NAMIBIA NATURE FOUNDATION

BIENNIAL REPORT

2019 & 2020

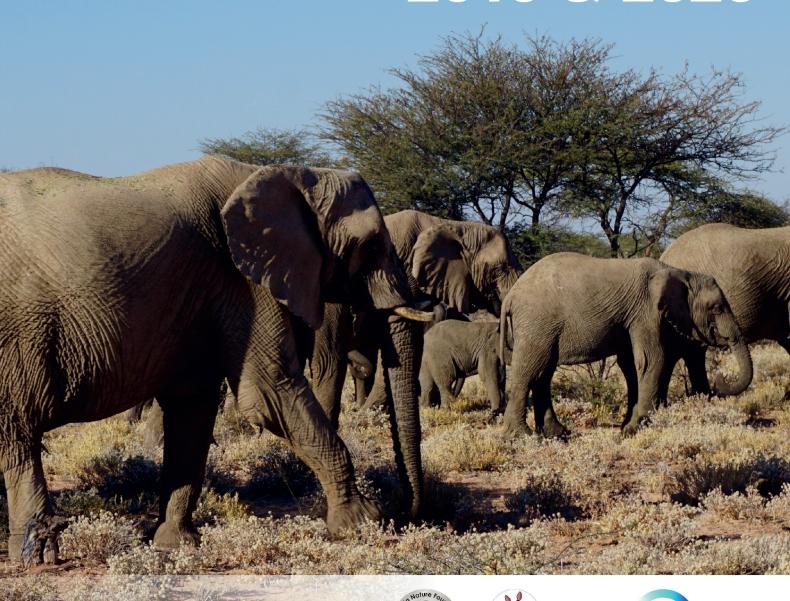










TABLE OF CONTENTS

Foreword: Board Chairperson	iii
Foreword: Executive Director	V
Highlights from 2019 and 2020	2
About Our Organisation	5
Our People	6
National and International Context	10
THEMES AND PROJECTS	12
Social Ecosystems Theme	14
Community-Based Natural Resource Management	16
Combatting Wildlife Crime	21
Environmental Education	23
Sustainable Development In Urban Areas	26
Natural Ecosystems And Biodiversity Theme	28
Marine Species Research And Conservation	30
Supporting the Namibia Islands Marine Protected Area	32
Ecosystem Services And Economics	38
Productive Land And Seascapes	44
Sustainable Use Of Plant And Wildlife Resources	46
Sustainable Inland Fisheries	47
Sustainable Agriculture	55
Sustainable Infrastructure	60
Global Environmental Issues And Policies	61
Supporting Multilateral Environmental Agreements	64
Financial Reports	66
Acronym List	68
Notes	70
Organisation Information	72



First and foremost, it is an honour to be entrusted as the chairman to the board of the Namibia Nature Foundation (NNF) to help steer this dynamic organisation. This biennial report is a thorough reflection of a productive two years despite uncontrollable and changing circumstances created by the pandemic. It also indicates that the NNF Strategy 2017-2022 proved to be instrumental in guiding the organisation by creating a common purpose amongst staff members. It also improved engagement with partners and stakeholders on all levels. The NNF performed outstandingly nationally and internationally, and in close corporation with line ministries, other NGO's and private stakeholders to promote our organisational mission and mandate.

For my part, I am impressed and gratified by the depth and breadth of the successful work output performed by the NNF staff in the face of the COVID-19 pandemic. Notwithstanding the strict regulations that were put into place for the public by the government to mitigate the escalation of infections, the NNF and its partners still managed to successfully initiate effective projects, some of which were completed and included in the annual audits. On a sad note, we lost a tremendous and long-standing supporter and Honorary Board Member of the NNF, Hanno Rumpf, a humanist and conservationist of great courage. The world of conservation was also hit by the unfortunate passing of African Conservationist, Garth Owen-Smith, in April 2020.

The late Mr. Owen-Smith was one of the founders of Namibia's rural communal conservancy system and actively began engaging in conservation issues faced by communities during the early 1980s and laying down the base of Namibia's globally recognised Community Based Natural Resource Management Programme. In 2020 we said farewell to our longstanding ally and doyen of CBNRM in Namibia Chris Weaver who returned to the United States following his retirement from our key partner, the World Wildlife Fund (WWF) in Namibia.

At the NNF, we continue to strive for conservation of the environment and ecosystems by supporting people who are on the frontline of conservation – particularly rural communities, be they conservancies, community forests, community fisheries or farmers' associations. These are people who make the everyday difference when it comes to conservation. Much of our community conservation has been supported through broad-spectrum tourism, including both photographic and hunting. Without this, many communities will face losses of revenue and, more critically, job losses. In an already fragile economy, the new reality has been recognised by the Ministry of Environment Forestry and Tourism (MEFT) and the Namibian Association of Community-Based Natural Resource Management (CBNRM) Support Organisations (NACSO), of which the NNF is a member. Under the leadership of the MEFT and together with a wide range of partners we continue to look for potential solutions to ensure that conservancies can continue to employ key staff and remain functional in the interest of social stability, development and conservation. At the same time, we have an ever-growing relationship with the Ministry of Fisheries and Marine Resources in replicating the people-centric approach to conservation of freshwater fisheries and the marine environment.

I also wish to recognise the exceptional leadership of our Executive Director, Angus Middleton express my particular appreciation towards all the NNF staff for dedication to their work and to Namibian conservation. I hereby thank the Board of Trustees for providing their valuable insights and resources to the organisation during this time. Lastly, I would like to extend our gratitude to the donors and partners for trusting the NNF to implement projects that promote sustainable development and environmental conservation in Namibia and beyond.

Dr Roy Miller Chairperson of the Board of Trustees



This report covers the years 2019 and 2020, two highly contrasting years but, at the same time, thankfully, two years of continuity for the NNF. We are fortunate to have in place a well-articulated Strategy which was endorsed in 2017 and under which, by 2018, we were well on our way to effecting the changes that the NNF required. Fortunately for us, 2019 was a year in which we started to hit our stride after a protracted period of organisational change and many struggles. By the end of 2019 we were touching on most areas of our Strategy and in doing so attracting an ever-increasing array of partners to work with, securing funding for our work and attracting and retaining a truly great team in the NNF, almost all of whom are still in place today.

Our growth and development over the last few years has been underlined by our ability to ride the storm that hit us in 2020. As the Covid-19 situation began to unfold we managed to take rapid and decisive action and for the most part we worked together as a team to stay informed, stay safe and keep working, particularly with communities out on the frontline of conservation. Amongst the very many achievements we are very proud to be a part of is the Conservation Relief, Recovery & Resilience team spearheaded by the Ministry of Environment Forestry & Tourism, which has seen essential financial support provided to Conservancies.

In addition to the progress made and the frankly amazing team response, there were two other ingredients to our success in 2020 that I would like to highlight. Both are about being better connected. Firstly, the African Conservation Leadership Network, a leadership course for African CBNRM focused NGO's run by Maliasili and funded by The Nature Conservancy. This was an amazing source of peer support to Edla and I and helped us attend to and deal with the professional, emotional and personal challenges of the Covid situation. The results of this have been evident in the performance and continued evolution of the NNF during this time. The second was about making and taking our luck. Shortly after the initial lock-down in April 2020, on a trip to Palmwag to respond to the first Rhino poaching in the North West Conservancies in over two years I received a message, on the spectacular Grootberg Pass, of a donation of N\$660,000. This came from a charitable trust created by the will of an influential, understated and considerate Namibian lady, our largest individual donation in my time at the NNF. This really epitomised our good fortune over the last couple of year but also suggests that we were visibly present in doing our work that we attracted such good fortune. This held true also with many of our partners and donors who proactively worked with us to get through the situation and new ones that have come on board.

This period of disruption, whilst proving challenging, has provided the NNF with the opportunity to rise to the challenge. This has brought about other opportunities to forge new relationships and rebalance others and start thinking differently about what we do and how we do it. It is this willingness to embrace challenges to regularly go the extra mile and remain people focused that convinces me that the NNF will remain the leading conservation and sustainable development organisation in Namibia. We, therefore, rightly, enter the new decade of conservation and the as yet to be defined post 2020 targets with a spirit of grounded optimism. We will rise to the challenge, we will attract youth into conservation, our younger staff will become leaders and we will find ways to honestly and justly progress wellbeing in the pursuit of a dignified reintegration with nature.

Again, I cannot express enough appreciation for my co-directors, Edla Kaveru (Operations) and Britta Hackenberg (Projects), who have been the principal drivers of this remarkable organisational development. But our efforts would have been fruitless if it were not for the NNF staff, a team who regularly go above and beyond in the pursuit of our collective mission and individual contributions to higher purposes. Thank you!

Angus Middleton **Executive Director**

HIGHLIGHTS FRO

INITIATED THE CBNRM INSTITUTIONAL DEVELOPMENT WORKING

GROUP PROJECT TO IMPROVE GOVERNANCE WITHIN SIX

COMMUNAL CONSERVANCIES

TRAINING ON ADVOCACY AND COMMUNICATION DELIVERED TO COMMUNITIES IN KAVANGO CONSERVANCIES

WORLD RHINO DAY 2019 CELEBRATED BY OVER 400 COMMUNITY
 MEMBERS MARCHING THROUGH KHORIXAS AS PART OF THE RHINO PRIDE CAMPAIGN

WILDLIFE CRIME WORKSHOP ON BLUE CORRIDORS WITHIN THE KAVANGO-ZAMBEZI TRANSFRONTIER CONSERVATION AREA

 ENVIRONMENTAL EDUCATION BOOSTED THROUGH THE EXPANSION OF
 THE DEPARTMENT OF WILDLIFE MANAGEMENT AND ECOTOURISM AT THE UNIVERSITY OF NAMIBIA KATIMA MULILO CAMPUS

ENVIRONMENTAL EDUCATION BOOSTED THROUGH THE EXPANSION OF
 THE DEPARTMENT OF WILDLIFE MANAGEMENT AND ECOTOURISM AT THE UNIVERSITY OF NAMIBIA KATIMA MULILO CAMPUS

CLIMATE SENSITIVE URBAN DEVELOPMENT PLAN DRAWN UP WITH THE COMMUNITY OF ONYIKA NO. 2 SETTLEMENT IN WINDHOEK

M 2019 AND 2020

SEABIRD BYCATCH REDUCED IN NAMIBIAN LONGLINE DEMERSAL FISHERIES BY 98.4% – SCIENTIFIC ARTICLE PUBLISHED IN BIOLOGICAL CONSERVATION

NATIONAL PARK MANAGEMENT PLANS AND INTEGRATED STATE FOREST PLAN PRODUCED FOR SIX PROTECTED AREAS IN THE NORTH-EAST AND THE ZAMBEZI STATE FOREST RESERVE THROUGH THE NAMPARKS IV PROJECT

CONSERVANCY SUPPORT PROVIDED TO SIX CONSERVANCIES FROM THE NEDBANK GO GREEN FUND FOR THE COVID-19 ESTABLISHED BY MEFT CONSERVATION RELIEF, RECOVERY, AND RESILIENCE FACILITY

CONSERVANCY RHINO-BASED TOURISM SURVEY TO GUIDE
DEVELOPMENT OF RHINO TRACKING ACTIVITIES WITH SAVE THE
RHINO TRUST

COMMUNITY FOREST ECONOMICS REVIEW COMPLETED FOR THE KWANDU AND SACHONA COMMUNITIES IN THE ZAMBEZI REGION

COST-BENEFIT ANALYSIS COMPLETED FOR POST-HARVESTING
TREATMENT OF BUSH CONTROL ACTIVITIES AS PART OF THE GIZ
BIODIVERSITY MANAGEMENT AND CLIMATE CHANGE PROJECT

BUSH CONTROL AND BIOMASS UTILISATION (BCBU) PROGRAMME
INITIATED, WITH THE NNF PLAYING A LEADING COORDINATION
ROLE

COMMUNITY FISHERIES RESERVES ALONG THE ZAMBEZI AND CHOBE RIVERS

SUPPORTED THROUGH THE RECRUITMENT OF FISH GUARDS AND MONITORS; AND BOOKLETS PRODUCED FOR FISHERIES MANAGEMENT

SUSTAINABLE WILDLIFE UTILISATION SUPPORTED THROUGH
CONSERVANCY GAME MANAGEMENT AND UTILISATION PLANS AND
ASSISTANCE WITH CONSERVATION HUNTING AGREEMENTS

FISHERIES FRAME SURVEY COMPLETED IN JOSEPH MBAMBANGANDU CONSERVANCY

DEVIL'S CLAW HARVESTERS REGISTERED AND TRAINED IN THE OMAHEKE REGION

CONSERVATION AGRICULTURE PRACTICES SUPPORTED AND PROMOTED IN

THE KAVANGO EAST REGION AND WITHIN CONSERVANCIES BORDERING THE
SOBBE WILDLIFE CORRIDOR

SUSTAINABLE INFRASTRUCTURE PROJECT WITH NAMPOWER ENTERED PHASE III – VEGETATION MANAGEMENT BOOKLET PRODUCED

ABOUT OUR ORGANISATION

The Namibia Nature Foundation is Namibia's leading conservation and sustainable development organisation. The NNF promotes sustainable development, the conservation of biological diversity and natural ecosystems as well as the wise and ethical use of natural resources for the benefit of all Namibians both present and future.

