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ACTION DOCUMENT

The BES-Net Regional Trialogue for East and Southern Africa

Advancing Inclusive Solutions for Invasive Alien Species
and Sustainable Use of Wildlife

 18-20 February 2025

 Windhoek, Namibia





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The Biodiversity and Ecosystem Services Network (BES-Net) is a flagship initiative of the Nature Hub. Recognizing that the natural world is a vital support system for our societies and economies, BES-Net aims to protect biodiversity and strengthen ecosystem resilience by facilitating dialogue between science, policy and practice. Through its efforts, BES-Net contributes to cultivating the culture of evidence-informed decisions and actions that work for both people and the planet.

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» Statements from the Organizers



“Namibia remains unwavering in its commitment to the Sustainable Development Goals and the Kunming-Montreal Global Biodiversity Framework. Invasive alien species are among the five primary drivers of biodiversity loss, as highlighted in the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Global Assessment Report. The Regional Trialogue, held in the wake of the Eleventh Plenary of IPBES in Namibia, serves as a catalyst for translating global biodiversity commitments into concrete action. By integrating cross-sectoral strategies and aligning our National Biodiversity Strategies and Action Plans with international frameworks, we are taking decisive steps to protect our ecosystems, enhance resilience, and ensure sustainable development for future generations.”

Mr. Teofilus Nghitila, Executive Director
Ministry of Environment, Forestry and Tourism, Namibia



“Achieving the ambitions of the 2030 Agenda for Sustainable Development requires moving beyond siloed interventions towards an integrated, full-portfolio approach. Protecting biodiversity is not just an environmental goal, it is an economic, social, and developmental imperative. The United Nations Development Programme recognizes that sustainable development depends on integrating conservation, climate resilience, and inclusive growth. The BES-Net Regional Trialogue highlighted the power of collaboration, where policymakers, scientists, and communities come together to shape solutions that are both impactful and equitable. By fostering cross-sectoral partnerships and innovative approaches, we can ensure that biodiversity remains at the heart of sustainable development, securing a prosperous future for both people and the planet.”

Ms. Alka Bhatia, Resident Representative
UNDP Namibia



“Environmental, social and economic crises – such as biodiversity loss, water and food insecurity, health risks and climate change – are all interconnected. They interact, cascade and compound each other in ways that make separate siloed efforts to address them ineffective and counterproductive. The best way to bridge these single-issue silos is through integrated and adaptive decision-making. ‘Nexus approaches’ offer policies and actions that are more coherent and coordinated – moving us towards the transformative change needed to meet our development and sustainability goals. The BES-Net Regional Trialogue offered a rich example of such approaches in action, helping countries see the benefits that come from treating related problems like invasive alien species and sustainable use of wild species in an integrated manner.”

Prof Pamela Mc Elwee
Co-chair of the IPBES Nexus Assessment

» Feedback from Selected Participants



“The process was interactive, and the discussions were productive—everyone’s voice counted.”

Dr Lizzie Mujuru,
Senior Lecturer, Bindura University of Science Education,
Zimbabwe



“The Trialogue deepened my understanding of invasive species and emphasized the power of integrated, community-based approaches—essential for countries like Malawi.”

Mr Guadalupe Matias Kabi,
Program Analyst, Resilience and Sustainable Growth,
UNDP Malawi



“Raising awareness about invasive species remains a major concern for all of us. The Trialogue gave it the urgency and platform it deserves.”

Mr Charles Bonaventure,
Echo East Africa Impact Centre Arusha, Tanzania

» I. Introduction

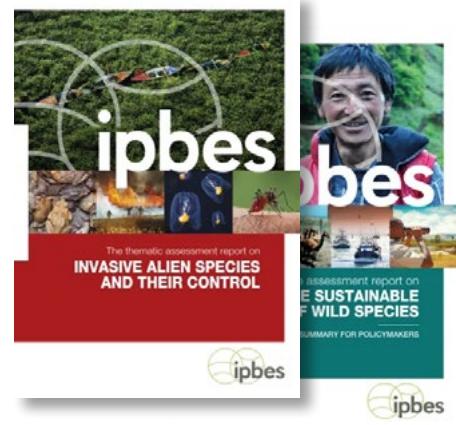
This Action Document presents the key discussion points and agreed priority areas of action generated during the BES-Net Regional Trialogue titled “Advancing Inclusive Solutions for Invasive Alien Species (IAS) and Sustainable Use of Wildlife” (hereafter “the Trialogue”), held in Windhoek, Namibia, from 18 to 20 February 2025. The Trialogue convened over 70 participants from Namibia and neighbouring countries (Botswana, Malawi, Tanzania, Uganda and Zimbabwe), alongside regional and global experts (**Annex 1**). Participants included scientists, policymakers, practitioners, and community representatives, aiming to bridge the gap between science, policy, and practice to address IAS challenges and promote sustainable resource use.

The event drew upon two key IPBES assessment reports to frame discussions:

1. [Thematic Assessment Report on Invasive Alien Species and Their Control \(2023\)](#), which provides global insights into the drivers, impacts, and management approaches for IAS; and
2. [The Thematic Assessment Report on Sustainable Use of Wild Species \(2022\)](#), which highlights pathways for ensuring that biodiversity-based livelihoods remain ecologically sustainable and socially equitable.

What are Trialogues?

[BES-Net Trialogues](#) are multi-stakeholder events, a signature methodology of the [Biodiversity and Ecosystem Services Network \(BES-Net\)](#), that bring together scientists, policymakers, and practitioners (including Indigenous Peoples and local communities) to foster dialogue and collaboration on biodiversity and ecosystem services issues, aiming to translate scientific knowledge into actionable strategies.



Participants applied key messages from these reports to assess regional and national priorities, focusing on policy frameworks, collaborative approaches, and cross-sectoral cooperation. The discussions aligned with global commitments, particularly the [Kunming-Montreal Global Biodiversity Framework \(GBF\)](#) and the [Sustainable Development Goals \(SDGs\)](#), with an emphasis on [Target 6 \(Reduce the introduction of invasive alien species\)](#) and [Target 9 \(Manage wild species sustainably\)](#).

Hosted by Namibia’s Ministry of Environment, Forestry, and Tourism (MEFT) in collaboration with UNDP and BES-Net, the Trialogue provided a platform for sharing knowledge and identifying solutions to IAS-related challenges. Participants discussed policy coherence, capacity-building, Indigenous and local knowledge (ILK), and sustainable use of wild species opportunities.

