

Commissioned by



A CASE STUDY ON NATURE DATA

Development Bank of Southern Africa

CONTENTS

3
FOREWORDS

5
EXECUTIVE SUMMARY

8
SECTION 1
INTRODUCTION

12
SECTION 2
DBSA'S INTEGRATED BIODIVERSITY
STRATEGIC FRAMEWORK (IBSF)

22
THEORY IN ACTION

24
SECTION 3
RECOMMENDATIONS FOR AFRICAN BANKS
ASSESSING NATURE RISK IN LARGE PROJECTS

26
GLOSSARY

27
ENDNOTES



FOREWORD

Dorothy Maseke
Head of Secretariat
African Natural Capital Alliance

On behalf of the African Natural Capital Alliance (ANCA), I'm delighted to introduce this groundbreaking whitepaper. This timely document represents a significant step forward for nature-positive investment in Africa, highlighting a critical challenge and showcasing an innovative solution.

As ANCA, a coalition of 36 African member organizations representing more than 8 African countries and united in harnessing the power of finance for nature, we recognize the immense potential of the continent's natural capital. However, unlocking this potential requires robust methodologies to assess and manage nature-related risks and opportunities. This whitepaper addressed a crucial gap by exploring the experiences of DBSA, a member of ANCA and one of the leading financial institutions participating in the TNFD Africa pilot.

The TNFD, or Taskforce on Nature-related Financial Disclosures, aims to equip the financial sector with a framework for understanding and managing nature-related risks and opportunities. DBSA's participation in the pilot revealed a specific challenge: how to assess the environmental impact of large-scale, geographically complex projects, like linear infrastructure and scattered developments.

This whitepaper delves into DBSA's pioneering methodology for addressing this challenge. It showcases a carefully crafted approach that leverages data, partnerships, and innovative tools to ensure nature positive investments.

This case study is more than just a technical solution; it's a beacon of hope, demonstrating the commitment and capability of African institutions to drive sustainable development.

The insights and learnings shared in this whitepaper hold immense value for any organization financing large-scale projects in Africa. By sharing DBSA's journey, we aim to inspire and empower others to adopt similar practices, ultimately leading to a future where finance serves as a powerful force for nature conservation and prosperity across the continent.

We commend DBSA, Oliver Wyman, and the TNFD for their collaborative efforts in producing this insightful document. ANCA is proud to have commissioned this whitepaper, and we believe it will serve as a valuable resource for the financial sector and beyond.

By empowering institutions with the knowledge to accurately assess nature and biodiversity risks, we pave the way for a future where development and environmental stewardship go hand in hand, ensuring a thriving Africa for generations to come.

Let this be a call to action. Let us embrace the knowledge shared within these pages, and together, pave the way for a more sustainable and prosperous future for Africa, where nature thrives and communities flourish.



FOREWORD

Boitumelo Mosako

CEO

Development Bank of Southern Africa

Nature loss poses a major risk to businesses, while moving to nature-positive investments offers opportunity. The alignment of financial flows to work in harmony with nature whilst simultaneously promoting human rights, and inclusivity is a complex field. It requires multiple actions at various levels by all those involved in the finance sector value chain. DBSA places much emphasis on advancing a culture of care, that has at its core, a reverence for all life on earth. This is an essential part of the journey.

Healthy, biodiverse ecosystems sustain life on Earth. Despite the value nature provides, and efforts to sustain nature, it continues to deteriorate at an alarming rate. The stakes are high. We are at a tipping point of multiple planetary boundaries. Africa's extraordinary richness in biodiversity and ecosystem services, and wealth of indigenous and local knowledge, comprises a strategic asset for sustainable development in the region but it's extremely undervalued and unappreciated. It is also vulnerable to climate change and other forces of unsustainable development.

Financial institutions are well placed to address global biodiversity loss at scale. Business as usual is not an appropriate scenario. We need to follow a transformative and a whole society/economy approach that can help countries balance their obligations globally under the Sustainable Development Goals and the new Global Biodiversity Framework goals (to 2030), while meeting urgent local basic needs.

DBSA has acknowledged its commitment to play a meaningful transformative role to stem the loss of biodiversity and make sustainable development possible. This includes safeguarding the rights of vulnerable people, recognizing all peoples contributions as stewards of nature. DBSA is actively growing a culture that promotes a reverence for all life on earth. This reverence must be translated into business opportunity, transition risk management and responsible disclosure and reporting.

The Environmental and Social Governance Unit, in collaboration with all units in DBSA has produced a draft DBSA Integrated Biodiversity Strategic Framework (IBSF). The framework seeks to address biodiversity/climate and water related risks, explore nature-based investment opportunities, biodiversity mainstreaming in all investment decisions, monitoring, reporting, disclosure and advancing action-centered partnerships. The framework seeks to align with emerging global good practice guidelines like those provided in the Task Force for Nature Disclosure (TNFD) guidelines. The IBSF includes an assessment of the DBSA loan book.

The white paper focuses on DBSA experience and lessons learnt in assessing its loan book. The DBSA adopted the WWF Water and Biodiversity Risk Filter as a key tool to develop the baseline. The importance of the baseline is to provide a corporate and portfolio-level screening tool to help DBSA prioritize for managing water/ biodiversity risks towards enhancing business resilience and contributing to a sustainable future. The development of baselines helps a bank to take stock of an institutions potential impact and contributes towards fast tracking its roadmap to play a more decisive, strategic and transformative role.

DBSA would like to express its sincerest gratitude to the financial institutions that have already blazed some trails and were willing to share their frameworks and their methodologies with DBSA. DBSA benefited from engagement of multiple institutions such as multiple member DFIs who comprise the IDFC, the United Nations, the FSD/TNFD, the African Natural Capital Alliance task teams, Agence Française de Développement (AFD), the Worldwide Fund for Nature (WWF), the South African Biodiversity Institute, the East African Development Bank and the West African Development Bank — all of whom have shared their biodiversity experiences on nature-based transformation.

EXECUTIVE SUMMARY

SECTION 1

Nature is important to African societies and the African economy. Africa is rich with natural capital and has a wealth of indigenous and local knowledge. Africa is losing biodiversity at an alarming rate, caused by a few key drivers of change.

Nature loss is a global problem which countries, regulators, and standard setters are addressing. Two important global initiatives are:

- Global Biodiversity Framework
- Taskforce on Nature-related Financial Disclosures

TNFD is aligned with some of the most significant global and regional disclosure standards, including the Taskforce on Climate-related Financial Disclosures (TCFD), International Financial Reporting Standards (IFRS) S1 and S2, Global Reporting Initiative (GRI) standards and Science-based Targets for Nature (SBTN).

As major financiers of economic activity, banks must be at the forefront of shifting financial flows to halt and reverse nature loss. They need a reliable, quantitative way to measure the impact and dependencies of their operations and portfolios on biodiversity; to reduce risks; and to promote nature-positive outcomes to build resilience. Several methodologies have been developed to complement the above emerging initiatives and provide market participants with quantitative measurement options, including some with specific guidance for financial institutions.