Founded in 1987, the NNF was initially established to help the (then) Department of Nature Conservation to raise and administer funds for the conservation of wildlife and protected area management. The NNF has since evolved into a national institution that provides support to all relevant aspects of the environment in Namibia, including sustainable development and wise and ethical natural resource management.

Our current focus of work is on sustainable development through community-based natural resource management, combating desertification, pollution and waste management. Our projects emphasise policy, training and education to build national and local capacity to tackle these challenges. We provide environmental and financial consultancy services as well as project management services in each of our four thematic areas: Social Ecosystems; Natural Ecosystems and Biodiversity; Productive Land and Seascapes; and Global Environmental Issues.

The NNF partners with other non-government organisations (NGOs) and educational institutions and can call on a wide range of experienced associates to enhance and complement the NNF team. We also have vast experience with donors from all over the world. Our highly collaborative approach ensures wide ranging stakeholder engagement, input from experts and close working relationships with government departments, at both national and local levels. Our team, and network of associates, provide expertise and practical experience that is backed by an organisation that has been delivering on conservation and sustainable development projects for more than 25 years.

Vision

An equitable, informed society living in harmony with nature and sustained, physically and mentally, by the natural richness of our environment.

Mission

To promote sustainable development, the conservation of biological diversity and natural ecosystems, and the wise and ethical use of natural resources for the benefit of all Namibians, both present and future.

Mandate

The NNF actively participates in key local, regional, national and global processes and contributes to environmental and sustainability solutions primarily within Namibia but also beyond our borders.

"NNF fully endorses the environmental clauses in Namibia's national Constitution and works to implement the policies and programmes that are contained in, and have evolved from, Namibia's Green Plan."

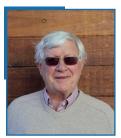
OUR PEOPLE

BOARD OF DIRECTORS

The Board of Directors is responsible for guiding the overall direction of the NNF and making decisions that are in the best interests of the organisation. The board members are further tasked with considering the interests of donor and partner organisations, our employees and beneficiaries. The current members draw on their diverse backgrounds and lifetime experiences to advise the management team on business decisions, strategic direction, and organisational structure and operations.



DR. ROY MCGILLIVRAY MILLER Retired



MR. MANFRED MS. RAU BOTTGER GOMACH Business Executive Lawyer



MS. RAULIN GISELLA GOMACHAS



DR. SIMSON NDAHUPULA HEITA Farmer



MR. MIKE HILL Retired



MR. ANGUS
MIDDLETON
Executive Director



MR. ARNE STIER Auditor



MR. KENNETH KIBAGU HEINRICH /UISEB Deputy Director MEFT



DR. PAULINE MARY LINDEQUE Manager Agra





SENIOR MANAGEMENT TEAM



MR. ANGUS GRAHAM MIDDLETON - Executive Director

Angus Middleton has over 15 years of senior management experience and organisational leadership in Africa and in Europe. He brings together a relevant mix of knowledge and technical experience in environmental economics, ecological resource management, agricultural management and biodiversity polices.



MS EDLA KAVERA - Director of Operations

Edla is responsible for the day to day running of the organisation, with a primary responsibility of providing leadership for the organisation's financial and operational functions. She holds an MBA, a Bachelor of Commerce degree and has completed various management development programs. She has 20 years' experience in financial management and corporate operations of which over 10 years have been in a leadership role. Edla was part of the team that successfully implemented the Millennium Challenge Account Namibia Compact between the years 2009 and 2015.



MRS FRANCES CHASE - Head of Projects

Frances has recently joined the team as Head of Projects at the NNF, she has over 5 years of senior management experience and several years of project management experience. She joins us from the National Botanical Research Institute (NBRI), where she was Head of the National Herbarium of Namibia (WIND). She holds an MSc in Plant Diversity from Reading University and a degree in Environmental Science and Geography with an honours in Physical Geography from Rhodes University. She worked at the Royal Botanic Gardens, Kew in the UK for 10 years as an Assistant Botanist and later a Botanist/ Curator in the Africa and Madagascar Regional Team. Her background is botany, mainly in herbarium management and plant taxonomy but also has a broad knowledge the plant ecology and plant conservation.



MS BRITTA HACKENBERG - Senior Technical Advisor (Fisheries)

Britta Hackenberg holds a Master of Science in Sustainable Forestry and Land Management and a number of certificates in various aspects of participatory planning and appraisals. Her specific experience includes technical advisory skills in CBNRM, land-use planning and community forests; land rights and tenure systems; developing Forest Management Plans. In addition, she has extensive project management experience in the field of land management, community-based natural resource management, marine and freshwater fisheries and ecosystems services. Britta has now taken over managing the Community Fisheries Program and is the liaison officer for KAZA.

NNF STAFF

"The NNF is driven by passion and we are fortunate to have been and continue to be served by some of the most dedicated and passionate people. A team that includes individuals from different walks of life but have come together to love Namibia, love nature."



NATIONAL AND INTERNATIONAL CONTEXT

The highly progressive Namibian constitution incorporates protection of the environment, which provides a strong framework for our work with the government. The NNF is further aligned with the Harambee Prosperity Plan and the fifth National Development Plan for Namibia that sets out our national aspirations and targets. At the operational level, the NNF has always enjoyed a close working relationship with the Ministry of Environment, Forestry and Tourism (formerly Environment and Tourism only). The current scope of our activities that include agriculture, fisheries and sustainable development and fall under the auspices of the Ministries of Agriculture, Water and Land Reform (MAWLR, formerly Agriculture, Water and Forestry), the Ministry of Fisheries and Marine Resources (MFMR) and the Ministry of Urban and Rural Development (MURD), respectively. We have therefore developed good working relationships with each of these four line ministries.

Within the international context, our work contributes to meeting the United Nations Sustainable Development Goals that were developed in 2015. These 17 goals were intended to inspire nations and institutions to create a more sustainable, equitable world by 2030. The NNF's work contributes materially to seven of these goals: No Poverty (G1), Zero Hunger (G2), Gender Equality (G5), Clean Water & Sanitation (G6), Sustainable Cities (G11), Responsible Consumption & Production (G12), Climate Action (G13), Life Below Water (G14), Life on Land (G15) and Partnerships for The Goals (G17). Throughout this report, we will use the SDG icons to indicate which SDGs are covered in each of our core themes.

The NNF was the first NGO in Namibia to become a member of the International Union for the Conservation of Nature (IUCN), which connects us to the world's largest network of conservation organisations. The NNF is therefore strategically placed to link Namibian conservation and sustainable development actions with global initiatives and trends.







SOCIAL ECOSYSTEMS

Human societies and the natural world are interdependent, with human socio-economic systems relying on and impacting ecological systems and biodiversity. Biological conservation can therefore never be separated from economies, cultures and human management decisions. While rural communities might be more aware of their dependence on natural resources, those living in urban environments are just as vulnerable to the consequences of environmental degradation and climate change. Both rural and urban communities have important roles to play as custodians of their environment to ensure that resources are used sustainably and are therefore available for future generations.

THE NNF'S VISION FOR SOCIAL ECOSYSTEMS

Under this theme, the NNF focuses on supporting rural communities through the Community-Based Natural Resources Management (CBNRM) programme and addressing socio-ecological issues in urban settings. In the rural areas, our focus is on reducing wildlife crime and supporting institutional development in communal conservancies, while in urban areas we work through partnerships to promote sustainable urban lifestyles. Environmental education is an overarching issue that affects all Namibian citizens, whether rural or urban, and is therefore a key part of this theme.

OUR WORK ON SOCIAL ECOSYSTEMS - CONSERVANCIES, WILDLIFE CRIME, URBAN RESILIENCE TO CLIMATE CHANGE AND ENVIRONMENTAL **EDUCATION**

The NNF is a long-standing member of the Namibian Association of CBNRM Support Organisations (NACSO) and host of the NACSO Secretariat. Our work in conservancies is thus part of the national CBNRM programme that includes the MEFT and other NGOs that are NACSO members. Donor organisations and partners for this work include the United States Agency for International Development (USAID), the Bureau of International Narcotics and Law Enforcement Affairs (INL) and the World Wide Fund for Nature (WWF) Namibia. In 2019 and 2020 our main projects involved reducing wildlife crime and supporting conservancies that were severely affected by the socio-economic consequences of the COVID-19 pandemic.

In the urban environment, we partnered with GIZ's Climate Cities Challenge to address urban resilience to climate change in a settlement within the city of Windhoek. After several participatory urban development consultations, the community co-produced a development plan with experts that will be implemented by the City of Windhoek with funding from the Challenge.

Environmental education at the tertiary level received a boost through the expansion of the Department of Wildlife Management and Ecotourism at the University of Namibia's (UNAM) Katima Mulilo campus, funded by the German Development Bank (KfW). Other projects in this period included updating the Namibian Atlas and continuing to support environmental education partners through the Nedbank Go Green Fund.

The NNF's work on Social Ecosystems aligns with the following Sustainable Development Goals (SDGs): No Poverty, Gender Equality, Clean Water and Sanitation, and Life on Land. (Include images of SDG 1, 5, 6, 11 and 15)

COMMUNITY-BASED NATURAL RESOURCE MANAGEMENT

Namibia's CBNRM programme is designed to grant conditional ownership rights of wildlife resources to rural communities that have established communal conservancies. Similarly, forest resource rights are devolved to community forests. With 86 communal conservancies and 43 community forests now established, it takes a strong and committed network of community support organisations (coordinated by NACSO) working with the MEFT to assist these communities. The severe impacts of the COVID-19 pandemic put the conservancies and their support network to the test; a coordinated joint effort rescued the CBNRM programme from collapse.

RESILIENCE IN THE FACE OF COVID-19

Many conservancies were unable to generate income in 2020 due to the drastic decline in tourism and hunting income following the COVID-19 pandemic. With the closure of the borders and travel bans, most conservation hunting and Joint Venture lodges were unable to generate income and therefore could not pay the conservancies. Without alternative sources of income, conservancies would not be able to retain staff and conduct their usual Natural Resource Management (NRM) activities such as deploying game guards and resource monitors.

The Minister of Environment, Forestry and Tourism therefore launched a Conservation Relief, Recovery and Resilience Facility (CRRRF) to provide financial relief to CBNRM institutions that are affected by the COVID-19 pandemic. The main objective of this facility is to ensure continuation of the NRM activities – specifically the protection and monitoring of wildlife and responding to human-wildlife conflict (HWC). Without this support, the COVID-19 pandemic could have resulted in a calamitous rise in poaching and illegal wildlife trade driven by a combination of economic suppression and reduced field patrols. Further, the failure of communal conservancies to pay their staff would have had severe impacts on the rural economy, as each staff member supports extended families.

The CRRRF attracted financial pledges amounting to N\$ 16 million, including N\$ 1 million from the Nedbank Go Green Fund administered by the NNF. The NNF was further able to secure N\$ 613 800 from the B2Gold Rhino Gold Bar initiative for deploying Rhino Rangers in the Kunene Region. The NNF channelled towards seven communal conservancies that paid salaries for 71 community game guards for a year. These seven conservancies (Muduva Nyangana, George Mukoya, Maurus Nekaro, Kapinga kaMwalye, !Khoro !Goreb, //Audi and Omuramba ua Mbinda) already had a working relationship with the NNF, which reduced transaction costs and maximised the funding impact.





A Game Guard from the Kapinga kaMwalye Conservancy



Community game guards Omuramba ua Mbinda



Mrs. Inonge Mukumbuta-Guillemin- NNF Project Coordinator, together with Mr. Wilbart Mukena from MEFT handing over a cheque to the Kapinga Kamwalye Conservancy committee.

Despite the challenges posed by COVID-19, the NNF continued to provide technical assistance to conservancies in southern Kunene and Erongo including training for more than 90 Community Game Guards and Rhino Rangers on the following topics: knowledge of their own conservancy, reporting and managing human-wildlife conflict (HWC), communicating with people in their conservancy, conducting patrols, and maintaining the Event Books. The NNF also delivered three induction trainings to the newly elected Conservancy Management Committees in Tsiseb, Ûibasen Twyfelfontein and Sorris Sorris.

INSTITUTIONAL DEVELOPMENT IN CONSERVANCIES

The NNF received a grant to provide Dripping Tap Support to Conservancies for conservancies in the Kavango, Omaheke, Erongo and southern Kunene regions during early 2020. This support focuses on setting up financial monitoring systems, providing training and mentoring on these systems, and assisting the conservancies prepare financial reports for their conservancies. This work will help to prevent financial irregularities from occurring and thus safeguard conservancy income in future. The project is aligned with MEFT's goal of improving financial management within conservancies and thus increasing the benefits that accrue to members.

This support complements and aligns with two EU supported projects on strengthening CBNRM in Namibia. The first of these is the EU-NACSO Secretariat project being implemented by NNF together with the NACSO Secretariat. Extensive reforms of the NACSO Secretariat were initiated during 2020 to improve its management systems. As the Secretariat's host, the NNF has been closely involved with this process and, with other NACSO members, aims to create a new structure that will improve the functioning of the Secretariat.