Structured across three days, the Trialogue featured keynote presentations, panel discussions, interactive sessions, and a field visit. Participants explored IAS impacts on biodiversity, livelihoods, and ecosystem health, while identifying opportunities for sustainable use of wild species and enhanced regional collaboration. For detailed session agendas and speaker profiles, please refer to the Trialogue agenda (**Annex 2**).

The Trialogue achieved its objectives, which included:

- **Raising Awareness and Commitment on IAS and Sustainable Use of Wild Species:** Addressing IAS threats to native ecosystems and livelihoods and promoting the commitment to sustainable use of wild species for community well-being.
- **Fostering Interaction and Collaboration:** Enhancing cross-sectoral and cross-country collaboration, regional cooperation on wildlife conservation and IAS management (e.g. cases like *Prosopis*) as well as weaving of scientific, traditional, and local knowledge systems.
- **Translating Knowledge into Action:** Converting global biodiversity insights into actionable regional and national solutions (i.e. action plans outlined in Section IV) and strengthening the science-policy-practice interface for biodiversity conservation.



This Action Document builds on the Background Document developed in preparation for the Triogue, which contextualized the IPBES Thematic Assessments on IAS and the Sustainable Use of Wild Species compiling evidence on related themes status, key drivers, and regional challenges through literature review and stakeholder consultations.

This Action Document captures the key discussions, insights, and priority actions identified by participants reflecting their collective knowledge, experiences, and aspirations shared during the three-day event. It is intended to support countries as they translate global knowledge into context-specific strategies, and as they strengthen national and regional efforts to manage biodiversity sustainably and equitably.

This document captures the discussions, presenting them with a progressively deepening level of specificity. For example, Table 1, highlighting challenges and opportunities, originated from the mixed-group discussions held on Day 1. These themes were further explored in focused working groups on Day 2, facilitated by subject matter experts who had introduced cross-cutting issues such as ILK, gender, and key messages from the relevant IPBES assessments.

The common priorities and thematic areas for action, outlined in Section III, emerged through this collaborative dialogue. These discussions, informed by knowledge exchange among participants including case studies outlined in Figure 2, laid the foundation for the country-specific action plans (presented in Section IV), drafted by participants to guide future efforts in awareness-raising, capacity building, policy development, and on-the-ground implementation in participating countries.

» II. Key messages

Why does the IAS Management Matters?

Globally, IAS are among the top five drivers of biodiversity loss, disrupting ecosystems, economies, and food systems (IPBES, 2023). In East and Southern Africa, IAS threaten food security, water availability, and livelihoods, exacerbated by limited cross-border coordination and limited policy enforcement (CABI, 2020). In the region, the spread of IAS across borders remains a major challenge, requiring coordinated regional action rather than isolated national efforts. The Trialogue underscored the importance of harmonized policies, shared knowledge, and early warning systems to improve IAS prevention and management. Without urgent and collective action, IAS will continue to threaten conservation efforts, reduce food production, and further strain vulnerable communities and economies.

What Are the Global IAS-related Challenges?

Globally, IAS continue to spread at an alarming rate (IPBES, 2023), driven by climate change, land degradation, and global trade (McGeoch et al., 2024). Their economic impact reaches hundreds of billions of dollars annually, straining agriculture, public health, and conservation efforts. Recognizing this urgency, international frameworks such as the GBF Target 6 (CBD, 2022) and the SDG 15 call for strengthened global cooperation to manage IAS and promote the sustainable use of wild species (de Mello Dondoni, 2022; Sayer et al., 2019). These commitments highlight the need for integrated strategies that address IAS impacts while supporting ecosystem resilience and human well-being.

Why does the Sustainable Use of Wild Species Matter?

Sustainable use of wild species, as defined by IPBES (IPBES, 2022), refers to the responsible utilization of wild species in ways that maintain their populations and ecosystems over time while supporting human well-being. Globally, wild species support biodiversity, ecosystem stability, and livelihoods. Continentally, they play a crucial role in food security, economic development, and cultural identity (Balvanera, 2022). Within East and Southern Africa, where many communities rely directly on wild species for sustenance and income, their sustainable use is particularly vital. Sustainable use of wild species, as reflected in the IPBES assessment findings, ensures biodiversity conservation while safeguarding livelihoods, securing long-term ecological and societal benefits. However, climate change, habitat destruction,

Highlights from the Trialogue discussions:

IAS are deeply tied to land use, agriculture, and conservation efforts, requiring multi-sectoral collaboration to mitigate their impact.

Sustainable use connects conservation with economic development, highlighting the need for policies that integrate biodiversity protection with human well-being.

Addressing IAS and Sustainable Use together provides opportunities for innovation and alternative livelihoods.

IAS control must be integrated into broader sustainability discussions on water, food, and climate resilience.

East and South African's challenges are part of a larger global issue, requiring alignment with international biodiversity frameworks.

Addressing these barriers requires regionally coordinated efforts and stronger enforcement mechanisms.

Scaling up successful interventions requires strong policy, research, and community engagement.

Gender inclusion is crucial for effective biodiversity management and equitable policy outcomes.

and policy gaps are increasingly threatening wildlife-based economies, making traditional resource-use practices more vulnerable (IUCN, 2021). ILK and community-driven conservation have been recognized as essential tools for managing wild species sustainably, ensuring that both ecosystems and human populations remain resilient (Reo & Ogden, 2018). Balancing economic opportunities with conservation requires stronger governance frameworks, participatory decision-making, and adaptive management strategies that acknowledge regional socio-economic realities.

How are IAS and the Sustainable Use of Wild Species Connected?

IAS and sustainable use of wild species are closely linked. IAS-driven ecosystem changes impact the availability of wild species that communities rely on for livelihoods, cultural practices, and economic activities. At the same time, sustainable use of wild species strategies can support IAS management by promoting their utilization for productive purposes such as bioenergy, fodder, and construction materials. Discussions at the Trialogue emphasized the need for regional collaboration to prevent the spread of IAS, fostering efforts of some nature-based solutions to turn IAS challenges into economic opportunities. Harvesting IAS for productive use was identified among the key strategies to strengthen IAS control and mitigate their negative impacts, while generating livelihood benefits for local communities and aligning conservation goals with economic resilience.

Nexus Assessment: Interlinkages Between Biodiversity, Water, Food, and Health

The [IPBES Nexus Assessment](#) emphasizes that biodiversity loss, water scarcity, food insecurity, and health challenges are interconnected. These issues are particularly evident in Africa, where ecological disruptions directly affect livelihoods. In East and Southern Africa, IAS further compound these challenges by exacerbating water shortages, soil degradation, and food system instability.

