this income would result in a negative cash flow for most of these conservancies, which would no longer be able to cover their running costs (bottom). Those conservancies relying mostly on tourism (Figure 22), would be able to adjust their activities to fit a reduced income, but would become less effective in managing their resources. Those conservancies relying mostly on hunting would become unsustainable and, unless other income could be secured, all conservation activities in those areas would stop.





a widening spectrum of natural resource returns

In addition to returns from tourism, trophy hunting and game harvesting, community conservation is generating cash income and in-kind benefits from an increasing spectrum of natural resource sectors (Table 9). Variations in amounts and sources of returns, as well as how these are being used and distributed are shown in Figure 24.

Crafting a living

Visitors to communal areas are able to buy superb and uniquely Namibian crafts directly from the producers. The sale of crafts, the development of craft outlets and links to wholesalers have provided many people, and especially women, with an independent source of income, which is an important success. Craft making can be fitted into women's daily routines without taking them away from the homestead. Many women are operating small businesses of their own. As self-employed entrepreneurs they feed into larger craft projects, living museums and other community-based enterprises, while lodges are also important sales outlets.

Making the most of indigenous plants

A great variety of valuable indigenous plants create an exciting natural resource sector. Income is generated from three major sources: the issuing of permits and use concessions in community forests, the sale of value-added products such as carvings, and the sustainable wild harvesting and sale of non-timber products. Non-timber products include thatching grass and produce from plants such as devil's claw and omumbiri. The significant growth of this sector is likely to continue as new species with commercial potential are investigated and developed. Strategic agreements with international cosmetic and pharmaceutical companies represent significant economic opportunities. The harvesting of the resources is an important source of income for a growing number of people. Indigenous plant nurseries represent another diversification of plant use, selling seedlings to nurseries in urban areas, who in turn sell them to end users.

Fishing for food

Fish are an important direct source of food for many people in northern Namibia, and are sold at markets by fishermen to earn cash income. While subsistence fishing is not directly controlled, both commercial fishing and sport angling require licences, and issuing these can generate income for communities. Recreational catch-and-release angling within fish reserves represents an important income opportunity, generated from rod fees charged by tourism lodges, who share the income with communities. Thriving lodges that market sport angling as a key activity, especially for popular tigerfish, catfish and other species, can create a variety of additional returns for communities.

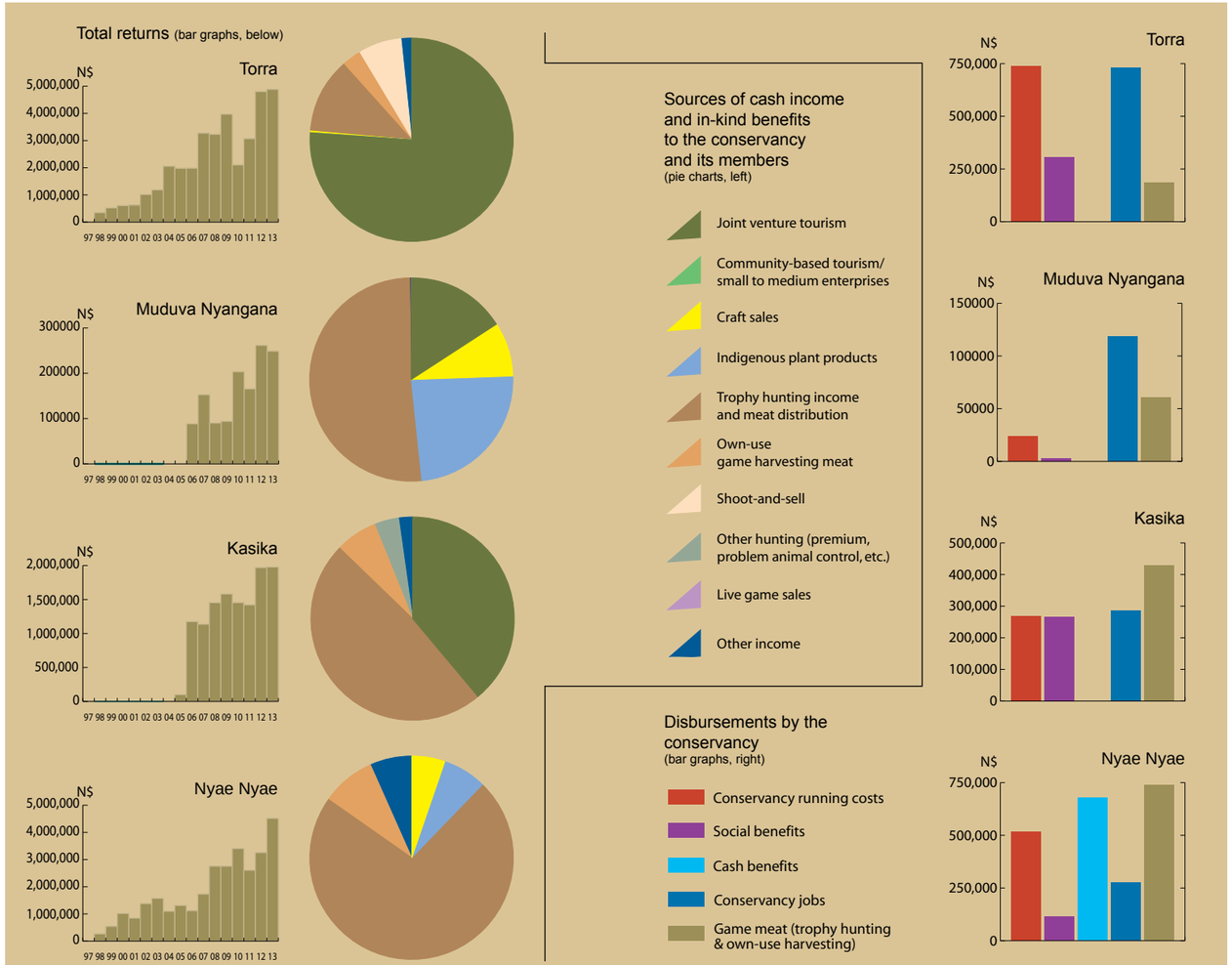


FIGURE 24.
Varied sources of natural resource returns... (above)
There is a large variation between conservancies in terms of their sources of natural resource returns, influenced by the available resources, private sector partnerships and other factors. Four sample conservancies illustrate some of the differences in 2013. The bar charts show total cash income and in-kind benefits over time, and the pie charts illustrate the ratios between sources of returns.

... and disbursements (above right)
Disbursements within conservancies also vary considerably. The same conservancies illustrate some of the differences in 2013. While some conservancies pay out substantial cash benefits to households, others provide broader social benefits to resident communities.

household returns from natural resources

Providing employment

The most significant community conservation return for individuals is direct employment in positions that have been created through natural resource management, most of which did not exist prior to the start of the conservancy movement. These are particularly important for people living in rural areas with few other means of earning regular cash, and have the greatest impact at both household and individual levels (Figure 25). Jobs in tourism represent great career opportunities, as staff can 'rise through the ranks' to the level of regional management or beyond, something that a number of people have achieved. Community conservation

TABLE 9.
Sources of returns to conservancies and their members in 2013
The spectrum of natural resource sectors that generate returns for communities continues to widen. Joint-venture tourism and trophy hunting are making the greatest contributions.

Source of cash income or in-kind benefits	Value in N$	Percentage of total cash income and in-kind benefits
Joint-venture tourism (includes all cash income and in-kind benefits to conservancies and members)	29,272,088	43%
Trophy hunting (includes all cash income to conservancies and members)	20,968,823	31%
Trophy hunting meat	6,260,112	9%
Own-use game harvesting meat	3,500,928	5%
Indigenous plant products	2,655,874	4%
Community-based tourism and other small to medium enterprises	1,974,079	3%
Crafts	1,162,764	2%
Shoot-and-sell game harvesting	990,744	1%
Miscellaneous (e.g. interest)	938,993	1%
Other hunting or game harvesting (e.g. problem animal control)	459,810	< 1%
Live game sales	17,200	< 1%
Premium hunting	-	0%
Total	**68,201,415**	**100%**

organisations are themselves important job creators, with all jobs usually being filled by local people. Jobs created through natural resource management and related tourism and trophy hunting activities are regarded as especially beneficial, because people no longer have to leave the land to seek employment in towns. Jobs can be balanced with a stable household and subsistence agriculture activities, improving social cohesion. Conservancies are able to provide diverse employment through the income they generate. The growth of administrative and managerial positions in conservancies is driven by the recognition that qualified staff is needed for the effective management of conservancy resources. Job creation in rural areas is particularly important given the high rates of unemployment in Namibia.

Diversifying income opportunities

Besides facilitating direct employment, community conservation is enabling a great variety of new income opportunities for individuals, of which craft production and the harvesting and sale of indigenous plant products are the two most important sectors. All new income streams from natural resource use provide much-needed household cash to supplement subsistence agriculture and improve individual lives.

natural resource returns for the community

Significant spenders

Conservancies are becoming important spenders in the rural economy, channelling funds generated from natural resource use to communities. Prior to the inception of community conservation, the revenue generated by tourism and other sectors was significantly lower, and almost all of it was drawn out of the area by businesses based in urban centres. Now, an increasing proportion of generated returns stay in communal areas.