The NNF secured a grant of € 510,000 from the European Union (EU) in August 2020 to help implement these reforms and move the Secretariat forward. Through the EU grant, the NACSO Secretariat was able to consult with its members and working groups to determine their needs and establish how they have been impacted by COVID-19. This in turn enabled the Secretariat to secure N\$ 9,000,000 from the Community Conservation Fund of Namibia (CCFN) to strengthen the support provided by the working groups and its members to the programme during this critical time.



Left to right: William //Gaseb, Elias Tourob and Wensley Ortmann: Game guards from Uibasen / Twyfelfontein conservancy in southern Kunene during a game guard training organised by NNF on NACSO Unit Standards for Game Guards, specifically focused on "Knowing your conservancy"

The second project is the EU-IDWG Governance project aims to improve governance of the national CBNRM programme by improving equitable benefit distribution through enhanced accountability of management structures and active community inclusion in decision-making. The NNF is taking a leading role in implementation with the support of a consortium comprising the NACSO IDWG, Namibia Development Trust (NDT) and Integrated Rural Development and Nature Conservation (IRDNC). The roles and responsibilities of each partner organisation were established and a total of 21 conservancies received support from the consortium through this project, six of which were allocated to the NNF.

Following standardised selection criteria that included increased vulnerability due to COVID-19 regulations, NNF selected George Mukoya and Muduva Nyangana in the Kavango region, Doro Inawas and Sorris Sorris and //Huab in southern Kunene, and Gaingu conservancy in the Erongo region to provide support and improve governance and accountability of the management committee to its members. Financial management training and coaching sessions were provided to these conservancies to help them re-prioritize their funding to focus on NRM activities and retention of employees, rather than benefit distribution to its members at a time when no income from hunting and tourism was generated. The target conservancies were also assisted with preparing key compliance documents for submission to Ministry of Environment, Forestry and Tourism (MEFT) even though no Annual General Meetings (AGMs) were conducted due to restrictions on large gatherings.

STRENGTHENING DEMOCRACY IN CONSERVANCIES

Supported by the United States Embassy, this project assists rural communities to become actively involved in the democratic process by giving individuals and communal conservancy representatives a voice on national platforms. The ultimate goal is for these communities to engage with the Namibian Parliament regarding legislative issues that affect them. To this end, six clusters were identified to educate and build capacity amongst communal conservancies and community forests on advocacy in Namibia, covering both how government works and issues and laws that affect their livelihoods.

A training programme was developed on advocacy and communication that included how the government, parliament and media operate, which was piloted during a workshop in late 2019. The training sessions that followed during 2020 were moved online after the outbreak of COVID-19 restricted face-to-face gatherings. An Online Advocacy and Communications was therefore conducted, focusing on understanding pressing issues communities face in CBNRM, identifying what communication media work best for conservancies to share campaigns, and empowering women and youth (including marginalised groups) to amplify their voices on issues that affect them. Twenty-seven participants that were nominated through their conservancy structures and regional associations attended the training.



Online training session with participants on Advocacy and Communication

Early in the project, we recognised the importance of youth as advocates for their communities. The NNF therefore invited the newly appointed Deputy Minister of Information and Communication Technology (ICT) Hon. Emma Theofelus to be the patron for a conservancy youth movement that we aim to establish in Namibia's CBNRM Programme. She accepted this role and prepared a video statement to encourage all future course participants. We continue to engage with the Deputy Minister on developing collaborative efforts with members of Parliament to involve Namibian youth in democratic processes.



NNFs Project Staff visit the Deputy Minister of Information and Communication Technology Office



Official meeting with Deputy Minister of ICT Hon. Emma Theofelus to invite her to become the patron for a conservancy youth movement

COMBATTING WILDLIFE CRIME

Wildlife crime, particularly for high value species like elephant and rhino, presents a continual threat to Namibian conservation efforts. Further, the income of communal conservancies is threatened by commercial poaching. Community game guards and Rhino Rangers are at the forefront of community anti-poaching efforts and therefore need continuous support to fulfil their mandates. Rural communities that are sensitised to the issue of wildlife crime and the value of their natural resources also play a critical role in preventing and reporting poaching. Namibia has developed a strong network to combat wildlife crime whereby government stakeholders and NGOs work together to protect Namibia's natural resources.

IMPROVING PUBLIC COMMUNICATION AND GENERATING RHINO PRIDE

With funding from the GIZ Polifund, NNF is collaborating with the MEFT to create an integrated public communications strategy about wildlife crime and related community conservation stories. The outputs from this collaboration thus far include short, impactful videos that include messages from the Minister, interviews with community members, and visits to support organisations in the field. These are shared on social media via the neutral Love Namibia, Love Nature platform and on the national television station. The overall strategy has further led to improved relations between the Ministry and local journalists to ensure that accurate information on wildlife crime is shared in the local media.

The Rhino Pride Campaign was launched in 2017 as a joint programme with the NNF's partners, Save the Rhino Trust (SRT), Integrated Rural Development and Nature Conservation (IRDNC). The programme aims to create opportunities for youth to unite and rally for rhino conservation through Rhino Youth Clubs. The World Rhino Day in September was the highlight for 2019, celebrating two years of no rhino poaching. More than 400 community members marched through Khorixas, led by the Deputy Minister of Environment, Forestry and Tourism, Honourable Bernadette Jagger, and U.S. Ambassador Lisa Johnson, under the theme "I am a Rhino Friend Forever". The Rhino day included cultural performances, live entertainment and sports events for the youth.

In 2020, Rhino Pride Day became a virtual event, due to restrictions on gatherings as part of COVID-19 precautions. Videos and other information were circulated via social media and reached More than 747 people, with more than 126 likes, comments and share on our social media platforms. Other activities were organised as part of the Rhino Pride campaign included:

Rhino Youth Club members teaming up with the community game guards on anti-poaching patrols and engaging with farmers on wildlife crime issues; a rhino-themed community clean up campaign in //Huab conservancy; and building elephant water points to reduce human-elephant conflict in ≠Khoadi //Hôas conservancy.

A HOLISTIC APPROACH TO COMBATTING WILDLIFE CRIME



Participants of a 2-week field-based, customised "Scout" training to detect poachers without being seen, report intelligence, and how to evade or protect themselves against poachers.

With USAID VukaNow funding, the NNF conducted the "Wildlife Crime in Blue Corridors" Workshop on 4 August 2020 in Katima Mulilo, which brought together government officials (Ministry of Fisheries and Marine Resources (MFMR), NAMPOL, MEFT, Customs), NGOs, Conservancies, Game Guards, Fish Guards and the private sector to discuss collaboration on combatting wildlife crime in "Blue Corridors" (the perennial rivers along and across which illegal wildlife products are trafficked). VukaNow provides complementary funding to the USAID Combating Wildlife Crime (CWC) project, particularly in trans-boundary areas.

The NNF continues to support various partners in the fight against wildlife crime, especially relating to rhino and elephant poaching. The NNF provides targeted funding for interventions that support a holistic approach towards CWC - N\$ 60 million has been raised to date. Support during the past two years included:

- Training and deployment of detection dog units to search for weapons and ammunition as well as selected wildlife products. Vehicles are very successfully searched at roadblocks, where weapons, both registered and unregistered, are regularly found hidden in vehicles. The dogs are equally trained to track down poachers.
- Fuel and regular maintenance for the MEFT helicopter, so that it can be used for anti-poaching patrols and rhino population management (e.g. dehorning, translocating).

- · In smaller conservation areas, provide camera traps to monitor individual rhinos and maintain records of their history – i.e. birth, translocations, calving events for cows.
- Supply Ministry field staff with ration packs complete meals in compact portions. These meals help the MEFT to substitute field allowances. Field staff are also provided with camping equipment and boots to be properly equipped for the demanding fieldwork required while protecting rhino and elephant.
- In Etosha National Park the advanced radio communications network and the operations rooms are being maintained and expanded. The radio network was initially bought with funding from the Millennium Challenge Account and has been kept in a good operational state ever since. In a big protected area with many staff a good radio network is essential for effective communication.
- Upgrading the communications infrastructure in National Parks in the north-east to allow MEFT field staff to send reporting data using Wi-Fi, thus improving reporting efficiency.
- The Directorate of Customs and Excise within the Ministry of Finance is supported with capacity building at the various regional border posts and ports. This is done in close cooperation with colleagues from the Investigations and Intelligence Unit (IIU) within the MEFT and the Protected Resources Division of NAMPOL. This cooperation allowed for real wildlife products (rhino horn and ivory) to be used for the scanner training and at the same time provided a networking opportunity for the different agencies. Training outcomes will be incorporated into updated Standard Operating Procedures.

The funding partners who make all these activities possible are the Bureau of International Narcotics and Law (INL) Enforcement Affairs in the US State Department and USAID. In Namibia the NNF works closely with other NGOs to coordinate the support to government agencies and other implementing partners.

ENVIRONMENTAL EDUCATION

Education provides the basis for an informed society. Awareness around environmental problems encourages the sustainable and efficient use as well as protection of natural resources for current and future generations. Environmental issues need to be incorporated into school curricula from an early age, while tertiary institutions need to equip students with the necessary skills for a career in this field. Moving beyond formal education, the general public must remain informed about the current state of the environment and the impacts of their lifestyle choices.

EQUIPPING FUTURE CONSERVATION PROFESSIONALS

The conservation sector is one of the key sectors requiring knowledge, expertise and skills to successfully protect Namibia's biodiversity and ecosystems. Yet about 900 positions in conservation at higher management level in public and private institutions and the private sector in the SADC region are not filled with sufficiently qualified staff. In Namibia, about 500 qualified employees are needed in the conservation sector.

The Namibia Nature Foundation is part of a Consortium that is guiding the KFW-funded expansion of the Department of Wildlife Management and Ecotourism at the University of Namibia (UNAM) Katima Mulilo Campus. Besides providing a physical space for the Department, the Consortium is helping the faculty adapt and revise its B.Sc. (Hons) programme, establish M.Sc. curricula, enhance research activities and establish international research networks. The aim is to develop innovative, practical and integrated training courses that are adapted to the knowledge and expertise requirements of the conservation sector.



The new UNAM Katima Mulilo Campus hosting the Department of Wildlife Management and Ecotourism will be located on the banks of the Zambezi River. The campus building is built using sustainable materials and thus blends into nature (Source: Internal Architect Report).



Staff members of the Department of Wildlife Management and Ecotourism discussing the new Bachelor of Science and Master of Science curricula. (Source: Internal Report).

ENVIRONMENTAL EDUCATION PROJECTS

The NNF supports environmental education projects through the GoGreen Fund, which was co-founded by Nedbank Namibia and the Namibia Nature Foundation in 2001. The non-profit Namib Desert Environmental Education Trust (NaDEET), managed by Viktoria Keding, is a GoGreen grantee that provides environmental education to Namibians. NaDEET creates awareness of environmental issues in a hands-on way that maintains the interest of a young audience. The support of the Go Green Fund to NaDEET has reached over 14,000 Namibian children with messages about how to live sustainably, whilst exposing them to the enchantment of the Namib Desert. They recently opened the Education for Sustainable Development Centre in Swakopmund that focuses on sustainable urban lifestyles.

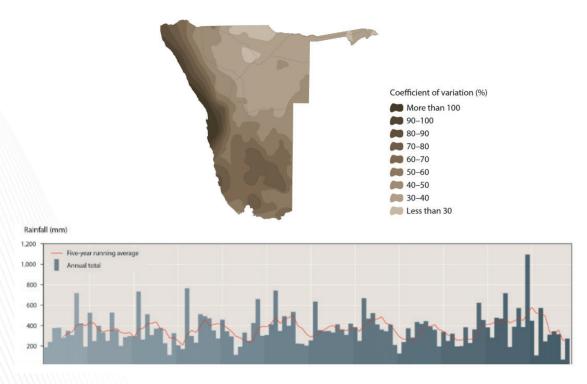


The KEEP team of educators created online media content to continue their educational programme during the COVID-19 lockdown in 2020 (Source: GCF).

The Giraffe Conservation Foundation GCF) runs the Khomas Environmental Education Programme (KEEP) that takes schoolchildren on immersive educational trips into the Daan Viljoen Nature Reserve near Windhoek. The project uses the giraffe as a key theme and aims to educate young Namibians on environmental issues and encourage sustainable practices. The KEEP project received a Go Green grant through the NNF, which they used to produce educational videos for Namibian children during the COVID-19 lockdown when schools could not visit the reserve. Trips to the reserve will resume as soon as health regulations permit.

UPDATED ATLAS OF NAMIBIA

As Namibia continues to develop, especially in sectors that require education, knowledge and awareness - up-to-date and reliable information on the country's physical, human, and natural environment is a necessity. The new Atlas of Namibia that is currently being drafted will provide updated information and highlight changes to the Namibian environment during the past three decades. The Atlas will be the authoritative reference on Namibia's geography for decision-makers, resource managers, researchers, students and the wider public, and will be a vital tool for education and training.