Three that were published during 2023 are outlined below:

- UN Environment Program Nature Risk Profile Methodology, published January 2023
- TNFD core metrics, published September 2023
- Principles for Responsible Banking Target Setting Guidance, published November 2023

TNFD Africa pilot: Shaping the future of sustainable finance in Africa

Africa was one of the regions where financial institutions took part in a TNFD pilot program, initiated by FSD Africa in March 2022. As part of the TNFD Africa pilot, financial institutions were guided through the TNFD framework and recommendations, starting with the LEAP (Locate, Evaluate, Assess, Prepare) approach which is the core element of the TNFD framework.

Insights from the TNFD Africa pilot showed that a common challenge amongst financial institutions was geolocating the nature and biodiversity risks of large scale. The Development Bank of Southern Africa (DBSA) was one of the participating financial institutions and has some useful experience to share.

DBSA developed an approach to pinpoint the nature and biodiversity risks associated with large-scale African projects. This white paper is a case study showcasing DBSA's methodology in action, providing valuable insights and learnings for any organization financing large-scale projects on the continent. By empowering institutions with the knowledge to accurately assess nature and biodiversity risks, we pave the way for a future where development and environmental stewardship go hand in hand, ensuring a thriving Africa for generations to come.

SECTION 2

DBSA's Integrated Biodiversity Strategic Framework (IBFS)

DBSA is on a journey to embed nature, alongside climate, into its decision-making. To achieve this, it is complementing its embedded Climate Policy Framework with a draft Integrated Biodiversity Strategic Framework (IBSF).

DBSA also drafted an initial suite of biodiversity targets and commitments to enable the implementation of the IBSF approach.

Challenges to applying the IBSF and how DBSA resolved them

Challenge 1: Sourcing data from publicly available tools

DBSA experienced difficulties in sourcing comprehensive and reliable data to support implementation and monitoring of the IBSF targets.

DBSA resolution and key learning: DBSA has assessed the availability of metrics, from publicly available nature assessment tools, that could be leveraged as key inputs. The developing longlist of metrics for evaluating and assessing projects have been mapped to key tools and datasets.

The publicly available tools provided valuable first information and experience and user support from tool owners is most helpful. The WWF water risk filter was particularly simple to navigate to obtain speedy and useful results.

Challenge 2: Assessing biodiversity impact of projects with no specific location information

Scattered projects refer to projects where the sites are either unknown or spread across a wide range of sites, making it difficult to accurately assess their nature risk.

Linear projects refer to infrastructure developments such as pipelines, roads, rail, and transmission lines. Linear projects are crucial for infrastructure development and are often financed by DBSA as part of its sustainable finance mandate.

DBSA resolution and key learning: To address these challenges, DBSA developed a geolocation methodology to classify linear and scattered projects into risk categories based on the percentage of the project area traversing sensitive or high-risk areas. The application was tested and reworked with analysts into a tool that was practical going forward.

Challenge 3: Sourcing impacts and dependencies from the Engaging Natural Capital, Opportunities and Exposures (ENCORE) tool

Financial Institutions are only just starting to use the ENCORE tool more systematically, with significant learning still required on how best to leverage its content.

DBSA Resolution and key learning: To help address this issue, DBSA has developed an internal interpretation of the content found through ENCORE's drop-down functionality into a shortened list of indicators that may be useful for the financial industry in interpreting the output from ENCORE, as illustrated in Appendix 1. Encore has advanced to take into consideration the feedback from pilot users such as the DBSA.

Challenge 4: How vulnerable groups can play a valued role in nature assessments, action plans and reporting

DBSA, together with other development finance institutions, supported part of the construction of the Western and Northern Aqueducts Project in eThekweni Municipality. DBSA invested R100 million, with the investment going through a concessionary loan finance instrument called the Infrastructure Investment Programme of South Africa. A budget of R5 million was set aside for a subproject called the eThekweni Municipality Palmiet Enviro-Champs program, over and above the budget set aside to mitigate harmful environmental impacts as per the aqueduct project's legal and safeguarding requirements.

DBSA resolution and key learning: Overall, the Palmiet Enviro-Champs subproject proved to be an effective community-based river monitoring initiative. By empowering local individuals to actively address environmental challenges, the subproject made significant strides in improving the health of the Palmiet catchment. The dedication and commitment of the Enviro-Champs had positive impacts on both the environment and the communities they served, setting an example for sustainable community-driven initiatives in the future.

Inclusivity and Community involvement reaps benefits for improved investment impact.

The subproject illustrated the power of citizen science (research conducted with participation from the public) and citizen engagement, which plays an important and valued role in all phases of project development, implementation, monitoring and review.

SECTION 3

Next steps for DBSA's IBSF

Second IBSF draft

DBSA is currently working on the second IBSF draft, which seeks to enhance its ability to meet its quantitative targets. DBSA continues to value authentic partnerships with CBOs, and other finance agencies and support networks (such as ANCA) that help to develop and share knowledge on how the financial value chain can be more effective and efficient and have a positive impact on nature.