Stakeholder exchanges at the regional discussion revealed several key insights on the complex interactions between IAS, water availability, food security, and climate change. These takeaways highlighting key regional challenges related to IAS and potential responses, applying nexus lens:

- IAS impact water resources by altering ecosystems, affecting wetland functions, and competing with native vegetation for water. Some invasive plants, such as *Prosopis juliflora*, consume significant amounts of groundwater, reducing availability for agriculture and domestic use.
- Food security is affected as IAS disrupt agricultural productivity—not only through direct crop damage by invasive pests but also by altering soil health and reducing pollination services.
- Climate change and IAS interact—rising temperatures, changing rainfall patterns, and extreme weather events create conditions that may favour the spread and establishment of certain IAS, intensifying their ecological and socio-economic impacts.



Drawing on the intersectoral approach of the Nexus assessment (**Figure 1**), participants highlighted the need for integrated approaches that recognize the interdependencies between biodiversity, food systems, water security, and human health. Strengthening cross-sectoral policies and governance was identified as essential for enhancing community resilience, reducing IAS impacts, and ensuring sustainable resource management.

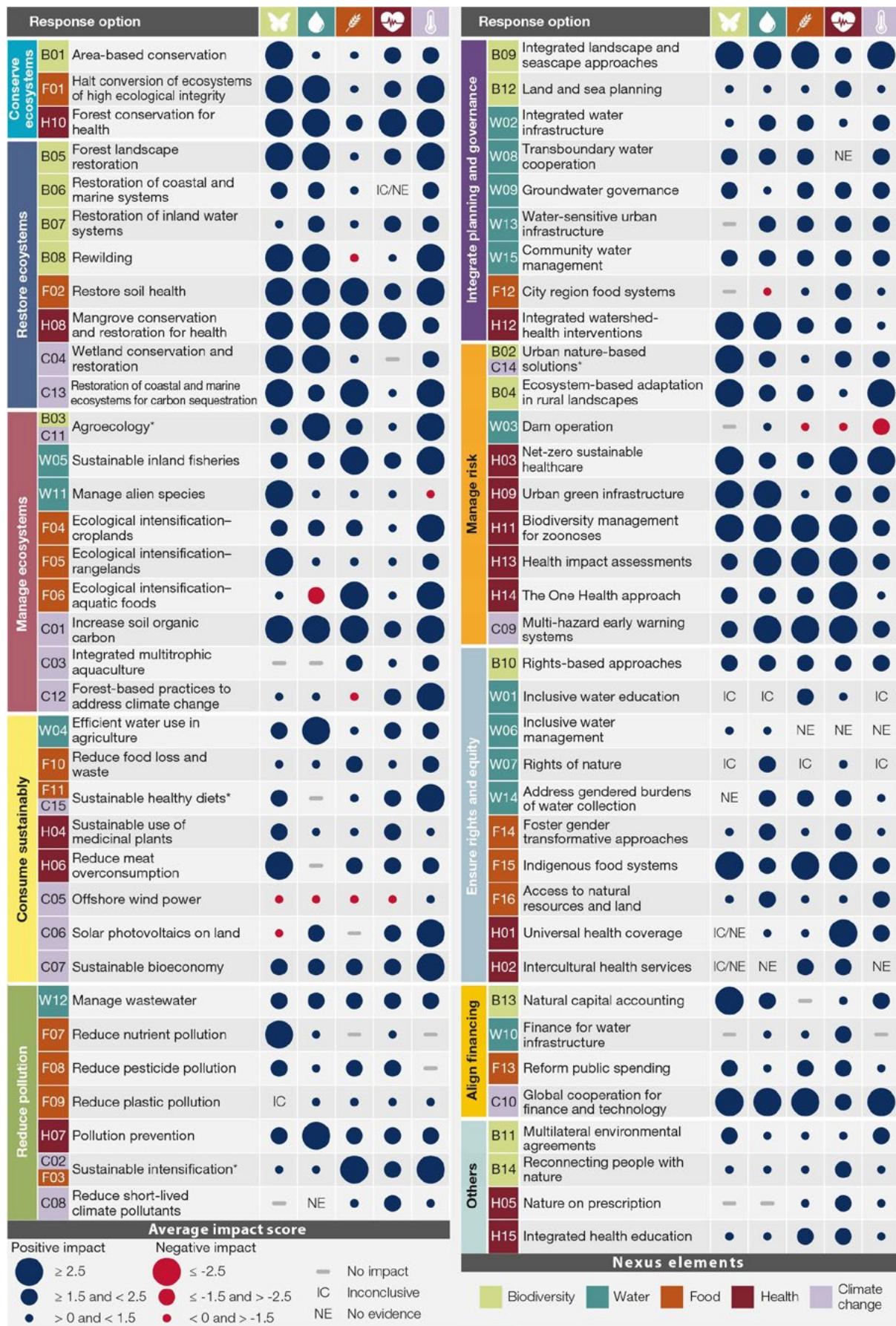


Figure 1: Positive and negative impacts of 71 response options addressing biodiversity, water, food, health, and climate linkages. Source: (IPBES, 2024) SPM.8.

What Regional Challenges and Opportunities in the Management of IAS and the Sustainable Use of Wild Species Exist?

In East and Southern Africa, IAS and the sustainable use of wild species are deeply interconnected, shaping ecosystems, livelihoods, and conservation efforts. Engagements during the Trialogue highlighted several pressing challenges in IAS management, including policy gaps, funding constraints, limited cross-border coordination, and underestimation of ILK. However, participants also explored opportunities for strengthening governance, enhancing collaboration and promoting inclusive, science-policy-community approaches.

A Rising Regional Crisis: *Prosopis juliflora*

Prosopis juliflora emerged as a critical concern during the East and Southern Africa Trialogue. This invasive species is rapidly transforming ecosystems and threatening livelihoods across the region. Key impacts reported from the Trialogue participating countries include:

- **Botswana:** In the Gantsi District, *Prosopis* invasion has led to a significant reduction in native plant species richness and density, altering community composition and increasing soil nutrient levels, which may favour its spread. [Read more here](#).
- **Namibia:** The species has invaded vital ecosystems, leading to the development of a [National Strategy on the Sustainable Management of Bush Resources 2022-2027](#), which addresses the challenges posed by bush encroachment, including invasive species like *Prosopis juliflora*.
- **Tanzania:** In the Moshi District, integrated management practices, including manual removal and restoration, have proven effective in controlling *Prosopis* and restoring grasslands. [Read more here](#).
- **Uganda, Malawi, and Zimbabwe:** Presentations during the Trialogue highlighted growing concerns over *Prosopis juliflora*, with participants acknowledging its threat and the need for stronger monitoring and management strategies. With support from [BIOFIN](#), future projects aim to strengthen invasive species management through policy alignment, capacity building, and coordinated regional action (CABI, 2020; Eschen et al., 2024; Kamiri et al., 2024).