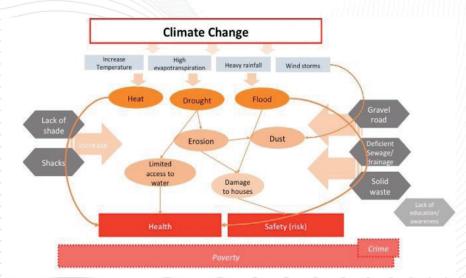


Some of the outputs from the updated Atlas of Namibia - rainfall trends spatially (map) and temporally (graph) (Source: Atlas of Namibia (in press)).

SUSTAINABLE DEVELOPMENT IN URBAN AREAS

Namibia is urbanising rapidly as people from rural areas move to the cities in search of employment and other opportunities. The influx of people into cities and towns puts pressure on municipalities to provide sufficient services, particularly water, sanitation and waste removal. Ecological degradation and lack of urban planning increases these communities' vulnerability to severe climatic events such as flooding. Addressing these issues requires a holistic approach that helps communities and urban developers to chart a path towards sustainable urban living.

CLIMATE SENSITIVE SETTLEMENT DEVELOPMENT IN WINDHOEK



Attending to climate change in cities, this is a conceptual development plan addressing social-ecological issues raised by the Onyika community in Windhoek during consultations.

In the context of socio-ecological and climatic challenges in cities, the GIZ, the NNF and the City of Windhoek (CoW) engaged in a participatory urban development exercise with the community of Onyika No. 2 settlement in Okuryangava, Windhoek. Three consultation workshops were held during which the community engaged with the team of consultants and experts to develop different propositions for a conceptual development plan for the Onyika settlement.

The community identified the main social issues as safety and crime, health issues related to solid waste and wastewater; while the main ecological issues were flooding within the settlement, erosion, dust from the road, heat and lack of shade. A list of possible interventions was proposed by the community and integrated with the help of a landscape architect, an urban design specialist, a traffic engineer and a waste specialist. The conceptual development plan proposes three phases of development for the Onyika settlement. plan proposes three phases of development for the Onyika settlement.

The interventions in the plan were prioritised based on their economic feasibility, contribution to climate change mitigation, and social benefits for the community. In order to be successful, the plan needs to be owned and embraced by the community that will use the new structures and services. A local committee was therefore established to lead the process and communicate with the CoW on community matters. Several community-led processes were also included in the implementation plan, including a recycling project, neighbourhood watch, and awareness-raising events. New public spaces to facilitate community activities were planned to improve social cohesion within the urban community.



Attending to climate change in cities, this is a conceptual development plan addressing social-ecological issues raised by the Onyika community in Windhoek during consultations.

NATURAL ECOSYSTEM

Natural ecosystems on land and in the ocean consist of a vast number of plants and animals that together are known as biodiversity. Although these species are capable of adapting to new conditions and ecosystems can thus be resilient to change over time, anthropogenic impacts are often too drastic or sudden to allow for adaptation. Such impacts can lead to species extinction and irreparable damage to ecosystems. The consequences of biodiversity loss and ecological degradation can be severe for human societies that rely on numerous ecosystem services for their livelihoods and well-being. Preventing or mitigating this damage requires a thorough understanding ecological processes and the conservation needs of terrestrial and marine organisms.



S AND BIODIVERSITY

THE NNF'S VISION FOR NATURAL ECOSYSTEMS AND **BIODIVERSITY**

Conserving natural ecosystems and the biodiversity they support requires scientific research and local knowledge to inform applied management actions. Namibia hosts numerous species that are of conservation concern and boasts an extensive network of protected areas on land and in the ocean. Managing ecosystems for biodiversity involves economic costs and benefits to society, so our work on ecosystem services includes economic analyses to assist decision makers. The NNF further supports species research and Protected Area management through partner organisations and in collaboration with relevant line ministries.

OUR WORK ON NATURAL ECOSYSTEMS AND BIODIVERSITY - MARINE AND TERRESTRIAL SPECIES CONSERVATION, ECOSYSTEM SERVICES AND ECONOMICS

The NNF supports species research and conservation primarily by empowering passionate individuals and organisations to research and understand species and their roles within terrestrial and marine ecosystems. The NNF provides an institutional home and organisational credibility to promising scientific endeavours and links these to broader conservation and that inform Namibian policies. Ecosystem services and their relation to the are covered through collaborative projects, while technical services are al and marine Protected Areas.

MARINE SPECIES RESEARCH AND CONSERVATION

The cold, nutrient-rich Benquela current that runs along Namibia's long coastline supports a rich diversity of marine life and an extensive fisheries sector. The marine environment is further impacted by mining, plastic waste and coastal developments. Namibia is therefore tasked with developing a Blue Economy that uses marine resources wisely and sustainably in a manner that limits the negative impacts of these activities on marine species.

REDUCING SEABIRD BYCATCH IN MARINE FISHERIES

The Albatross Task Force (ATF) is an international project funded by the Royal Society for the Protection of Seabirds (RSPB) and Birdlife International. The ATF focuses on reducing bycatch of threatened seabirds (primarily albatrosses and petrels) in demersal fisheries around the world. Bait lines set by demersal longline and trawling vessels attract these seabirds, which frequently results in the birds being hooked and drowned. The Namibian branch of ATF was established 12 years ago under the auspices of the NNF to collect data on bycatch and advise the MFMR on suitable mitigation measures. Data collected prior to implementing mitigation measures revealed a serious problem in Namibian fisheries – 22,000 seabirds were killed on longline vessels, whilst 7,000 were killed on trawl vessels.



Albatrosses interacting with trawl warp cables



An Albatross caught & drowned by a longline fishing hook

The ATF collaborated with the MFMR to introduce regulations to reduce seabird bycatch in 2015 by introducing simple, yet effective mitigation measures. This involves attaching locally made bird-scaring lines to deter the birds from the fishing lines. With the help of the Fisheries Observer Agency that monitors compliance to the new regulations and continuously collects data on bycatch, the ATF and their RSPB and Birdlife partners published the results of these new regulations in scientific journal Biological Conservation.

Their findings, which were also widely reported in the media, were extremely positive. Compliance with the new regulations was high -95% of the longline vessels and 91% of the trawl vessels deployed bird-scaring lines with their nets. In the longline fleet, bycatch was reduced by 98.4%, from 22,000 to only 215 seabirds, while the trawl fleet recorded a 79% reduction from an estimated 7,000 to 1,400 birds. The mitigation measures can be refined further in the trawl fisheries to further reduce bycatch. ATF remains committed to tackling new and unfolding issues related to seabird bycatch in other fleets such as the pelagic fishery.

The new regulations created a demand in the fisheries industry for bird-scaring lines. The NNF therefore assisted a Women's Group called Meme Itumbapo to manufacture these lines for sale to the fisheries in Walvis Bay. With assistance from the ATF staff, Meme Itumbapo signed a Memorandum of Understanding with Walvis Trawl and the NNF that will ensure that sound financial management and a reliable supply chain for the fisheries industry.

SUPPORING THE NAMIBIA ISLANDS MARINE PROTECTED AREA

The Namibia Islands Marine Protected Area (NIMPA) is an important marine biodiversity hotspot for seabirds, marine mammals, fish and crustaceans in southern Namibia. Despite being the second largest marine protected area in Africa and designated in 2009, NIMPA currently lacks a management plan and has no dedicated operational budget. This marine protected area and its marine life are currently threatened by activities such as diamond mining, overfishing, pollution, port development, untested phosphate extraction and live marine mammal harvesting. With funding from the Blue Marine Foundation, the NNF is working with the government to develop and implement a management plan that would lead to the recovery of valuable marine habitats, fish stocks, whale and seabird populations that contribute to a resilient and robust ecosystem. The project is still in its early stages and requires approval from the Ministry to revise the management plan (originally drafted in 2008) using a new approach that includes extensive consultations with relevant stakeholders.

TERRESTRIAL SPECIES RESEARCH AND CONSERVATION

North-eastern Namibia is a key link within a broader landscape including parts of Angola, Botswana, Zambia and Zimbabwe that hosts globally important wildlife populations and numerous rural communities. The state protected areas in this part of Namibia must therefore be managed within the context of this landscape by maintaining existing wildlife corridors and engaging with neighbouring rural communities on natural resource management concerns that cross Park and national boundaries. The NNF and its partners are actively engaged with the Namibian government to guide the sustainable management of this complex landscape.

PARK MANAGEMENT PLANS FOR THE NORTH-EASTERN PROTECTED AREAS

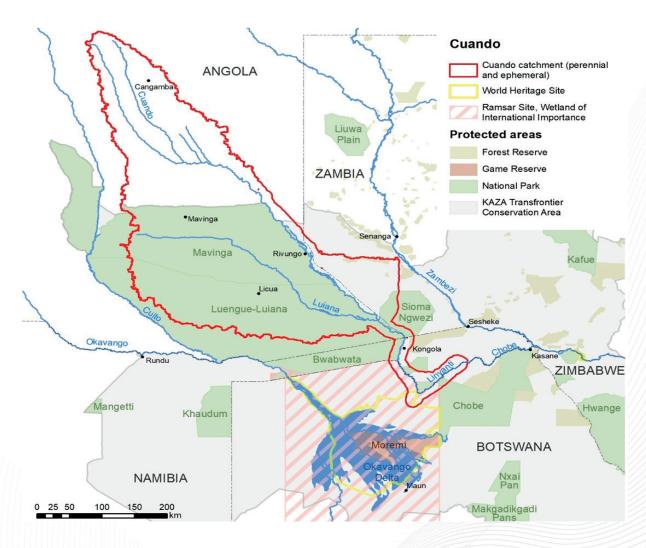
The National Parks and Reserves in north-eastern Namibia hold a lot of tourism potential, apart from quite distinct biodiversity to rest of Namibia. The NNF were granted a consultancy on behalf of the MEFT to update the Management Plans for the following National Parks: Bwabwata, Mudumu, Nkasa Rupara, Khaudum, Mangetti and the Popa Falls Nature Reserve. If this management planning exercise can contribute towards developing this tourism potential, the tourism pressure on Etosha and Sossus Vlei can be alleviated in the coming years. This consultancy is part of the NamParks IV project funded by KfW.

After numerous consultations with MEFT field staff and regional stakeholders, the revised park management plans for all six focal Parks were submitted to the MEFT towards the end of 2019. This was followed up with training session for field staff on the process for developing such plans to build their capacity for doing this work in future.

INTEGRATED PLANNING FOR THE ZAMBEZI STATE FOREST RESERVE

A thorough review of all government gazettes since 1990 revealed that the Zambezi State Forest Reserve had never been formally declared. The NNF was nonetheless contracted through the NamParks IV project (funded by KfW) to assist the MEFT and the Directorate of Forestry (before it was moved to the MEFT) to create a management plan for the State Forest. This included extensive consultations with the communities living adjacent to the State Forest, who expressed a desire to co-manage the area, rather than be excluded from using the resources within it. The final management plan was approved in late 2020, along with an advisory note outlining the next steps for formally gazetting the forest and working with adjacent communities.

PROFILE OF THE CUANDO/KWANDO RIVER BASIN



The Cuando/Kwando River is one of the last remaining long, naturally connected rivers in the entire Zambezi Basin and one of few undeveloped river systems globally. While little is yet known about it, it plays a critical function in the landscape, particularly within the Kavango-Zambezi Transfrontier Conservation Area (KAZA TFCA). The river originates in a remote and wild area of central and southern Angola, flows alongside the Zambian border for about 220 kilometres, crosses through Namibia's Zambezi Region and finally ends in the Linyanti Swamps on the border with Botswana. Ith therefore supports the single most important KAZA wildlife corridor whereby large numbers of elephants move from the Chobe National Park and surrounds in Botswana through Namibia and into southern Angola and Zambia's Sioma Ngwezi National Park.

The NNF is therefore pleased to partner with Research and Information Services of Namibia (RAISON) and the Wild Bird Trust to develop the State of the Basin report for the Kwando River. This project is part of the project: "Transboundary Governance of the Kwando River Basin: Protecting the heart of Southern Africa" which is a partnership between WWF, the KAZA Secretariat and the Zambezi Watercourse Commission (ZAMCOM). The focus of this larger project is transboundary water management and governance for the Kwando River basin. Having submitted a draft State of the Basin Report in late 2020, the NNF and partners are planning fieldwork to collect more data to inform the final report in 2021.

GOING GREEN WITH NEDBANK NAMIBIA

Nedbank Namibia partnered with the NNF in 2001 to support promising conservation and research projects throughout Namibia by establishing the Go Green Fund. During this nearly two decades long partnership, the Go Green Fund has disbursed over N\$ 7 million to over 40 projects focusing on species conservation, habitat protection, environmental education, sustainable development and livelihoods based on natural resources. These projects produce tangible results for conservation and information that can be used to address threats and challenges facing Namibia's biodiversity.

The Go Green Fund is a unique Corporate Social Investment that relies on a long-term partnership with one organisation, yet allows many different institutions and individuals to fund a wide range of projects and on-going programmes. The seven successful grant applications for 2019 (one of which was postponed to start in 2021 due to COVID-19) reflected the usual diversity of projects supported by the Go Green Fund – from brown hyaena and rhino through to monitoring lichen using a drone. These projects keep Namibia at the cutting edge of environmental research, while maintaining a strong link with the people who are ultimately responsible for caring for the environment.