Distributing cash benefits

Conservancies with strong revenue streams and a small membership often distribute significant cash benefits to villages and households, where just a small amount can make an important difference. Yet most conservancies cannot make regular cash payouts to members, and annual general meetings tend to support the concept of investment in community projects.

Committed to rural development

Increasing initiatives aimed at maintaining or uplifting general living conditions in rural areas are being funded by community conservation. Examples of initiatives funded by conservancies include water infrastructure, agricultural equipment and materials, bursaries for students and grants to schools, kindergartens and sports tournaments, medical treatment, grants to the elderly, transport and funeral assistance for community members and a variety of other social benefits. Through this, community conservation is demonstrating a clear commitment to rural development.

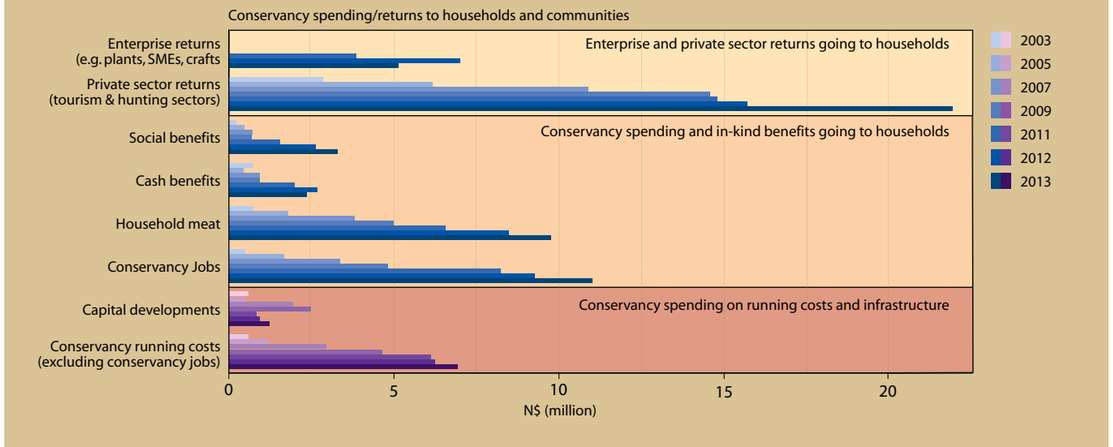
Building capacity

Skilled and educated young people often leave rural areas in pursuit of better opportunities in towns. As the success of community conservation broadens, it can help to reverse urbanisation trends and is already strengthening human potential in communal areas. By recruiting more skilled staff, community conservation organisations can improve their operations in an upward growth spiral. Positions of responsibility are being filled by community members in a range of roles including office management, book keeping and natural resource management, in the management of joint-venture lodges, as tour guides, and as trackers and camp staff in the trophy hunting industry. Rural women are increasingly seen in leadership roles in conservancies, especially in the area of financial management. The provision of student bursaries from conservancy funds is aimed at increasing skills available to rural communities.

The value of intangible benefits

Community conservation creates a great variety of less measurable benefits such as strengthening a common identity and giving communities a collective voice, increasing the participation of women in decision-making, supporting initiatives to combat HIV/AIDS, creating a sense of community pride and ownership over resources, and increasing community awareness of issues. Through CBNRM, communities are recognised as the rightful custodians of natural resources. Community conservation strengthens local level democracy, creates awareness of business and sustainability issues, opens opportunities for entrepreneurship and generally diversifies livelihoods, thereby reducing people's economic and social vulnerability, especially in the face of climate change.

FIGURE 25. **Understanding the various returns facilitated by conservancies:** *Enterprise and private sector returns generate direct cash income for households through sales and wages, and also include fringe benefits (e.g. staff housing) and donations to the community. Conservancy income is used to fund social benefits (e.g. education, health), make cash payments to members, and pay wages of conservancy staff. Conservancies also distribute meat of considerable value to households. Further conservancy income is spent on running costs (e.g. office, vehicle), while capital developments are investments in conservancy infrastructure.*



covering operational expenses

A key objective of CBNRM is that community conservation should be self-financing and sustainable. Before conservancies or community forests can spend money on social projects or distribute benefits to households, they first need to cover their own operational costs. These include salaries for conservancy staff, allowances for committee members, travelling costs, insurance, office administration and training activities, and vehicle running costs. During their initial development stage, all conservancies and community forests are dependent upon external funding. As they move into a more productive operational stage, an increasing number of conservancies are covering all running costs from their own income (see Table 1 on page 31 in Chapter 1).

the costs and benefits of living with wildlife

Facilitating diversity

Modern environmental understanding makes it clear that biodiversity is vital for the health of local ecosystems as well as the whole planet. An environment is healthiest when it supports a high diversity of indigenous species – including large wildlife. Community conservation facilitates this diversity by enabling communal area residents to achieve a balance between land uses that include wildlife use. But wildlife also creates conflicts and the returns generated from natural resource use should clearly outweigh human-wildlife conflict costs for farmers. Importantly, some of the generated returns need to be used to directly offset the losses of those who incur them.

Inherent environmental costs

Human-wildlife conflict is seen as one of the major challenges facing community conservation. Wildlife often comes into conflict with agricultural activities when predators attack livestock or game raids crops. Such conflicts can be reduced through prevention and mitigation measures, but will never be eliminated entirely. All industries carry some inherent costs. Environmental costs, induced by changes in climate, disease, and the impacts of a great variety of animals from elephants to insects, are an inherent cost of agriculture. Although the types of impact vary from area to area, this is true everywhere in the world.

Creating a positive ratio

Losses caused by wildlife can undoubtedly be severe. This is especially true in the tragic cases where people are injured or killed by wild animals. Poor households surviving on small crop yields or low livestock numbers can also be very hard-hit by wildlife conflicts. Nonetheless, perceptions of the scale of the problem are often skewed. Data evaluation has shown that in the majority of surveyed conservancies, the returns generated from wildlife far outweigh the losses incurred through it. In some cases the positive return ratio exceeds 50 to 1. The returns used in these comparisons do not include any of the farming income and in-kind benefits being generated by agriculture. It is thus possible to offset the losses from wildlife through returns from natural resource use alone, thereby largely recouping this inherent cost to agricultural activities. Such calculations are, however, made at an overall conservancy level. It is vital that the individual community members who incur losses receive fair compensation.

A wide range of returns from natural resources can create a positive return ratio that far outweighs the costs of human-wildlife conflict. Although they are a threat to small stock, jackals are still common in Orupembe Conservancy.

reducing poverty

Immediate and long-term contributions

Namibia is ranked as a middle income country, yet it has a highly skewed distribution of income, and unemployment is extremely high. A large part of the population lives in rural areas and is dependent on natural resources and a healthy environment for its livelihood. Although community conservation alone is not going to reduce poverty for the majority of communal area residents, it can make significant immediate and long-term contributions. The provision of employment is the most direct contribution, providing steady income to build up household assets and reinforce local cash economies. By diversifying rural livelihoods, natural resource use is also creating a range of new economic opportunities. Conservancies are promoting private sector investment in communal area tourism, which generates immediate returns for local people and facilitates a variety of related enterprise opportunities. In addition, CBNRM enables important training and capacity building which, in turn, develops new skills and improves employment options.

Empowered to improve

Social empowerment, which includes the devolvement of legal rights to communities and the development of new governance structures, is an important factor in the long term reduction of poverty in communal areas. This is particularly significant given Namibia's apartheid legacy that left many rural Namibians marginalised and poverty stricken. By lifting some people out of poverty, diversifying livelihood opportunities and providing long-term institutional structures that help to drive economic growth, CBNRM is being recognised by the Namibian government as making an important contribution to national development plan aims (Table 10).

Increasing food security

CBNRM initiatives such as community rangeland management and conservation agriculture are increasing the productivity of communal farmers. Improved livestock productivity and increased crop yields are helping to increase food security, as are initiatives such as fish reserves that improve the size and quality of fish catches. The game meat distributed to households by conservancies is an additional support to households.

Running a kiosk at the Sorris Sorris Conservancy office – community conservation facilitates a wide range of new economic opportunities and contributes to poverty reduction, enabling enterprises, jobs and career options.

Kiosk manager Astrid Eises, Sorris Sorris Conservancy

TABLE 10.
CBNRM contributions to National Development Plan 4 objectives related to society and the economy
CBNRM makes a variety contributions, portrayed in more detail in the text and illustrations of this chapter.