As emerged during the Trialogue discussions recognizing the common challenge in the participating countries, addressing the *Prosopis* invasion requires a unified regional approach, emphasizing coordinated management strategies and policy alignment to mitigate its ecological and socio-economic impacts.



Table 1 presents cross-cutting issues identified during the Trialogue, derived from the mixed-group discussions held on Day 1 through the Tree of Life adaptation exercise. It summarizes the shared reflections of participants from multiple sectors and countries, alongside emerging opportunities for action that were further explored in the subsequent working group sessions.

Table 1: Key challenges and opportunities related to IAS management and sustainable use of wild species across East and Southern Africa.

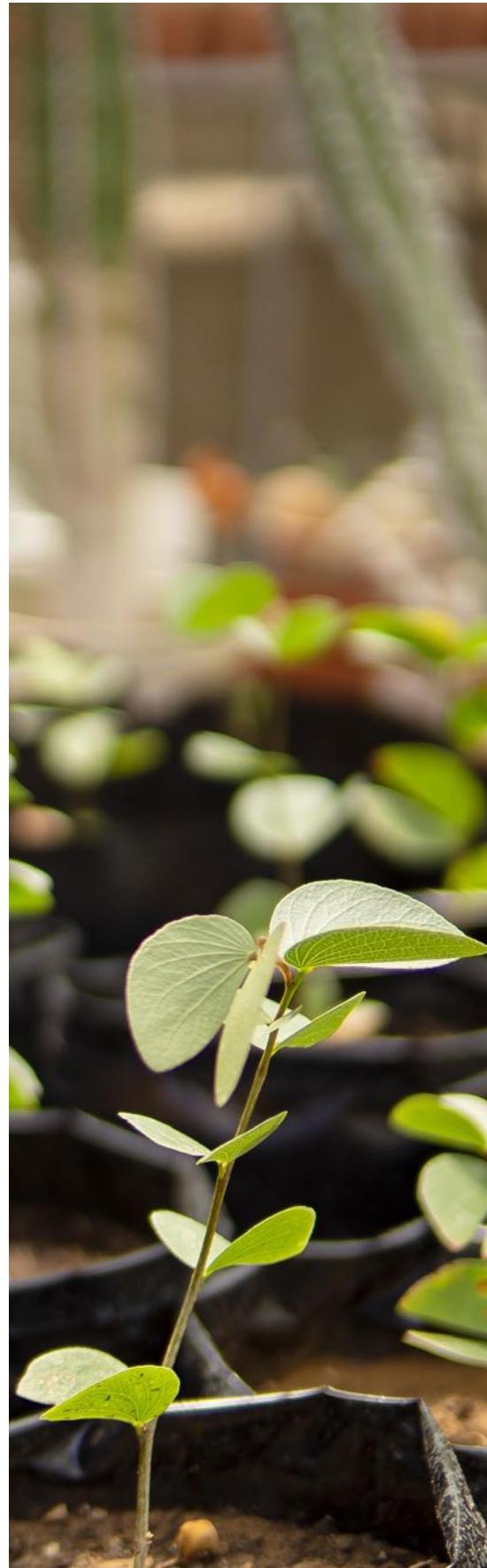
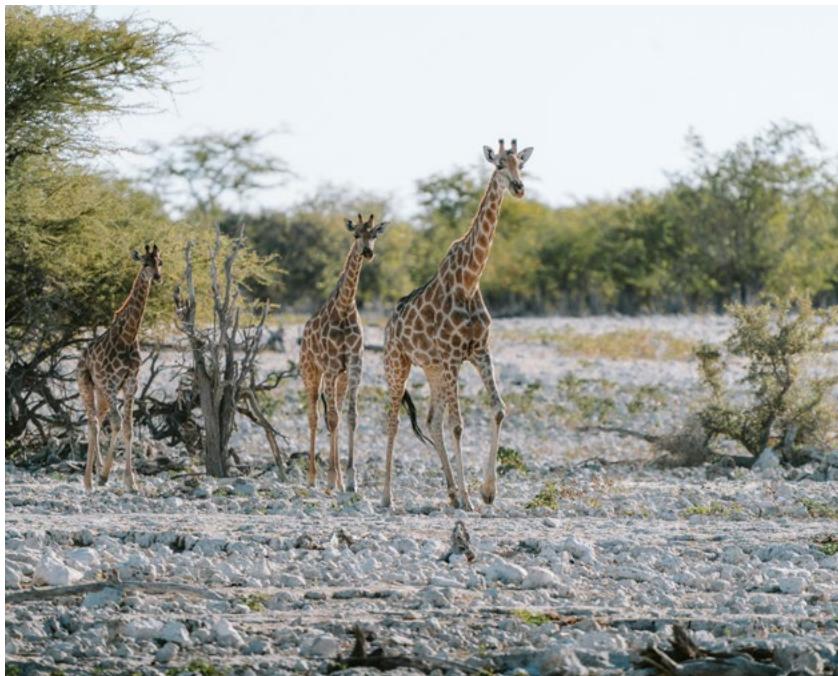
 Challenges	 Opportunities for Action
<p>Evolving Policy Framework & Fragmented Governance: Variability in regulations, overlapping institutional responsibilities, and limited coordination among stakeholders present ongoing challenges for effective IAS management. The role of ILK is not yet consistently reflected in formal policy processes.</p>	<p>Strengthening Policy & Governance: Aligning IAS strategies with national biodiversity frameworks, local development plans, and global commitments (e.g., GBF Target 6 & SDG 15) can enhance enforcement. Establishing multi-sectoral working groups can ensure policy coherence and accountability.</p>
<p>Limited Regional Collaboration: IAS spread across borders, yet countries often work in isolation. A lack of shared monitoring systems and differing national policies hinders coordinated action.</p>	<p>Enhancing Regional Cooperation: Strengthening transboundary collaboration, harmonized IAS policies, and shared data platforms can improve monitoring and response effectiveness. A regional IAS coordination mechanism could facilitate joint actions.</p>
<p>Funding Constraints: Conservation programs often rely on short-term funding, limiting long-term IAS control efforts, research, and awareness campaigns.</p>	<p>Expanding Funding & Resource Mobilization: Exploring innovative financing models (e.g., payments for ecosystem services, public-private partnerships, and conservation trust funds) could improve resource availability for IAS management.</p>
<p>Gaps in Knowledge & Data Sharing: Scientific and ILK knowledge systems remain disconnected, leading to fragmented decision-making. ILK is often undocumented or underutilized.</p>	<p>Bridging Scientific & Indigenous Knowledge: Recognizing, documenting, and weaving ILK into IAS management can improve early detection, ecosystem restoration, and community-based monitoring. Creating ILK-science partnerships could validate and scale up traditional management practices.</p>
<p>Low Public Awareness & Community Engagement: Many communities lack access to IAS-related information, reducing participation in prevention and control efforts. Outreach initiatives are often not culturally relevant.</p>	<p>Scaling Up Public Awareness & Engagement: Encouraging citizen science, community-led IAS monitoring programs, and digital outreach initiatives (e.g., mobile reporting, social media, radio) can increase awareness and public involvement.</p>
<p>Gender Inequality in Conservation & IAS Governance: Women and more vulnerable groups (such as Indigenous Peoples, youth, and people with disabilities) are underrepresented in IAS decision-making, despite their key roles in resource management.</p>	<p>Advancing Gender-Inclusive Conservation: Mainstreaming gender into IAS policies, supporting women-led biodiversity initiatives, and ensuring equal access to leadership, training, and funding can enhance conservation efforts.</p>

