

# **Scoping report on the potential finance mechanisms and blended finance options for the Namibian Islands Marine Protected Area**



**Authors:** Usman Khan (Namibia Nature Foundation), Kaija Barisa (Blue Marine Foundation), Gabrielle Thomas (Namibia Nature Foundation)

**Suggested citation:** Namibia Nature Foundation. 2024. Scoping report on the potential finance mechanisms and blended finance options for the Namibian Islands Marine Protected Area. Namibia Nature Foundation. Windhoek, Namibia.



# Table of Contents

<b>Acronyms</b>	5
<b>1. Introduction</b>	7
1.1. Context	7
1.1.1. Namibian Islands Marine Protected Area	7
1.1.2. Kunming-Montreal Global Biodiversity Framework	8
1.1.3. Sustainable financing of MPAs	9
1.2 Objectives of the scoping report	10
<b>2. Assessment of MPA financing needs at local level</b>	11
<b>3. Resource mobilisation at the national level for MPAs</b>	13
3.1. Domestic government budget	13
3.1.1 Marine Resources Fund	14
3.2 Official Development Assistance (ODA)	15
3.3 Project Finance for Permanence	17
3.4 Marine Improvement District	19
3.5 Crowdfunding	21
3.6 Debt instruments	23
3.6.1 Bonds	23
3.6.2 Debt-for-nature swaps	24
3.7 Nature markets	26
3.7.1 Carbon	27
3.7.2 Biodiversity	30
3.7.3 Nutrient	33
<b>Recommendations</b>	34
<b>References</b>	36

## Tables

Table 1 Preliminary identified costs for managing the Namibian Islands MPA .....	11
Table 2 Summary Table – Overseas Development Assistance.....	17
Table 3 Summary Table – Project finance for Permanence.....	19
Table 4 Summary Table – Business Improvement District .....	21
Table 5 Summary Table – Crowdfunding.....	22
Table 6 Summary Table – Bonds.....	23
Table 7 Summary Table – Debt-for-Nature Swaps.....	26
Table 8 Summary Table – Carbon Markets.....	29
Table 9 Summary Table – Biodiversity Credits .....	32
Table 10 Summary Table – Nutrient Markets .....	34

## Figures

Figure 1 Public expenditure data for Vote 22: Fisheries and Marine Resources (Source: MFPE) .....	13
Figure 2 Budget outturns associated with Vote 22: Fisheries and Marine Resources (Source: MFPE) .....	14
Figure 3 Accommodation occupancy rates in Lüderitz (Source: NTB) .....	20
Figure 4 Tripartite swap among an NGO, commercial creditor and government (Adapted from Chamon et al. (2022)).....	25
Figure 5 Government debt as a % of GDP (Source: BoN) .....	25
Figure 6 Comparing actual kelp distribution within NIMPA versus modelled data (Source: Elwen and Ingledew (2023)) .....	29

## Acronyms

BCC	Benguela Current Convention
BCLME	Benguela Current Large Marine Ecosystem
BMUV	Federal Ministry for Environment, Nature Conservation and Nuclear Safety
CBD	Convention on Biological Diversity
CO <sub>2</sub> e	Carbon dioxide equivalent
COSDEC	Community Skills Development Centre
DNS	Debt for Nature Swap
EBSA	Ecologically of Biologically Significant Area
EIF	Environmental Investment Fund of Namibia
EU	European Union
FAO	Food and Agriculture Organisation
GBF	Global Biodiversity Framework
GCF	Green Climate Fund
GEF	Global Environment Facility
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GRN	Government of the Republic of Namibia
ICVCM	Integrity Council of the Voluntary Carbon Market
KPI	Key performance indicator
MDB	Multilateral Development Bank
MET	Ministry of Environment and Tourism
M&E	Monitoring and Evaluation
MFPE	Ministry of Finance Public Enterprises
MFMR	Ministry of Fisheries and Marine Resources
MPA	Marine Protected Area
MRV	Monitoring, Reporting and Verification
MSP	Marine Spatial Planning
NAMCOB	Namibian Foundation for the Conservation of Seabirds
NIMPA	Namibian Islands' Marine Protected Area
NNF	Namibia Nature Foundation
NTB	Namibia Tourism Board
ODA	Official Development Assistance
SAERI	South Atlantic Environmental Research Institute
SANCCOB	Southern African Foundation for the Conservation of Coastal Birds
SBTi	Science Based Targets initiative
TNC	The Nature Conservancy
TNFD	Taskforce on Nature-related Financial Disclosures
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
VCM	Voluntary Carbon Market



VCMI

Voluntary Carbon Markets Integrity Initiative

# 1. Introduction

## 1.1. Context

Marine protected areas (MPAs) have been designed as a strategic tool to maintain essential ecological processes and life support systems; preserve genetic diversity; and ensure the sustainable utilisation of species and ecosystems. Effectively managing MPAs require dedicated resources. Yet, it is the case that many sites remain critically underfunded and as such struggle to meet management targets.

Long term support, moving beyond funding horizons of donors, is needed. Establishing sustainable financing for MPAs is a prerequisite to enable to attain effective management.

### 1.1.1. Namibian Islands Marine Protected Area

The waters off the coast of Namibia are among the most productive in the world. The continental shelf is part of the Benguela Current Upwelling System. Winds and currents in the region drive cold nutrient-rich waters up from the deep to the surface, which form the basis of the entire marine ecosystem along the southern west coastline of Africa. The Benguela Current flows along the whole Namibian coastline and has three upwelling cells. It is one of the world's most productive marine regions, with unique biological diversity that supports Namibian livelihoods.

The Government of the Republic of Namibia (GRN) has in the past demonstrated political will to improve ocean governance and marine protection. In 2009, it proclaimed its first MPA: the Namibian Island' Marine Protected Area (NIMPA), covering 1.7 percent of Namibia's waters. NIMPA is a large coastal no-take area for industrial fishing (trawling and purse seining) in southern Namibia, with one adjacent human settlement: the town of Lüderitz, with a population of 16,000. NIMPA covers an area of 9,500 km<sup>2</sup>, making it the second largest MPA in Africa.

However, sustainable resource use is threatened by overfishing, pollution, mining, climate change, ineffective management and a society disconnected from marine values. Through support from the Blue Action Fund<sup>1</sup>, Namibia Nature Foundation (NNF) and its consortium partners (Blue Marine Foundation, GRID-Arendal, South Atlantic Environmental Research Institute (SAERI), Southern African Foundation for the Conservation of Coastal Birds (SANCCOB), Community Skills Development Centre (COSDEC) Benguela and Namibian Foundation for the Conservation of

---

<sup>1</sup>Blue Action Fund (2023) Grant Fact Sheet, Strengthening and expanding Namibia's MPA network (NIMPA+). Retrieved from: [https://www.blueactionfund.org/wp-content/uploads/2023/06/Grant-Fact-Sheet\\_NNF\\_Namibia\\_A4.pdf](https://www.blueactionfund.org/wp-content/uploads/2023/06/Grant-Fact-Sheet_NNF_Namibia_A4.pdf)

Seabirds (NAMCOB)) under the leadership of the Ministry of Fisheries and Marine Resources (MFMR) will develop and implement a management framework for NIMPA. A new management plan will require a financial strategy that accurately plans the effective financing of activities that will contribute to the achievement of environmental and socio-economic objectives of the MPA. Part of this exercise will involve assessing funding sources available for the MPA.

### 1.1.2. Kunming-Montreal Global Biodiversity Framework

The UN Biodiversity Conference (COP15) in December 2022 saw the adoption of a new set of international goals for biodiversity, the Kunming-Montreal Global Biodiversity Framework (GBF). Nations agreed to four goals and 23 targets to be achieved by 2030. Target 3, (30x30) is particularly relevant, and includes a target to protect at least 30% of land and ocean globally by 2030 ("30x30 target"). MPAs will play a key role in meeting this target.

Financing remains critical in achieving 30x30. At a global level, and based on biodiversity conservation needs by 2030, the financing gap is estimated to be in the region of US\$700 billion annually. Biodiversity finance is referenced multiple times in the GBF, specifically:

- Target 14: *Integrate Biodiversity in Decision-Making at Every Level*, i.e., integrating biodiversity and its values into policies and strategies and aligning financial flows with the goals and targets of the GBF;
- Target 15: *Businesses Assess, Disclose and Reduce Biodiversity-Related Risks and Negative Impacts*, i.e., a focus on financial institutions and businesses reducing negative impacts and increasing positive impacts on biodiversity, through legislations, policy and administrative measures;
- Target 16: *Enable Sustainable Consumption Choices To Reduce Waste and Overconsumption*, i.e., dealing with empowering consumers to make better decisions, e.g., through better supply chain transparency and certification schemes;
- Target 18: *Reduce Harmful Incentives by at Least \$500 Billion per Year, and Scale Up Positive Incentives for Biodiversity*, i.e., a call for economic and legal tools to incentivise nature-positive choice, and to eliminate, phase out or reform incentives (including subsidies) harmful to biodiversity to ensure biodiversity is not harmed; and
- Target 19: *Mobilise \$200 Billion per Year for Biodiversity From all Sources, Including \$30 Billion Through International Finance*, i.e., a focus on increasing resources.



Target 19 outlines a few distinct elements in mobilising this US\$200 billion annually. There is emphasis on resource mobilisation from all sources; official development assistance reaching US\$20 billion by 2025, rising to US\$30 billion by 2030; domestic resource mobilisation increasing significantly; leveraging private sector finance, through for e.g., blended finance mechanisms, impact funds, etc.; and stimulating innovative finance schemes such as payment for ecosystem services, green bonds, biodiversity offsets and credits etc. as a means of mobilising resources for implementation.

### 1.1.3. Sustainable financing of MPAs

Currently, in practice, the majority of MPAs rely on one or two sources of funding, most often dominated by government budget allocation<sup>2</sup>. However, conservation spending in national budgets competes with other pressing needs, which, in Namibia, include education, social protection, food security, healthcare and infrastructure, often resulting in severe underfunding for conservation<sup>3</sup>. MPA management must hence move away from public funding as a sole revenue stream and explore alternative modes of financing, through bringing in private sector investments or blended finance instruments as reflected in Target 19 of the GBF.

Alongside government funding, philanthropy has been able to support some marine conservation projects and has allowed to the implementation and management of various MPAs. However, the oceans have received less than 1% of all philanthropic funding since 2009, and Life Under Water (Sustainable Development Goal (SDG) 14) remains the least funded SDG. Ocean conservation projects in Africa have received over \$220 million over the last 12 years, however only 5% of that has gone to programmes in Southern Africa<sup>4</sup>. Though it can be an effective tool, this funding rarely guarantees funding in perpetuity and can leave MPAs unable to implement effective management, hence not constituting a long-term financing mechanism.