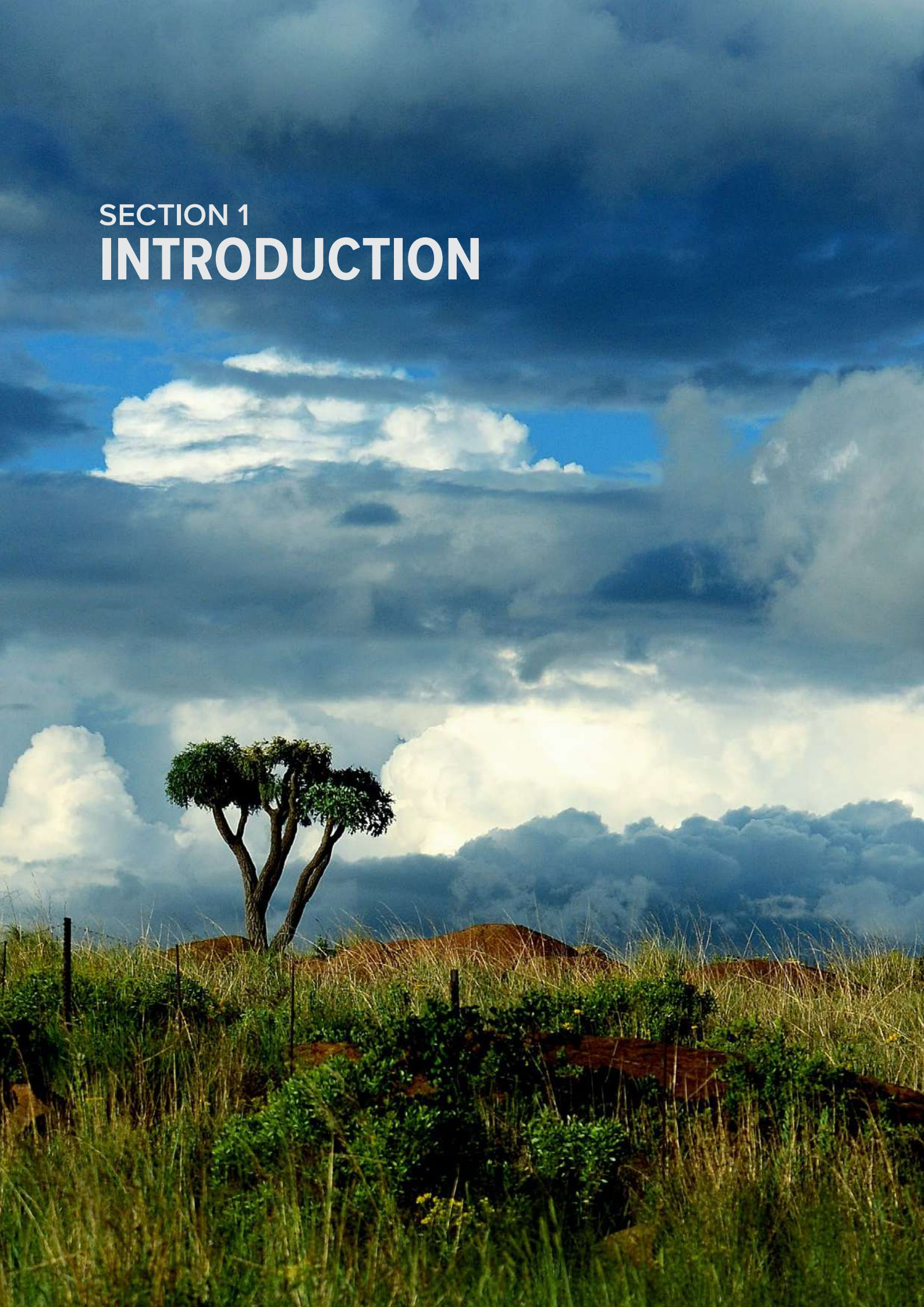
Development of a bespoke biodiversity tool to support the IBSF

DBSA is aligning its corporate data systems with TCFD and TNFD findings at project, sector, group, and corporate level, enabling them to be more easily automated and incorporated into regular quarterly and annual reporting. The bank is revising an internal biodiversity appraisal tool to test and reflect this ambition. This is inclusive of a tool for more accurate geolocation pinpointing and apportioning risk. This tool will be essential for effectively utilizing available tools such as the Water Risk Filter or Biodiversity Risk Filter.

Mainstreaming inclusivity in monitoring and reporting and disclosure

Working with CBOs and NGOs can raise more meaningful partnerships and help promote citizen engagement, which plays an important and valued role in assessing impacts and dependencies, designing interventions, monitoring, reporting and disclosing on nature based impacts and dependencies.

SECTION 1
INTRODUCTION



NATURE IS IMPORTANT TO AFRICAN SOCIETIES AND ECONOMIES

Making up 20% of the planet's land area, Africa is rich with natural capital. Many of the world's most iconic animals, including a quarter of all mammal species and one-fifth of all bird species, are resident here. The continent also has around one-sixth of the world's remaining forests, including those that comprise the Congo Basin, a 240-million-hectare rainforest straddling eight African countries and supporting the livelihoods of 80 million people in the region.¹

Africa's extensive nature and biodiversity provide invaluable ecosystem services to the continent and the planet. More than 62% of Africa's rural population rely on the continent's diverse natural ecosystems for their food, water, energy, health, and livelihoods.² In some African regions, marine and coastal ecosystems contribute more than 35% of the gross domestic product.³ Two marine ecosystems along Africa's west coast — the Benguela Current in the south-eastern Atlantic and the Canary Current in the north-eastern Atlantic — contain a continuous upwelling of nutrient-rich deep water that gives rise to extremely high biological productivity that provides 20% of the world's fish harvest.⁴

It is, therefore, important for institutions with an economic development mandate in Africa, such as the Development Bank of Southern Africa (DBSA), understand that sound management of Africa's natural capital is inextricably connected to their success in the long run.



AFRICA IS LOSING NATURAL CAPITAL AT AN ALARMING RATE

Africa's rich biodiversity is under duress. The key drivers of change include changes in land and sea use (for example increased mining activities, human settlements, agricultural expansion); direct unsustainable exploitation of organisms; climate change; pollution; the spread of invasive species and uncontrolled fires.

More than 6,400 animal species and 3,100 plant species in Africa are at varying risk of extinction.⁵ Africa has experienced a two-thirds (66%) decline in wildlife populations since 1970. This translates to a 27% faster rate of decline compared to the global average. An IUCN assessment of five important wildlife groups (mammals, birds, amphibians, corals, and cycads) found that all had deteriorated steadily between 1993 and 2016.⁶

The threatened species are either vulnerable, endangered or critically endangered with the specific timeframe for extinction risk varies depending on the category:

- **Vulnerable:** Likely to become endangered if the causal factors continue
- **Endangered:** Face a very high risk of extinction in the wild within a few decades
- **Critically Endangered:** Face an extremely high risk of extinction in the wild within a few years or even sooner⁷

INITIATIVES TO ADDRESS NATURE LOSS ARE IN PROGRESS

Nature loss is a global problem which countries, regulators, and standard setters are implementing or discussing initiatives to halt and reverse. Two notable global initiatives include the Kunming-Montreal Global Biodiversity Framework (GBF) and the Taskforce on Nature-related Financial Disclosures (TNFD).

The GBF was developed as a conclusion of the 15th Conference of Parties to the UN Convention on Biological Diversity (COP15) in 2022 and aims to halt and reverse nature loss through 23 global targets to be achieved by 2030 and beyond.⁸

The TNFD published guidance for organizations to report and act on evolving nature-related dependencies, impacts, risks, and opportunities in September 2023. It is aligned with some of the most significant global and regional disclosure standards, including the Taskforce on Climate-related Financial Disclosures (TCFD), International Financial Reporting Standards (IFRS) S1 and S2, Global Reporting Initiative (GRI) standards and Science-based Targets for Nature.⁹

As major financiers of economic activity, banks can influence financial flows to halt and reverse nature loss. Multilateral development banks have a particular responsibility given their mandate to promote economic growth through financing sustainable development projects. To do this, they need a reliable, quantitative way to measure the impact and dependencies of their investments on nature.