Moving forward: The cross-cutting action points presented here and further unpacked in Section III, reflect the outcomes of the focused group discussions held during the Trialogue, facilitated by subject matter experts. These sessions built on earlier exchanges and explored shared priorities in depth, identifying areas that are best addressed through regional or transboundary collaboration.

Participants emphasized that addressing these challenges requires turning commitments into action by translating policies into enforceable strategies, ensuring sustained investment, and strengthening accountability mechanisms. As emphasised by the Trialogue participants, a collective action from multiple stakeholders, including governments, researchers, and local communities is critical to operationalize regional commitments, track progress, and adapt strategies based on evolving challenges. A coordinated, well-resourced, and inclusive approach will be critical in shaping the future of IAS management and sustainable biodiversity use in East and Southern Africa.

Success & Key Insights

Throughout the Trialogue, participants shared bright spots, case studies, and key discussion points that highlight innovative strategies, community-driven solutions, policy actions and lessons learned in IAS management and sustainable biodiversity use. Examples captured in Figure 2 provide practical insights that can inform research, policymaking, and on-the-ground conservation efforts across East and Southern Africa.





Spatial Planning for Biodiversity Conservation

Zimbabwe

Overview: Spatial planning plays a critical role in aligning biodiversity conservation with local development needs. However, past approaches have been top-down and exclusionary, leading to resistance from communities.

Key Impact: A shift towards participatory, community-driven spatial planning strengthens conservation effectiveness and local ownership.

Challenge: Non-aligned policies and uncoordinated actions have created conflicts between conservation priorities and community needs.

Solution: By adopting bottom-up, participatory planning models, Zimbabwe is ensuring that biodiversity conservation strategies are inclusive, reflecting local realities while advancing national conservation goals.



Strengthening Sustainable Agriculture & IAS Management

Tanzania

Overview: The [ECHO](#) East Africa Impact Center in Arusha empowers small-scale farmers through training, resources, and sustainable agriculture, addressing food security and Invasive Alien Species (IAS) threats.

Key Impact: [ECHO](#) collaborates with CABI to develop tools like the Guide to the Naturalized and Invasive Plants of Eastern Africa, supporting farmers and conservationists in IAS identification and management.

Challenge: Farmers face land degradation, climate unpredictability, and IAS spread, which reduce crop yields and ecosystem stability. Limited policy coordination further hampers IAS control.

Solution: Through hands-on training, knowledge-sharing, and policy engagement, ECHO promotes sustainable farming, agroecological solutions, and cross-border IAS management collaboration.



Empowering Malawian Farmers through Permaculture Training

Malawi

Overview: The [Permaculture Paradise Institute \(PPI\)](#) is dedicated to transforming the lives of Malawian youths and smallholder farmers by offering affordable, intensive, and practical permaculture training.

Key Impact: PPI has successfully trained numerous farmers in sustainable agricultural practices, leading to the establishment of food forests and improved food security in various communities.

Challenge: Many smallholder farmers in Malawi face challenges related to food insecurity, poverty, and environmental degradation due to unsustainable farming methods.

Solution: Through hands-on permaculture design courses, agro-ecology training, and onsite technical support, PPI equips farmers with the knowledge and skills to implement sustainable farming techniques, thereby enhancing their livelihoods and promoting environmental conservation.



Empowering Indigenous & Local Knowledge (ILK) in Conservation

Multi-Country Initiative

Overview: Indigenous and Local Knowledge (ILK) has long guided biodiversity management, yet it remains undervalued and underutilized in conservation policies.

Key Impact: A UNDP-supported initiative has enhanced peer-to-peer learning and ILK integration into National Environmental Action (NEA) projects in Botswana, Malawi, and the Dominican Republic.

Challenge: ILK is often excluded from formal decision-making, leading to knowledge gaps in conservation strategies.

Solution: By documenting and elevating ILK in policy discussions, this initiative is ensuring that community knowledge informs national biodiversity strategies, making them more inclusive and effective.

[LEARN MORE](#)

Figure 2: Bright spots of action highlighting IAS management and sustainable use initiatives in East and Southern Africa.

» III. Emerging Themes that Inform Action

A synthesis of cross-cutting themes and shared priorities identified during the Trialogue is presented here. These emerged through a participatory and iterative process, starting with mixed-group discussions on Day 1 and deepened in targeted working groups on Day 2, facilitated by subject matter experts. The sessions drew on key messages from the IPBES Thematic Assessments and encouraged reflection on interlinked issues such as ILK, governance, financing, awareness-raising, gender mainstreaming, and regional collaboration.

Despite differing national contexts, discussions revealed strong alignment on the need for regional and cross-border collaboration, as well as integrated, inclusive approaches to managing IAS and advancing the sustainable use of biodiversity. These insights underpin the country-specific action plans outlined in Section IV.