2019 GO GREEN PROJECTS

1. Brown hyaena research and tourism

The Brown Hyaena Research project is developing a tourism product based on brown hyaenas foraging around seal colonies along Namibia's coast. The are monitoring the hyaena population using satellite telemetry and camera traps before and after the expected increase in tourism to evaluate and mitigate any negative impacts. The ultimate aim is to promote this species for its tourism potential and assist the government with the Tourism Development Plan to ensure long-term sustainability and offer training to tour guides and concessionaires.

The Brown Hyaena Research project is developing a tourism product based on brown hyaenas foraging around seal colonies along Namibia's coast. The are monitoring the hyaena population using satellite telemetry and camera traps before and after the expected increase in tourism to evaluate and mitigate any negative impacts. The ultimate aim is to promote this species for its tourism potential and assist the government with the Tourism Development Plan to ensure long-term sustainability and offer training to tour guides and concessionaires.





(Photos from the darting of two brown hyenas: fitting the GPS collars, taking samples and measurements)

2. Black rhino monitoring and protection



(Erwin Karutjaiva/SRT collects data on new SMART enabled device. Credit Marcus Westberg)

Save the Rhino Trust (SRT) continuously improves their monitoring procedures for the critically endangered black rhino, which includes maintaining intelligence-gathering networks, collaborating with partners in other security-related activities, and monitoring human activities in key buffer areas. SRT's trackers record sightings of individual rhinos in the Kunene Region on a regular basis that informs the MEFT's management of this population, deters poachers, and provides critical intelligences leading to the arrest of would-be poachers.



3. ROAN News 2019 Magazine

The Namibian Environment & Wildlife Society's 2019 ROAN News Magazine showcased Namibia's wildlife environment as something ordinary citizens to be proud of and willing to conserve. It also provided a communication platform for the people and projects that are making a difference in the field. The magazine strives to broaden environmental awareness and inform the public on pertinent environmental issues by publishing a wide variety of illustrated articles on current affairs, research and conservation projects, and general natural history.



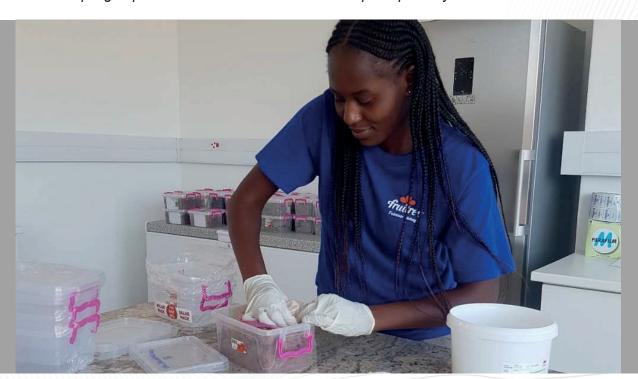
4. Eco-drones monitor lichen in the Namib

The Gobabeb-Namib Research Institute is investigating the use of drones to monitor diverse lichen species in the coastal central Namib Desert. Using multispectral images produced from a specially equipped drone, the research team aims to closely observe lichen photosynthetic activity. The team has completed 18 trips to the study area and seeks to establish baseline photosynthetic activity for healthy lichen before comparing these results with lichen that has been damaged by human disturbances (e.g. off-road driving).

5. A Bio-Indicator Sample Repository for Namibia



Field Sampling Impressions for the Bio-Indicator Sample repository ORS



UNAM bio-chemistry graduate Elizabeth Shangano processing soil samples for long-term storage at ORC's laboratories in northern Namibia

The Ongava Research Centre (ORC) aims to establish a professional and reliable bio-indicator collection to preserve environmental conditions and their changes for future reference and analysis. Between January and October 2020, ORC collected and archived a total of 207 bio-indicator samples, including soils, water, and plant and animal materials. These comprise 2,260 unique specimens from 37 species. Of each sample, one specimen will be retained for long-term storage at ORC. Surplus specimens are available for analysis by national and international researchers.

2020 GO GREEN FUND RESPONDS TO URGENT NEEDS

The year 2020 called for quick and decisive action to assist communal conservancies in the wake of collapsing international tourism due to COVID-19. Communal conservancies were especially vulnerable to shutting down international travel, as most of their income is derived from international visitors. The Fund responded to calls from the MEFT to contribute to the Conservation Relief, Recovery & Resilience Facility (CRRRF) that they had established to provide coordinated support for conservancies that could no longer afford to pay critical staff members such as community game guards. See the Community-Based Natural Resource Management section of this report for details.



Inonge Mukumbuta-Guillemin with two members of the Muduva Nyangana Conservancy office

ECOSYSTEM SERVICES AND ECONOMICS

The NNF has a long history of research and analysis in conservation economics and tries as much as possible to make an economic case for ecosystem conservation and support decision-making in its projects and policy advocacy. The NNF promotes the recognition of all values of nature, beyond direct use values, making the case that a healthy ecosystem benefits all Namibians.

DEVELOPING A SUSTAINABLE BLUE ECONOMY

Since early 2019, we have engaged with relevant stakeholders on Namibia's Sustainable Blue Economy policy and action plan, which is being developed by an inter-ministerial committee. The NNF's contribution to the process has focused on developing innovative funding mechanisms for the Blue Economy by collating lessons learned from other countries on the use of Blue Carbon markets and Blue Bonds.

Besides the Namibian government, the NNF engaged with the inter-governmental Benguela Current Commission (BCC, which includes Angola and South Africa) and the Namibian private The Cuando/Kwando River is one of the last remaining long, naturally connected rivers in the entire Zambezi Basin and one of few undeveloped river systems globally. While little is yet known about it, it plays a critical function in the landscape, particularly within the Kavango-Zambezi Transfrontier Conservation Area (KAZA TFCA). The river originates in a remote and wild area of central and southern Angola, flows alongside the Zambian border for about 220 kilometres. crosses through Namibia's Zambezi Region and finally ends in the Linyanti Swamps on the border with Botswana. Ith therefore supports the single most important KAZA wildlife corridor whereby large numbers of elephants move from the Chobe National Park and surrounds in Botswana through Namibia and into southern Angola and Zambia's Sioma Ngwezi National Park

The NNF is therefore pleased to partner with Research and Information Services of Namibia sector to establish further support for sustainable Blue Economy concepts. Several proposals have been submitted in partnership with South Atlantic Environmental Research Institute (SAERI) for projects that could significantly support the Blue Economy Policy development process. This includes a proposal on the valuation of marine ecosystem services under the One Ocean Hub grant.

RHINO-BASED TOURISM ECONOMIC SURVEY

Rhino-based tourism must be managed correctly to link it with community development and conservation in a sustainable way that benefits all stakeholders. To this end, the NNF together with Save the Rhino Trust (SRT) collected data on the preferences of tourists visiting Namibia pertaining to rhino tracking activities. The analysis revealed that most respondents wanted local communities to receive the largest share of the profits from rhino tracking activities, and were willing to pay an additional US \$43-670 to ensure that this happened. Respondents in the class most interested in rhino tracking were willing to pay an additional \$34 per trip to ensure that trackers were present and fully involved with the clients during the tour.

These findings support the idea that a triple-bottom-line can be reached in the nature-based tourism sector, where local communities and conservation could receive higher income from tourism activities at no additional cost for operators. This is because visitors' are willing to pay a higher price to ensure that more income is distributed to communities that help to conserve rhinos.

WILDLIFE CREDITS - PAYING FOR ECOSYSTEM SERVICES IN CONSERVANCIES

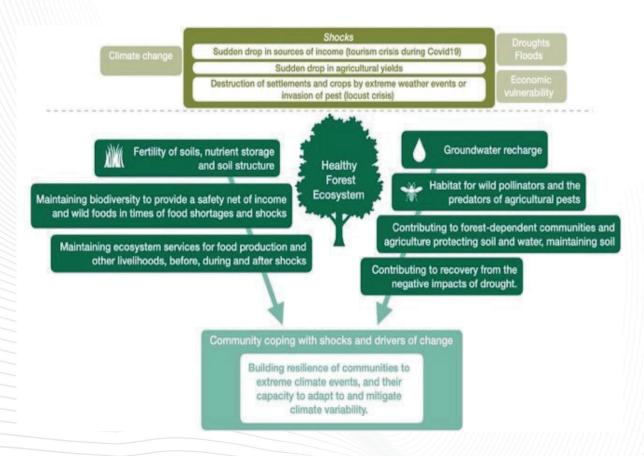
Wildlife Credits, supported by WWF-Namibia and tourism operators, is a type of Payment for Ecosystem Services (PES) scheme that rewards communities for conserving wildlife that are valuable for tourism yet costly to conserve. The NNF is implementing this Payment for Ecosystem with four conservancies in the southern Kunene and Erongo Regions – Tsiseb, Sorris Sorris, //Huab and ≠Khoadi //Hôas.

In each conservancy, the partnering tour operator makes payments based on independently verified sightings of elephant, lion, or black rhino (depending on which species are prevalent) and these payments are matched by the Wildlife Credits scheme led by WWF-Namibia. The Conservancy Management Committees (CMCs) must then decide on how to use these funds to best support their communities, focusing particularly on mitigating human-wildlife conflict and supporting rhino anti-poaching efforts. In 2020, these funds helped conservancies to survive the economic impact of COVID-19 by paying for their operational costs.

Prior to the outbreak of COVID-19, the NNF continued to support tourism development in their target conservancies. This included drafting a management plan for a joint management area among three conservancies (Sorris Sorris, Doro !nawas and Ûibasen Twyfelfontein), negotiating for a Joint Venture campsite in Otjimboyo conservancy in an area with high levels of human-elephant conflict.

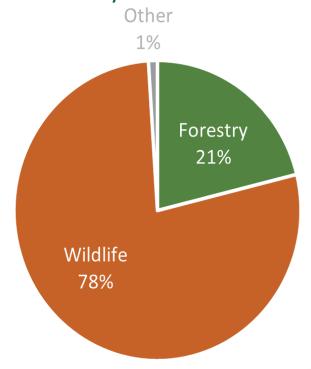
COMMUNITY FOREST ECONOMICS

The NNF provided an in-depth analysis to make the case for forest ecosystem conservation in Zambezi Region. With the support of the World Bank, we provided a review and analysis of available forest resources and resource use in the Kwandu and Sachona Community Forests in conjunction with an analysis of forest ecosystem functioning and sources of revenue. This will identify potential development opportunities that could improve the sustainability of forest use and ecosystems services in the Zambezi Region. These forest-based development solutions are also essential for building resilience of local communities to climate change.



Contribution of the SFR ecosystem to community resilience (adapted from FAO, 2019)

Share of total income generated in Kwandu Community Forest 2011-2019



Income share from wildlife and forestry in Kwandu, 2011-2019. Source: NACSO

oro !nawas and Ûibasen Twyfelfontein), negotiating for a Joint Venture campsite in Otjimboyo conservancy in an area with high levels of human-elephant conflict.

A COST-BENEFIT ANALYSIS FOR BUSH HARVESTING AFTERCARE

Encroaching woody species in Namibia have become a major ecological and economic issue, substantially reducing land productivity in terms of grazing capacity for livestock, suitability for game, and other ecosystem services such as groundwater recharge rates. For this reason, the government of Namibia has integrated bush control in its development targets and aims to thin bush in an area covering 15.5 million hectares by 2030.

This requires land users to engage in large-scale thinning of woody plants, however, many woody encroachers do not die after being removed and strongly regrow from the roots and/or stem bases. Consequently, one either needs to thin the bush repeatedly, or apply a post-harvest treatment (aftercare) to prevent regrowth. Yet aftercare treatments are rarely used in Namibia, as they are considered labour intensive and expensive.

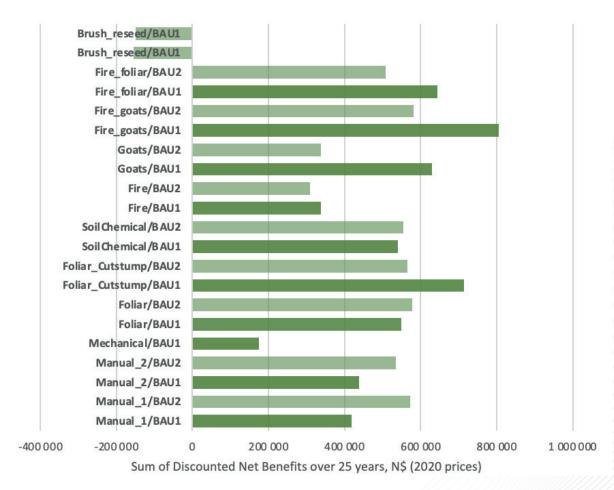
The GIZ Biodiversity Management and Climate Change Project (BMCC II) therefore commissioned the NNF to conduct a detailed cost-benefit analysis of aftercare treatments based on evidence for the net benefits of different aftercare measures over 25 years. This should allow farmers and biomass users to consider different options to minimise costs while maximising long-term benefits of aftercare treatments. It also examines the potential economic and environmental trade-offs of different measures and is thus complementary to Environmental Assessment studies of post-harvest measures.