Sustainable financing for an MPA can be defined as “a portfolio of diverse and stable financial mechanisms that contribute to the conservation of a protected area,

---

<sup>2</sup>Emerton, L., Bishop, J., & Thomas, L. (2006). *Sustainable Financing of Protected Areas: A global review of challenges and options*. Gland: IUCN; UNEP. (2022). *MPA Finance – Status and Future Directions*. Nairobi: UNEP.

<sup>3</sup> IUCN ESARO. (2020). *Closing the Gap. The financing and resourcing of protected and conserved areas in Eastern and Southern Africa*. Nairobi : IUCN ESARO, BIOPAMA. Retrieved from: <https://portals.iucn.org/library/sites/library/files/documents/2020-013-En.pdf>

<sup>4</sup>Lewis, F., Saliman, A., Peterson, E. “Funding Trends 2023: Tracking the State of Global Ocean Funding.” Our Shared Seas. 2023.

covering the operational and other costs with a combined option of short and long-term revenues”<sup>5</sup>. Sustainable financing hence implies the use of a combination of mechanisms and sources, aiming to support managers meet the ongoing and evolving needs of MPAs beyond set up<sup>6</sup>. Sustainable financing streams are crucially needed, as the cost of meeting the 30% global target of protected ocean area is estimated to require USD 228 billion from 2015 to 2050, and while it has not been computed globally, the financing gap for the sustainable management of MPAs is likely very high, as cashflows and investments in conservation are significantly lower than current needs. In the Mediterranean only, the financing gap was estimated at around 776.4 million USD/year<sup>7</sup>. Both marine and terrestrial conservation in Southern Africa are considered severely underfunded, hindering appropriate management<sup>8</sup>. Hence, to ensure that financing needs are continuously met, additional financing streams must be explored.

## 1.2 Objectives of the scoping report

NNF, in partnership with Blue Marine Foundation, have conducted an initial scoping exercise for sustainable financing options for the NIMPA. The purpose of this report is to inform the reader on the status of financing within the MPA and identify future, long-term financing options. The specific objectives include the following:

1. Outline current understanding of financing flows, determining costs requirements and financing capacity needs of the NIMPA;
2. Review traditional and innovative financing mechanisms and assess applicability in Namibian context; and
3. Recommend options and opportunities for sustainable financing mechanisms within the NIMPA.

---

<sup>5</sup>Gallegos, V. L., Vaahtera, A., & Wolfs, E. (2005). Sustainable Financing for Marine Protected Areas: Lessons from Indonesian MPAs, Case Studies Komodo and Ujung Kulon National Parks. *Vrije Universiteit Amsterdam*.

<sup>6</sup>Emerton et al. (2006).

<sup>7</sup>Sumaila, U. R., Walsh, M., & Hoareau, K. e. (2021). Financing a Sustainable Ocean Economy. *Nature Communications*, 12. doi: <https://doi.org/10.1038/s41467-021-23168-y>

<sup>8</sup>IUCN ESARO. (2020). Closing the Gap. The financing and resourcing of protected and conserved areas in Eastern and Southern Africa. Nairobi : IUCN ESARO, BIOPAMA. Retrieved from: <https://portals.iucn.org/library/sites/library/files/documents/2020-013-En.pdf>

## 2. Assessment of MPA financing needs at local level

One reason for the underfunding as described earlier derives directly from a lack of reliable information regarding the costs of MPA management. Generally, costs can be divided into recurrent and investment, encompassing items such as human resources, maintenance, utilities and equipment for the former; and material resources, monitoring and education for the latter.

To illustrate these costs within the NIMPA context, the report uses the MedPLAN tool, developed by the network of MPA managers in the Mediterranean (MedPAN). This is a cost and revenue assessment tool outlining the various management costs to be considered when establishing MPA financing needs. This tool has broad similarities with some of the costing tools under BIOFIN previously used for biodiversity management. Engagement with MFMR representatives from the Lüderitz office took place in October 2023 to make a first attempt at identifying specific costs associated with the NIMPA. These are outlined in Table 1.

Table 1 Preliminary identified costs for managing the Namibian Islands MPA

Category	Sub-category	Type of expenditure	Namibian Islands MPA specific
Recurrent costs	Human resources	Permanent staff	Chief Fisheries Inspector
			Fisheries Inspector(s)
			Senior Fisheries Biologist
			Fisheries Research Technician
		Short-term and seasonal staff	TBD
	Maintenance	Building maintenance	Infrastructure on three islands
		Vehicle maintenance and fuel	Vessel maintenance and fuel
			Ski Boat maintenance and fuel
			Vehicle maintenance and fuel
	Local utilities	Office maintenance	TBD
	Basic equipment	Clothes	TBD

Investment costs	Material resources	New equipment purchase	4x4 vehicle(s)
			Radio equipment for vehicle(s)
			Short-range drone(s)
			Ski Boat
		Low infrastructures purchase	TBD
	Monitoring	Research	Ski Boat training
	Education	Outreach programmes	Short-range drone training
	Remediation of the quality of ecosystems and compensatory actions	Active restoration	TBD

The absence of an official management plan, validated by MFMR, makes it difficult ensure costs of management are comprehensive. Nonetheless, there is a clear vision of the main conservation objectives of the MPA and so a temporary roadmap to achieve them can be outlined. This would be the first step in developing a financing strategy for the MPA.

### 3. Resource mobilisation at the national level for MPAs

#### 3.1. Domestic government budget

Government budgets typically constitute the largest traditional source of funding for conservation, and this is likely the case within the NIMPA context. The total tabled global budget for the 2024/25 financial year amounts to N\$84.1 billion, which comprises 11 percent and 89 percent for development and operational budget respectively. Vote 22, Fisheries and Marine Resources, speaks to government support towards sustainably managing living aquatic resources and promoting the aquaculture sector. Vote 22 typically comprises less than 0.5 percent of the total allocated budget. In comparison, fishing is estimated to contribute around 3 percent to GDP<sup>9</sup>, and is hence a key sector for the Namibian economy.

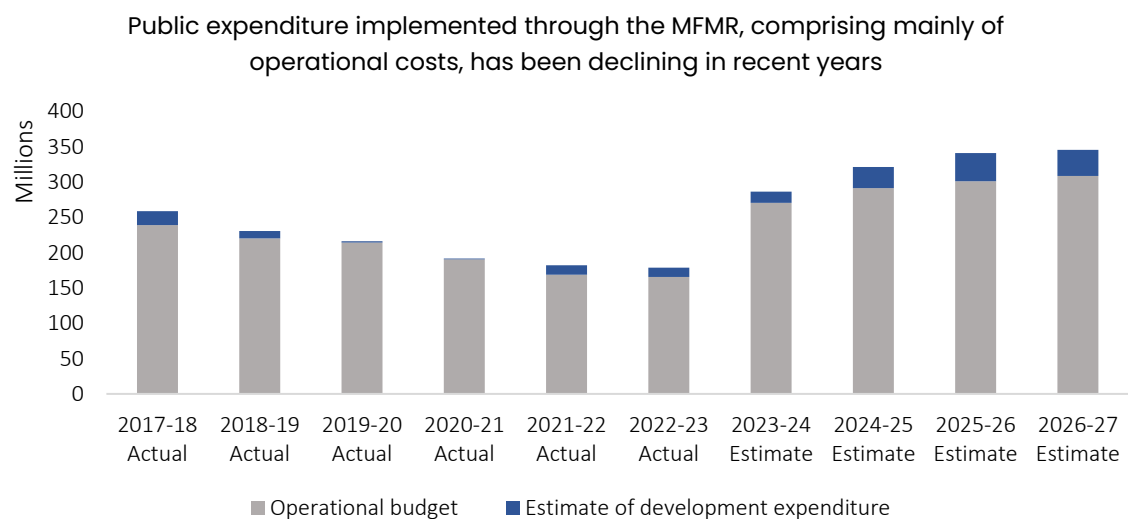


Figure 1 Public expenditure data for Vote 22: Fisheries and Marine Resources  
(Source: MFPE)

Figure 1 presents data on public expenditure by the Ministry of Fisheries and Marine Resources, separated by operational (recurrent) and development spending. On average, development expenditure comprises only 5 percent of the budget for MFMR. There has also been a gradual decline in total expenditure in the sector. In 2017/18, this figure was in the region of N\$240 million. That figure is now N\$165 million

<sup>9</sup> International Trade Administration. (2024). *Commercial Fishing*. Retrieved from: <https://www.trade.gov/country-commercial-guides/namibia-commercial-fishing#:~:text=Fishing%20is%20one%20of%20Namibia's,in%20sustainably%20managing%20its%20fisheries>.

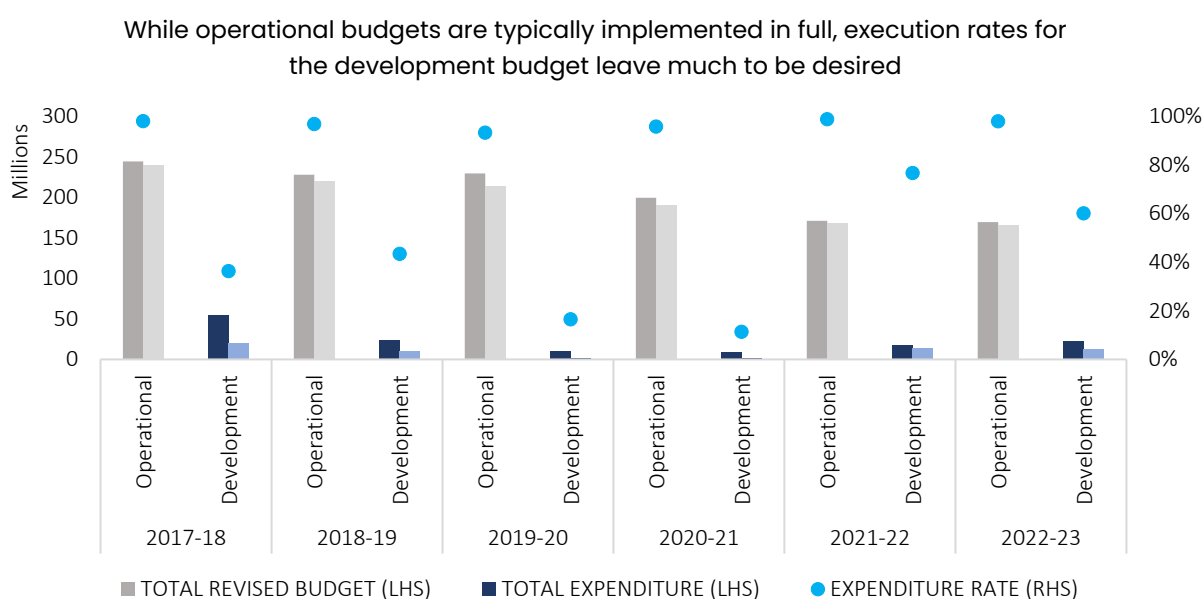


Figure 2 Budget outturns associated with Vote 22: Fisheries and Marine Resources (Source: MFPE)

in the most recent financial year (2022/23), reflecting a 30 percent decrease in nominal expenditure, and hence an even larger decrease in real terms.