Strengthening the Role of ILK in IAS Management and Conservation

ILK provides deep ecological insights—from identifying invasive species early to understanding ecosystem changes and biodiversity values. However, policy responses informed by ILK remain limited, as ILK is often considered voluntary rather than obligatory in decision-making. Participants stressed the need to:

- Create structured governance frameworks that formally recognize ILK.
- Strengthen documentation and validation processes to ensure ILK contributes meaningfully to IAS strategies.

Addressing Knowledge Gaps on IAS

IAS management is hindered by data gaps, particularly on species distribution, ecosystem impacts, and socio-economic costs. While ILK and scientific knowledge can complement each other, barriers such as insufficient knowledge-sharing platforms and lack of trust persist. Key priorities include:

- Improving cross-sectoral collaboration to weave ILK and scientific research.
- Developing open-access regional databases to enhance information exchange.

Improving Access to Resources for Effective Action

Participants highlighted financial, technical, and institutional constraints as major barriers to IAS management. Equitable access to funding, especially for Indigenous Peoples and local communities, remains a challenge. Solutions discussed included:

- Innovative financing models, such as payment for ecosystem services and blended finance.
- Strengthening regional partnerships to mobilize sustainable funding.
- Applying the nexus approach to align IAS funding with food security, water, and health priorities.

Strengthening Community Awareness on IAS

Engaging local communities is essential for early detection and response to IAS. However, top-down approaches often fail to resonate at the grassroots level. Key recommendations included:

- Leveraging participatory approaches, such as citizen science and traditional knowledge-sharing.
- Developing locally adapted awareness campaigns that align with community values and priorities.
- Involving policymakers and practitioners in co-developing communication strategies.

Mainstreaming Gender into Biodiversity Management

Despite playing key roles in natural resource management, women often face barriers to participation. The Trialogue discussions emphasized the need for:

- Gender-responsive policies that actively involve women in conservation decision-making and IAS management.
- Capacity-building initiatives to strengthen leadership roles for women in conservation.
- Documentation of gender-specific knowledge on IAS and biodiversity management.

Enhancing Regional Collaboration for IAS and Conservation

IAS cross borders, yet regional coordination remains limited. Participants highlighted the urgency of aligning national policies and improving transboundary cooperation. Key areas for action include:

- Harmonized IAS policies to facilitate coordinated responses.
- Shared regional data platforms for IAS tracking and monitoring.
- Increased investment in cross-border initiatives to enhance early warning systems and rapid response strategies.

These insights underscore the need for inclusive, knowledge-driven, and well-resourced IAS management strategies. The next section outlines country-specific actions, highlighting how these discussions translate into on-the-ground implementation across the region.



Gender Dimensions in IAS Management and Sustainable Use of Wild Species

Gender plays a critical yet often overlooked role in biodiversity conservation and IAS management (Muigua, 2021; Rocheleau, 1995). Women, particularly in rural communities, are primary resource users and knowledge holders (Howard, 2015; Shackleton et al., 2019), relying on forests, water sources, and wild species for food, medicine, and livelihoods. However, systemic barriers limit their participation in decision-making processes, policy formulation, and resource governance (Shackleton et al., 2023). Addressing these gender disparities is essential for inclusive and effective IAS control and strategies for sustainable use of wild species.

Women as Knowledge Holders

Women have deep ecological knowledge about managing wild species, yet their contributions are often limited in decision-making processes, especially those related to land management, IAS governance and policy platforms; this lack of participation is driven in part by gendered roles within the context of IAS management, wildlife conservation and customary land ownership.

Limited Access to Resources and Decision-Making

Women frequently lack access to/ encounter more obstacles to access training, financial resources, and leadership roles in IAS control programs, restricting their ability to implement solutions.

Key Gender-Related Insights from the Trialogue



Disproportionate Impacts

As observed by CABI, IAS could lead to inequities in gender- and age-specific activities, for example, by increasing women's agricultural labour burdens, negatively impacting their health and livelihoods, and affecting men through reduced livestock productivity due to degraded grazing lands.

Gender-Responsive IAS Strategies

Equitable participation of women in IAS management requires mainstreaming gender perspectives, ensuring that policies and interventions reflect the needs and realities of women.

Call for Gender-Responsive Action

The Trialogue underscored the urgent need for gender-responsive policies that recognize and integrate women's knowledge and leadership into IAS and sustainable use governance. Strengthening women's participation in decision-making, providing access to financial and technical resources, and embedding gender-responsive approaches in IAS strategies will enhance both social equity and environmental sustainability. Looking ahead, cross-sectoral collaboration is essential to bridge gender gaps, empower women and develop inclusive IAS management frameworks that benefit entire communities.



» IV. National-Level Ambitions and Action Priorities

This section presents the strategic and context-specific actions developed by country delegations during the working group exercises at the Trialogue for East and Southern Africa. Facilitated on Day 2 and 3, these co-creative exercises invited participants to reflect on their national contexts and collaboratively identify practical steps to address the interconnected challenges of IAS and the sustainable use of wild species and broader realm of biodiversity conservation.

The proposed actions align with each country's biodiversity strategies, socio-economic realities, and institutional frameworks. Informed by the insights from the IPBES assessments and the cross-cutting themes explored earlier in the Trialogue, the discussions emphasized the importance of coherent governance, cross-border collaboration, and inclusive, community-driven approaches.



» Botswana

Challenges

Botswana is increasingly affected by IAS, threatening biodiversity, water resources, and agricultural productivity. They significantly impact Botswana's ecosystems and livelihoods. Studies indicate that woody invasive species, such as *Acacia mellifera*, contribute to bush encroachment, leading to rangeland degradation and reduced grazing areas for livestock (Dougill et al., 2016; Lesoli et al., 2013; Seletlo et al., 2024). In aquatic systems, invasive plants like *Salvinia molesta* pose substantial threats to wetlands by disrupting native flora and fauna, thereby affecting water quality and availability (Gondwe et al., 2021; Kurugundla et al., 2016). These changes adversely affect the livelihoods of communities dependent on pastoralism and fishing.

Strengthening inter-agency coordination would present an opportunity to enhance the effectiveness of IAS response efforts. Cross-border IAS management remains limited, despite shared ecosystems with neighbouring countries. Additionally, short-term control projects dominate, with limited funding for long-term, sustained IAS programs.