For the majority of financial institutions, there will not be any single methodology or approach but several that need to be applied in combination and in alignment with their particular business model and risk profile.¹⁰

One of the methodologies being developed to enable financial institutions with the quantitative measurement capabilities that the emerging initiatives require is the UN Environment Program (UNEP) Nature Risk Profile Methodology. It outlines a new method to help companies and investors find and measure their exposure to natural events (Nature Risk Profile).¹¹

Another emerging approach is the TNFD's two core metrics which are proposed for financial institutions while they build towards reporting on the TNFD's full set of global metrics: metric 1, which represents the financial exposure to a defined set of sectors considered to have material nature-related dependencies and impacts, and metric 2, which represents the financial exposure to companies with activities in sensitive locations.¹²

A third emerging approach is Principles for Responsible Banking Target Setting Guidance which assists banks to set portfolio-wide targets in support of the policy goals established by the GBF to address nature and biodiversity loss.¹³

DBSA IS ACTIVELY ENGAGED IN ADDRESSING NATURE LOSS

Africa was one of the regions where financial institutions took part in a pilot program to test and refine the TNFD framework during its development.¹⁴

As part of the Africa pilot program, initiated by FSD Africa in March 2022, financial institutions were guided through the TNFD framework and recommendations with the support of Oliver Wyman. The pilot program customized the LEAP (Locate, Evaluate, Assess, Prepare) approach which is the core element of the TNFD framework. Pilot participants also had access to a financial institutions' toolkit which was developed for the program and iterated with hands on experience, representing a best-in-class methodology to mature their capabilities related to nature.¹⁵

Insights from the Africa pilot showed that financial institutions face several critical challenges in the area of data, impacting their ability to accurately assess the environmental impact of large-scale projects. In 2023, FSD Africa conducted a review of the availability and coverage of nature-related data for Africa by 22 mainstream data sources which yielded several insights. Some of the key insights include that data sources lack a consistent taxonomy, and that geographical coverage of Africa is not as granular as for other regions, while also displaying bias towards countries that are signatories of specific sustainability initiatives. This challenge is amplified when projects exhibit complex geographies, granular biodiversity information in such situations typically falls short of what is available in developed markets like Europe and North America.¹⁶

DBSA participated in the Africa pilot program and has some useful experience to share. DBSA has tackled certain data challenges head-on, developing an approach to pinpoint the nature and biodiversity risks associated with large-scale African projects. This white paper is a case study of DBSA's methodology in action, providing insights and learnings for any organization financing large-scale projects on the continent.

SECTION 2

DBSA'S INTEGRATED BIODIVERSITY STRATEGIC FRAMEWORK (IBSF)



OVERVIEW

DBSA is on a journey to embed nature and biodiversity with greater urgency into its decision-making. To achieve this, the DBSA has drafted an Integrated Biodiversity Strategic Framework (IBSF) which complements its embedded climate Policy Framework together with other strategic policies.

The IBSF has multiple aims:

- Mobilise finance for nature-positive projects;
- Assess and manager nature-related risks, impacts, and dependencies at the portfolio level;
- Seek opportunities to mainstream nature more effectively in infrastructure development decisions by more consistently and comprehensively seeking nature positive co-benefits and impacts;
- Measure, track, and report on nature-related risks, impacts, dependencies, and opportunities; and
- Identify and stop harmful practices and investments through exclusion lists and improved screening of investments.



Exhibit 1: IBSF vision and approach

DBSA'S DRAFT INTEGRATED BIODIVERSITY STRATEGIC FRAMEWORK (IBSF)

Methodology and design	<ul style="list-style-type: none"> • Alignment with global, African and South African frameworks and policies • Identification of stakeholders • Risk /Opportunity and shared learning/dialogue • Sector assessment • Geographic assessment • Client assessment • Connected to external working groups on global good practices • Key strategic choices- sector, geographic scope and metrics • Reiterative process involving all actors who have a role to play whilst using the process to empower people to engage and grow a nature positive organization • Using scenarios and linking with other DBSA corporate strategic planning processes • Promoting a learning organisation/cultural change
Trajectory	<ul style="list-style-type: none"> • Biodiversity exposure of DBSA loanbook based on Encore, TNFD, WWF Water and Biodiversity Risk Filter and GBF (Impact, risk and dependency methodology) • Client risk and dependency exposure based on external information and client biodiversity plan information and other available information
Alignment IBSF framework	<ul style="list-style-type: none"> • Reference scenario choices • Portfolio/Sector target setting: financing green, greening finance, halting harmful investments, supporting positive partnerships and supply chains • Steering financial flows so they track with end goal • Governance • Establishing two sets of targets: public commitments and inhouse more detailed targets for ongoing stretching, testing and experimenting • Promoting inclusivity by seeking ways to engage even the most vulnerable and organizations that represent them • Institutional arrangements. Determining Roles and Responsibilities
Monitoring and evaluation	<ul style="list-style-type: none"> • Regular methodology reassessment through the Development Results Framework and Template • Monitoring and Evaluation • Reporting and improving transparency and accountability • Governance • Client /NGO/recipient knowledge sharing and dialogue • Global good practice support

Source: DBSA

DBSA is in the process of drafting an initial suite of biodiversity targets and commitments (see Exhibit 2) to enable the implementation of the IBSF approach as detailed in Exhibit 1.

Exhibit 2: IBSF qualitative and quantitative targets

METRIC TYPE	OVERVIEW
Quantitative targets (short and long-term)	<p>Increase the volume of financial flow to biodiversity through mainstreaming to secure biodiversity</p> <p>Benefits in infrastructure investments</p> <p>Increase volume of financial flow of nature positive investments that targets measurable nature positive impact to the value of Rx by 2030 and Rx by 2050, focusing on water sector and seeing new clients/markets/resources in multiple sectors ie, Water resource management, Infrastructure for protected areas and Conservation</p> <p>Decrease very high-risk and high biodiversity loss investment portfolio by x% by 2030</p>
Qualitative and binary targets	<p>Biodiversity Strategic Framework and Action Plan approved by 2024 and revised every 5 years or sooner if needs arise</p> <p>Create governance structures and reporting mechanisms aligned with the Just Transition Strategy and Climate Action Plan by 2024</p> <p>Incorporation into Credit Risk Procedures, aligned with TNFD and TCFD procedures (Credit Risk Level 3) by 2025</p> <p>Local finance supply chain partners: Work with at least x new counterparties to promote biodiversity upstream and downstream by 2030 and x by 2050</p> <p>Support SA government and its regulators in GBF application from 2025 up to 2050 and beyond</p> <p>Develop a biodiversity toolkit by x date and redesign in 2030, 2040 and 2050</p> <p>Create a coverage and front-line biodiversity specialist team and adopt new innovative financial instruments at least x new instrument by 2030 and x by 2050</p> <p>Build DBSA responsive capacity in biodiversity and water resource management by employing x biodiversity specialist in the DBSA by x date</p> <p>Build partnerships for advancing financial flows to biodiversity and nature-based solutions (x new partners by 2030 and x by 2050)</p> <p>Design and implement DBSA-wide biodiversity training (with special training for executives and board members by x date) and provide additional training opportunities annually thereafter</p> <p>Green accreditation for DBSA campus by x date</p> <p>DBSA Community River Outreach Programme to support catchment initiatives to build climate resilience and biodiversity investment by x date. Expanded for additional support by x date</p> <p>Development Results Framework public reporting improved for relevant biodiversity, adaptation and water impacts/dependencies based on potentially relevant TNFD/GCF/GEF standard targets and indicators by x date</p> <p>Regular annual reports on metrics and success stories or case studies for knowledge sharing by x date</p> <p>Formalised capacity support services and knowledge sharing for inclusivity in biodiversity/adaptation transition with poor, disadvantaged, and vulnerable groups, including women, people with disabilities, and children (at least x programme up to 2030 and x by 2050)</p> <p>Improved communications and knowledge sharing for culture change in organisation integrated with wider organizational change (at least x biodiversity communication per year up to 2050)</p>