National Development Plan 4	CBNRM contribution
What we cherish as a nation: pages 3-5	
Upholding the Constitution and good governance • "Our emphasis is also on good governance, and we continue to improve on issues relating to equity in access to productive resources, and in reducing ... poverty and economic stagnation".	• promotes democracy in rural areas through community participation and democratic election of office bearers • emphasises accountability, transparency and good governance through performance monitoring and evaluation • requires the equitable distribution of returns • promotes economic development and poverty reduction through diversification and private-sector partnerships
Partnership • "... creating an environment that is conducive to working together as a key to economic progress and social harmony ..."	• promotes partnerships through active collaboration amongst communities, and between communities and government, the private sector, NGOs and donor agencies
Capacity enhancement • "...we consider investing in people to be a crucial precondition for the desired social and economic transformation…."	• enables significant capacity enhancement through ongoing training in governance, natural resource management and business, as well as in-service training in the private sector
Comparative advantage • "We capitalise on Namibia's comparative advantages over other countries around the world, and provide suitable incentives to use our national resources in the most efficient and sustainable way possible…"	• capitalises on the comparative advantage of charismatic wildlife in spectacular landscapes (often better suited to wildlife than livestock) through tourism and hunting • provides significant incentives for sustainable resource use through economic returns (N$ 72,158,768 in 2013)
Gender equality and the empowerment of women • "... gender equality is a prerequisite for sustainable development and ... permeates all spheres of life. We will ... endeavour to create and promote an enabling environment in which gender equality and the empowerment of women are realised ..."	• promotes gender equality and the empowerment of women through equal access to employment and governance, resources and economic opportunities, with documented high female participation (e.g. 49% female conservancy treasurers/ financial managers in 2013)
Basic Enablers:	
Health/HIV & AIDS – pages 55-56 • "... broad challenges which impact on health outcomes ... [include] factors such as malnutrition, sanitation, education, infrastructure and poverty ..." • "... the sparsely distributed population of Namibia ... makes it difficult to ... provide health services ... and adds additional transport costs ... to access services ..." • "…HIV/AIDS remains one of the fundamental challenges ... [with] a devastating effect ..."	• facilitates improved health outcomes through funding of community health, education and other infrastructure projects, as well as transport provision to service centres • reduces malnutrition and poverty through economic development, as well as the distribution of cash benefits and game meat to households (N$ 15,409,745 in 2013) • mitigates the HIV/AIDS challenge through the documented reduction of drivers of infection through outreach and education programmes
Extreme poverty – pages 65-67 • "... increasing household food security and ... nutrition levels in order to reduce malnutrition among children ..." • "... improved agricultural productivity would benefit two thirds of the extremely poor households. The adoption of new farm management systems such as Conservation Agriculture … will ... result in higher yields and increased food security ..." • "… increased job opportunities in rural areas – where most of the extremely poor reside – will contribute to a reduction in extreme poverty".	• increases household food security and reduces malnutrition through livelihood diversification and provision of game meat • promotes sustainable practices and increases agricultural productivity through land-use diversification, structured and sustainable management, and activities such as Conservation Agriculture and Community Rangeland Management • facilitates new jobs and income opportunities in rural areas, especially within the tourism, hunting, natural plant product and craft sectors (6,472 jobs in 2013)
Economic Priorities: Tourism – pages 92-96 • "... improve the infrastructure and visitor services on offer in Namibia, as well as to ensure the conservation of the natural environment and cultural heritage through sustainable tourism development ..." • "... improve the availability of skills and training in tourism-related activities ..."	• enables the development of communal area tourism, one of Namibia's prime tourism products (39 JV lodges in 2013) • promotes cultural pride and the conservation of cultural heritage through responsible tourism and the development of living museums and other cultural tourism initiatives • makes significant contributions to environmental conservation, funded through tourism and trophy hunting income
Economic Priorities: Agriculture – pages 106-110 • increasing livestock and crop production in order to improve food security and boost economic growth	• increases livestock productivity through community based rangeland management (66 defined areas in 2013) • increases crop yields through conservation agriculture

contributing to national economic growth

The national impact

Community conservation has an impact on the broader economy of the country significantly exceeding direct returns to rural communities, and contributes to nation building by driving national economic growth. This national impact can be assessed by including all incomes earned by communities, government and the private sector as a consequence of community conservation.

What are these additional incomes?

Firstly, private sector tourism and hunting partners earn income which is not distributed in conservancies, for example as salaries for people outside the conservancy, profits for the company, interest and principal payments to financiers, as well as government taxes and rentals. Secondly, tourists drawn to Namibia by the attractions held in trust through community conservation also spend in the wider economy during their trips, generating direct income for urban hotels, airlines and car rental companies, for example. Thirdly, tourism and other enterprises use products, such as food and fuel from other sectors of the economy, and this generates further national income. Fourthly, part of all this new income earned by households, companies and government gets re-spent in the economy during further rounds of spending, generating additional income.

Contributions to net national income

All these economic contributions may be termed contributions to net national income (NNI). The NNI contributions can be defined as the value of goods and services that activities, community conservation activities in this case, make available each year to the nation. Contributions made by community conservation to NNI should also include adjustments for stock appreciation (or depreciation). This is the accumulated capital value of wildlife stocks, to which conservancy management and conservation are making an important contribution. The management of wildlife stocks and any related increase in the capital value of the animals is seen as an extra economic benefit of conservancies. The animals' value is taken as their monetary value 'on the hoof', in other words the value they could fetch if they were to be sold or harvested commercially. The annual increase (or decrease) in the capital value of wildlife is the value attributed to the fluctuating numbers of wildlife in the north-west conservancy areas. This excludes values associated with the other areas for which suitable data are lacking. The north-west figures are considered to provide at least an indication of the relative values of wildlife that have benefited from protection in conservancies. Besides stock values, further economic values could be counted if adequate measures were available, including the economic value of local management institutions and the capacity which resulted from training provided to people associated with conservancies.

FIGURE 26.
Estimates of the national economic returns from CBNRM compared to economic investment costs

In 2013, the net national income (NNI) contribution made by CBNRM was about N$ 444 million. Due to the effects of drought, wildlife stock values in the north-west declined during 2013, which is reflected in the graph. Between 1990 and 2013, the cumulative value of the NNI contributions amounts to an estimated N$ 3.42 billion. The increased capital value of wildlife in north-western Namibia between 1990 and 2013 is estimated at N$ 497 million. Together, the NNI contributions and increased capital value of wildlife over this period add up to about N$ 3.92 billion. This is an impressive figure, which has been increasing rapidly. The graph also shows the value of spending on the CBNRM programme each year, which cumulatively adds up to about N$ 1.6 billion of investment between 1990 and 2013. Donors supplied most of the funds, while the MET and NGOs also provided inputs, mainly as 'in-kind' contributions such as staff, vehicles and other kinds of support.*

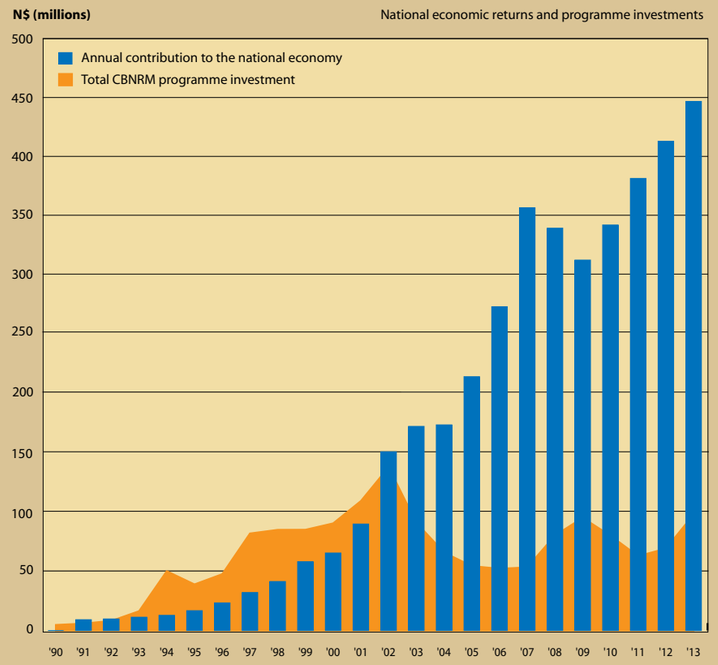


TABLE 11.
The economic efficiency of CBNRM

Since 1990, the programme has had an economic internal rate of return of 23% and has earned an economic net present value of some N$ 669 million. This is a highly positive economic return for a programme investment.

Year	Economic rate of return	Net present value at 6%
15	5%	- N$ 9.3 million
17	16%	N$ 178.1 million
19	19%	N$ 330.7 million
21	21%	N$ 495.3 million
23	23%	N$ 668.9 million

Table 11 shows economic rates of return and net present values. In the first 12 years of the programme, costs exceeded economic returns, but since then rapidly growing returns far exceed costs (Figure 26). Positive economic returns for the programme (economic rate of return above the estimated real discount rate) have become evident during the latter years. The depicted economic return is very positive for a programme investment.

An excellent investment

The economic merits of programme spending can be seen by comparing the investment in community conservation to returns in terms of NNI and increasing annual stock asset values in a cost-benefit analysis. This can provide an indication of the degree to which the investment made in the CBNRM programme has contributed overall to the national economy and whether this investment has been economically efficient.

making a global contribution

While delivering the variety of immediate and tangible returns described, community conservation also provides an important service to the nation and the world by maintaining healthy ecosystems.

Providing ecosystem services

Internationally, the concept of payments for ecosystem services is gaining hold, as ecosystems come under ever-greater pressure from industry and development. Ways need to be found to ensure that ecosystems continue to deliver vital services such as clean water, productive soils and healthy plant and animal communities, which create the basis for human activities and economies. The value of these services can be calculated in monetary terms and options for creating payments to the entities that safeguard the services are being explored.

Erongo-Kunene Community Conservation Area

Community conservation contributes to national economic growth as well as facilitating the health of ecosystems.

Conservancies and community forests could in future become the beneficiaries of such payments and would thereby be able to carry out their functions more effectively and sustainably.

Benefitting from biodiversity offsets

Biodiversity offsets represent a related concept, developed to mitigate the impacts of destructive activities such as mining. The rapid growth of uranium and other mining across much of western Namibia is impacting on some conservancies. The pressure on mining companies to offset the biodiversity impacts of their activities will increase as global environmental concerns such as loss of biodiversity and climate change become more acute. Again, conservancies should benefit from these biodiversity offsets, because they are safeguarding national and global biodiversity.