How well the budget is implemented can also be tracked. Figure 2 highlights recurrent and development expenditures, by the amount budgeted for and amount spent. It is clear to see that recurrent budgets are typically implemented in full; development expenditures, on the other hand, have only exceeded 50 percent execution in the last two years. There are a wide variety of reasons why budget execution has not gone to plan; engagement with the MFMR will be crucial in understanding impediments and whether there is any immediate support that can be provided to strengthen expenditure rates.

Further, variability in the budget year-on-year and other competing priorities (e.g., infrastructure, healthcare, education and food security) means that conservation is deprioritised, and so government support cannot be wholly relied on.

### 3.1.1 Marine Resources Fund

As per the Marine Resources Act 27 of 2000, the Minister may impose levies in respect of harvesting any marine resource, to be paid into the Marine Resources Fund. Resources mobilised through this procedure can be used to:

- Defray the expenses of research, development, training and education relating to marine resources; and

- Arrange for the undertaking of research, development, training and education relating to marine resources by any competent institution of the State or any person or body, or grant financial assistance in connection therewith on the conditions determined by the Minister with the approval of the Minister responsible for finance.

If the Fund's current spending on marine conservation per se is not publicly available, its mandate is directly in line with the financing needs of NIMPA, and so close collaboration with the Ministry could take place to explore where revenues can be increased to support MPA management costs. With that said, the most recent Fund audit report, published in late 2023 and covering the financial statements of the Fund for the financial years ending 31 March 2019, 2020 and 2021 reveals an adverse audit opinion. Strengthening financial management should be a priority, and once this is addressed, government should look to using this as a mechanism whereby resources are mobilised and earmarked for MPA management.

### 3.2 Official Development Assistance (ODA)

ODA has provided support for MPAs, and more broadly the ocean economy around the world. According to the most recent figures available (2013–2018), ODA targeting ocean-based industries and ocean protection is estimated to make up 1.6 percent of total ODA, averaging at US\$2.9 billion annually. If support to the ocean economy has grown substantially more than other ODA sectors, it is still considered largely under-funded with regards to other sustainable development areas, and constitutes a small percentage of total ODA, even for coastal and island countries<sup>10</sup>. Only a small percentage of marine ODA is dedicated to support MPAs. However, ODA in related industries could indirectly benefit NIMPA. Only 11% of the entire ODA for the blue economy is dedicated to marine protection, representing a support of US\$312 million a year, according to data from 2013–2018, a much smaller portion than support provided to maritime transport for instance. Of this amount, only 14 percent, or US\$44 million were directly dedicated to establishing and managing MPAs. Marine protection support was provided through developing strategies, financing capacity building initiatives or specific one-off projects. ODA does not only provide direct monetary and capacity support to MPAs but can also help the creation of an enabling environment for private investments, through for instance reducing investment risks by providing collateral options. ODA also supports sustainable and traceable seafood projects, as well as sustainable tourism initiatives, which can link

---

<sup>10</sup> OECD. (2020). *Sustainable Ocean for All: Harnessing the Benefits of Sustainable Ocean Economies for Developing Countries, The Development Dimension*. Paris: OECD Publishing. doi:<https://doi.org/10.1787/bede6513-en>.



to activities within NIMPA<sup>11</sup>. Therefore, ODA in tourism or fisheries could also be viewed as indirect financing mechanisms for MPAs and could constitute an additional financing source for NIMPA.

The largest providers of ODA in the marine sector are Japan, EU institutions and the International Development Association. Multi-donor funds have also been set up, such as PROBLUE, hosted by the World Bank. Through PROBLUE or standalone engagements, the World Bank has supported the creation and management of numerous MPAs – 40 in 2022<sup>12</sup>. No specific support through PROBLUE has been given or is planned for Namibia at present but the potential to submit applications for the NIMPA could be explored.

Several ODA-funded projects have been implemented in the marine sector in Namibia, focusing on improving governance. In Namibia, total ODA was estimated at N\$1.8 billion in the 2021/2022 fiscal year, or around US\$95 million. 16.4 percent of funds were dedicated to environmental sustainability. However, no values are available on funds dedicated specifically to ocean protection<sup>13</sup>. Several initiatives financed by ODA have supported ocean governance strengthening, and hence management capacities of MPAs within the country. Projects financed by ODA mainly focused on improving the management around the Benguela Current Large Marine Ecosystem (BCLME), through strengthening the Benguela Current Convention (BCC) and member countries' institutions. The Global Environment Facility (GEF) has been a major funder in Namibia, supporting ocean governance assessments and workplans to improve spatial planning, strengthening the institutional framework surrounding marine management, as well as fostering private sector investment in the region. Activities have extended to building resilience and reducing vulnerability to climate change of the Benguela Current marine fisheries system. Lastly, the German Government, through BMUV, has supported ecosystem-based Marine Spatial Planning (MSP) in the BCC countries. Implemented through the GIZ, this project aimed at supporting these countries in designing successful and inclusive Marine Spatial Plans and supporting governance frameworks surrounding Ecologically or Biologically Significant Areas (EBSAs). Going forward, it is anticipated that the funding sources that have been utilised previously will sought to be used. There appears to be some diversification as it relates to climate funds, with a possible project in the pipeline to the Green Climate Fund (GCF).

---

<sup>11</sup> OECD (2020).

<sup>12</sup> PROBLUE. (2023). *Healthy Ocean – Healthy Economies – Healthy Communities 2023 Annual Report*. Washington DC: World Bank Group

<sup>13</sup> National Planning Commission. (2023). *Official Development Assistance Report for 2020/21 and 2021/22*. Windhoek. Retrieved from <https://www.npc.gov.na/wp-content/uploads/2023/05/NPC-ODA-Report.pdf>



Table 2 Summary Table – Overseas Development Assistance

<b>Feasibility</b>	<ul style="list-style-type: none"> <li>• Depends on commitments from funders to focus on MPA financing</li> <li>• Likely requires significant co-financing commitments from the Namibian government and other partners</li> </ul>
<b>Socio-economic impacts</b>	<ul style="list-style-type: none"> <li>• Capacity-building measures which could have socio-economic impacts</li> <li>• Disbursement can be accompanied by socio-economic requirements</li> </ul>
<b>Track record</b>	<ul style="list-style-type: none"> <li>• <a href="#">NACOMA, GEF/World Bank/MET/MRLGH</a>: 2005 – 2013; US\$4.9 million grant, US\$23.8 million co-financing</li> <li>• <a href="#">MARISMA, GIZ/BCC</a>: 2014 – 2023; US\$4.7 million grant, US\$19.2 million co-financing</li> <li>• <a href="#">BCLME III, GEF/UNDP/BCC</a>: 2016 – 2023; US\$10.9 million grant, US\$TBD million co-financing</li> <li>• <a href="#">GEF/FAO/BCC</a>: 2016 – 2023; US\$10.9 million grant, US\$TBD million co-financing</li> <li>• <a href="#">NIMPA+, Blue Action Fund/NNF</a> 2023 – 2028; €3.6 million grant, €3.4 million co-financing</li> </ul>
<b>Robustness of model</b>	<ul style="list-style-type: none"> <li>• Relies on Namibia's eligibility for ODA funding</li> <li>• Co-financing is essential consideration in securing projects</li> </ul>
<b>Examples</b>	<ul style="list-style-type: none"> <li>• GCF/EIF/MFMR <a href="#">concept note</a> submitted</li> <li>• BCLME IV, GEF/UNDP/BCC <a href="#">concept note</a> approved</li> </ul>

(Structure adapted from Vivid Economics, 2018)

### 3.3 Project Finance for Permanence

Project Finance for Permanence (PFP) is a blended finance model that 'secures important policy changes and all funding necessary to meet specific conservation goals of a program over a defined, long-term timeframe with the ultimate aim of achieving the ecological, social, political, organizational, and financial sustainability of that program.'<sup>14</sup> The programme involves a large conservation goal and plan, a financial model and business plan to maintain this goal, upfront philanthropic and government commitments for implementation funding, and clear 'closing' and disbursement conditions that the participants and stakeholders are held to. PFP programmes have to ensure five elements: sustainability, ecological, social, political, organisational, and financial.

<sup>14</sup>Cabrera, h. Et al. (2021). Securing sustainable financing for conservation areas: a guide to project finance for permanence. Washington D.C: amazon sustainable landscapes program and WWF.

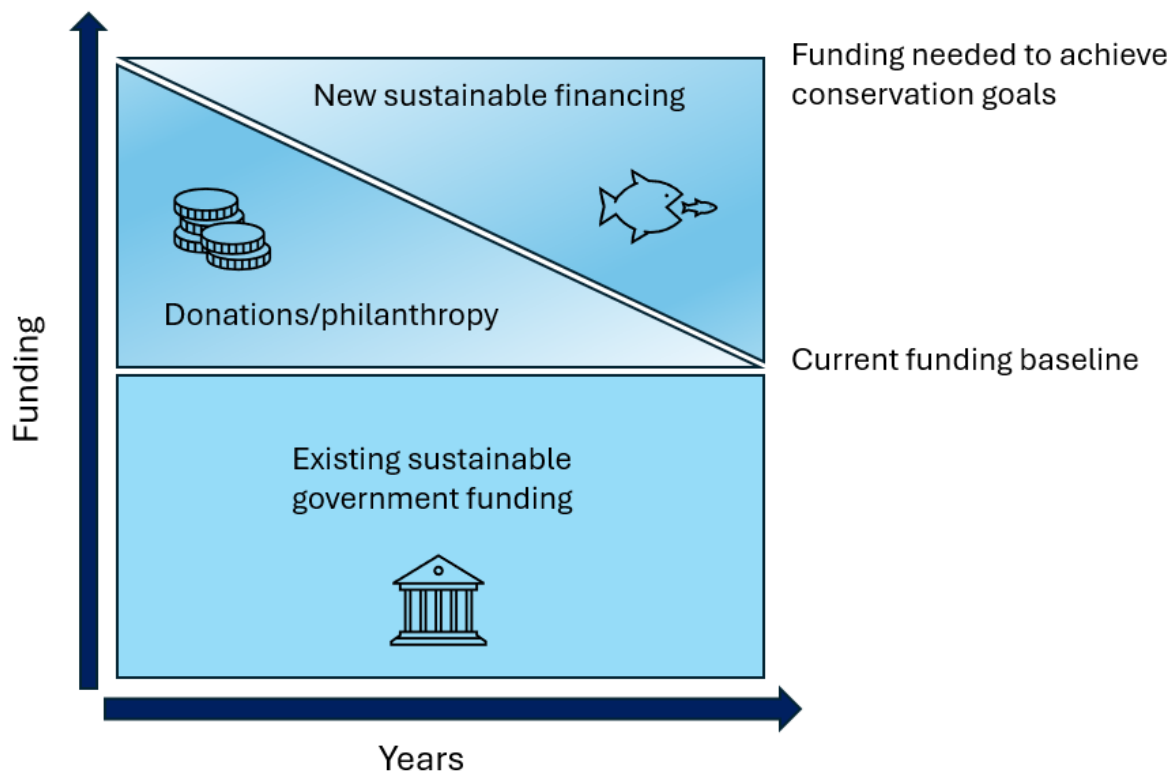


Figure 3 A simplified diagram of PFP outcomes adapted from World Bank (Cabrera et al., 2021).