Source: DBSA

In addition, DBSA is developing a unique biodiversity assessment tool to screen potential projects at an early stage, specifically in support of its IBSF. This tool streamlines the initial risk assessment process by leveraging data from established sources like the WWF Water Risk Filter and IBAT Geographic Risk data. Additionally, it allows the user to indicate the project's expected contribution towards each of the 17 UN Sustainable Development Goals (SDGs). Based on these inputs, the tool generates a preliminary assessment of the project's potential impact on nature, specifically focusing on biodiversity and water resources. This output is categorized using a five-point scale (Neutral, Low Negative, High Negative, Fatal Flow/Red Flag). Furthermore, the tool assigns a risk category (Low, Medium, High) based on DBSA's own safeguards and credit line safeguard frameworks. This integrated approach equips DBSA with a comprehensive overview of potential environmental and social risks associated with a project, enabling informed decision-making at the outset of the project development cycle, ultimately contributing to the success of the IBSF.

HOW DBSA HAS USED THE IBSF TO RESOLVE SOME DATA CHALLENGES

Challenge 1: Sourcing data from publicly available tools

DBSA experienced difficulties in sourcing comprehensive and reliable data to support implementation and monitoring of the IBSF targets as outlined in Exhibit 2. These difficulties include scarcity of baseline data, inconsistencies in collection methods and technical capacity gaps.

In order to address these challenges, DBSA assessed the availability of metrics from publicly available nature assessment tools that could be leveraged as inputs (see Exhibit 3), creating a mapping between the developing longlist of IBSF metrics for evaluating and assessing projects and the tools and datasets that it reviewed.

Exhibit 3: DBSA's assessment of publicly available assessment tools by metric type

CATEGORY	METRIC	AVAILABLE ASSESSMENT TOOLS			
		ENCORE	TNFD	WWF	IDFC
Dependency	% of exposure to firms with material dependencies	✓	✓	✓	✓
Impact	Footprint-based impact (%)	✓	✓	✓	✓
	Revenue-based impact (%)	✓	✓	✓	✓
Risk	Exposure to physical risks	✓	✓	✓	✓
	Exposure to transition risks	✓	✓		✓
	Impacts on specific risk parameters (e.g expected loss)	✓	✓	✓	✓
	Value at Risk	✓	✓	✓	✓
Opportunity	Volume of financial flow (investment, lending and, insurance) with companies or sectors where activities are deemed to have material exposure to nature- based opportunity		✓		✓
	Volume of financial flow (investment, lending and, insurance) with evidence of material mitigation of nature related risk (Engagement, due diligence and sustainability linked KPIs)		✓		✓
	Volume of financial flow (investment, lending and, insurance) with demonstrated positive impacts on nature		✓		✓

Source: DBSA

DBSA's experience highlights how publicly available biodiversity assessment tools can be a valuable starting point for development projects. Tools like ENCORE, IBAT, WWF Water Risk Filter, and South Africa's National Biodiversity Tool offer initial insights that, while requiring case-by-case refinement, provide a solid foundation for understanding potential biodiversity risks. The positive user support experience and ease of navigation, especially with the WWF Water Risk Filter, demonstrate the accessibility of these resources. This underscores the potential of publicly available tools to streamline the initial phases of biodiversity risk assessment for development banks and other financing institutions.

Challenge 2: Assessing biodiversity impact of projects with multiple locations

DBSA has experienced a particular challenge in assessing the impact of large-scale infrastructure projects for which there is no specific location information or for which location information is complex. Examples of such projects include linear and scattered projects:

- Scattered projects refer to projects where the sites are either unknown or spread across a wide range of sites, making it difficult to accurately assess their nature risk
- Linear projects refer to infrastructure developments such as pipelines, roads, rail, and transmission lines. Linear projects are crucial for infrastructure development and are often financed by DBSA as part of its sustainable finance mandate

Scattered and linear projects typically fall under a single loan agreement and traverse large and complex geographical regions, biomes, or habitats. Various natural habitats that a project passes through, may have different associated risks that need to be considered when assessing the biodiversity impact. These types of projects present unique challenges when it comes to accurately assessing their impact on nature-related risk and the effect thereof on the assessment of a loan book. Some of the challenges articulated by the DBSA team included:

- Some clients have a significant percentage of the loan book spread across different locations, which can skew results if only the headquarters location is mapped
- Mapping the entire country or region where a client operates can underestimate or exaggerate risks, affecting loan book assessments
- Flexibility of projects in selecting subcomponents or subprojects is a consideration
- Legal conditions in loan agreements to avoid vulnerable or sensitive locations and specific nature-related criteria developed by clients are important factors
- Linear projects may traverse highly sensitive or critical habitat areas, with only a small percentage of the pipeline/road impacting a sensitive landscape, but the impact could be significant regardless of the project's total physical area percentage

Key lesson: A new tool for accurate geolocation was needed

The bank experimented with several methods to geolocate complex projects before it arrived at its preferred methodology.

- The first test was run on the loan book using the geolocation point that the project lead had provided (normally the city where the client was based in a region). A key lesson from the first attempt at assessing book debt was the importance of more accurately addressing linear or scattered projects. Geolocating complex projects is a crucial aspect of assessing the biodiversity impact of certain types of projects. This process involves accurately determining the location and extent of complex projects.
- After consideration, the DBSA team developed a methodology requiring the analyst on each project appraisal to geolocate the project more accurately, rather than giving one overall coordinate. The second test run provided a rule of thumb that if more than 20% of the project area falls within a sensitive/high risk area, then the entire project was rated high-risk.
- The third test run was based on a risk-based tool that allowed a level of analysis and transparency of argument that provided flexibility for the environmental analyst. The tool allowed an analyst to proportion a risk rating to two or more representative geolocation points per investment. This methodology took a pragmatic approach that allowed for a more nuanced assessment of the project's risk profile, considering the specific nature of these types of projects. The last test run aligned best with the TNFD's metric 2 for financial institutions: exposure to sensitive locations.

Once a project is more accurately geolocated into risk subcategories, the tools for loan book assessments could be more meaningfully applied.