* Figures have been adjusted for inflation to be equivalent to the value of Namibia dollars in 2013. This means they are not directly comparable with those used in the 2012 Community Conservation Report, which used figures equivalent to the value of Namibian dollars in 2012.


Erongo-Kunene Community Conservation Area

to work for a common vision...

... means focussing on what can be achieved, rather than yielding to difficulties; looking beyond individual activities and local impacts to bigger regional, national and trans-boundary connections, influences and achievements, while facing challenges, anticipating change and striving for sustainability...

achieving sustainability... The Namibian conservancy movement has become an internationally acclaimed CBNRM success model. Community conservation is making significant biodiversity contributions and creating synergies with state protected areas. It is strengthening rural economies and contributing to rural development. A large number of conservancies are already fully self-financing. Other community conservation initiatives are well-established and operating effectively. A sound foundation is being created, but much needs to be done to fully entrench the movement and attain sustainability. Most important are true integration of both policies and activities, ensuring adequate technical support and long term maintenance, continuing to expand and diversify natural resource potential, as well as removing barriers and countering threats that may arise.


Game guard Gerhard Kasupi

X.

working for a common vision

facing challenges
and looking to the future


School children,
Kwandu Conservancy

The aim of community conservation is to enable coordinated, integrated and equitable use of all natural resources such as wildlife, plants, soils and water, and through this to support a thriving rural economy based on a highly productive mix of land uses that includes tourism, trophy hunting, agriculture, forestry, fisheries, craft production and more. Community conservation can empower rural people to make the most of a wide range of livelihood choices to improve their lives.

What's the story?

behind working for a common vision

facing climate change and other global challenges through community conservation

a look at increasing community resilience to various impacts by applying community conservation principles

Flooding, Zambezi Community Conservation Area

Drought, Erongo-Kunene Community Conservation Area

so will it get wetter or drier?

The shrivelled remains of cattle, dead from drought, are a heartsore sight for most, in a country with a broad farming affinity and a distinct cattle culture. Yet Namibians are used to droughts. They are a part of life across much of the most arid country in sub-Saharan Africa. Rainfall in our country is generally erratic. It's been that way for millennia. Again and again, rainy seasons are poor or patchy, with a harrowing impact on livestock and people. Many parts of the country experienced poor rainfall during 2013. In the north-west, in particular, large numbers of both livestock and wildlife died as a result. But rainy seasons can also be well above average. While some areas experience drought, others are being flooded.

Flooding has become another part of life in parts of Namibia, periodically displacing significant numbers of people. Floods, too, have always occurred in this country. As human populations have grown, though, increasing settlement in areas prone to flooding have multiplied the number of people affected by flooding in the Cuvelai Basin and along the rivers of the Zambezi Region. Yet extreme weather events, be it droughts or floods, appear to be getting more frequent and more severe, something already predicted by experts.

Climate change is not a simple matter. It affects different parts of the world in very different ways. In some areas, the signs are unmistakable – melting glaciers, rising seas and shrinking polar regions are undeniable effects of a changing climate. In Namibia, the changes are more subtle, less well-defined. Accustomed to a generally unpredictable climate, many Namibians still see all extreme weather events as part of normal natural cycles, while others now put every drought or flood down to the effects of climate change. Large variations in annual weather patterns in Namibia are natural, due to its position in relation to the three major systems affecting climate in southern Africa, as well as the influences of the cold Benguela Current along the coast. In general though, climate change modelling indicates that most of Namibia is likely to become even drier than it already is. Most communal areas of Namibia have historically had limited agricultural potential, which will be exacerbated by climate change impacts.

Climate change is a global reality. Yet, like much of Africa, Namibia has a negligible influence on that change. Namibia's carbon emissions and other activities that drive climate change are minimal compared to the impacts of the highly industrialised nations. Slowing climate change is mostly up to changing practices in those countries. While Namibia can only make minor contributions to slowing climate change, it is likely to be one of the countries particularly hard-hit by it.

How then, can Namibia, and especially the poor, rural communities in our communal areas, deal with the effects of climate change in an already harsh environment? Community conservation may have at least some answers.

and what will we do about it?

Many Namibians are seeking to reduce their 'carbon footprint' and their environmental impacts in general. In conservancies, joint-venture lodges are well-aware of their environmental responsibilities, and the Eco-awards Scheme recognises tourism operators with the lowest impacts, motivating best practices.

Community forests facilitate the sustainable use of plant resources, combat deforestation, manage fires and seek to increase natural vegetation cover – activities which reduce carbon emissions and increase carbon storage. Other community conservation practices, such as conservation agriculture and community rangeland management also improve local environments.

Biofuel and carbon storage plantations based on exotic monoculture have been suggested for north-eastern Namibia. However, the effects on indigenous biodiversity and the use of limited water resources to make such plantations viable are not justified.

Mines are the biggest consumers of electricity and water in many parts of Namibia, and are becoming increasingly active in conservancies. Mining is an important economic sector, but must seek to minimise both climate and biodiversity impacts. Biodiversity offset schemes can compensate for some mining impacts.

At a household level, a large percentage of conservancy residents do not have access to electricity or running water. Most could, however, reduce their firewood consumption by using fuel efficient stoves or solar ovens. Such changes would certainly contribute to local environmental health, even if measurable climate change results would be limited.

For most rural Namibians, adaptation to the actual effects of climate change – increasing temperatures, reduced rainfall and extreme weather events – is the primary objective. A key adaptation strategy in rural areas is to optimise land uses. That means finding the mix of activities best suited to each area, which produces the greatest returns with the least environmental impacts.

The sustainable use of indigenous natural resources is particularly effective in Namibia. In arid environments, indigenous fauna and flora, already well-adapted to arid and erratic conditions, can cope better than introduced livestock and crops. Reducing the dependency on agriculture by diversifying livelihoods also strengthens people's economic resilience. The great variety of natural resource uses that are possible is described in other chapters, while further diversification within particular sectors is touched on in the following pages.

Increased diversification of land uses and income sources mitigates the impacts of extreme weather events, and also helps rural communities to deal with further global challenges such as economic or political fluctuations that affect tourism or other global markets. By not relying completely on any one land use, but rather using a complementary mix of activities best suited to the land, rural people are better-equipped to deal with all livelihood impacts.

Coordinator John Aibeb, //Huab Conservancy

The difficult task of conservancy management – conservancies are confronted with multiple internal and external challenges, barriers and threats and need support to deal with some of them.

what lies ahead for community conservation?

Filling the gaps

The rapid growth of community conservation areas is likely to slow over the next few years. The number of community forests may still increase considerably, while conservancy registration is already slowing. Most areas well-suited to wildlife management are now covered by conservancies, although a few obvious gaps remain. Buffer zones along the borders of national parks could be seen as a priority. It is expected that by around 2015, between 90 and 100 conservancies and 40 to 50 community forests will embrace well over 50% of all communal lands.

Realigning support services

Although many recently registered conservancies do not yet generate returns, a growing number of the more established conservancies are able to support their operating costs from their own income. Many are now in the transition from a support-intensive development stage to a less costly, long-term maintenance stage. 36 established conservancies have reached financial self-sufficiency, covering their running costs from own income, with 38 also distributing benefits to members. However, financial independence on its own will not lead to sustainability.

Strengthening governance capacities

Many conservancies and community forests still require focussed governance support, especially those in the early stages of institutional development. Mechanisms that reduce the loss of institutional memory during committee changes are needed, while benefit distribution systems and mechanisms to ensure full accountability for the use of funds must be strengthened.

Improving resource use

Over 70 percent of conservancies currently harvest wildlife for own use, shoot-and sell or trophy hunting. While the offtake is based on sustainable quotas, the actual harvesting methods and controls need to be improved. Shoot-and-sell harvesting is particularly problematic, and mechanisms are being implemented to improve this sector.

Seeing the big picture

The Erongo-Kunene Community Conservation Area covers 74,745 square kilometres, while the Omaheke-Otjozondjupa CCA embraces all communal lands of the Otjozondjupa Region and much of those of Omaheke. The community conservation areas of other regions, while smaller and more fragmented, are also impressive. These contiguous areas represent real development opportunities. Effective overall destination development and marketing can transform tourism and hunting, and associated landscape level management in these areas.

threats and challenges are growing

Standing together to combat poaching

Commercial poaching impacts on rhino and elephant are increasing in Namibia, although they remain below those in other range states. Several rhino were poached in Namibia in 2013, and poaching for ivory increased in the Zambezi Region, also affecting other species. While community conservation makes vital contributions to the protection of valuable species, the highly organised and ruthless poaching threat requires innovation and collaboration at national and international levels to reverse the trends and ensure the long-term protection of high-value species.

Influencing global wildlife use perceptions

The complexities of conservation outside parks are largely misunderstood by both the international and Namibian conservation-minded public. Increasing international calls by conservation organisations, animal rights groups and others to save the last wildlife on Earth have created the impression that wildlife is declining everywhere and urgent action is required. The fact that Namibian wildlife populations are generally stable or increasing is being overlooked, and all consumptive wildlife use is receiving unfounded, increasing criticism. Trophy hunting is facing the most vocal opposition. Sustainable hunting is a positive land use that can safeguard habitats against destructive uses and does not have negative effects on overall game populations, while generating significant income for communities living with wildlife. The loss of legal hunting income would be extremely detrimental to conservancies, many of which would no longer be viable.

barriers persist

While progress has been made, barriers to investment in communal areas persist. Insecurity of land tenure and lease agreements continues to present a challenge. Despite ongoing negotiations, the planned Ministry of Lands and Resettlement tax on lodges in communal areas was not resolved during 2013 and still threatens the viability of lodges and the returns flowing to communities.