PFP eligibility is based on four features: impact, viability, feasibility, and readiness. In order to establish a PFP for the NIMPA and other marine areas, criteria regarding financing, conservation, and stakeholder engagement would have to be met including growing capacity within the government to coordinate the transaction. The NIMPA+ project already aims to extend the existing MPA network in Namibia by adding two further protected areas indicating that a PFP could contribute significantly to goals for nature and people in the long term. Through work streams within the NIPMPA+ project there will be additional training and capacity provided to government, structured stakeholder engagement, and establishment of long-term sustainable finance mechanisms through empowerment of the local community. To enable a successful PFP, additional work would have to be done to train PFP specific capacity and administrative authorities, and an assessment of philanthropic fundraising potential for the establishment of the PFP would have to be conducted.

Table 3 Summary Table – Project finance for Permanence

<b>Feasibility</b>	<ul style="list-style-type: none"> <li>• Clear long-term finance plan necessary that estimates the full costs to achieve conservation goal in perpetuity.</li> <li>• Requires significant co-financing commitments from the Namibian government and a large philanthropic donation.</li> <li>• Rigorous stakeholder and government engagement in setting conservation goal and annual targets.</li> <li>• Needs to be sufficient potential for long-term sources of funding.</li> </ul>
<b>Socio-economic impacts</b>	<ul style="list-style-type: none"> <li>• Multi-stakeholder engagement in establishing conservation goal.</li> <li>• Community based conservation activities are included in deal and can provide employment opportunities.</li> <li>• Disbursement can be accompanied by socio-economic benefits.</li> </ul>
<b>Track record</b>	<ul style="list-style-type: none"> <li>• The Nature Conservancy is exploring a PFP model in Gabon, the first in Africa.</li> </ul>
<b>Robustness of model</b>	<ul style="list-style-type: none"> <li>• Needs an independent fund administrator with multi stakeholder board for implementation.</li> <li>• Clear annual funding disbursement milestones that have to be met to continue release of funding.</li> <li>• Co-financing is essential consideration in securing projects</li> </ul>
<b>Examples</b>	<ul style="list-style-type: none"> <li>• <a href="#">Forever Costa Rica</a>: 1.05 million ha of terrestrial, 1.55 million ha of marine protected areas.</li> <li>• <a href="#">Great Bear Rainforest</a>: 7.4 million ha of ecosystem-based management, 2.6 million ha under strict protection through 100 First Nations' conservancies.</li> </ul>

### 3.4 Marine Improvement District

A Marine Improvement District (MID) is based off the structure used in a Business Improvement District (BID) model. A Business Improvement District (BID) is a business-led and business funded body formed to improve a defined commercial area. They are a business-led organisation where each business pays a levy to participate in the BID with the money being ringfenced for the BID area only. The businesses then decide what to spend the money on often having environmental and community benefits as priorities. In the UK, the annual income of BIDs range between £200,000 and £600,000. BIDs were first established in Canada and the US but now exist in countries across the world such as Japan, New Zealand, and South Africa.

For MPAs, a 'MID' could include local businesses surrounding the MPA coming together and choosing to finance the enforcement, monitoring, community engagement, town events, or related activities in and around the MPA. In the NIMPA context the activities funded could benefit both the MPA but also spur possible tourism or other business activity in Lüderitz. The MID would benefit the participating businesses by allowing them network with neighbouring businesses, promote Lüderitz as a destination, and help them develop good relationships with local governments. Lüderitz town has the presence of a large variety of businesses such as mining, energy, and tourism that could all benefit from a MID scheme while contributing to the successful management and promotion of the NIMPA.

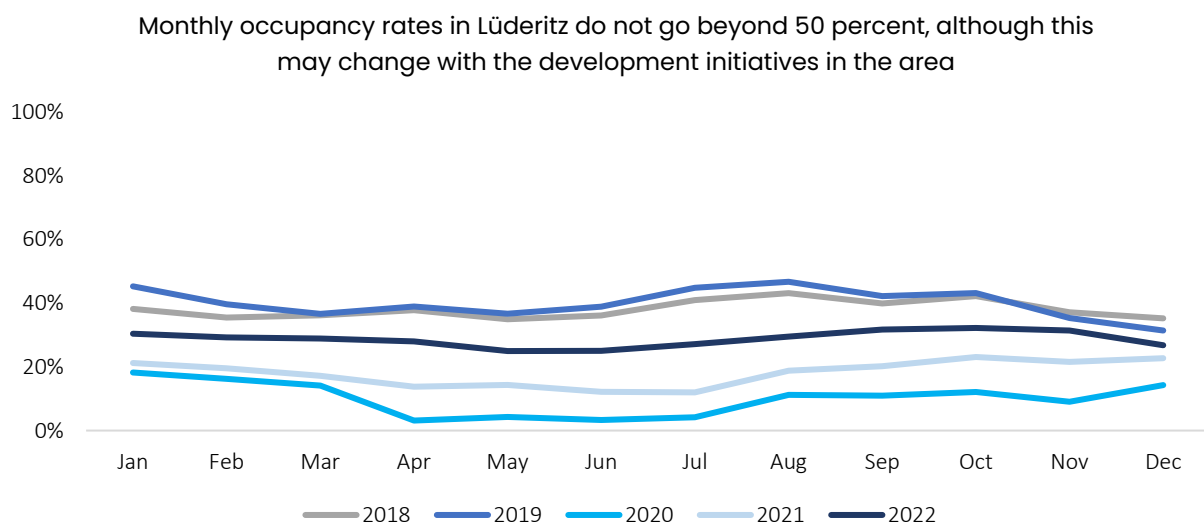


Figure 3 Accommodation occupancy rates in Lüderitz (Source: NTB)

Data provided by the Namibia Tourism Board (NTB) in Figure 3 illustrates the current situation regarding tourism. Occupancy rates for accommodation remain stubbornly below 50 percent through the year. This is expected to rise with the number of impending developments in the region. As such, there does seem to be scope to engage on such a business model.

Table 4 Summary Table – Business Improvement District

<b>Feasibility</b>	<ul style="list-style-type: none"> <li>• Requires rigorous stakeholder engagement with the businesses to get the majority to vote in favour of the levy.</li> <li>• A clear definition of geographical area included in MID required.</li> <li>• Capacity and skills to set up MID and business will be required.</li> <li>• Need to establish community business interest group.</li> <li>• Need to develop regulations to enforce and manage the MID.</li> </ul>
<b>Socio-economic impacts</b>	<ul style="list-style-type: none"> <li>• Engagement with local business and potential future supporters.</li> <li>• Could include overall improvements to Lüderitz tourism and town.</li> <li>• Funding for MPA and local area improvements.</li> </ul>
<b>Track record</b>	<ul style="list-style-type: none"> <li>• Over 250 BIDs established in the UK.</li> <li>• BIDS established in the US, Canada, Japan, New Zealand, and South Africa.</li> <li>• No MPA focused BIDs.</li> </ul>
<b>Robustness of model</b>	<ul style="list-style-type: none"> <li>• Usually BID contracts are for 5 years at a time, need to ensure renewal.</li> <li>• If agreement on levy can be reached this can lead to sustained annual funding, and there are opportunities to attract new participants through success.</li> </ul>
<b>Examples</b>	<ul style="list-style-type: none"> <li>• <a href="#">Newquay Business Improvement District, UK</a></li> </ul>

### 3.5 Crowdfunding

Alongside traditional philanthropic funding, which involves applications for grants from trusts, foundations, or individuals, more wide scale philanthropic methods have been able to sustain some conservation projects around the world. Crowdfunding is when small amounts of money are collected from a large number of individuals ending up in the collection of a significant amount of capital. A study by Gallo-Cajiao et al<sup>15</sup>. found that between 2009 and 2017, nearly \$5 million was raised for conservation initiatives through crowd funding, with nearly a third of these campaigns having raised awareness as a part of their end goal. However, only 8.8% projects funded were marine projects, with the vast majority of funding focusing on species-based or terrestrial projects.

For NIMPA, a crowdfunding model, while not a core financing stream, could provide additional resources for specific activities. NGOs implemented permanently around the MPA, such as the Namibian Foundation for the Conservation of Seabirds (NAMCOB), would be a particularly appropriate channel to leverage this mechanism to finance some of their initiatives, such as rangers' training and patrols.

<sup>15</sup> Gallo-Cajiao et al. (2018) Crowdfunding biodiversity conservation. *Conservation Biology*, 32(6), pp.1426–1435.

### Example: Niue Ocean Wide Conservation Commitments

A crowdfunding model, under the form of an Ocean Conservation Commitment (OCC) was implemented in Niue to help fund marine the protection of Niue's ocean waters, as well as leverage the development of Niue's broader climate resilient natural environment and blue economy. The value of each OCC was calculated by estimating the costs of protecting 1km<sup>2</sup> for one year, including enforcement, opportunity cost, sustainability, and resilience, then multiplied by 20 so that each credit represents protection of 1km<sup>2</sup> over twenty years. The MPA concerned, the Moana Mahu large scale MPA (LSMPA), is 127,000 km<sup>2</sup>, and hence there are that many OCCs for sale. In order to ensure protection for the entire LSMPA for 20 years – for all OCCs to be sold – the Niue Ocean Wide organisation would have to raise NZ\$32 million to be placed in an endowment. As of May 2024, the project has sold nearly a fifth of the OCC's.