This methodology was shared with other key parties, such as WWF, and SANBI. It is now in process of being considered as part of the formal DBSA procedures captured in its draft biodiversity toolkit.

Challenge 3: Sourcing impacts and dependencies from the Engaging Nature Capital, Opportunities and Exposures (ENCORE) tool

The adoption of the ENCORE tool for biodiversity risk assessment within the financial sector, while gaining momentum, presents a challenge. While the tool proves valuable in initial assessments, ensuring context-specific interpretation and refinement remains crucial for comprehensive impact analysis. This underscores the need for clear guidance and best practice development as the financial sector seeks to systematically integrate ENCORE into its decision-making processes. Institutions like the Development Bank of Southern Africa are on the forefront of this practice, and their experience highlights the learning curve associated with fully leveraging ENCORE's capabilities.

DBSA has developed an internal interpretation of the content found through ENCORE's drop-down functionality into a shortened list of indicators that may be useful for the financial industry in interpreting the output from ENCORE, as illustrated in Exhibit 4.

A key lesson learnt was the value of partnerships. DBSA and SANBI developed a partnership through a Global Environmental Facility (GEF) funded project titled 'Biodiversity for Water Security' that contributed to quality spatial data sets for South Africa on nature (including water resources). Under this project DBSA engaged in a SANBI French Development Agency, partnership that paired biodiversity data sets with economic analysis to provide a deeper understanding of nature opportunities, risk and dependencies across landscapes and sectors including the financial sector. This work used the ENCORE tool as part of its methodology. The results of the work provided a useful entry point into understanding DBSA corporate and sector risk of its loan book.¹⁷ Unfortunately data sets at this granularity do not exist across other countries in Africa.

Challenge 4: Promoting inclusivity for identifying key indicators to address potential impacts and dependencies

An important element of nature risk mapping is ensuring engagement of the client, citizens, and other interested, affected, or vulnerable parties. This is consistent with guidance in the TNFD framework which states that engagement with IPLCs and affected stakeholders be considered as a cross-cutting component of the LEAP approach, informing all phases. This guidance is one of the ways in which the TNFD differs from the TCFD. These findings should be included in an internal data system that links to an aggregated loan book assessment cycle over time. A case study on how this could occur is briefly discussed below.



Exhibit 4: DBSA’s interpretation of sector dependencies based on ENCORE

ENERGY

Ecosystem Services	Natural Capital Assets	Drivers of Environmental Change
Mass stabilization and erosion	Habitats	Weather conditions
Flood and storm protection	Water	Habitat modification
Climate regulation	Soil and sediments	Industrial or domestic activities
Surface water	Species	Pollution
Ground water	Atmosphere	Flooding

WATER AND SANITATION

Ecosystem Services	Natural Capital Assets	Drivers of Environmental Change
Climate regulation	Water	Weather conditions
Ground water	Habitats	Habitat modification
Surface water	Atmosphere	Pollution
Water flow maintenance	Soils and sediments	Droughts
Filtration	Species	Industrial or domestic activities

ROADS & DRAINAGE

Ecosystem Services	Natural Capital Assets	Drivers of Environmental Change
Flood and storm protection	Habitats	Habitats
Climate regulation	Atmosphere	Weather conditions
Water flow maintenance	Water	Pollution
Filtration	Soil and sediments	Industrial or domestic activities
Bioremediation	Species	Flooding

COMMUNICATIONS

Ecosystem Services	Natural Capital Assets	Drivers of Environmental Change
Flood and storm protection	Habitats	Water conditions
Climate regulations	Water	Habitat modification
n/a	Atmosphere	Industrial or domestic activities
n/a	Soils and sediments	Flooding
n/a	Species	Sea level rise

BUILDINGS & RESIDENTIAL FACILITIES

Ecosystem Services	Natural Capital Assets	Drivers of Environmental Change
Flood and storm protection	Habitats	Habitat modification
Climate regulation	Atmosphere	Weather conditions
Water flow maintenance	Water	Pollution
Filtration	Soils and sediments	Industrial or domestic activities
Bioremediation	Species	Flooding

Source: DBSA

NEXT STEPS FOR DBSA'S IBSF

DBSA continues to value authentic partnerships with CBOs, and other finance agencies and support networks (such as WWF, SANBI, ENCORE, and ANCA) that help to develop and share knowledge on how the financial value chain can be more effective and efficient and have a positive impact on nature

DBSA is currently working on the second IBSF draft, seeking to enhance the institution's ability to meet its quantitative targets (see Exhibit 5). DBSA has appreciated that at the foundation of an effective strategy is an understanding of an organisations core values and culture as well as its ability to systematically and consistently assess its risks and its impacts and to strive to build authentic partnerships to achieve strategic and significant nature positive impacts.

Exhibit 5: DBSA's planned initiatives in the second IBSF draft

TARGET	INITIATIVE
Increase volume of financial flow of nature positive investments by mainstreaming nature into all infrastructure investments to ensure all investments have nature positive impacts	Identifying new investment opportunities related to nature
Increase volume of financial flow to biodiversity investments with direct or principle biodiversity objectives	Better capturing the unique features of biodiversity and ecosystem-related risks
Decrease very high-risk and high biodiversity loss investment portfolio	<p>Providing guidance on nature-related metrics and targets intended for the IBSF effort to run in parallel with updates of the climate policy framework</p> <p>Improving alignment with emerging disclosure frameworks such as TNFD and SBTN</p> <p>Decreasing transition risks over the next two to five years</p> <p>Locating assets and closing the data gap in supply chains</p> <p>Developing a bespoke biodiversity assessment tool (see detail below)</p> <p>Contributing to industry initiatives aiming to set standards for nature finance</p>

Source: DBSA

How vulnerable groups can play a valued role in nature assessments

The example of eThekweni Municipality

DBSA, together with other development finance institutions, supported part of the construction of the Western and Northern Aqueducts Project in eThekweni Municipality. DBSA invested R100 million, with the investment going through a concessionary loan finance instrument called the Infrastructure Investment Programme of South Africa. A budget of R5 million was set aside for a subproject called the eThekweni Municipality Palmiet Enviro-Champs program, over and above the budget set aside to mitigate harmful environmental impacts as per the aqueduct project's legal and safeguarding requirements.

This subproject formed part of a wider municipal community-based river monitoring initiative aimed at improving the health of the Palmiet catchment in the city, and explored inclusive models that future engineering projects could utilize to address nature impacts/dependencies in a more systematic, integrated way, while piloting community-based nature rehabilitation methods.

The subproject, which ran from August 2019 to October 2022, involved training and employing 31 previously unemployed local community members, known as Enviro-Champs, to identify and address environmental challenges in the area. Between August 2019 and October 2022, the Enviro-Champs were involved in monitoring sewer infrastructure, conducting door-to-door dialogues with community members, and responding to environmental emergencies such as floods. The Enviro-Champs worked on issues such as pollution, water quality, and infrastructure problems, and they also conducted river clean-ups and raised awareness about water and sanitation issues.