Integration is often a slow process and a lack of recognition of community-based organisations remains a barrier to the long-term sustainability of conservancies and other initiatives. Integration of policies at ministry level, as well as of management structures and activities on the ground, can improve efficiency and significantly expand the current range of returns being generated by community conservation. Sectors that will benefit from closer collaboration include inland fisheries and agriculture.

The future at a glance

Community conservation may grow to...

- 90-100 conservancies and 40-50 community forests
- cover over 21% of Namibia and well over 50% of all communal land
- embrace up to 15% of all communal area residents and well over 50% of rural communal areas residents in suitable areas

What might be achieved?

Community conservation can...

- facilitate significant further growth of tourism in communal areas and increase local involvement
- enhance the reputation of communal areas as offering some of the country's most spectacular destinations
- entrench Namibia's position as offering some of the best trophy hunting on unfenced land in Africa
- mitigate the effects of climate change by reducing dependence on subsistence agriculture
- maximise the potential of indigenous plants through further strategic international partnerships
- strengthen incentives for people to live with and manage wildlife so our children's children can continue to share in this important African heritage

New for 2014:

- introduction of mandatory conservancy compliance requirements by the MET
- introduction and roll-out of a game guard certification system

The biggest challenges?

- enabling optimum conservancy governance capacities, effective decision-making and wise leadership, as well as pro-active members
- optimising land allocation and administration in communal areas
- further promoting policy integration amongst government ministries
- ensuring long-term technical support to community conservation structures
- achieving self-sufficiency and programmatic sustainability


Erongo-Kunene Community Conservation Area

diversifying
economic opportunities

Increasing **diversity** to reduce **dependency**

Community conservation should ensure economic diversification to reduce dependency on any one sector as the main source of income. Droughts quickly reduce agricultural outputs, while periods of economic downturn or political instability can translate to immediate impacts on tourism or trophy hunting, all of which reduce community returns. By broadening the range of economic activities, as well as diversifying income streams within each sector, vulnerability to external influences can be reduced.

Creating new **income streams**

New income streams can be created by strengthening the development of a variety of enterprises based on diverse resources including wildlife, plants, fish, crafts and others. The value-added processing of products is only just beginning for most sectors and can be significantly expanded. As tourism in conservancies grows, a range of spin-off enterprises can be developed, and benefit capture along various parts of the tourism value-chain can be significantly enhanced.

Recognising the value of **communication**

The importance of marketing and communication as a vital aspect of modern management continues to be overlooked. Both internal programme communications and external marketing can be significantly strengthened. Initiatives that build on the recognition achieved through marketing of the communal conservancy tourism sector have been limited. Positive positioning of the communal conservancy hunting sector has been neglected and should be considered an urgent priority. Individual conservancies still need support in developing their own corporate identities. While the use of a pilot series of brochures and posters profiling individual conservancies has achieved some market recognition, the public relations abilities of conservancies themselves needs to be strengthened. At a regional level, larger community conservation areas can be marketed as conservation entities and tourism destinations.

adapting
to growth and change

Managing an **increasing complexity**

Established conservancies are faced with a growing complexity of business interests, which may compete for the same resources or areas. Conflicts may arise between tourism, trophy hunting and game harvesting interests, as well as between these and agricultural activities. Many conservancies are managing a multitude of agreements with joint-venture lodges, hunting operators, shoot-and-sell harvesting clients, indigenous plant product buyers, and other stakeholders. At the same time, predators and other wildlife are increasing and require greater management attention, including the mitigation of human-wildlife conflicts. As the success of conservancies grows, the often competing expectations of a variety of stakeholders seeking access to natural resource returns place increasing pressure on conservancy management. It is certainly commendable that conservancies are dealing with all these challenges, but also understandable that shortfalls occur and technical support is still needed.

Operating in a **dynamic environment**

Community conservation operates in a dynamic domain and faces ongoing environmental, cultural and social changes, as well as the rapid growth of the CBNRM programme itself. Conservancies manage resources in large, open systems with highly variable conditions, a variability that is likely to increase with climate change. Economic and social challenges include resource and market fluctuations, as well as land use and resource conflicts.

Ensuring **adaptive management**

By continually monitoring both resources and activities, as well as refining methods and approaches, community conservation can adapt to the dynamics of growth and change, while maximising returns for local people. Planning, monitoring and evaluation are thus core aspects of community conservation, as are ongoing training and technical support.

attaining
long-term sustainability

Delivering **core support services**

The NACSO working groups collaborate with government to provide support to community conservation organisations. The Natural Resources Working Group, particularly, has made important progress in delivering strategic technical support to conservancies, rather than carrying out reactive interventions. In the future, it may be more effective for NACSO to provide integrated community conservation extension services under one umbrella, in order to do justice to the inter-dependence of good governance, wise resource management and meaningful returns.

Providing **sustainable financing**

A sustainable financing strategy has been formulated for community conservation, yet much work needs to be done to implement it. A sustainable finance plan will reduce dependence on declining donor support to Namibia. Finance mechanisms may include tiered payments for services by conservancies and community forests (based on income), increased government support, an endowment to fund critical costs, and the receipt of biodiversity offsets from mining.

Ensuring **strategic implementation**

Work on the National CBNRM Sustainability Strategy continued during 2013. It aims to ensure the ongoing provision of minimum support packages to community conservation organisations. These will be based on the development phase and operational complexity of a conservancy or community forest. The Strategy also seeks to improve support efficiency through calendar-based training aimed at regional clusters.

Reaching new levels of **community conservation**

While the conservancy movement has achieved local success and international recognition, current challenges and threats show that it remains vulnerable. Wider private sector engagement, not only at an individual enterprise but also at national industry level, could evolve into a broader support structure based on a synergy between government, NGOs and the private sector. Further integration of the management of all natural resources can also continue to strengthen community conservation, while additional natural resource returns can be unlocked through innovative approaches and effective marketing. All such initiatives can take community conservation to new levels.

Namibian community conservation is like a river flowing through a dry land... it offers a wealth of resources, increases diversity and changes the lives of those close to it. Some returns fluctuate with the seasons; others, flowing deeper and more broadly, are permanent.


Erongo-Kunene Community Conservation Area

XX.

who's who

stakeholder details

registered conservancies 2013

Name	Map No.	Region	Reg. Date	Area km2	Approx. People	Contact
!Gawachab	36	Karas	Sep-05	132	200	0812622401
!Han /Awab	52	Karas	May-08	1923	688	063-283059
!Khob !naub	23	Karas	Jul-03	2747	2025	0814309976
!Khoro !goreb	65	Kunene	Sep-11	1283	1062	-
//Audi	50	Kunene	Oct-06	335	612	0814914728
//Gamaseb	24	Karas	Jul-03	1748	1606	0814028963
//Huab	22	Kunene	Jul-03	1818	772	067-331392
≠Gaingu	30	Erongo	Mar-04	7732	2607	0814561224
≠Khoadi-//Hôas	3	Kunene	Jun-98	3365	3972	081395393
African Wild Dog	39	Otjozondjupa	Sep-05	3824	4399	062-529097
Anabeb	25	Kunene	Jul-03	1570	1348	0813135800
Balyerwa	45	Zambezi	Oct-06	225	1000	0816010056
Bamunu	64	Zambezi	Mar-11	556	2541	0813081477
Doro !nawas	6	Kunene	Dec-99	3978	1143	0812172161
Dzoti	59	Zambezi	Oct-09	287	1509	0817629468
Ehi-Rovipuka	13	Kunene/ Omusati	Jan-01	1980	1651	0813523091
Eiseb	55	Omaheke	Mar-09	6626	1382	0812849859
Epupa	77	Kunene	Nov-12	2912	3230	-
Etanga	79	Kunene	Mar-13	908	1398	-
George Mukoya	41	Kavango-E	Sep-05	486	930	0814301911
Huibes	58	Hardap	Oct-09	1328	750	0814028963
Iipumbu ya Tshilongo	73	Oshana/ Omusati	May-12	1548	2201	0812450369
Impalila	44	Zambezi	Dec-05	73	890	0813187857
Joseph Mbambangandu	31	Kavango-E	Mar-04	43	1640	0813299755
Kabulabula	66	Zambezi	Nov-11	89	552	0818118860
Kasika	43	Zambezi	Dec-05	147	1130	0813210240
King Nehale	40	Oshikoto	Sep-05	508	4564	0813387324
Kunene River	47	Kunene	Oct-06	2764	4158	065-274002
Kwandu	8	Zambezi	Dec-99	190	3559	0813072232
Marienfluss	11	Kunene	Jan-01	3036	340	0818897736
Mashi	16	Zambezi	Mar-03	297	2235	0813000172
Mayuni	9	Zambezi	Dec-99	151	2241	0813322490
Muduva Nyangana	37	Kavango-E	Sep-05	614	1731	0813221856
N≠a Jaqna	29	Otjozondjupa	Jul-03	9123	3579	067-245047
Nyae Nyae	1	Otjozondjupa	Feb-98	8994	2609	067-244011
Ohungu	48	Erongo	Oct-06	1196	1168	0813430733
Okamatapati	42	Otjozondjupa	Sep-05	3096	1840	067-318033
Okanguati	76	Kunene	May-12	1159	2153	0813437722
Okangundumba	21	Kunene	Sep-03	1131	1714	061-228506
Okatjandja Kozomenje	74	Kunene	May-12	656	1416	0818779932
Okondjombo	53	Kunene	Sep-08	1645	100	0818758889
Okongo	57	Ohangwena	Aug-09	1339	2544	0818394958
Okongoro	67	Kunene	Feb-12	956	1222	0813861596