Table 5 Summary Table – Crowdfunding

<b>Feasibility</b>	<ul style="list-style-type: none"><li>• Clear long-term finance plan necessary that estimates the full costs to achieve conservation goals annually.</li><li>• Funding is not guaranteed and therefore conservation goals might have to be adjusted.</li><li>• NIMPA has charismatic species within it which would provide for a good narrative for buyers.</li><li>• Projects supported by crowdfunding often need a clear start and finish clear fundraising.</li></ul>
<b>Socio-economic impacts</b>	<ul style="list-style-type: none"><li>• Any employment supported by the conservation goal can be supported by crowdfunding.</li></ul>
<b>Track record</b>	<ul style="list-style-type: none"><li>• Organisations such as the World Wildlife Foundation has secured millions in funding from monthly membership payments ranging between \$3-\$5.</li></ul>
<b>Robustness of model</b>	<ul style="list-style-type: none"><li>• No guarantee of success in crowdfunding campaign.</li><li>• Crowdfunding often focuses on one species or a single habitat which in the NIMPA's case could be seabird islands or kelp forests.</li><li>• Crowdfunding campaigns are a one off indicating a need to renew marketing efforts annually.</li></ul>
<b>Examples</b>	<ul style="list-style-type: none"><li>• <a href="#">Save Our Seals – Ocean Conservation Namibia</a>: US\$33,381 by 458 participants.</li><li>• <a href="#">Save our Wild Isles Community Fund</a>: £2.5 million raised by over 12,000 participants.</li></ul>

	<ul style="list-style-type: none"> <li>• <a href="#">Niue Ocean Conservation Commitments- Niue Ocean Wide</a></li> </ul>
--	--

## 3.6 Debt instruments

Debt instruments can form part of the set of tools used to benefit climate and nature. Through increased government fiscal space, pro-poor economic growth can be targeted, and overall debt sustainability improved.

### 3.6.1 Bonds

As one of the largest capital markets, the debt market can play a significant role in catalysing investments. There have been a series of “blue bond” issuances, essentially green bonds which are focused on the sustainable use of maritime resources and promotion of related sustainable economic activities. There are no set principles that guide how proceeds can be used, however existing global market standards (Green Bond Principles, Social Bond Principles, Sustainability Bond Guidelines and Sustainability-linked Bond Principles) that underpin the global sustainable bond markets outline best practice, ensuring integrity in the development of the market by clarifying the approach for issuance.

Issuers of blue bonds can include:

- Sovereigns and sub-sovereign agencies such as municipalities
- Multilateral development banks (MDBs) and development finance institutions
- Banks and other financial institutions, and
- Large and medium-sized companies

Most relevant and immediate is the possible issuance of a US\$80 million blue bond by startup Kelp Blue<sup>16</sup>. Proceeds generated by the bond could support marine conservation. Specifically, Kelp Blue maintains it will use these funds to support effective implementation of the NIMPA management plan. Engagement on this is key as it is yet to be determined what the funds will be deployed for. A better understanding of what it would cost per year to effectively protect the NIMPA would be beneficial to lead those engagements.

Table 6 Summary Table – Bonds

<b>Feasibility</b>	<ul style="list-style-type: none"> <li>• Namibia lacks a green or blue finance taxonomy which can be used to determine eligibility for sustainable finance – however, positive</li> </ul>
--------------------	---

<sup>16</sup> Kelp Blue.(2023). Kelp Blue announces Landmark Blue Bond Program for Marine Restoration at COP28. Retrived from: <https://kelp.blue/kelp-blue-announces-landmark-blue-bond-program-for-marine-restoration-at-cop28/>



	<p>signs in that NSX is a signatory to the Marrakesh Pledge dedicated to fostering green finance in Africa.</p> <ul style="list-style-type: none"> <li>• Would require significant institutional arrangements and drafting of appropriate guidelines.</li> <li>• If developing outcome bonds, clear achievable KPIs would have to be agreed by all stakeholders.</li> <li>• A sufficient number of eligible projects would need to be developed.</li> </ul>
<b>Socio-economic impacts</b>	<ul style="list-style-type: none"> <li>• If social bonds principles are associated with blue bonds, socio-economic impact could be high.</li> </ul>
<b>Track record</b>	<ul style="list-style-type: none"> <li>• Blue bonds have for instance been issued by the Seychelles with some level of success but remain a very nascent.</li> <li>• Bond issuances by Bank Windhoek in 2018, First National Bank Namibia and Standard Bank Namibia have followed since. Development Bank of Namibia also has plans to issue.</li> </ul>
<b>Robustness of model</b>	<ul style="list-style-type: none"> <li>• Bond issuance is always accompanied by risk.</li> <li>• Outcome bonds could allow for NIMPA linked outcomes to induce payments back to investors</li> </ul>
<b>Examples</b>	<ul style="list-style-type: none"> <li>• <a href="#">“The Rhino Bond”, South Africa</a></li> </ul>

### 3.6.2 Debt-for-nature swaps

In the age of the “polycrisis”, the Global South has experienced rising debts which have threatened sustainable recovery and development. Reducing a country’s debt burden is one way in which debt sustainability can be addressed, climate action achieved and development, in a broad sense, can be more impactful. One mechanism that addresses this issue head-on is a debt-for-nature swap (also referred to as debt-for-climate swap depending on the specific context of the deal). A debt swap enables countries to exchange existing debt obligations for new, restructured, debt obligations which specifically support nature or climate initiatives.



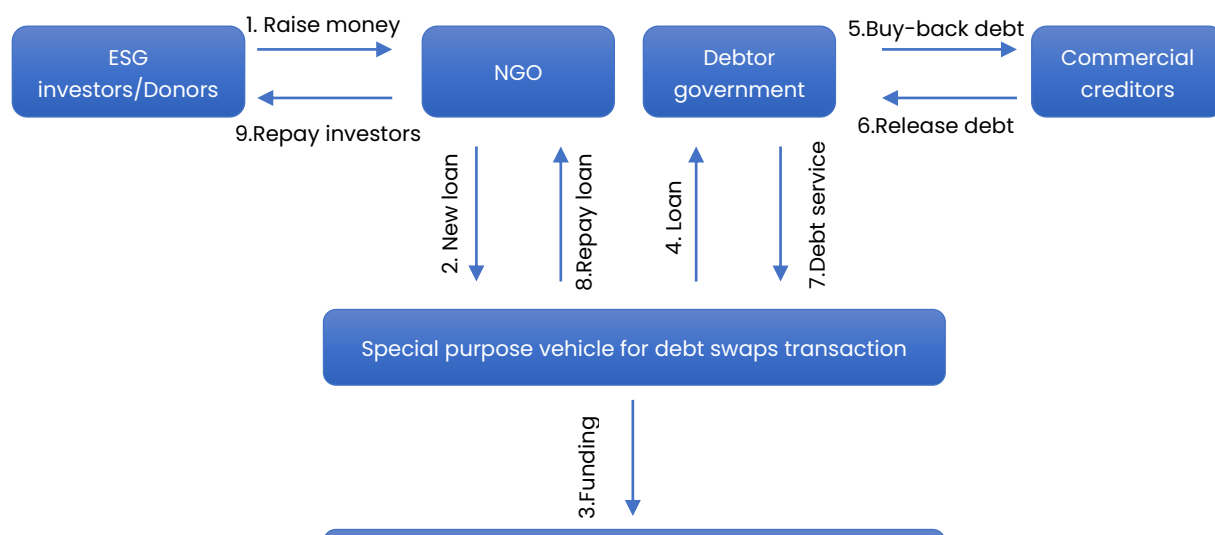


Figure 4 Tripartite swap among an NGO, commercial creditor and government (Adapted from Chamon et al. (2022))

Figure 4 illustrates a typical tripartite swap, which involves buybacks of privately held debt financed by donors or new lenders, intermediated by an international NGO, conditional on nature- or climate-related actions.

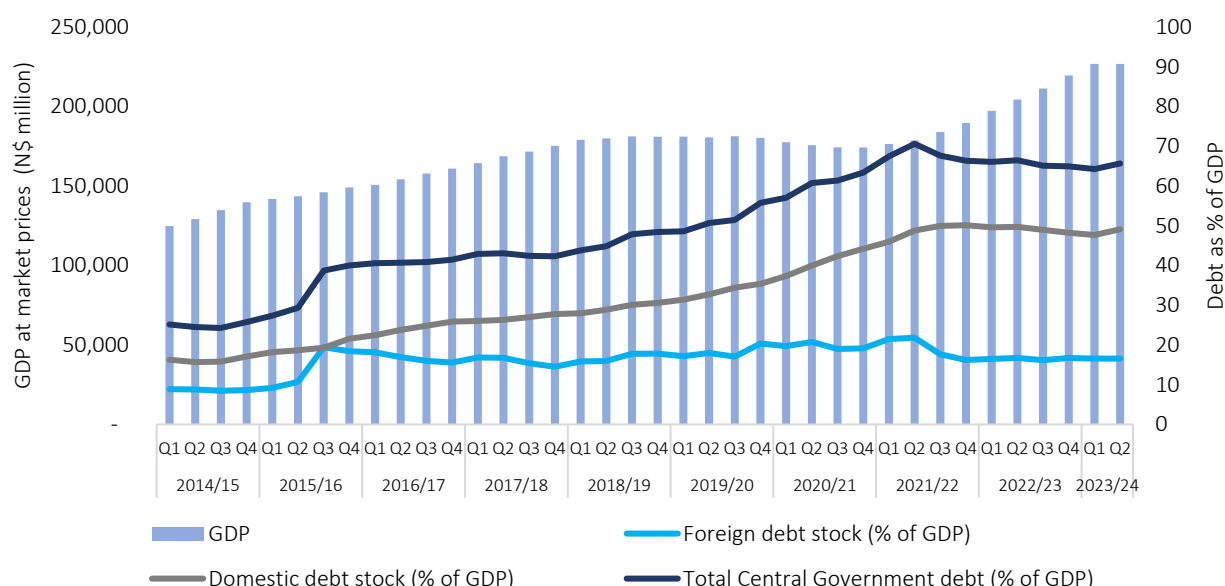


Figure 5 Government debt as a % of GDP (Source: BoN)

At this stage, the level of interest and political support is unclear, with no clear message from the Ministry of Finance Public Enterprises (MFPE). MFPE would then

need to identify potential debt to be converted. Figure 5 illustrates the sovereign debt situation in Namibia. Debt to GDP peaked at just under 71 percent in 2021/22 and has since been hovering around 65 percent<sup>17</sup>. Within this, a US\$750 million eurobond maturing in October 2025<sup>18</sup> was identified as a possibility, however, nothing tangible has emerged from discussions. There remain actors interested in facilitating such a deal, e.g., Climate Fund Manager. However, there are multiple steps that need to be taken in a very short timeframe.