Key lesson: Community involvement reaps benefits

Overall, the Palmiet Enviro-Champs subproject proved to be an effective community-based river monitoring initiative. By empowering local individuals to actively address environmental challenges, the subproject made significant strides in improving the health of the Palmiet catchment. The dedication and commitment of the Enviro-Champs had positive impacts on both the environment and the communities they served, setting an example for sustainable community-driven initiatives in the future. The subproject illustrated the power of citizen science (research conducted with participation from the public, or amateur researchers) and citizen engagement, which could play an important and valued role in designing, implementing and monitoring linear project impacts and dependencies. This monitoring could be included in client reports, independent environmental practitioner audits, and Lender Technical Advisor reports. These results would then be integrated into DBSA's monitoring and reporting frameworks, such as the Development Results Framework, which, in turn, are linked to DBSA loan book assessments and reporting.

Summary of lessons learned

The drive to transition to a just, sustainable, inclusive biodiversity rich economy has multiple potential entry points and pathways. One entry point is to assess and disclose the impact on nature, the risks and the dependencies involved in managing a loanbook. The process of undertaking this analysis forms a powerful common ground for multiple parties (both internal and external) in the financial value chain to engage and strategise how to grow a culture of reverence for nature and to scale up effective, efficient, inclusive and sustainable finance. Sharing of resources helps speed up the process.

THEORY IN ACTION

The Western and Northern Aqueducts Project in eThekweni Municipality traversed various terrains, including sensitive river crossings



The Enviro-Champs fostered community relationships and promoted environmental education. They adopted the role of citizen scientists, by collecting, analyzing, and reporting data to help find sustainable solutions.



The project's lessons were documented in a closeout report, which covered aspects like selection, training, achievements, social impacts, and long-term sustainability potential.

SECTION 3

RECOMMENDATIONS FOR AFRICAN BANKS ASSESSING NATURE RISK IN LARGE PROJECTS



SECTION 3

RECOMMENDATIONS FOR AFRICAN BANKS

ASSESSING NATURE RISK IN LARGE PROJECTS

Integrate nature into project finance for responsible investments

Clauses should be embedded into loan agreements that actively guide projects away from vulnerable or sensitive locations, for instance clear stipulations against deforestation in protected areas or disrupting vital migration corridors. By making environmental responsibility a contractual obligation, financial institutions require developers to prioritize sustainable practices from the outset. DBSA has highlighted this as a key learning when geolocating linear projects and is incorporating legal conditions in loan agreements for projects to avoid vulnerable or sensitive locations.

Develop screening criteria to flag potential biodiversity risks

This could involve utilizing biodiversity maps, geospatial data, and consultations with local communities to identify sensitive areas before loans are even considered. By proactively filtering out projects that are incompatible with environmental sustainability, banks can avoid future reputational and financial risks, while laying the groundwork for investments that contribute to a thriving Africa. DBSA, is taking this approach and creating specific nature-related criteria for new project screening.

Implement community-inclusive management models for sustainable outcomes

While legal safeguards are essential for mitigating environmental harm, truly sustainable development demands community engagement. African financial institutions must move beyond compliance checklists and engage in genuine dialogue with affected communities — citizens and local stakeholders can actively map biodiversity risks alongside technical experts, their traditional knowledge enriching environmental assessments. This shift towards community engagement and proactive stewardship enriches traditional project finance models. It fosters trust, builds social capital, and ensures informed decision-making that respects both project imperatives and local concerns. For DBSA, the Enviro Champs mechanism introduced through the eThekweni Municipality Aqueducts project addressed nature impacts/dependencies in a more systematic, integrated way, while piloting community-based nature rehabilitation methods.

Foster collaboration and knowledge sharing among stakeholders

It is proving helpful for institutions to establish platforms for sharing best practices, case studies (such as this white paper), and research findings related to geolocating linear and scattered projects. Participation in pilot programs and initiatives, such as the TNFD regional pilot programs and consultation groups, provide practical insight and contribute to the development of practical skills and knowledge. DBSA has a successful history of collaboration with other financing and implementing institutions and recognizes the value of aligning with these partners on its approaches.

Invest in capacity building and research for effective solutions

It is worth investing in capacity building programs to an internal taskforce with an advanced understanding of nature-related data and metrics. This should include training on data collection methodologies, analysis techniques, and reporting frameworks. DBSA's methodology to geolocate linear projects requires the analyst on each project appraisal to geolocate the project more accurately and sets out steps to guide them in achieving this. There is a wealth of untapped resources available for assessing nature-related risks in Africa. Institutions are encouraged to support innovative solutions and to collaborate with academic institutions and research organizations to leverage their expertise and resources. It is far easier to be financially accountable when nature based data is available and easily accessible. The work of organisations such as Birdlife Africa, SANBI, CSIR and WWF that often combine resources to provide detailed granularity of nature data in South Africa makes it far easier to more meaningfully assess a financial institutions impact and dependencies. It is therefore important for banks operative across Africa to support nature based data development across Africa.