Name	Map No.	Region	Reg. Date	Area km2	Approx. People	Contact
Omatendeka	17	Kunene	Mar-03	1620	1767	0812992614
Ombazu	75	Kunene	May-12	871	2089	0813836629
Ombujokanguindi	70	Kunene	Feb-12	1160	827	
Omuramba ua Mbinda	63	Omaheke	Mar-11	3217	484	0812313027
Ondjou	46	Otjozondjupa/ Omaheke	Oct-06	8731	2748	0814308720
Ongongo	69	Kunene	Feb-12	501	699	0817271298
Orupembe	20	Kunene	Sep-03	3566	215	061-228506
Orupupa	62	Kunene	Mar-11	1234	1769	0812353361
Oskop	14	Hardap	Feb-01	96	52	0813192725
Otjambangu	54	Kunene	Mar-09	348	780	0813364044
Otjikondavirongo	78	Kunene	Mar-13	1067	1428	-
Otjimboyo	18	Erongo	Mar-03	447	266	0814792295
Otjitanda	60	Kunene	Mar-11	1174	462	0812196252
Otjituuo	38	Otjozondjupa	Sep-05	6134	5806	067-243615
Otjiu-West	72	Kunene	May-12	1100	795	0814520790
Otjombande	68	Kunene	Feb-12	329	1285	-
Otjombinde	61	Omaheke	Mar-11	5889	4692	0812278032
Otuzemba	71	Kunene	Feb-12	742	482	0814722807
Ovitoto	51	Otjozondjupa	May-08	625	3292	067-317132
Ozonahi	33	Otjozondjupa	Sep-05	3204	10851	067-317770
Ozondundu	28	Kunene	Jul-03	746	408	0813116960
Puros	10	Kunene	May-00	3562	543	0817163669
Salambala	2	Zambezi	Jun-98	930	8318	0812518791
Sanitatas	27	Kunene	Jul-03	1446	113	0817403987
Sesfontein	26	Kunene	Jul-03	2466	1355	0812971123
Shamungwa	34	Kavango-E	Sep-05	53	140	0816920035
Sheya Shuushona	35	Omusati	Sep-05	5067	3020	0812577683
Sikunga	56	Zambezi	Jul-09	287	2471	0816049429
Sobbe	49	Zambezi	Oct-06	391	1019	0812058669
Sorris Sorris	15	Kunene	Oct-01	2290	950	0817847624
Torra	4	Kunene	Jun-98	3494	963	0818411149
Tsiseb	12	Erongo	Jan-01	7914	2291	0812066928
Uibasen-Twyfelfontein	7	Kunene	Dec-99	286	230	0812372500
Uukolonkadhi Ruacana	32	Omusati/ Kunene	Sep-05	2994	32136	0812706323
Uukwaluudhi	19	Omusati	Mar-03	1437	771	0811248777
Wuparo	5	Zambezi	Dec-99	148	1124	0813355080
Kyaramacan Association	α	Kavango-E/ Zambezi	Mar-06	4,100	4,660	0818984088
Doro !nawas/Uibasen-Twyfelfontein JMA	6-7	Kunene	n.a.	160	n.a.	-

registered community forests 2013

Name	Map No.	Region	Reg. Date	Area km2
Bukalo	A	Zambezi	Feb-06	53
Cuma	P	Kavango-E	Mar-13	116
George Mukoya	R	Kavango-E	Mar-13	486
Gcwatjinga	Q	Kavango-E	Mar-13	341
Hans Kanyinga	B	Kavango-E	Feb-06	277
Kahenge	S	Kavango-W	Mar-13	267
Katope	T	Kavango-W	Mar-13	638
Kwandu	C	Zambezi	Feb-06	212
Likwaterera	U	Kavango-E	Mar-13	138
Lubuta	D	Zambezi	Feb-06	171
Marienfluss	V	Kunene	Mar-13	3034
Masida	E	Zambezi	Feb-06	197
Mbeyo	F	Kavango-W	Feb-06	410
Mkata	G	Otjozondjupa	Feb-06	865
Muduva Nyangana	W	Kavango-E	Mar-13	615
Ncamagoro	H	Kavango-W	Feb-06	263

Name	Map No.	Region	Reg. Date	Area km2
Ncaute	J	Kavango-E	Feb-06	118
Ncumcara	K	Kavango-W	Feb-06	152
Nyae Nyae	X	Otjozondjupa	Mar-13	8992
Ohepi	Y	Oshikoto	Mar-13	30
Okondjombo	Z	Kunene	Mar-13	1644
Okongo	L	Ohangwena	Feb-06	765
Omufitu Wekuta	Aa	Ohangwena	Mar-13	270
Orupembe	Ab	Kunene	Mar-13	3565
Oshaampula	Ac	Oshikoto	Mar-13	7
Otjiu-West	Ad	Kunene	Mar-13	1100
Puros	Ae	Kunene	Mar-13	3562
Sachona	Af	Zambezi	Mar-13	122
Sanitatas	Ag	Kunene	Mar-13	1446
Sikanjabuka	M	Zambezi	Feb-06	54
Uukolonkadhi	N	Omusati	Feb-06	848
Zilitene	Ah	Zambezi	Mar-13	81

government agencies

Ministry of Agriculture, Water and Forestry Directorate of Forestry	Tel: 061 208 7663 www.mawf.gov.na
Ministry of Agriculture, Water and Forestry Department of Water Affairs	Tel: 061 208 7288 www.mawf.gov.na
Ministry of Environment and Tourism Directorate of Regional Services and Park Management	Tel: 061 284 2520 www.met.gov.na

Ministry of Fisheries and Marine Resources	Tel: 061 205 3911 www.mfmr.gov.na
Ministry of Lands and Resettlement	Tel: 061 296 5000 www.mlr.gov.na
Ministry of Mines and Energy	Tel: 061 284 8111 www.mme.gov.na

Game count team, Zambezi Game Count

NACSO secretariat

Namibian Association of CBNRM Support Organisations (NACSO) Secretariat	Tel: 061 230888 www.nacso.org.na

NACSO working groups

NACSO Business, Enterprises and Livelihoods Working Group	Tel: 061 230888 www.nacso.org.na
NACSO Institutional Development Working Group	Tel: 061 230888 www.nacso.org.na
NACSO Natural Resources Working Group	Tel: 061 230888 www.nacso.org.na

NACSO members

Centre for Research Information Action in Africa (CRIAA SA-DC)	Tel: 061 220117 www.criaasadc.org
Desert Research Foundation of Namibia (DRFN)	Tel: 061 377500 www.drfn.org.na
Integrated Rural Development and Nature Conservation (IRDNC)	Tel: 061 228506 www.irdnc.org.na
Legal Assistance Centre (LAC)	Tel: 061 233356 www.lac.org.na
Multi-disciplinary Research Centre and Consultancy (MRCC-UNAM)	Tel: 061 2063051
Namibia Development Trust (NDT)	Tel: 061 238003 www.ndt.org.na
Namibia Nature Foundation (NNF)	Tel: 061 248345 www.nnf.org.na
Nyae Nyae Development Foundation of Namibia (NNDFN)	Tel: 061 236327 nndfn@iafrica.com.na
Omba Arts Trust (OAT)	Tel: 061 242799 www.omba.org.na
Save the Rhino Trust (SRT)	Tel: 064 403829 www.savetherhinotrust.org