GRN would also need to identify project(s) to be funded, create a financial structure for channelling debt swap proceeds and identify who is responsible for supervision and evaluation of use of funds.

Table 7 Summary Table – Debt-for-Nature Swaps

<b>Feasibility</b>	<ul style="list-style-type: none"> <li>China, Paris Club and private creditors are holders of substantial debt and could benefit through their contribution to international climate and biodiversity commitments.</li> <li>KPI framework will require elaboration of and linkage to MRV/M&amp;E systems, which currently do not exist at a national level in Namibia.</li> <li>Requires years of negotiation to produce a final agreement.</li> </ul>
<b>Socio-economic impacts</b>	<ul style="list-style-type: none"> <li>So long as the KPIs of the deal are met, there is no reason why value gained from the swap cannot address poverty alleviation.</li> </ul>
<b>Track record</b>	<ul style="list-style-type: none"> <li>Debt-for-nature and climate swaps in the 1980s and 1990s characterised as being small in scale; high in transaction costs.</li> <li>More recent transactions, e.g., Belize have been on a more appropriate scale (US\$550+ million).</li> </ul>
<b>Robustness of model</b>	<ul style="list-style-type: none"> <li>Fear that debt swaps could downgrade credit rating of a country, which Namibia desperately is seeking to avoid.</li> </ul>
<b>Examples</b>	<ul style="list-style-type: none"> <li><a href="#">Seychelles (2018), Paris Club/Government of Seychelles/SeyCCAT/TNC</a></li> <li><a href="#">Belize (2021), Credit Suisse/DFC/BBIC/Government of Belize/TNC</a></li> <li><a href="#">Barbados (2022), Credit Suisse/Government of Barbados/BESF/TNC</a></li> <li><a href="#">Ecuador (2023), Credit Suisse/IDB/DFC/ GPS Blue Financing</a></li> </ul>

### 3.7 Nature markets

<sup>17</sup> Bank of Namibia. (2024). Total Government Database. Retrieved from: <https://www.bon.com.na/Bank/Financial-Markets/Investor-Relations/Public-Debt-Statistics/Total-Government-Debt-Database.aspx>

<sup>18</sup> MFPE. (2024). Budget Statement for the 2024/25 Financial Year. Retrieved from: <https://www.parliament.na/wp-content/uploads/2024/02/Republic-of-Namibia-2024-25-Budget-Statement.pdf>

Pricing the value of nature in economic decision making has regularly been absent within policymaking circles, leading to the overexploitation of natural resources. The rise of nature markets can play an important role in mobilising resources to encourage nature-conserving behaviour. There are many forms of nature markets; the following section will take on nature credit markets, which reflect efforts to enhance or conserve ecosystem assets or services are traded. These especially focus on carbon markets and emerging biodiversity credit markets.

### 3.7.1 Carbon

Coastal and marine ecosystems play a significant role in the global carbon cycle, sequestering and storing carbon over long timescales. By financially connecting blue carbon ecosystems to the role they play in the global climate system, economic incentives can be introduced to prevent degradation. There is growing interest in exploring carbon credits, which involves receiving credits for reducing, avoiding, or sequestering carbon. A carbon credit is a certificate representing one metric ton of carbon dioxide equivalent (CO<sub>2</sub>e), that is either prevented from being emitted or removed from the atmosphere because of a project.

A distinction must be made between compliance and voluntary carbon markets (VCM). Regulatory mandates drive the former: governments or international bodies set emission limits and participating actors must comply. The United Nations Framework Convention on Climate Change (UNFCCC) processes have been the source of most carbon market rules to date. However, none of the compliance markets today specifically allow for use of offset credits generated by blue carbon projects. As such, the focus of this study will be on the latter, i.e., VCM, where the market is ready for blue carbon credits. This market caters to individuals, companies or governments who wish to purchase carbon credits to voluntarily offset their own carbon emissions. In a VCM, credits are generated by activities of projects that are certified by carbon standards, organisations which hold projects to a set of core principles. Examples of carbon standards include Verra's Verified Carbon Standard (VCS); Gold Standard; and Plan Vivo. According to a recent report, the overall value of the VCM as of 2022 is just under US\$2 billion<sup>19</sup>.

Blue carbon has traditionally referred to ecosystems such as seagrass, mangroves, and salt marshes. These ecosystems are recognised as globally significant carbon sinks, storing as much, if not more, carbon per unit area than tropical forests. The carbon standards mentioned above have already developed methodologies and started to implement projects around these habitats.

---

<sup>19</sup> Forest Trends' Ecosystem Marketplace. (2023). *State of the Voluntary Carbon Markets 2023*. Washington, D.C.: Forest Trends Association.

More recent research on blue carbon, however, goes beyond these coastal vegetated habitats. “Emerging” blue carbon ecosystems, such as macroalgae, benthic sediments and mudflats are increasingly being considered for inclusion in project portfolios. “Actionability” will rely on solid evidence on the scale of emission removals being significant; longevity of CO<sub>2</sub>e sequestration; anthropogenic impacts on the ecosystems leading to CO<sub>2</sub> emissions; sustainable management of the ecosystems to reduce emissions or enhance being viable and practical; and the science behind these is sufficiently robust.

Namibia’s coastline does not feature the well-established blue carbon ecosystems. In terms of emerging blue carbon ecosystems, there has been a great deal of interest around macroalgae and leveraging the VCM to finance conservation within NIMPA. Kelp species native to Namibia include the split-fan kelp (*Laminaria pallida*) and sea bamboo (*Ecklonia maxima*).

There is much work to be done to better understand Namibia’s blue carbon ecosystems more generally. Through the One Ocean Hub programme, NNF and SAERI have attempted to bridge this knowledge gap and sought to consolidate information on blue carbon ecosystems<sup>20</sup>. Figure 6 illustrates an example of this: as part of understanding the extent to which kelp exists along Namibia’s coastline and within the NIMPA more specifically, a modelled kelp distribution dataset from Jayathilake & Costello (2020) is overlaid with actual kelp distribution that was mapped out by Namdeb Holding. These data do not compare well at all and reflect the need for localised data collection. This will be even more necessary when it comes to establishing the scientific basis for sequestration, recognising the unique nature of the Benguela Upwelling System.

Prices for credits also need to be examined to assess whether pursuing such a mechanism makes financial sense. Again, a distinction must be made between credits that remove emissions and those that reduce. While credit prices for the former have held steady, prices for projects under the latter have experienced a decline over the course of 2023 and into 2024. This study will focus on reduction credits, as they are more applicable within the NIMPA context. According to a review from Ecosystem Marketplace, the average credit price is around US\$7 per ton. Prices can fluctuate according to market dynamics (i.e., supply and demand), project costs, value delivered (including environmental, social and economic impacts). The VCM over 2023 had less than favourable coverage, particularly around value addition<sup>21</sup>. Newer credits are expected to bring with them more robust

---

<sup>20</sup> South Atlantic Research. (n.d.). One Ocean Hub Blue Carbon Namibia. Retrieved from: <https://south-atlantic-research.org/one-ocean-hub-blue-carbon-namibia/>

<sup>21</sup> Greenfield, P. (2023). Revealed: more than 90% of rainforest carbon offsets by biggest certifier are worthless, analysis shows. *The Guardian*. Retrieved from: <https://www.theguardian.com/environment/2023/jan/18/revealed-forest-carbon-offsets-biggest-provider-worthless-verra-aoe>

methodologies, and global demand for credits through VCMs may increase by factors of 15 and 100 by 2030 and 2050 respectively, which in turn will raise prices<sup>22</sup>.

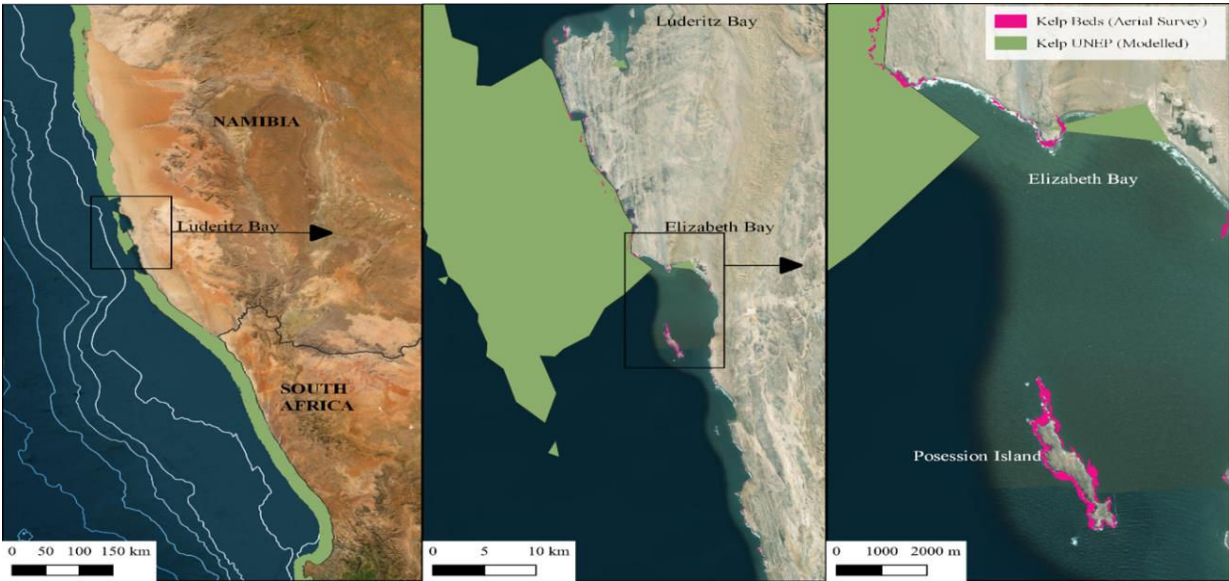


Figure 6 Comparing actual kelp distribution within NIMPA versus modelled data (Source: Elwen and Ingledew (2023))

Market participants are also seeking further clarity from key voluntary standard setting initiatives (e.g., Integrity Council of the Voluntary Carbon Market (ICVCM), Voluntary Carbon Markets Integrity Initiative (VCMI)), who are developing end-to-end rules for integrity in VCMs, from demand to supply sides. For examples, the ICVCM launched Core Carbon Principles<sup>23</sup> which are a global benchmark for high-integrity carbon credits.