Healthy wooded savannah landscape

The benefits of bush harvesting and aftercare were assessed in terms of grazing availability, increased carrying capacity for cattle and improved groundwater recharge rates, while costs were calculated based on farmer and technical reports. Aftercare treatment scenarios included a variety of manual, mechanical and chemical treatments, controlled burning regimes and stocking goats as a form of biological control. Some of these scenarios were considered in combination, while brush packing and reseeding grass plants was considered as a complementary measure to all of the other scenarios.

Overall, the evaluation of costs and benefits associated with post-harvesting measures suggests that undertaking post-harvest interventions is consistently beneficial for the farmer in the medium-term (25 years). The costs associated with inputs, labour and opportunity cost are always recovered by higher benefits from an increased grazing capacity and higher availability of groundwater, when compared with not applying any aftercare treatment.



Summary of Net Present Values of post-harvesting measures in Namibian dollars





Natural ecosystems provide a host of resources that humans rely on for food and livelihoods. These resources can either be depleted, thus depriving future generations of their use, or managed sustainably for long-term productivity. Sustainability thus requires a farsighted approach to human activities and livelihoods that meets current needs for natural resources while still maintaining ecosystem health and thus securing future uses. The ultimate goal is to create a circular economy, whereby outputs (e.g. food) are maximised through efficient management practices that have a minimal ecological footprint and any excess or waste is cycled back into the system. As human populations continue to grow and the effects of climate change are increasingly felt, resources must be used ever more efficiently and sustainably using adaptive management systems that can respond to ever-changing conditions.

THE NNF'S VISION FOR PRODUCTIVE LAND AND SEASCAPES

Namibia's diverse ecosystems provide an array of services that people use to support their livelihoods and feed their families. The NNF promotes the wise use of fish, plants and mammals that occur naturally in Namibia, while also helping crop farmers conserve their soil and farm more efficiently. The ultimate purpose is to leave these species, ecosystems and rural economies in a better state than we found them in by supporting sustainable practices and rural governance systems, while linking them with lucrative international markets. The NNF is also concerned with mitigating the impacts of infrastructure on the environment to ensure that national economic development does not come at the expense of our biodiversity.

OUR WORK ON PRODUCTIVE LAND AND SEASCAPES - DEVELOPING THE ECONOMIC POTENTIAL OF NATURAL RESOURCES SUSTAINABLY

The NNF works at local, national and international scales to work towards the concept of a circular economy. Key local institutions include communal conservancies, community forests, inland fisheries committees and farmers clubs who have the greatest interest in maintaining their resource base. At national levels, the NNF works with several different line ministries and other Namibian NGOs whose expertise and goals align with our own work and amplify our impact. Finally, we work with several different Namibian and international institutions that provide links between Namibian resources and international markets that greatly increase the value of Namibia's natural products and incentivise sustainable, eco-friendly production methods.

The following subthemes are in line with these SDGs (Include images SDG 1, 2, 5, 12, 13, 15 and, 17)

SUSTAINABLE USE OF PLANT AND WILDLIFE RESOURCES

Namibia's landscapes have enormous potential to contribute to rural livelihoods by linking local production systems with international markets. This potential must be unlocked using traditional knowledge and science to harvest plants and animals in a way that promotes ecosystem health and protects economically important species from over utilisation. The NNF is involved in a number of interventions that meet these aspirational criteria.

BUSH CONTROL AND BIOMASS UTILISATION

It is estimated that 30 to 45 million hectares, more than 30% of Namibia's territory, is affected by bush encroachment or thickening. Bush encroachment in Namibia causes severe economic losses on both commercial and communal land and contributes to desertification and environmental degradation. The Bush Control and Biomass Utilisation (BCBU) programme under the Ministry of Agriculture, Water and Forestry (now Ministry of Agriculture, Water and

Land Reform) and supported by GIZ tries to address this challenge by promoting a combination of bush thinning and harvesting activities with biomass utilisation, thereby adding value to encroacher biomass. The project has created significant interest in and around the development of the bush control and biomass sector. The first phase of the project started in 2014 (to 2017) and the second phase will end in 2020.

To carry the efforts and successes of the project into the future and make them sustainable, a governance framework involving public, private and civil society organisations for the sector must be created. The NNF has been tasked with triggering high-level support and re-engaging all stakeholders to define and establish this framework. This should lead to the drafting of a guiding document and the establishment of a coordinating body that will be used for strategic guidance by decision-makers in the encroacher bush-based biomass industry in the future.

Since October 2019, the NNF has engaged with government, private sector and civil society actors to constitute a working group, which includes key stakeholders who will drive the guiding document drafting process. In addition to individual engagements with different institutions, a discussion on the environmental impacts of bush control was hosted at the annual Namibian Chamber of Environment (NCE) End-of-Year Function to discuss changes to the landscape and potential adverse impacts caused by the development and growth of the biomass industry, and potential mitigation measures and safeguards required to create a sustainable industry.

During the first working group meeting in February 2020, members discussed the format of the guiding document and coordinating body, potential objectives and purpose, as well as the scope of the guiding document. Upcoming working group meetings will focus on the policy landscape, the structure of the coordinating body and the outline for the guiding document.

The cross-sectoral nature of the sector is challenging to navigate. The sector spans four ministries: (1) Ministry of Agriculture, Water and Land Reform, (2) Ministry of Industrialization and Trade (3) Ministry of Environment, Forestry and Tourism and (4) Ministry of Mines and Energy. There is a need for improved collaboration and discussions. The move of the Directorate of Forestry into the Ministry of Environment and Tourism facilitated this process by bringing regulation for bush harvesting and environmental impacts under one Ministry.

DEVIL'S CLAW HARVESTING



Devil's Claw is a plant that grows in the Kalahari ecosystem (covering eastern Namibia, Botswana and parts of South Africa) that has been harvested and used as a traditional remedy for centuries. The plant's medicinal properties have since become known internationally and it is therefore used as an alternative remedy for pain and inflammation. The growing international market and traditional harvesting methods that do not damage the plants make this an ideal opportunity for supporting livelihoods through sustainable use. The NNF supports the growth of this industry by assisting communal conservancies in the Kavango and Omaheke Regions to monitor Devil's Claw harvesting and access markets for the final product.

The Social Security Commission (SSC), USAID and FNB Namibia have supported the NNF's work in the Omaheke Region since late 2018. The three target conservancies – Eiseb, Omuramba ua Mbinda and Otjombinde – struggle to generate sufficient income to cover their operational costs. Developing a Devil's Claw industry in these conservancies will thus provide greater community support for the conservancy concept and strengthen their institutional capacity to monitor and manage their natural resources. The NNF's support included training and equipment for game guards (who also act as resource monitors for Devil's Claw), facilitating contracts between the conservancies and EcoSo Dynamics (a Namibian Devil's Claw trader), and improving overall conservancy governance and financial management systems.

From the start of the 2020 harvesting season in March, the NNF carried out an extensive awareness campaign in Omuramba ua Mbinda and Eiseb Conservancies that reached 200 community members to inform them about this opportunity and invite harvesters to register. Despite COVID-19, 100 harvesters were registered and trained, provided with harvester kits and supported in their permit applications to MEFT. This project culminated in the sale of three tonnes of Devil's Claw from Omuramba ua Mbinda Conservancy to EcoSo Dynamics at a price of N\$ 52/kg for the harvesters and N\$ 2/kg commission to the conservancy. This event was widely covered in various newspaper articles and on our social media pages as harvesters celebrated having reaped benefits from this natural resource. EcoSo Dynamics has expressed interest in engaging in a long-term contract of three years with the two conservancies.

In the Kavango Region, the NNF provides similar support for Kapinga Kamwalye, Maurus Nekaro and Muduva Nyangana conservancies by registering and training harvesters with funding from Resilient Waters. Two of these conservancies have signed agreements with EcoSo Dynamics for selling their Devil's Claw harvests. This buyer offers a better price than harvesters receive from informal trading in the area. Harvesters in Kapinga Kamwalye Conservancy are still awaiting permits from MEFT.

SUSTAINABLE USE OF WILDLIFE

The sustainable use of wild animals through conservation hunting supports a large number of communal conservancies in Namibia, many of which have no other source of income. Highly selective hunting for a small number of mature male animals can be sustainable even where game populations are relatively low. The income from these hunts is critical to developing conservancies and building community support for conservation.

A number of important steps must be taken to ensure that wildlife use is sustainable and that conservancies maximise their returns from this resource. Each conservancy must have a Game Management and Utilisation Plan (GMUP) in place. Implementing this plan requires monitoring game populations through regular counts and game guard patrols that produce data for quota-setting purposes. They must then sign agreements with professional hunting outfitters to use these quotas, particularly by bringing international hunting clients to hunt for trophies.

The NNF developed GMUPs for Otjikondavirongo, Otjiu-West and Purros conservancies with funding from GIZ. The final report for this work was submitted at the end of 2020. A Training of Trainers event was held during March 2020 in Otjiwarongo for the MEFT regional permit

issuing staff to equip officers with the necessary skills in game management operations. A database was developed to capture detailed records of all conservation hunting activities that will allow officials to get real time off-take data for conservancies and National Park concessions.

We assisted the Huab, Eiseb, Kunene River, Epupa and Ondjou conservancies to renew their conservation hunting agreements with their existing operators. The Okangundumba, Okongoro, Otjikondavirongo, Ombujokanguindi, Otjambangu, Otuzemba and ≠Khoadi //Hôas conservancies advertised their hunting concessions through a tender process and signed hunting agreements with their selected operators with assistance from the NNF. The Omuramba Ua Mbinda and Otjombinde conservancies in the Omaheke region were assisted in advertising for a conservation hunting operator after receiving a quota from MEFT, and chose the same operator who hunts in Eiseb Conservancy.

SUSTAINABLE INLAND FISHERIES

The perennial rivers in north-eastern Namibia are the lifeblood of this region for both humans and wildlife. The people living on the banks of the Zambezi, Chobe, Kwando and Kavango Rivers supplement their diets and livelihoods with fish and fishing is an important part of local cultures. All of these rivers flow through Namibia from and into neighbouring countries, making fisheries management a trans-boundary concern. Yet local communities hold the key to stabilising fish populations by establishing Fisheries Reserves, monitoring their catches and guarding their fish stocks from over-fishing.

ZAMBEZI TRANS-BOUNDARY FISHERIES RESTORATION PROJECT

The NNF, in partnership with Peace Parks Foundation, is working with local communities along the Zambezi and Chobe rivers to restore the trans-boundary fish resource in this region. The ultimate goal is for residents to secure this important source of protein and retain fishing as an integral part of their social fabric. This will be achieved through sustainable management of the community fisheries, well-functioning inland fisheries committees, strongly defined user rights, and trans-boundary harmonisation of regulations impacting the biological success of the fishery.

Through consultation processes with local communities 14 sites in Ikaba and 4 sites in Nsundwa were identified as potential Fisheries Reserves. In the process, 18 members of the Ikaba community have been elected to serve on the Ikaba Inland Fisheries Committee (IFC) and six committee members of the Nsundwa emerging conservancy have been appointed to serve on the Nsundwa IFC.

A workshop was held to train these IFCs and ensure that they understand their different roles. The MFMR regional office in Katima Mulilo also supported these training workshops. The frame survey and a Participatory Rural Appraisal (PRA) exercise were conducted in Nsundwa and Ikaba to gather information on the role that fish and fisheries play in these communities. This information will form part of the Fisheries Management Plan that will be developed for these areas.

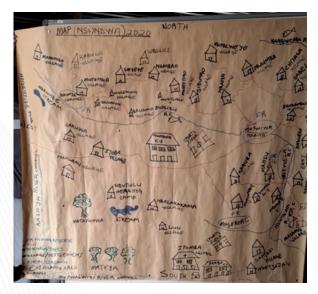
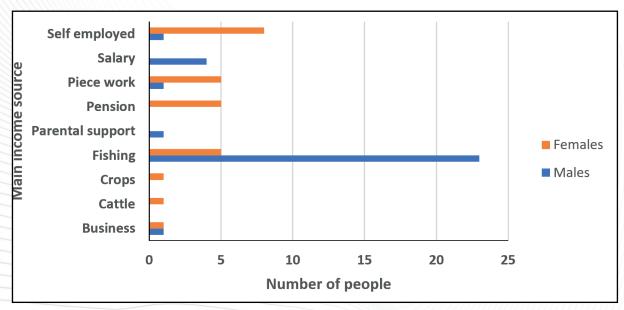




Figure 1: Sketch Map Nsundwa as drawn by the participants during the PRA Figure 2: Nsundwa PRA workshop, problem Inventory poster workshop.

The next step, which started in October 2020, was to appoint fish guards and fish monitors for the two areas (Ikaba and Nsundwa). In the near future, the NNF will facilitate an IFC bilateral exchange visit to Impalila or Sikunga Fisheries Reserve to expose the newly established IFCs to the experiences gained by the Impalila and the Sikunga communities, which have been running their own Fisheries Reserves for several years.



Main income sources of people interviewed at Nsundwa (Source: Hay et al. Draft Frame Survey report for Nsundwa).