NACSO associate members

Kavango Regional Conservancy Association	P.O Box 709, Rundu
Kunene Regional Conservancy Association	Tel: 065 271 257 PO Box 293, Opuwo
Otjozondjupa Regional Conservancy Association	Tel: 061 238 003 PO Box 8226, Windhoek
Namibian Environment and Wildlife Society (NEWS)	Tel: 061 306 450 www.NEWS-namibia.org
Tourism Supporting Conservation (TOSCO)	Tel: 081 453 5855 www.tosco.org
WWF in Namibia	Tel: 061 239 945 PO Box 9681, Windhoek
Dhyani Berger Independent consultant	Tel: 061 225 680 dhyani@iafrica.com.na
Anna Davis Independent consultant	Tel: 061 225 085 ad@iway.na
Brian Jones Independent consultant	Tel: 061 236 186 bjones@mweb.com.na
Carol Murphy Independent consultant	Tel: 081 296 4625 POBox 1551 Katima Mulilo
Hendrika Skei Independent consultant	Tel: 081 274 4397 ha@iway.na
Annie Symonds Independent consultant	Tel: 061 220 555 annie.s@iway.na

funding partners

Austrian Government	www.bka.gv.at
British High Commission	www.gov.uk
Canada Fund	www. canadainternational.gc.ca
Comic Relief	www.comicrelief.com
Danish International Development Agency (DANIDA)	www.um.dk/en/danida-en/
Environmental Investment Fund of Namibia	www.eifnamibia.com
European Union	europa.eu
Fonds Français pour l'Environnement Mondial (FFEM)	www.ffem.fr
German Church Development Service (EED)	www.eed.de
Gesellschaft für Internationale Zusammenarbeit (GIZ)	www.giz.de
Global Environment Facility (GEF)	www.thegef.org
Humanistisch Instituut Voor Ontwikkelingssamenwerking (HIVOS)	www.hivos.nl
Icelandic International Development Agency (ICEIDA)	www.iceida.is
Millennium Challenge Account Namibia	www.mcanamibia.org
Norwegian Agency for Development Cooperation (NORAD)	www.norad.no
Swedish International Development Agency (SIDA)	www.sida.se
Swiss Agency for Development and Cooperation (SDC)	www.sdc.admin.ch
United Kingdom Department for International Development (DfID)	www.gov.uk
United Kingdom Lottery Fund	
United Nations Development Programme (UNDP)	www.undp.org
United States Agency for International Development (USAID)	www.usaid.gov
Royal Norwegian Embassy	www.regjeringen.no
Voluntary Services Overseas (VSO)	www.vsointernational.org
World Bank (WB)	www.worldbank.org
WWF-International	www.panda.org
WWF-Germany, Netherlands, Norway, Sweden, Switzerland, United Kingdom, United States	www.panda.org

consumptive wildlife use partners 2013

Hunting Concession	Hunting Operator	Contact
≠Gaingu	Gert van der Walt Hunting Safaris	gvdwhuntingsafaris@iway.na
≠Khoadi-//Hôas	African Safari Trails	african-safari-trails@mweb.com.na
//Huab	Omuwiwe Hunting Lodge	pieter@omuwiwe.co.za
Anabeb	Thormählen & Cochran Safaris	peter@africatrophyhunting.com
Balyerwa	Mike Kibble Hunting Safaris	progress@mweb.com.na
Bamunu	Camelthorn Safaris	camelthornsafaris@iway.na
Doro !nawas	Omujeve Safaris	omujeve@mweb.com.na
Dzoti	Ondjou Hunting Safaris	halsenton@iway.na
Ehi-Rovipuka	Thormählen & Cochran Safaris	peter@africatrophyhunting.com
George Mukoya	Exclusive Hunting Safaris	viktor.azevendonamibia@gmail.com
Impalila	Jamy Traut Hunting Safaris	jamytraut@gmail.com
Kabulabula	Kungulu Hunting Safaris	P.O Box 9061 Windhoek
Kasika	Jamy Traut Hunting Safaris	jamytraut@gmail.com
Kyaramacan Association	Allan Cilliers Hunting Safaris	allan@cilliershunting.com
Kyaramacan Association	Hunt Africa Safaris	info@huntafrica.com.na
King Nehale	Van Heerden Safaris	vhsaf@mweb.com.na
Kunene River	Gert van der Walt Hunting Safaris	gvdwhuntingsafaris@iway.na
Kwandu	Jamy Traut Hunting Safaris	jamytraut@gmail.com
Marienfluss	Conservancy Hunting Safaris Namibia	russell@kcs-namibia.com.na
Mashi	Omujeve Safaris	omujeve@mweb.com.na
Mayuni	Jamy Traut Hunting Safaris	jamytraut@gmail.com
Muduva Nyangana	Exclusive Hunting Safaris	viktor.azevendonamibia@gmail.com
N≠a Jaqna	Eden Hunting and Tourism	hunteden@mweb.com.na
Nyae Nyae	SMJ Hunting Safaris	smj@iway.na
Ohungu	Okomutati Safaris & Tours	tommy@chs-namibia.com.na
Okangundumba	Christie's Adventures	cds@mweb.com.na
Okondjombo	Conservancy Hunting Safaris Namibia	russell@kcs-namibia.com.na
Omatendeka	Omujeve Safaris	omujeve@mweb.com.na
Ondjou	Van Heerden Safaris	vhsaf@mweb.com.na
Orupembe	Conservancy Hunting Safaris Namibia	russell@kcs-namibia.com.na
Orupupa	Thormählen & Cochran Safaris	peter@africatrophyhunting.com
Otjambangu	Christie's Adventures	cds@mweb.com.na
Otjimboyo	Nick Nolte Hunting Safaris	info@nicknoltehunting.com
Ozondundu	Christie's Adventures	cds@mweb.com.na
Puros	Conservancy Hunting Safaris Namibia	russell@kcs-namibia.com.na
Salambala	Kungulu Hunting Safaris	P.O Box 9061 Windhoek
Sanitatas	Conservancy Hunting Safaris Namibia	russell@kcs-namibia.com.na
Sesfontein	Thormählen & Cochran Safaris	peter@africatrophyhunting.com
Sikunga	Ndumo Hunting Safaris	karl@huntingsafari.net
Sobbe	Ndumo Hunting Safaris	karl@huntingsafari.net
Sorris Sorris	Rex Safaris	rexeshunt@iway.na
Torra	Savannah Safaris	savannahnamibia@mweb.com.na
Tsiseb	African Hunting Safaris	kaiuwe@erongosafaris.com
Wuparo	Caprivi Hunting Safaris	colinbritz@mweb.com.na

tourism partners 2013-14

Tourism Operator	Conservancies	Enterprises	Contact
African Eagle	Anabeb	Khowarib Mobile Camp	Tel: +264 61 259 681; www.africaneaglenamibia.com
	Doro !nawas	Granietkop Campsite	
African Monarch Lodges	Mayuni	Nambwa Lodge	Tel: +264 81 124 4249
Big Sky Lodges	Anabeb; Omatendeka	Etendeka Mountain Camp	Tel: +264 61 239 199; www.etendeka-namibia.com
Brandberg White Lady Lodge	Tsiseb	Brandberg White Lady Lodge	Tel: +264 64 684 004; www.brandbergwllodge.com
Camelthorn Safaris	Epupa	Omarunga Lodge & Campsite	Tel: +264 64 403 096; www.omarungalodge.com
	Anabeb; Torra; Sesfontein	Palmwag Lodge	Tel: +264 64 403 096; www.palmwaglodge.com
Camp Chobe Safaris	Salambala	Camp Chobe	Tel: +264 66 686 021; www.campchobe.com
Camp Syncro	Marienfluss	Camp Syncro	Tel: +264 65 685 993
Caprivi Collection	Mayuni	Susuwe Island Lodge	Tel: +264 61 224 420; www.caprivicollection.com
Conservancy Safaris Namibia	Marienfluss; Okondjombo; Orupembe; Puros; Sanitatas	Conservancy Safaris Namibia; Etambura Lodge	Tel: +264 64 406 136; www.kcs-namibia.com.na
Desert & Delta Safaris	Kasika	Chobe Savannah Lodge	Tel: +27 83 960 3391; www.desertdelta.com
Gondwana Collection	Mashi	Namushasha Lodge	Tel: +264 61 230 066; www.gondwana-collection.com
Hobatere Lodge	≠Khoadi-//Hôas	Hobatere Lodge	Tel: +264 67 333 017; kh.conservancy@gmail.com
House on the Hill	Orupembe	House on the Hill	Tel: +264 81 124 6826; knott@iafrica.com.na
Islands in Africa	Impalila	Impalila Island Lodge; Ntwala Lodge	Tel: +264 61 401 047; www.namibialodges.net
Journeys Namibia	≠Khoadi-//Hôas	Grootberg Lodge	Tel: +264 61 308 901; www.grootberg.com
Kaokohimba Safaris	Epupa	Epupa Falls Lodge & Campsite	Tel: +264 65 685 021; www.kaoko-namibia.com
Kapika Waterfall Camp	Epupa	Kapika Waterfall Camp	Tel: +264 65 685 111; www.kapikafalls.com
Kunene River Lodge	Kunene River	Kunene River Lodge	Tel: +264 65 274 300; www.kuneneriverlodge.com
Lions in the Sun	Puros	Okahirongo Elephant Lodge	Tel: +264 65 685 018; www.okahirongolodge.com
	Marienfluss	Okahirongo River Lodge	
Losange Lodges	Mashi	Camp Kwando	Tel: +264 81 206 1514; www.campkwando.com
Mantis Collection	Kasika	Zambezi Queen	Tel: +27 21 715 2412; www.zambeziqueen.com
Mashi River Safaris	Mashi	Mashi River Safaris; Mavunje Campsite	Tel: +264 81 461 9608; mashiriversafaris@gmail.com
Mazambala Island Lodge	Mayuni	Mazambala Island Lodge	Tel: +264 66 686 041; www.mazambala.com
Namibia Country Lodges	Twyfelfontein-Uibasen	Twyfelfontein Country Lodge	Tel: +264 61 374 750; www.twyfelfonteinlodge.com
Namibia Exclusive Safaris	George Mukoya; Muduva Nyangana	Kavango Retreat; Khaudum Camp	Tel: +264 81 128 7787; www.nes.com.na
	Omatendeka	Omatendeka Lodge	
	Sorris Sorris	Sorri-Sorris Lodge	
	Sheya Shuushona	Sheya Shuushona Lodge	
Nkasa Lupala Tented Lodge	Wuparo	Nkasa Lupala Tented Lodge	Tel: +264 81 147 7798; www.nkasalupalalodge.com
Olthaver and List Leisure Hotels	Kasika	King's Den Lodge	Tel: +267 73 004 848; www.namibweb.com/kingsden.htm
Skeleton Coast Safaris	Marienfluss	Kunene River Camp	Tel: +264 61 224 248; www.skeletoncoastsafaris.com
	Puros	Leylandsdrift Camp	
	Torra	Kuidas Camp	
Travelling Tortoise	Ehi-Rovipuka	Etosha Roadside Halt & Lodge	Tel: +264 81 376 0184 ; www.travellingtortoise.com
Uukwaluudhi Safari Lodge	Uukwaluudhi	Uukwaluudhi Safari Lodge	Tel: +264 65 273 504; www.uukwaluudhi-safarilodge.com
Visions of Africa	Twyfelfontein-Uibasen	Camp Kipwe	Tel: +264 61 232 009; www.kipwe.com
Whipp's Wilderness Safaris	Sorris Sorris	Madisa Camp	Tel: +264 81 698 2908; www.madisacamp.com
Wilderness Safaris Namibia	Anabeb; Sesfontein; Torra	Desert Rhino Camp; Hoanib Skeleton Coast Camp	Tel: +264 61 274 500; www.wilderness-safaris.com
	Doro !nawas	Doro Nawas Camp	
	Marienfluss	Serra Cafema	
	Torra	Damaraland Camp	