Advancing National Ecosystem Assessment

Since mid-2023, Botswana has been conducting NEA, supported by the NEA Initiative at UNEP-WCMC. Implemented by the Botswana University of Agriculture and Natural Resources (BUAN) in partnership with the Department of Environmental Affairs (DEA), Ministry of Environment and Tourism, the project aims to synthesize knowledge on biodiversity and ecosystem services and their interlinkages to people.

Trends and Threats



Botswana is currently undertaking a National Ecosystem Assessment to evaluate the economic and ecological impacts of environmental changes, including IAS. While specific data on the percentage of affected ecosystems with structured IAS management plans is not readily available, the proliferation of invasive species remains a significant concern. Factors such as climate variability and expanding trade routes have exacerbated the spread of IAS, particularly along Botswana's extensive international borders, which total approximately 4,347 kilometres. Invasive species like *Prosopis juliflora* and *Salvinia molesta* threaten Botswana's agriculture and biodiversity, invading rangelands and water bodies. The IUCN reports that Botswana has approximately 18% of the land protected, with unregulated wildlife corridors, which risk further IAS spread. Strengthening early detection, rapid response, and sustainable management is crucial to safeguarding ecosystems and livelihoods.



Opportunities and Response Options

To strengthen IAS management, Botswana through [its NBSAP](#) is advancing:

- **Enhanced inter-agency coordination** – Establishing a **national IAS coordination platform** linking environment, agriculture, trade, and border control agencies.
- **Long-term IAS control programs** – Shifting from short-term interventions to **5–10-year sustainable IAS management plans** integrated into biodiversity strategies.
- **Early detection and response systems** – Expanding surveillance networks, aiming to **increase IAS monitoring coverage by 50%** within five years.
- **Sustainable IAS utilization** – Exploring commercial use of IAS for **bioenergy, fodder, and construction materials**, aligning with circular economy initiatives.
- **Regional collaboration** – Strengthening transboundary projects to align IAS prevention with **Southern African Development Community (SADC) biodiversity goals**.

Botswana's action plan is focused mainly on IAS and was developed by their delegation during the Trialogue, in line with national biodiversity strategies, conservation targets, and socio-economic priorities. The following action table (Table 2) outlines the key strategies, actions, and implementation frameworks identified to strengthen IAS management in Botswana.



Table 2: Botswana's Actions on IAS Management, Stakeholders, and Implementation Levels

Strategy	Action	Level (Regional / National / Local)	Champion(s)	Stakeholder(s)	Timeline
Ambition 1: Strengthen and enhance coordination of Invasive Alien Species (IAS) management					
Improve coordination among government agencies and other key stakeholders on IAS management.	<ul style="list-style-type: none"> Establish an integrated, inclusive stakeholder engagement framework Establish Local and National IAS working groups 	National/ Local (Districts)	Ministry of Environment and Tourism Lead Department-Department of Forestry and Range Resources (DFRR)	Government Departments, NGOs, Private Sector, Local Communities, Academia	Short-term (1 year)
Harmonize and update legal and policy frameworks for IAS management.	Review, revise, and integrate outdated sectoral policies and legislation related to IAS control.	National, Regional	Ministry of Environment and Tourism Lead Department-Department of Forestry and Range Resources (DFRR)- Ministry of Land and Agriculture, -Department of Plant Protection Ministry of Water and Human Settlement Ministry Of Health Department of Public Health Department of Wildlife and National Parks	Academic Institutions, Conservation Organizations, Local Communities Ministry of Land and Agriculture, -Department of Plant Protection Ministry of Water and Human Settlement Ministry Of Health Department of Public Health Department of Wildlife and National Parks	Short to Mid-term (2 years)
Improve national coordination to prevent IAS introduction.	Establish partnerships among trade, transport, customs, and environmental agencies for IAS monitoring and prevention.	National	Ministry of Environment and Tourism Lead Department-Department of Forestry and Range Resources (DFRR)	Law Enforcement, Academia, Conservation NGOs Ministry of Transport and Infrastructure, Customs Authorities	Short-term (1 year)

Strategy	Action	Level (Regional / National / Local)	Champion(s)	Stakeholder(s)	Timeline
Ambition 2: Reduce the introduction of IAS into Botswana					
Strengthen cross-border collaboration to prevent IAS introduction.	<ul style="list-style-type: none"> • Develop cooperation agreements with neighbouring countries on IAS Management • Develop collaborative transboundary IAS projects with neighbouring countries. 	National, Regional	Ministry of Environment and Tourism Lead Department-Department of Forestry and Range Resources (DFRR)	Border Agencies, Regional Environmental Bodies, Neighbouring Governments Ministry of International Relations Ministry of Justice and Correctional Services	Long-term(5 Years)
Ambition 3: Reduced rate of spread of IAS in Botswana					
Strengthen and enhance capacity for the eradication, containment, and control of invasive alien species	<ul style="list-style-type: none"> • Develop and implement National IAS Strategy, surveillance monitoring plans • Develop IAS Control Programme • To develop education and awareness programme on IAS 	National, Local (Districts)	Ministry of Environment and Tourism Lead Department-Department of Forestry and Range Resources (DFRR)	Government Departments, Private Sector, NGOs CBOs Local Communities Development Partners	Long-term (5 years)
Ambition 4: Improve data and knowledge availability on IAS					
Establish national assessment and monitoring system on IAS.	<ul style="list-style-type: none"> • Establish baseline data and information on IAS • Development of National Database on IAS • Conduct periodic national assessment and monitoring on IAS 	National, Local (Districts)	Ministry of Environment and Tourism, Academia	Academic Institutions, NGOs, Government Departments Local Communities	Long term (5 years)

Strategy	Action	Level (Regional / National / Local)	Champion(s)	Stakeholder(s)	Timeline
Strengthen and coordinate research on IAS	Strengthen Capacity of research institutions and relevant stakeholders to undertake research on IAS	National, Local (Districts)	Ministry of Environment and Tourism Lead Department-Department of Forestry and Range Resources (DFRR)	Academic Institutions, NGOs, Government Departments Local Communities	Long term (5years)
	Development of Policy briefs in accordance with Research findings	National, Local (Districts)	Ministry of Environment and Tourism Lead Department-Department of Forestry and Range Resources (DFRR)	National Assembly, Academia, Civil Society Org NGOs, Government Departments Local Communities	Short Term After Recommendations from Research Findings





» Malawi

Progressing with National Ecosystem Assessment

Malawi which initiated its NEA in 2020, led by Lilongwe University and the Environmental Affairs Department, with technical support from the BES-Net and partners like UNDP, UNEP-WCMC, and UNESCO, has completed a [scoping report outlining the assessment's framework](#). This foundational document sets the stage for a comprehensive evaluation of Malawi's ecosystems, aiming to inform sustainable management practices and policy development.