Table 8 Summary Table – Carbon Markets

<b>Feasibility</b>	<ul style="list-style-type: none"><li>Namibia has committed to participate in Article 6.4 of the Paris Agreement, with a draft Carbon Market Framework waiting approval by the Cabinet – however, no clear guidance on the VCM</li><li>Blue carbon habitats need to be clearly mapped and restoration or protection interventions need to be identified, not apparent in Namibia’s case.</li><li>Needs to adhere to rigorous monitoring, reporting and verification requirements including proving additionality and preventing leakage.</li></ul>
--------------------	--

<sup>22</sup>Claes, J., Hopman, D., Jaeger, G., & Rogers, M. (2022, May 13). *Blue carbon: The potential of coastal and oceanic climate action*. Retrieved from <https://www.mckinsey.com/business-functions/sustainability/our-insights/blue-carbon-the-potential-of-coastal-and-oceanic-climate-action>

<sup>23</sup> The Integrity Council. (n.d.). The Core Carbon Principles. Retrieved from: <https://icvcm.org/the-core-carbon-principles/>

	<ul style="list-style-type: none"> <li>• Need to secure ownership of the carbon assets and carbon rights from government or seabed owner.</li> <li>• Currently limited available methodologies for assessing kelp carbon.</li> <li>• Expensive verification process which may not be offset by revenues generated.</li> </ul>
<b>Socio-economic impacts</b>	<ul style="list-style-type: none"> <li>• Loss of fishing ground if disturbance is being removed from blue carbon habitat.</li> <li>• Depends on the carbon standard and revenue sharing mechanism developed.</li> </ul>
<b>Track record</b>	<ul style="list-style-type: none"> <li>• Only a few blue carbon projects within the VCM, but certainly scope to scale.</li> </ul>
<b>Robustness of model</b>	<ul style="list-style-type: none"> <li>• Blue carbon markets are generally focused on established ecosystems: mangrove habitats, with few projects in focused on seagrass and saltmarsh habitats.</li> <li>• There is only one methodology currently available for monitoring kelp carbon focused on habitats located in Japan, with a specific intervention through removing urchins – not applicable for Namibia's environment.</li> </ul>
<b>Examples</b>	<ul style="list-style-type: none"> <li>• <a href="#">Mikoko Pamoja, Kenya</a></li> <li>• <a href="#">Urchinomics, Japan</a></li> </ul>

### 3.7.2 Biodiversity

A biodiversity 'credit' or 'certificate' is a unit representing an uplift in biodiversity due to conservation efforts. Biodiversity credits offer us a way to value nature beyond extraction. Through this valuation they present an opportunity to channel private finance into nature – a markets-based mechanism to value a whole ecosystem, not just one habitat or species. They represent a 'nature positive' unit that contributes to nature protection and recovery rather than offset damaging activity elsewhere. The emerging market aims to catalyse private finance into conservation projects through rigorous monitoring and reporting schemes across taxonomic groups within different habitats. These will be a part of a voluntary market where companies will be able to purchase these on an annual basis to further their ESG, CSR, or other reporting commitments.

The NIMPA is a key biodiversity area due to the protection of critically endangered birds, and the effective protection of the area should lead to biodiversity increases across the whole MPA. Biodiversity credits present an opportunity to use this improvement and monetise it for funds for continued monitoring and enforcement. Additionally, as these credits are nature positive, they are not enabling bad behaviour elsewhere contributing to movement aiming to halt and reduce



biodiversity loss. Additionality for the project can be achieved through addressing financial barriers, (i.e. Ministry no longer funding rangers, so now only able to operate based on donor funding), institutional barriers, (i.e. management plan that needs to be operationalized as well as regulations which need to be updated) and technical barriers, (i.e. lack of expertise/suitable equipment to implement activities). Below are two examples of biodiversity credits or certificates which could be leveraged as a sustainable funding source for the NIMPA:

- Plan Vivo Nature<sup>24</sup>

Plan Vivo is a certifier of community led conservation projects both in the carbon and biodiversity space. Their projects capture carbon from the atmosphere (PV Climate – Plan Vivo's Carbon Standard) and protect and restore biodiversity (PV Nature – Plan Vivo's Biodiversity Standard). These improvements can be claimed by projects as Plan Vivo Certificates, which can be sold by projects to help fund their operations and bring on new participants. 60% of income from the sale of Plan Vivo Certificates must go directly to the participants.

PV Nature is Plan Vivo's Biodiversity Standard, aimed at generating the first high-integrity biodiversity certificates that deliver robust and credible outcomes for nature alongside social and climate benefits. The PV Nature standard plans to issue two types of biodiversity credits both classified as nature positive and NOT offsets. These credits include:

- Conservation: protecting existing areas of globally significant biodiversity; and
- Restoration: restoring and regenerating previously degraded ecosystems, which is done by re-establishing the structure, productivity and species diversity that was previously present in the areas.

- Wadappt Biodiversity Certificates<sup>25</sup>

Wadappt is a new initiative which aims to connect global capital markets to on-the-ground biodiversity conservation efforts, through selling certificates guaranteeing biodiversity outcomes to private sector actors. Wadappt's biodiversity certificates specifically focus on financing realized conservation outcomes, meaning that initiatives have to be enacted, and demonstrate success

---

<sup>24</sup> Plan Vivo. (n.d.) About PV Nature. Retrieved from: <https://www.planvivo.org/pv-nature>

<sup>25</sup> Wadappt. (n.d.) Innovative Nature Financing Solutions. Retrieved from: <https://wadappt.io/>

to be financed. The certificates are based on rigorous data verification and are directly linked to international commitments, such as the Sustainable Development Goals (SDGs), making them a reliable investment option for companies. They seek to become an integral part of companies' investment strategies, potentially being automatically included with certain products or forming a recurring aspect of their Environmental, Social, and Governance (ESG) commitments.

Wadappt's first product, the Rhino Guardianship certificate, financing Rhino conservation in Namibia, was launched in April 2024, in partnership with a local NGO. These certificates provide their buyers with the guarantee that specific rhino rangers have committed a quantified level of effort and spotted a number of different rhinos over a period of time.

While no certificates have been set up for marine conservation, they could be designed in collaboration with Wadappt. Seabird counts, or rangers' efforts could be rewarded, requiring however significant efforts in data collection. These could be explicitly aligned with SDGs and GBF target commitments and provide a complementary financing stream for the NIMPA.

Table 9 Summary Table – Biodiversity Credits

<b>Feasibility</b>	<ul style="list-style-type: none"> <li>Needs to adhere to rigorous monitoring, reporting and verification requirements including proving additionality and preventing leakage.</li> <li>Need to secure ownership of the biodiversity assets and rights from the government or seabed owner.</li> <li>A new and developing market so demand for credits is currently unknown.</li> <li>Would require high initial investment into project development with high risk of not offsetting that from credit sales.</li> </ul>
<b>Socio-economic impacts</b>	<ul style="list-style-type: none"> <li>Nearly all proceeds could be allocated to further enforcement and monitoring within the MPA, providing continuous employment opportunities.</li> <li>Opportunities to arrange that a proportion of income is dedicated to the local communities to spend on select projects.</li> <li>Opportunities to train and engage local communities in citizen science activities.</li> </ul> <p>Some tangible biodiversity recovery impacts could include stock recovery for commercially valuable fish caught by small scale local fishermen.</p>
<b>Track record</b>	<ul style="list-style-type: none"> <li>There are many existing biodiversity credit standards with pilot projects in places such as Kenya and the UK.</li> </ul>



	<ul style="list-style-type: none"> <li>• Terrasos, an organisation based in Colombia has created and beginning to sell biodiversity credits representing 10m2 of forest protected for 30 years.</li> <li>• Plan Vivo, the likely partner in the NIMPA project, are currently running seven pilot biodiversity projects of which two are based in marine ecosystems.</li> <li>• Wadappt has launched the Rhino Guardianship Certificate in April 2024,</li> </ul>
<b>Robustness of model</b>	<ul style="list-style-type: none"> <li>• No guarantee for credit purchases annually so there is a need for constant market engagement.</li> <li>• If credit sales exceed needs of one-year, additional funds can be placed into conservation trust fund.</li> <li>• Risk of nature-positive credits being used to greenwash or offset damaging activity by purchaser.</li> </ul>
<b>Examples</b>	<ul style="list-style-type: none"> <li>• <a href="#">Rhino Guardianship Certificates</a></li> </ul>

### 3.7.3 Nutrient

Nutrient trading refers to a market-based strategy for meeting nutrient-related water quality goals and has emerged as a promising strategy to reduce nutrient discharge in a cost-effective way. Most sources of marine pollution are land-based and often from nonpoint sources such as agricultural runoff. Nutrient credits represent a market-based mechanism to allow those producing high nutrient loads in nature to purchase offsetting credits at relatively low cost. These schemes often include requirements to offset the load by more than 100%. Developers must predetermine their predicted nutrient load and then mitigate those as much as possible before turning to nutrient trading schemes to offset their nutrient pollution. Currently, offsets are commonly created using techniques altering terrestrial ecosystems such as creating wetlands, grasslands, or woodlands, managing drainage ditches, mimicking beaver dams, creating riparian buffers and fallowing agricultural land.


A critical requirement is the definition of a measurable and enforceable cap, which often requires significant investments in research and monitoring activities. Then, designing questions around the geographic boundaries of the scheme or the specific pollution sources also requires in-depth knowledge of the specifics of the catchment area, while political acceptability issues, notably around the concept of trading pollutants' emissions reductions, often require significant stakeholder engagement. Moreover, independent and rigorous verification is essential to ensure market integrity. Finally, due to the long ecosystem time-response delays, there is non-negligible uncertainty about the delivery of the scheme's outcomes.

Within the NIMPA the feasibility of nutrient trading schemes would have to be scoped out. Nutrient offsetting options would include using mariculture such as oyster farming to produce credits, or the development of kelp based nutrient credits. A feasibility and scoping assessment would include compiling scientific studies of the current nutrient levels within the NIMPA, mapping the sources of pollution such as development or agricultural areas, identifying locations where nature based nutrient mitigation could occur, and rigorous stakeholder engagement. Furthermore, there would have to be identification of third-party verifiers and regulation in place to ensure no false claims can be made regarding the nutrient credits.