Fish monitors have been collecting fish capture data from the Impalila and Sikunga fisheries for the last eight years. The fishery targets mainly tilapia species (Cichlidae family). The Threespot Tilapia, Greenhead Tilapia and the Redbreast Tilapia accounted for more than 60% of the catch. The overall catch rates of the local fishers have declined over the monitoring period.



Fish monitors busy with recording the catches from the local fishers near Impalila Island (Photo: C. Hay).

SUSTAINABLE FISHERIES ALONG THE KWANDO RIVER

Fisheries Reserves were proclaimed in the Mayuni and Balyerwa Conservancies and are patrolled by local community fish guards. Training was provided to these fish guards including boat training to equip them with the necessary boating skills. Fish monitors are collecting catch data from their respective areas that are used to assess the state of the fish stocks in the river.





Fish guards at Mayuni and Balyerwa Conservancies being trained in boat handling and basic maintenance.



The NNF staff discussing the establishment of a Fisheries Reserve in the Balyerwa Conservancy (Photo: C. Hay)

SUSTAINABLE FISHERIES ALONG THE OKAVANGO RIVER

Okavango River Basin Water Commission (OKACOM), with funding from GEF and UNDP, is providing support to the Joseph Mbambangandu Conservancy as one of its demonstration projects in Namibia for improving conservation and sustainable use of shared fish resources through a co-management approach. The main aim of the project is to empower local communities to sustainably utilise and conserve local fish resources through improved fisheries management. The project is being implemented by the NNF in close collaboration with the MFMR.

Several areas in the Joseph Mbambangangu Conservancy were demarcated as potential Fisheries Reserves. Necessary supporting documents, including proof of community consultations, Fisheries Constitution and Fisheries Management Plan, were submitted to the Regional MFMR office.

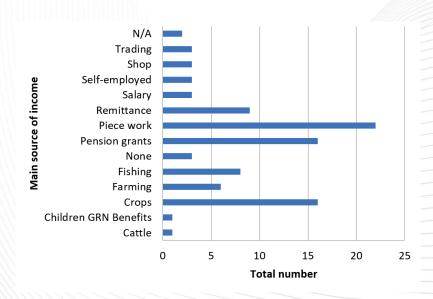
Eight fisheries staff members were recruited for Joseph Mbambangandu with support from the NNF and MFMR. Six of those will be fish guards doing the patrols along the protected areas and two will be fish monitors to monitor catches from the local fishery. The Conservancy Management Committee, fish guards and fish monitors underwent training in their respective fields. The fish guards and fish monitors will be provided with the necessary equipment to execute their respective roles.



Utokota village members writing a selection test for fish guards and fish monitors posts (NNF).

Moreover, a Fisheries Frame Survey was conducted to gain a better understanding of the roles that fish and fishing currently play in this community and to collect data so that the community can sustainably manage their fish resources. 96 participants were interviewed from four different villages. Interviewees have been residing in those villages between 11-40 years. These communities have a high unemployment rate of 84% - only eight of the participants are self-employed and three formally employed. Most people in the communities earn less than N\$ 500 per month.

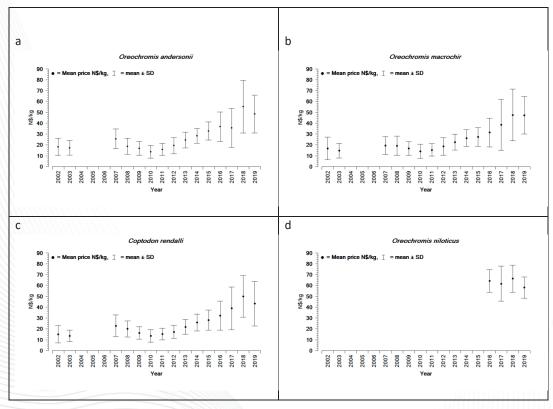
Fishing is not a main source of income although 65% of the respondents said that they fish for their own consumption and sell surpluses or trade the fish for Mahangu and Maize. Income from fishing is between N\$200 and N\$2100 per month. Most fishers (83%) stated that catches have declined. Hook and line is the most commonly used fishing technique for men and fish traps for women.



Main source of income for the interviewed people during the frame survey in Joseph Mbambangandu Conservancy (From: Hay et al. 2020)

INLAND FISHERIES ECONOMICS AND MARKETS

Fish prices at the Katima Mulilo market have increased over time (Figure 7). The main cause appears to be the flooding of Lake Liambezi, when large volumes of Tilapia were exported to neighbouring countries and thus sold at higher prices. The lake dried up in 2016/17, but prices remained high despite the collapse of the export trade. The Nile Tilapia, an alien fish species that does not occur naturally in Namibian waters, appeared in the fish market during 2016 just after Lake Liambezi dried up. Fish vendors (mainly women) buy Nile Tilapia at a fish farm in Livingstone to sell at the Katima Mulilo fish market. A shortage of locally caught Tilapia seems to be the reason for this.



Average annual prices (N\$/kg) for the a) Threespot Tilapia, b) Greenhead Tilapia, c) Redbreast Tilapia and d) Nile Tilapia sold at the Katima Mulilo fish market between 2002 and 2019. These are all fresh fish prices (Source: Draft Katima Mulilo Fish Market Report, NNF).



Redbreast Tilapia and Threespot Tilapia (one on the right) sold at the Katima Mulilo fish market. Dried fish can be seen at the back of the market

SUSTAINABLE AGRICULTURE

Food security in north-eastern Namibia relies to a large extent on crop production, but conventional farming methods lead to reduced soil fertility and declining yields over time. This process drives deforestation, as farmers seek lands with higher soil fertility. To address these challenges, the NNF promotes Conservation Agriculture that focuses on improving soil fertility and increasing agricultural yields. We are also investigating organic certification options with an eye to developing lucrative new markets for farmers that are committed to sustainable farming practices.

CONSERVATION AGRICULTURE IN THE KAVANGO

The USAID Resilient Waters Project supports farmers who are practicing Conservation Agriculture (CA) in Kavango East Region. The specific objective of the project is to improve the ecosystem functioning and ability of communities to adapt to climate change-related impacts through integrated catchment management. The grant has three components, of which CA is one, with the aim of improving climate-smart agricultural and horticultural production for more resilient livelihoods.

This two-year project commenced in December 2019 and runs up until November 2021. It focuses on providing support to 12 Farmers' Clubs with an average of fifty farmers in each Club. To date, 551 farmers were provided support during the 2019 and 2020 seasons. The NNF is working in partnership with Development Aid from People to People (DAPP). DAPP is responsible for field mobilisation and reaching out to farmers through its field-based instructors while the NNF provides technical support to both field instructors and farmers.

Climate change impacts on the variability of rainfall are bound to increase in the future causing livestock losses, reducing crop production and yields, and causing severe water shortages. 2019 was one of the worst rainfall years in Namibia's history with almost all regions of the country receiving significantly less rainfall than average. The dry spell had considerable impacts on agriculture, and the Kavango regions were particularly affected. Over 50% of all farmers did not plant their crops after because the main rainy season did not materialise, and those who did plant experienced devastatingly low yields of 30 kg/ha (average across the region). Most of these farmers are still using conventional farming methods.

The adoption of CA by farmers has enabled them to be food secure for at least three months after harvest and be able to harvest something even during drought seasons. The three main principles of CA are:

- Minimum tillage, to reduce soil disturbance;
- Permanent organic soil cover (crop residues retained on the land and incorporated as part of soil improvement);
- · Diversification of crop species in sequences and/or associations (with inclusion of nitrogen-fixing legume crops).

When these principles are followed together with supporting principles, such as timely weeding and using improved seed, farmers can greatly increase their yields without having to clear new lands.

CONSERVATION AGRICULTURE IN THE ZAMBEZI

The Sustainable Communities Partnership (SCP) project is located in the Mudumu complex in the Zambezi Region, covering six conservancies: Mashi, Sobbe, Kwandu, Balyerwa, Wuparo and Dzoti. The NNF has been promoting Conservation Agriculture (CA) for the past four years in conservancies bordering the Sobbe Wildlife Corridor. Under CA, fields are smaller and more manageable, which reduces the pressure on wildlife corridors and could lead to reduced wildlife damages.

The project started in August 2016 with two field instructors, a technical coordinator, project manager and a consultant. The primary activity in the first year was recruiting 32 farmers including lead farmers in four Conservancies (Mashi, Balyerwa, Wuparo and Dzoti) to practice CA. The conservancy committees facilitated introductions with farming communities in the different areas. From 2017 to 2019, with the help of Peace Corps volunteers, farmers were trained in nutrition, marketing, budgeting and business skills. These lead farmers are therefore equipped to showcase CA to others in their community, thus encouraging broader adoption of CA in these conservancies (Table 1).

Table 1. Increase in the number of famers doing CA each year

No of farmers	Year 1	Year 2	Year 3	Year 4
	32	40	86	210

Crop yields on CA lands are 1.0 tonne/ha, compared to the conventional national average of 0.4 tonne/ha. The farmers have increased their revenue from crops each year since implementing CA, even during the drought of 2019/20 (Table 2).

Table 2. Increase in farmer revenue from crops

	Maize	Vegetable	Cowpea	Millet	Sorghum
2016/17	N\$ 68,330	N\$ 5, 695	N\$ 1, 740	0	0
2017/18	N\$ 166,438	N\$ 5,050	N\$ 8, 169	0	0
2019/20	N\$ 311,010	N\$ 6,585	N\$ 1,310	N\$ 1,438	N\$1000

Other achievements include:

- The NNF published four success stories (three CA and one for the savings club) of farmers who experienced increased yield, generated income from crop sales and saved more money.
- 22 lead farmers were assisted to start a savings club for saving money and granting each other loans to be used for CA activities.
- A private partner firm brought 4.2 tonnes of seed to be sold through local agents by promoting the seeds during local farmers' meetings. Seven of the agents earned N\$25,315 commission for their sales.
- The budgeting and business skills training have helped 11 lead farmers start their own small business to support their families.



Figure 1.1, Farmers continue to benefit from the backyard gardens during the drought season



Figure 1.2, The Farming Instructors demonstrates dry ripping



Figure 1.3, Manure application demonstration after ripping.



Figure 1.4, farmers top dressing maize plants with cattle manure.



Figure 1.5, Farmers harvesting their maize for storage.

ORGANIC KNOWLEDGE HUB

The Namibia Nature Foundation (NNF) and the Namibian Organic Association (NOA) entered a long-term mutual agreement to promote the conservation of biological diversity and agroecosystems as well as the wise use of natural resources, with the framework of sustainable development in Namibia. This collaborative partnership is important for long-term sustainable socio-economic development in Namibia, which depends to a great extent on the sustainable agricultural practices, both now and in the face of climate change.

In early 2020, the NNF and NOA received a grant from GIZ as part of an African continental project to promote organic agriculture. The aim is to develop Knowledge Centres across the continent to share information and train multipliers (trainers as well as trainer-of-trainers) on organic agriculture practices. In Southern Africa, the project has just started, and the participating countries are Namibia, South Africa, Zambia and Malawi. The same project is being implemented in East, North and West Africa. The Sustainability Institute is the anchor organisation for the project in southern Africa.

Focus group meetings were held in Rundu on the 29th and 30th of July 2020 to start to ascertain the type of information and format that could make the Knowledge Hubs more accessible to field operators.

They key outputs for the Knowledge Hubs are:

- Output 1: Validated technical and methodological knowledge for the promotion of organic agriculture, including processing, is prepared for the context of the participating countries and stakeholder groups.
- Output 2: Validated knowledge, strategies and good practices in the field of organic agriculture, adapted to the contexts of the countries participating in the regional knowledge hubs, have been disseminated.
- Output 3: Key actors in the organic agriculture value chains of the participating countries in the four regions are networking in an exemplary manner.

In October 2020, NNF and NOA participated in the Bank Windhoek online series on Climate-Smart Agriculture. Their presentations as part of the "Organic Agriculture, Food and Nutrition Security" session covered topics on the organic market opportunities, producing organic products and certification.

SUSTAINABLE INFRASTRUCTURE

Economic development and human population growth jointly increase the need infrastructure development in Namibia. The energy sector, in particular, is changing rapidly as renewable energy sources are sought to replace fossil fuels. Poorly designed infrastructure can lead to high animal mortalities and costly repairs, while development in biologically sensitive areas imperils rare plants and animals. Our strategic partnership with NamPower considers mitigation measures to reduce the impacts of energy infrastructure on biodiversity and vice versa.

NAMPOWER/NNF STRATEGIC PARTNERSHIP

The NamPower/NNF Strategic Partnership was launched in 2008, with funding from the European Investment Bank. The mission of the Partnership is to address interactions between electricity supply infrastructure and wildlife in Namibia, as these interactions are costly both to the energy industry and to biodiversity conservation. The partnership aims to create an enabling environment for NamPower to realise its objectives on environmentally sustainable electricity transmission/distribution and development.

Two phases of the project have been successfully completed to date:

- · Phase I: Awareness and training on electricity supply and wildlife issues; and
- Phase II: The collection and collation of data on electricity supply and wildlife incidents.

The partnership launched Phase III in January 2019 which will run for three years, building on the first two phases by expanding the scope of the project to keep pace with current power generation alternatives. Data collection will continue and findings consolidated to apply them for further mitigation of impacts associated with power supply.