Camp Chobe, Salambala Conservancy

Damaraland Camp, Torra Conservancy

Living Hunter's Museum, Nyae Nyae Conservancy

key events
in the life of community conservation

Early 1980s Local leaders, Nature Conservation staff and NGOs agreed to start the Community Game Guard system in north-western Namibia to curb poaching of wildlife. This was the first coordinated CBNRM activity in Namibia.

From 1990 to 1992 A series of socio-ecological surveys identified key issues and problems from a community perspective concerning wildlife, conservation, and the then Ministry of Wildlife, Conservation and Tourism (MWCT).

1992 MWCT developed the first draft of a new policy providing for rights over wildlife and tourism to be given to communities that form a common property resource management institution called a 'conservancy'.

1993 The Living in a Finite Environment (LIFE) Programme brought major donor support (USAID and WWF) and the CBNRM programme started to evolve as a partnership between government, NGOs and rural communities.

1995 Cabinet approved the new policy for communal area conservancies, and work began on drafting legislation to put the policy into effect.

1996 Parliament passed the new conservancy legislation for communal areas.

1998 The first four communal area conservancies were gazetted. A workshop was held to plan and launch a national CBNRM coordinating body.

September 1998 Official public launch of Namibia's Communal Area Conservancy Programme by the President, His Excellency Sam Nujoma. On behalf of Namibia and the CBNRM programme, the President received the WWF 'Gift to the Earth Award' in recognition of the value and uniqueness of the conservancy programme.

August 1999 The second phase of the LIFE Programme started. This was to last a further five years.

July 2000 The CBNRM Association of Namibia, CAN, (consisting of MET and NGOs) secretariat was established. It was later renamed the Namibian Association of Community-Based Natural Resource Management (CBNRM) Support Organisations (NACSO).

2001 The Forest Act was passed by parliament.

2003 The Polytechnic of Namibia incorporated the teaching of CBNRM into its National Diploma in Nature Conservation, institutionalising CBNRM as an option in its Bachelor of Technology (Nature Conservation and Agriculture) degree.

October 2004 The ICEMA, LIFE Plus and IRDNC Kunene / Caprivi CBNRM Support Projects were launched.

February 2005 The first State of Conservancies Report, entitled *Namibia's Communal Conservancies - a Review of Progress and Challenges* was launched.

2005 The Parliamentary Standing Committee on Economics, Natural Resources and Public Administration, which visited conservancies in the north-west, strongly endorsed conservancies and tourism for contributing to national development.

2005 The Forest Amendment Act was passed, amending the 2001 Forest Act.

November 2005 In its report *Recommendations, Strategic Options and Action Plan on Land Reform*, the Permanent Technical Team on Land Reform (PTT) recognised conservancies and community forests as CBNRM models to be followed for the development of Namibia's communal lands.

2006 The six year Strengthening the Protected Area Network (SPAN) Project was officially started.

February 2006 The first 13 community forests were gazetted in terms of the Forest Act.

2007 Cabinet approved the National Policy on Tourism and Wildlife Concessions on State Land.

2009 Netumbo Nandi-Ndaitwah, Minister of Environment and Tourism, launched the National Policy on Human-wildlife Conflict Management.

2011 A Namibian delegation headed by Netumbo Nandi-Ndaitwah, Minister of Environment and Tourism, attended the Adventure Travel World Summit in Mexico and presented a bid to host the Summit in Namibia in 2013.

2013 The tenth Adventure Travel World Summit was held in Namibia - the first time that it was held in Africa.

2013 The Ministry of Environment and Tourism launched the National Policy on Community-Based Natural Resource Management.

2013 The number of registered communal conservancies increased to 79 and the number of registered community forests increased to 32. CBNRM generated around N$ 72.2 million in returns during 2013.

≠Khoadi-//Hôas game guard Albert Guruseb and MET senior warden for Kunene South, Nahor Howoses

local and international awards
to community conservation

Regional and international interest in the CBNRM programme continues to grow, as an increasing number of high profile delegations visits Namibia to study and learn from its experience. A host of awards from international, regional and Namibian organisations have recognised the success and progress made in developing CBNRM and conservancies in communal areas:

1993 Garth Owen-Smith and Margaret Jacobsohn (IRDNC): 'Goldman Environmental Prize' (Africa).

1994 Garth Owen-Smith and Margaret Jacobsohn (IRDNC): United Nations Environmental Programme 'Global 500 Award'.

1997 Garth Owen-Smith and Margaret Jacobsohn (IRDNC): Netherlands 'Knights of the Order of the Golden Ark'.

1998 Republic of Namibia: WWF 'Gift to the Earth Award'.

1998 Damaraland Camp (Torra Conservancy) and Wilderness Safaris Namibia: British Guild of Travel Writers 'Silver Otter Tourism Award'.

2000 Janet Matota (IRDNC Caprivi): Namibia Nature Foundation (NNF) 'Environmental Award'.

2001 Benny Roman (Torra Conservancy): Namibia Professional Hunting Association (NAPHA) 'Conservationist of the Year Award'.

2001 Prince George Mutwa (Salambala Conservancy): NNF 'Environmental Award'.

2002 Patricia Skyer (NACSO): WWF 'Woman Conservationist of the Year Award'.

2002 Patricia Skyer (NACSO): Conde Nast Traveller Magazine 'Environmental Award',

2003 Garth Owen-Smith and Margaret Jacobsohn (IRDNC): Cheetah Conservation Fund (CCF) 'Conservationist of the Year Award'.

2003 King Taaipopi (Uukwaluudhi Conservancy) and Chris Eyre (MET): NNF 'Environmental Award'.

2004 Chris Weaver (WWF/LIFE): NAPHA 'Conservationist of the Year Award'.

2004 Torra Conservancy: United Nations Development Programme (UNDP) 'Equator Prize' (Sub-Saharan Africa).

2005 NACSO and the NNF: 'Namibia National Science Award — Best Awareness and Popularisation' for the book *Namibia's Communal Conservancies - A Review of Progress and Challenges*.

2005 Wilderness Safaris and Torra Conservancy's Damaraland Camp: World Travel & Tourism Council 'Tourism for Tomorrow Award' (Conservation Award).

2006 Beaven Munali (IRDNC Caprivi): Nedbank Namibia and NNF 'Go Green Environmental Award'.

2006 Anton Esterhuizen (IRDNC Kunene): NAPHA 'Conservationist of the Year Award'.

2007 Chief Mayuni (Mafwe Traditional Authority, Caprivi): Nedbank Namibia and NNF 'Go Green Environmental Award'.

2007 Dorothy Wamunyima (NNF): River Eman Catchment Management Association (Sweden) 'Water Award'.

2007 The Kyaramacan Association and MET: International Council for Game and Wildlife Conservation (CIC) 'Edmond Blanc Prize'.

2008 N≠a Jaqna Conservancy: UNDP 'Equator Prize' (Sub-Saharan Africa).

2010 John Kasaona: CCF 'Conservationist of the Year Award'.

2010 NACSO: World Travel & Tourism Council 'Tourism for Tomorrow Awards Finalist' (Community Award).

2011 Namibia Communal Conservancy Tourism Sector web site: Travel Mole 'African Web Award' (Area Attraction).

2011 Namibia Communal Conservancy Tourism Sector web site: Hospitality Sales and Marketing Association International (HSMAI) and National Geographic Traveler 'Leader in Sustainable Tourism — Platinum Award'.

2011 Chris Brown (NNF): NAPHA 'Conservationist of the Year Award.

2011 Maxi Louis (NACSO): CCF 'Woman Conservationist of the Year Award'.

2012 NACSO and MET: CIC 'Markhor Award for Outstanding Conservation Performance'.

2013 Republic of Namibia: WWF 'Gift to the Earth Award'.

2013 Namibia's Community Game Guards: REI Sustainable Tourism Award.

Community conservation

grew out of the recognition that wildlife and other natural resources
were disappearing in many communal areas, and that these losses could be reversed,
and both rural livelihoods and the environment could be improved,
if local communities were empowered to manage and use the resources themselves

more information at www.nacso.org.na