Table 10 Summary Table – Nutrient Markets

<b>Feasibility</b>	<ul style="list-style-type: none"> <li>• There needs to be robust legislation and need for nutrient load reduction in the area.</li> <li>• Needs to include stakeholder buy in to create a market and enable trading of nutrient credits.</li> <li>• Very strict project requirements in terms of location, monitoring, and verification that require third party involvement.</li> </ul>
<b>Socio-economic impacts</b>	<ul style="list-style-type: none"> <li>• Companies causing a higher nutrient load have to be mandated to pay for additional pollution therefore adding a financial cost.</li> <li>• A trading scheme can enable industries like aquaculture and mariculture to use their farms as nutrient offsetting increasing their income.</li> </ul>
<b>Track record</b>	<ul style="list-style-type: none"> <li>• NutriTrade is a platform trading nutrient credits in the Baltic Sea.</li> <li>• Chesapeake Bay is using oyster farming and cultivation to help reduce nutrient loading and receiving payments from nearby polluting industries.</li> </ul>
<b>Robustness of model</b>	<ul style="list-style-type: none"> <li>• Unless restoration or protection activities are happening in a catchment area in a targeted nutrient loading area, there cannot be nutrient credits created and sold.</li> <li>• This would require an increase of aquaculture activity in Lüderitz and appropriate legislation has to be put in place to allow nutrient pollution to be offset.</li> <li>• Without a specific nutrient load reduction need, a trading scheme is not feasible.</li> </ul>
<b>Examples</b>	<ul style="list-style-type: none"> <li>• <a href="#">Oyster credits: Chesapeake Bay, USA</a></li> </ul>

## Recommendations



With the scoping report having identified possible mechanisms for MPA financing, the following recommendations and next steps are advised:

- Domestic budget allocation and ODA, despite their limitations, will likely remain mainstays of MPA financing in Namibia.
  - To bridge MPA funding gaps, costs must first be identified. The first step will be the finalisation of the NIMPA management plan during 2024. A clear management strategy, through an operational management plan is a precondition for a sustainable financial strategy. It will be important to engage with relevant directorates at the MFMR to ensure that MPA costs, such as those outlined in Table 1, have associated expenditures adequately captured. With these data, a business plan for the MPA could then be elaborated.
  - Domestic budget allocation could be improved, and the project would do well to understand where technical capacity is required in terms of advocating for greater allocations, supporting where necessary.
- Assess feasibility of implementation of Impact Bonds for the NIMPA using a new MPA outcome framework.
- On nature credit markets, pursue further engagement on biodiversity credit pilots. A lot of the groundwork in assessing feasibility, especially under the PV Nature certification, has been done.
- On user fees and potential MID establishment, seek to link this study with Blue Action Fund project activity 3.4.1 “Establish and facilitate a platform for corporate social responsibility (CSR) managers with coastal industries in Lüderitz”.

## References

- ADB. (2023). *Bonds to Finance the Sustainable Blue Economy: A Practitioner's Guide*. Manila: ADB.
- Bank of Namibia. (2024). Total Government Debt Database. Retrieved from <https://www.bon.com.na/Bank/Financial-Markets/Investor-Relations/Public-Debt-Statistics/Total-Government-Debt-Database.aspx>
- BCC. (n.d.a.). Climate Change Project. Retrieved March 20, 2023, from <https://www.benguelacc.org/climate-change-project/>
- BCC. (n.d.b.). Marine Spatial Planning. Retrieved March 20, 2023, from <https://www.benguelacc.org/marisma-2/>
- Blue Action Fund. (n.d.). Grant Fact Sheet, Strengthening and expanding Namibia's MPA network (NIMPA+). Retrieved from [https://www.blueactionfund.org/wp-content/uploads/2023/06/Grant-Fact-Sheet\\_NNF\\_Namibia\\_A4.pdf](https://www.blueactionfund.org/wp-content/uploads/2023/06/Grant-Fact-Sheet_NNF_Namibia_A4.pdf)
- Bohorquez, J. J., Dvarskas, A., Jacquet, J., Sumaila, U. R., Nye, J., & Pikitch, E. K. (2022). A New Tool to Evaluate, Improve, and Sustain Marine Protected Area Financing Built on a Comprehensive Review of Finance Sources and Instruments. *Frontiers in Marine Science*, 1-16.
- Cabrera, H. e. (2021). *Securing sustainable financing for conservation areas: a guide to project finance for permanence*. Washington DC: Amazon sustainable landscapes program and WWF.
- Chamon, M., Klok, E., Thakoor, V., & Zettelmeyer, J. (2022). "Debt-for-Climate Swaps: Analysis, Design, and Implementation" IMF Working Paper 2022/162. Washington, D.C.: International Monetary Fund.
- Claes, J., Hopman, D., Jaeger, G., & Rogers, M. (2022, May 13). *Blue carbon: The potential of coastal and oceanic climate action*. Retrieved from <https://www.mckinsey.com/business-functions/sustainability/our-insights/blue-carbon-the-potential-of-coastal-and-oceanic-climate-action>
- Elwen, S. H., & Ingledew, J. (2023). *Blue Carbon Potential in Namibia Blue Carbon Habitat Mapping Report. A report for the One Ocean Hub*.
- Emerton, L., Bishop, J., & Thomas, L. (2006). *Sustainable Financing of Protected Areas: A global review of challenges and options*. Gland: IUCN.

Forest Trends' Ecosystem Marketplace. (2023). *State of the Voluntary Carbon Markets 2023*. Washington, D.C.: Forest Trends Association.

Gallegos, V. L., Vaahtera, A., & Wolfs, E. (2005). Sustainable Financing for Marine Protected Areas: Lessons from Indonesian MPAs, Case Studies Komodo and Ujung Kulon National Parks. *Vrije Universiteit Amsterdam*.

Gallo-Cajiao, E., Archibald, C., Friedman, R., Steven, R., Fuller, R., Game, E., . . . Ritchie, E. (2018). Crowdfunding biodiversity conservation. *Conservation Biology*, 32(6), 1426-1435.

GIZ. (n.d.). Managing and protecting the Benguela Current marine ecosystem. Retrieved March 20, 2023, from <https://www.giz.de/en/worldwide/128746.html>

Greenfield, P. (2023). Revealed: more than 90% of rainforest carbon offsets by biggest certifier are worthless, analysis shows. Retrieved from <https://www.theguardian.com/environment/2023/jan/18/revealed-forest-carbon-offsets-biggest-provider-worthless-verra-aoe>

International Trade Administration. (2024). *Commercial Fishing*. Retrieved from <https://www.trade.gov/country-commercial-guides/namibia-commercial-fishing#:~:text=Fishing%20is%20one%20of%20Namibia's,in%20sustainably%20managing%20its%20fisheries>.

IUCN ESARO. (2020). *Closing the Gap. Financing and resourcing of protected and conserved areas in Eastern and Southern Africa*. Nairobi: IUCN ESARO; BIOPAMA. Retrieved from <https://portals.iucn.org/library/sites/library/files/documents/2020-013-En.pdf>


Jayathilake, D. R., & Costello, M. J. (2020). A modelled global distribution of the kelp biome. *Biological Conservation*.

Kelp Blue. (2023). Kelp Blue announces Landmark Blue Bond Program for Marine Restoration at COP28. Retrieved from <https://kelp.blue/kelp-blue-announces-landmark-blue-bond-program-for-marine-restoration-at-cop28/>

Lewis, F. S. (2023). *Funding Trends 2023: Tracking the State of Global Ocean Funding. Our Shared Seas*.

MFPE. (2023). *Medium Term Expenditure Framework 2023/24 - 2025/26*. Windhoek: MFPE.

- MFPE. (2024). *Budget Statement for the 2024/25 financial year*. Retrieved from <https://www.parliament.na/wp-content/uploads/2024/02/Republic-of-Namibia-2024-25-Budget-Statement.pdf>
- Namibia Statistics Agency. (2024). GDP Time Series 2000–2024. Retrieved from [https://nsa.nsa.org.na/new\\_publications/qgdp-time-series-2000-2024q4/](https://nsa.nsa.org.na/new_publications/qgdp-time-series-2000-2024q4/)
- National Planning Commission. (2023). *Official Development Assistance Report for 2020/21 and 2021/22*. Windhoek. Retrieved from <https://www.npc.gov.na/wp-content/uploads/2023/05/NPC-ODA-Report.pdf>
- OECD. (2020). *Sustainable Ocean for All: Harnessing the Benefits of Sustainable Ocean Economies for Developing Countries, The Development Dimension*. Paris: OECD Publishing. doi:<https://doi.org/10.1787/bede6513-en>.
- Plan Vivo. (n.d.). *About PV Nature* . Retrieved from <https://www.planvivo.org/pv-nature>
- PROBLUE. (2023). *Healthy Ocean – Healthy Economies – Healthy Communities 2023 Annual Report*. Washington DC: World Bank Group. Retrieved from <https://documents1.worldbank.org/curated/en/099804010192330094/pdf/IDU06f4e5bd0062e204fda0a66108223ca4010cd.pdf>
- PROBLUE. (n.d.). *PROBLUE and Biodiversity*. Retrieved March 20, 2024, from <https://thedocs.worldbank.org/en/doc/dcb50c3383110e23850603bdf92fe065-0320072023/original/PROBLUE-GBF-CLEARED-and-FINAL-May-31.pdf>
- South Atlantic Research. (n.d.). One Ocean Hub Blue Carbon Namibia. Retrieved from <https://south-atlantic-research.org/one-ocean-hub-blue-carbon-namibia/>
- Sumaila, U. R., Walsh, M., & Hoareau, K. e. (2021). Financing a Sustainable Ocean Economy. *Nature Communications* , 12. doi:<https://doi.org/10.1038/s41467-021-23168-y>
- The Integrity Council . (n.d.). *The Core Carbon Principles*. Retrieved from <https://icvcm.org/the-core-carbon-principles/>
- UNDP. (n.d.). PIMS 5113 Improving Ocean Governance and Integrated Mgt. Retrieved March 20, 2024, from <https://open.undp.org/projects/00097898>
- UNEP. (2022). *MPA Finance – Status and Future Directions*. Nairobi: UNEP.
- Vivid Economics. (2018). *Sustainable financing mechanisms for Marine Protected Areas in North Devon*. London. Retrieved from



[https://ukseasproject.org.uk/cms-  
data/reports/North%20Devon%20sustainable%20finance%20mechanisms%  
20report%20FINAL.pdf](https://ukseasproject.org.uk/cms-data/reports/North%20Devon%20sustainable%20finance%20mechanisms%20report%20FINAL.pdf)

Waddapt. (n.d.). *Innovative Nature Financing Solutions*. Retrieved from <https://wadapt.io/>

World Bank. (2023). *Unlocking Blue Carbon Development: Investment Readiness Framework for Governments*. Washington, D.C.: World Bank.