The partnership facilitated the annual stakeholders' induction of powerline monitoring in January for NamPower to provide clearance for monitoring under powerlines for the central areas. The stakeholders that participated in this one-day induction included Swakop Uranium, Rössing Uranium, Orano Mining Namibia, and Walvis Bay Municipality that also do surveys on powerline sections at the mines. Monitoring surveys on wildlife interactions with powerlines and the effectiveness of mitigation methods (e.g. bird flappers) continue to be conducted and the data entered into the Birds and Powerline Assessment Tool on the Environmental Information Service website.

A small vegetation booklet is currently in the final stages of production that will assist NamPower utility workers and contractors to identify sensitive areas and protected tree species that should not be removed during construction or maintenance. Work is also underway on monitoring and mitigation of powerlines whereby risk assessments are being done on the effectiveness of bird flappers that have been installed on NamPower lines.

Parallel to this and in line with our work on Bush Control and Biomass Utilisation, the NamPower team that is tasked with developing the Biomass Power plant have increasingly engaged with the NNF. We are exploring opportunities under the partnership for further engagement on this issue. More funding for this partnership is currently being sought, as the current funding will end in 2021.





The natural world operates as an interconnected whole, onto which humans have drawn political boundaries. With increasing globalisation, human communities that live on opposite sides of the globe can affect each other through trade and environmental impacts (e.g. overfishing, carbon emissions, and wildlife crime). It would therefore be foolish for any one country to try and manage their natural resources in isolation from the rest of the world. Global problems such as climate change and desertification require global solutions, while local problems may benefit from international cooperation or lessons learned from other countries. It is nonetheless important that international agreements align with national policies as far as possible and that the interests of national citizens are taken into account during multilateral negotiations. Finding the balance between the global good and national concerns thus requires an understanding of how global issues and policies interact with local ecosystems and economies.

THE NNF'S VISION FOR GLOBAL ENVIRONMENTAL ISSUES AND POLICIES

The NNF closely monitors global environmental issues and aligns our work within Namibia accordingly. As members of the IUCN and a trusted partner of the Namibian government, we also help to ensure that our national concerns are fed into global processes. In line with our other key themes, the NNF emphasises the need for sustainable development in conjunction with environmental conservation efforts. We fully support the principles of sustainable development and the sustainable use of resources as enshrined in the Namibian Constitution, Namibia's Green Plan, the Harambee Prosperity Plan (HPP) and UN Sustainable Development Goals (SDGs).

OUR WORK ON GLOBAL ENVIRONMENTAL ISSUES AND POLICIES - CONNECTING NAMIBIA TO THE WORLD

Our long track record and close association with the Namibian government's conservation efforts places the NNF in an ideal position to assist our government as they engage with the international community. Our work focuses especially on Namibia's relation to Multilateral Environmental Agreements that are formed to address specific environmental concerns e.g. biodiversity loss, desertification, climate change, and wildlife trade. The NNF is further interested in helping rural Namibian communities to engage with the issues that most affect their lives and livelihoods.

The following subthemes are in line with these SDGs (Include images SDG 13, 14, 15 and, 17)

SUPPORTING MULTILATERAL ENVIRONMENTAL AGREEMENTS

Namibia is a signatory to several multilateral environmental agreements (MEAs) that guide international cooperation on issues of global significance - e.g. biodiversity conservation, desertification, climate change, and the international trade in plants and animals. The NNF supports the Namibian government with meeting its obligations to the MEAs they are party to, while also monitoring other relevant MEAs that may affect Namibia, even though the country is not a signatory (e.g. the Convention on Migratory Species). As a member of the IUCN, we also engage directly with international wildlife conservation matters.

CITES 18TH CONFERENCE OF THE PARTIES

The Convention on International Trade in Endangered Species of Fauna and Flora (CITES) held its 18th Conference of the Parties (CoP18) in Geneva in 2019. Namibia and other members of the Southern African Development Community (SADC) that want to use wildlife sustainably for the benefit of their citizens face strong opposition to its proposals within CITES. Many countries and observer organisations that try to influence the voting are against all forms of wildlife use and therefore push for tightening restrictions on international trade.

Namibia's CBNRM programme is based on the rights of local communities to use and trade their resources, which often includes international markets (e.g. foreign hunting clients). The Namibian delegation to the CITES CoP thus included several community representatives who were provided training and support to engage with other delegates at CITES on topics that are relevant to their communities.

The NNF supported the MEFT and community representatives that attended CoP18 both before and during the conference with a media team that was tasked with telling the CITES story from a Namibian perspective. Our team documented the experiences of four women from communal conservancies as they travelled from their homes to Geneva and shared their thoughts before and during the conference. The team also filmed the Minister of Environment, Forestry and Tourism giving his thoughts on key outcomes of CoP18 and how they affect Namibia. Short videos captured during the conference were shared via our Love Namibia, Love Nature social media platform and the stories of the four women will be told in a documentary.

After CoP18, the NNF Wildlife Utilisation Coordinator attended the African Wildlife Consultative Forum in Zimbabwe and served as a panellist for discussions on community perceptions of hunting. These deliberations considered how to better engage communities in the CITES process and on other international platforms to voice their concerns and perceptions of the hunting industry and its role in community conservation.

UNITIED NATIONS CONVENTION TO COMBAT DESERTIFICATION (UNCCD)

Namibia is highly vulnerable to the impacts of desertification on natural ecosystems and rural livelihoods. The NNF is therefore actively involved in the UNCCD and are engaged in a civil society approach to combatting desertification that is driven by the African Union. At the invitation of the MEFT, the NNF attended the UNCCD CoP13. The critical issues highlighted at the CoP were restoration, land rights and the role of women in combatting land degradation. This conference provided an opportunity for the NNF to establish new relationships and networks with other organisations working on the issue of desertification.

INTERNATIONAL UNION FOR THE CONSERVATION OF NATURE (IUCN)

As a member of the IUCN, the NNF was actively involved in the preparations for the 2020 World Conservation Congress that was postponed to 2021 due to COVID-19. We attended the IUCN Regional Conservation Forum in Johannesburg in July 2019. In our engagement with these processes, the NNF actively supports motions aimed at strengthening community conservation and contributes to the selection of new IUCN Councillors for the East and Southern Africa Regions.

IDENTIFYING SYNERGIES AMONG THE RIO CONVENTIONS

The NNF was tasked by the World Conservation Monitoring Centre (WCMC) to assess synergies between the three Rio Conventions – the Convention on Biological Diversity (CBD), the UNCCD, and the United Nations Framework Convention on Climate Change (UNFCCC). We conducted interviews with stakeholders, co-facilitated a workshop with stakeholders, and finalised a roadmap for the implementation of a synergy strategy. This also included concept notes on three interventions: climate-smart agriculture, sustainable forest management, and bush-based biomass production.

FINANCIAL REPORTS

The Namibia Nature Foundation's Annual Financial Statements are prepared for our core operating finances and against our Institutional (core) budget. This does not directly include the individual projects which we implement and or manage, many of which are audited separately in accordance with individual donor rules and stipulations.

SUMMARISED FINANCIAL STATEMENTS

Summarised Statement of Fir		
	2019	2020
Assets		
Property, Plant, Equipment	21 916 725	21 876 732
Current Assets	2 157 858	4 477 955
Total Assets	N\$ 26 610 643	N\$27 533 854
Funds & Liabilities		
Funds	25 098 028	24 879 229
Current Liabilities	1 512 615	2 654 625
Total Funds & Liabilities	N\$26 610 643	N\$27 533 854

Summarised Statement of Comprehe	ensive Income for end of Fe	bruary
	2019	2020
Operating Income	15 240 861	16 920 542
Operating Expenses	(14 379 455)	(17 084 806)
(Deficit)/Surplus	828 473	(218 799)
Revaluation of Property		
Balance as of end of February	19 798 336	19 664 526
		HHHHHHHHH

Total Fund
\$ 21 904 829
2 364 726
\$ 24 269 555
828 473
N\$19 798 366
(218 779)
N\$24 879 229

CORPORATE SPONSORSHIP

Summarised Statement of Cash Flows for end of February		
	2019	2020
Cash Flows from Operating Activities	(1 086 653)	1 143 704
Cash Flows from Investing activities	11 262	(270 240)
Net movement in cash and cash equivalents	1 154 966	(1 356 893)
Cash and Cash equivalents at beginning of year	1 381 094	2 536 060
Cash and Cash equivalents at end of year	N\$1 179 167	N\$2 536 060

BASIS OF PRESENTATION OF FINANCIAL STATEMENTS

The summarised financial statements for the years ended 28 February 2019 and 29 February 2020 are the responsibility of the Trustees and have been prepared in accordance with the framework concepts as well as the measurement and recognition requirements of the Namibian Statement of Generally Accepted Accounting practice-NAC 001: Financial Reporting for Small and Medium Sized Entities. They do not include all the information required for full annual financial statements and should be read in the conjunction with the annual financial statements of the Namibia Nature Foundation as at and for the years ended 28 February 2020 and 29 February 2020.

The Foundation's external auditors, SGA, have issued an unmodified audit opinion on the annual financial statements for the years ended 28 February 2019 and 29 February 2020. The summarised financial statements have been derived from and are consistent in all material respects with the audited financial statements but are themselves not audited. A copy of the audit report and a full set of the audited annual financial statements are available on request (info@nnf.org.na) or on our website at www.nnf.org.na.

SIGNIFICANT ACCOUNTING POLICIES

The foundation's accounting policies comply with NAC001 and are consistent with those of previous reporting period.

ACRONYMS

List

ATF Albatross Task Force

BCBU Bush Control and Biomass Utilisation

BCC Benguela Current Commission

CITES Convention on Trade in Endangered Species

CMC Conservancy Management Committee

CoP Conference of the Parties

COVID-19 Coronavirus disease caused by SARS-Cov-2

CRRRF Conservation Relief, Recovery and Resilience Facility

CSF Conservation Strategy Fund

CSI Corporate Social Investment

DAPP Development Aid from People to People

CA Conservation Agriculture

CBD Convention on Biological Diversity

CBNRM Community Based Natural Resource Management

EU European Union

GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit (formerly GTZ)

HWC Human-Wildlife Conflict

IDWG Institutional Development Working Group (NACSO)

IFC Inland Fisheries Committee

INL Bureau of International Narcotics and Law Enforcement (USA State Department)

IRDNC Integrated Rural Development and Nature Conservation

IUCN International Union for Conservation of Nature

KAZA TFCA Kavango Zambezi Transfrontier Conservation Area

KfW Kreditanstalt für Wiederaufbau (German Development Bank)

LAC Legal Assistance Centre

MoU Memorandum of Understanding

MAWLR Ministry of Agriculture, Water and Land Reform (formerly Agriculture, Water and Forestry)

MEFT Ministry of Environment, Forestry and Tourism (formerly Environment and Tourism)

MFMR Ministry of Fisheries and Marine Resources

MURD Ministry of Urban and Rural Development

NACSO Namibian Association of Community Based Natural Resource Management (CBNRM) Support Organisations

NCE Namibian Chamber of the Environment

NEWS Namibian Environment and Wildlife Society

NDT Namibia Development Trust

NGO Non-Governmental Organisation

NIMPA Namibian Islands Marine Protected Area

NNF Namibia Nature Foundation

NOA Namibian Organic Association

NRM Natural Resources Management

ODI Overseas Development Institute

OKACOM Okavango River Basin Water Commission

PRA Participatory Rural Appraisal

RAISON Research and Information Services of Namibia

SADC Southern African Development Community

SAERI South Atlantic Environmental Research Institute

SDG Sustainable Development Goal

SRT Save the Rhino Trust

TNC The Nature Conservancy

UNAM University of Namibia

UN United Nations

UNCCD United Nations Convention to Combat Desertification

UNDP United Nations Development Programme

UNFCC United Nations Framework Convention on Climate Change

USAID United States Agency for International Development

WWF World Wide Fund for Nature

ZAMCOM Zambezi Watercourse Commission

NOTES

	•
<u>\\\\\\\</u>	
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
<u> </u>	
A/A/WWW/W/////////////////////////////	
VIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	
	. 17
	Tun.
	Minn.
	Militaria.
	Marana Tanananan

NOTES

•	•
	////////
	/////////
	/////////
	//////////////////////////////////////
	[777] [177]
<u>. </u>	
 11111 ₁₁₁₁	
1444 1444	
1//// _{1/17} . 1////////////////////////////////////	

ORGANISATION

Information

Administration

Namibia Nature Foundation 76&78 Frans Indongo Road, Windhoek West Tell: +264 61 248 354 PO Box 245 Windhoek Namibia

Registered Address

Namibia Nature Foundation Reg no: 00504971-011 76&78 Frans Indongo Road, Windhoek West Tell: +264 61 248 354 PO Box 245 Windhoek Namibia

Auditors

SGA 24 Orban Str, Klein Windhoek, Windhoek, Namibia P O Box 30 Windhoek Namibia





NNF PHYSICAL ADDRESS:

76&78 Frans Indongo Road, Windhoek West Tell: +264 61 248 354 PO Box 245 Windhoek, Namibia www.nnf.org.na