GLOSSARY

ACSS

African Center for Strategic Studies

AFD

French Development Agency

CBD

Convention on Biological Diversity

CO₂

Carbon Dioxide

COP15

Fifteenth meeting of the Conference of the Parties

CPF

Climate Policy Framework

DBSA

Development Bank of Southern Africa

ENCORE

Exploring Natural Capital Opportunities, Risks and Exposure

GBF

Global Biodiversity Framework

GDP

Gross Domestic Product

GEF

Global Environmental Facility

IBAT

Integrated Biodiversity Assessment Tool

IBSF

Integrated Biodiversity Strategic Framework

IPCC

Intergovernmental Panel on Climate Change

IUCN

International Union for Conservation of Nature

IPBES

Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

SANBI

South African Biodiversity Institute

SBTN

Science-Based Targets Network

TCFD

Taskforce on Climate-related Financial Disclosures

TNFD

Taskforce on Nature-related Financial Disclosures

UNEP

United Nations Environment Programme

UNEP-WCMC

United Nations Environment Programme World Conservation Monitoring Centre

WWF

World Wildlife Fund

ENDNOTES

- 1 African Center for Strategic Studies (ACSS). (2022). African Biodiversity Loss Raises Risk to Human Security. Washington DC: Africa Center for Strategic Studies
- 2 Ibid, endnote 1
- 3 World Wide Fund for Nature (WWF). (2016). Valuing South Africa's ocean economy. Available from WWF: www.fafrika.awsassets.panda.org/downloads/wwf_oceans_facts_and_futures_report_oct16.pdf
- 4 Ibid, endnote 1
- 5 Sahara and Sahel Observatory. (2023). World Wildlife Day 2023. Available from OSS Online: www.oss-online.org/en/jmvs23#:~:text=According%20to%20the%20International%20Union,wildlife%20conflict%20and%20habitat%20loss
- 6 Ibid, endnote 1
- 7 Our World in Data. (2023). What does it mean for a species to be at risk of extinction? Available from Our World in Data: www.ourworldindata.org/extinction-risk-definition
- 8 Convention on Biological Diversity. (2022). Nations Adopt Four Goals, 23 Targets for 2030 In Landmark UN Biodiversity Agreement. Available from Convention on Biological Diversity: www.shorturl.at/vAE05
- 9 Taskforce on Nature-related Financial Disclosures (TNFD). (2023). Recommendations of the Taskforce on Nature-related Financial Disclosures. Available from TNFD: www.tnfd.global/wp-content/uploads/2023/08/Recommendations_of_the_Taskforce_on_Nature-related_Financial_Disclosures_September_2023.pdf
- 10 United Nations Environment (UNEP). (2023). UNEP and S&P Global Sustainable1 launch new nature risk profile methodology. Available from UNEP: www.unep.org/news-and-stories/press-release/unep-and-sp-global-sustainable1-launch-new-nature-risk-profile
- 11 UNEP. (2023). Nature Risk Profile: A Methodology for Profiling Nature Related Dependencies and Impacts. Available from UNEP: www.unep.org/resources/publication/nature-risk-profile-methodology-profiling-nature-related-dependencies-and
- 12 TNFD. (2023). Sector guidance: Additional guidance for financial institutions. Available from TNFD: www.tnfd.global/wp-content/uploads/2023/08/Guidance_for_Financial_Institutions_v1.pdf
- 13 UNEP. (2023). PRB Nature Target Setting. Available from UNEPFI: www.unepfi.org/wordpress/wp-content/uploads/2023/11/PRB-Nature-Target-Setting-Guidance_2023.pdf
- 14 FSD Africa. (2023). Promoting an African voice for the Taskforce on Nature Related Disclosures (TNFD) and nature-related financial risk management. Available from FSD Africa: www.fsdafrica.org/projects/promoting-an-african-voice-for-the-taskforce-on-nature-related-disclosures-tnfd-and-nature-related-financial-risk-management/
- 15 Ibid, endnote 14
- 16 FSD Africa and Vivid Economics by McKinsey. (2023). Nature and financial institutions in Africa: A first assessment of opportunities and risks. Available from McKinsey and Company: www.mckinsey.com/~media/mckinsey/business%20functions/sustainability/our%20insights/nature%20and%20financial%20institutions%20in%20africa%20a%20first%20assessment%20of%20opportunities%20and%20risks/nature-and-financial-institutions-in-africa-a-first-assessment-of-opportunities-and-risks.pdf
- 17 The Agence Française de Développement (AFD) Group. (2023). Socioeconomic and spatially-explicit assessment of nature-related risks: the case of South Africa. Available from AFD: www.afd.fr/en/ressources/socioeconomic-and-spatially-explicit-assessment-nature-related-risks-case-south-africa

DEVELOPMENT BANK OF SOUTHERN AFRICA

The DBSA is a government-owned development finance institution, established in 1983, with the mandate to promote sustainable development across the African continent. Our product solutions span a wide range of support mechanisms across the development value chain including infrastructure planning and project preparation and investment. DBSA also provides non-financial investment support to infrastructure implementation and delivery.

DBSA is materially exposed to biodiversity dependency (reputational and physical risk) and water/climate change risk. Managing these risks is important to DBSA as the nature of DBSA business is to support sustainable infrastructure development often in high-risk communities.

In 2022 the DBSA updated its public position statement on biodiversity to align with the International Development Finance Club (IDFC) position statement and the Global Biodiversity Framework (Montreal in Canada December 2022). DBSA is committed to:

- Develop a biodiversity strategy or action plan, combining risk management, impact mitigation, as well as direct conservation finance, inspired by global good practice, policies and standards, in accordance with their governments' guidance and priorities.
- Address the direct drivers of biodiversity loss by mitigating negative impacts on biodiversity of DBSA finance, using a range of approaches such as the implementation of environmental and social safeguards or guidelines, due diligence, off-setting, or the exclusion of activities that have harmful impacts upon biodiversity and ecosystem services.
- Reaffirm the importance of developing positive biodiversity impacts in investment portfolios through nature-based solutions or other mainstreaming approaches.
- Reiterate the need to increasingly mobilize finance, build effective partnerships including with the private financial sector, and share experience to strengthen their contribution to the global biodiversity agenda, as they do for the objectives of the Paris agreement and the SDGs.
- Stress the importance of consistent and robust reporting methodologies on direct or indirect biodiversity investments and of sharing of reporting experience and perspectives with the broader finance community to improve mobilization, impact and visibility.
- Commit to actively exploring all opportunities to contribute to achieving the objectives of the future Post-2020 Global Biodiversity Framework.
- Recognize the links between social, biodiversity and climate finance and commit to progressively strengthen the convergence between these three overall finalities by developing approaches with multiple co-benefits, in line with the 2030 Agenda and the SDGs. (IDFC 48 banks Nov 2020 updated 2023).

In 2023 DBSA signed the Nature Voices Pledge for African Natural Capital Alliance (ANCA), recognizing the critical role of nature in our continent's well-being and sustainable development. The pledge gives emphasis to:

- Acknowledging the importance of nature
- Emphasizing the African context
- Assuming responsibility as financial institutions

Oliver Wyman is a global leader in management consulting. With offices in more than 70 cities across 30 countries, Oliver Wyman combines deep industry knowledge with specialized expertise in strategy, operations, risk management, and organization transformation. The firm has more than 7,000 professionals around the world who work with clients to optimize their business, improve their operations and risk profile, and accelerate their organizational performance to seize the most attractive opportunities.

For more information, please contact the marketing department by phone at one of the following locations:

Americas
+1 212 541 8100

Europe
+44 20 7333 8333

Asia Pacific
+65 6510 9700

India, Middle East & Africa
+971 (0) 4 425 7000

Copyright ©2024 Oliver Wyman

All rights reserved. This report may not be reproduced or redistributed, in whole or in part, without the written permission of Oliver Wyman and Oliver Wyman accepts no liability whatsoever for the actions of third parties in this respect.

The information and opinions in this report were prepared by Oliver Wyman. This report is not investment advice and should not be relied on for such advice or as a substitute for consultation with professional accountants, tax, legal or financial advisors. Oliver Wyman has made every effort to use reliable, up-to-date and comprehensive information and analysis, but all information is provided without warranty of any kind, express or implied. Oliver Wyman disclaims any responsibility to update the information or conclusions in this report. Oliver Wyman accepts no liability for any loss arising from any action taken or refrained from as a result of information contained in this report or any reports or sources of information referred to herein, or for any consequential, special or similar damages even if advised of the possibility of such damages. The report is not an offer to buy or sell securities or a solicitation of an offer to buy or sell securities. This report may not be sold without the written consent of Oliver Wyman.