Challenges

Malawi's ecosystems, agriculture, and water resources face mounting threats from IAS, particularly aquatic plants in lakes and rivers and the spread of invasive species in rangelands. IAS disrupt biodiversity, reduce fish stocks, and degrade pasturelands, impacting over 80% of rural households that rely on agriculture and fisheries (Ellis et al., 2003). The introduction of alien fish species poses further risks to native biodiversity and ecosystem health.

Trends and Threats

Efforts to combat IAS are growing, with regional cooperation and awareness campaigns expanding to address invasive species in water bodies. However, gaps in border control, policy enforcement, and stakeholder coordination allow IAS to spread unchecked. Malawi's forests and wetlands are shrinking, with over 5.6% of forests lost since 1990, exacerbating ecosystem vulnerability (Wanda et al., 2016). Without stronger intervention, IAS could lead to further declines in food security and ecosystem resilience.



Opportunities and Response Options

Malawi is advancing several key strategies to strengthen IAS management:

- **Public education and community-based monitoring** – Expanding awareness programs and local participation to track IAS spread.
- **Regional partnerships for knowledge-sharing** – Strengthening collaboration with neighbouring countries to improve IAS control strategies.
- **Policy integration and governance strengthening** – Enhancing IAS management through better coordination between environmental, agricultural, and trade sectors.
- **Sustainable land use and climate-smart agriculture** – Promoting agroecological practices to reduce land degradation and strengthen food security.



Malawi's IAS action plan aligns with national biodiversity strategies and leverages government, academia, and local communities to drive long-term impact. The following action table (Table 3) outlines key strategies and implementation frameworks for addressing IAS and intertwined challenges of degraded ecosystems and food security in Malawi.

Table 3: Malawi's Strategy for Invasive Species Control and Sustainable Use of Wild Species: Actions, Stakeholders, and Implementation Timeline

Strategy	Action	Level (Regional / National / Local)	Champion(s)	Stakeholder(s)	Timeline
Ambition 1: Restoration of degraded ecosystems					
Restore degraded landscapes, especially wetlands and forests.	Halt conversion of ecosystems with high ecological integrity.	National, Regional, Local	Forestry Department, Environment Affairs Department (EAD)	Land Resources Department, Academia, NHBG, Local Communities Traditional leaders	Mid to Long-term
Secure resources for biodiversity conservation.	Develop funding proposals and mobilize resources from government, private sector, and donors.	National, Regional	Environmental Affairs Department	NGOs, Development Partners Forestry Department Ministry of Finance	Short to Mid-term

Strategy	Action	Level (Regional / National / Local)	Champion(s)	Stakeholder(s)	Timeline
Ambition 2: Enhance management and control of IAS					
Strengthen IAS management strategies in the revised NBSAP (2025-2035).	Integrate IAS control into national biodiversity plans.	National	EAD	Ministry of Finance, Academia, Department of Forestry, Agriculture	Short to Mid-term
Strengthen border control measures to prevent IAS entry.	Enforce quarantine and biosecurity measures, conduct risk assessments, implement early detection strategies for invasive species.	National	Ministry of Agriculture, EAD	Border Agencies, Customs, Ministry of Trade and Industry, Forestry Department	Mid-term
Improve coordination in IAS management.	Establish multi-stakeholder platforms for IAS control and harmonize policies.	National, Regional	EAD,	Local Communities, Civil Society Organizations (CSOs)	Ongoing
Develop institutional frameworks for IAS management.	Establish IAS coordination offices, train personnel, and strengthen governance structures.	National	EAD/MEPA	Academia, Civil Society, Forestry Department	Mid to Long-term
Ambition 3: At all levels, improve awareness, knowledge sharing, and dissemination mechanisms on IAS					
Strengthen education and outreach on IAS threats.	Conduct national awareness campaigns targeting traders, travellers, local communities, and stakeholders.	National, Local	EAD/MEPA	Academia, Ministry of Agriculture, Farmers, Schools, Media	Short-term
Enhance knowledge-sharing platforms.	Organize workshops, stakeholder dialogues, and scientific exchange programs targeting multiple stakeholders including park managers, extension workers, and frontline staff	Regional, National	EAD/MEPA	Ministry of Agriculture, Department of Forestry, Academia, CSOs, Local Communities	Ongoing

Strategy	Action	Level (Regional / National / Local)	Champion(s)	Stakeholder(s)	Timeline
Promote stakeholder collaboration.	Foster coordination among government agencies, local communities, and civil society.	National, Regional	EAD, Ministry of Agriculture	NGOs, Private Sector	Ongoing
Ambition 4 Improve food and nutrition security					
Promote sustainable land use and agroecological practices.	Train farmers in sustainable agriculture, agroecology, and biodiversity-friendly farming.	National, Local	Ministry of Agriculture, EAD	Local Farmers, Agricultural NGOs	Short to Mid-term
Implement sustainable inland fisheries.	Conduct specialized training programs for smallholder farmers to enhance food security.	National, Local	Fisheries Department	Fisherfolk, Conservation Agencies, Local communities	
Implement climate-smart agriculture and sustainable land-use practices.	Develop and promote ecosystem-based adaptation strategies for climate resilience.	National, Local	Ministry of Agriculture, Forestry Department	Farming Cooperatives, Development Agencies	Ongoing





» Namibia

Challenges

Namibia faces growing IAS threats, particularly in arid and semi-arid regions, where invasive plants accelerate land degradation and biodiversity loss. IAS such as *Prosopis juliflora* deplete groundwater, exacerbating water scarcity in a country where 92% of land is classified as arid or semi-arid (Shikangalah, 2020). The potential spread of invasive insects, such as termites, poses additional risks to agriculture and ecosystem resilience. Despite comprehensive legal frameworks, insufficient enforcement and fragmented institutional coordination hinder effective IAS response. While Namibia's Community-Based Natural Resource Management (CBNRM) program provides a strong governance model, local communities still lack resources for sustained IAS control.

Trends and Threats

Namibia has strengthened environmental regulations and is expanding regional collaboration on IAS control. However, invasive species continue to spread rapidly, particularly in rangelands and riparian zones, reducing forage availability for livestock in a country where 70% of rural livelihoods depend on pastoralism (GIZ, 2020). Without enhanced IAS detection and control, Namibia risks increased land degradation, higher water treatment costs, and disruptions to local economies reliant on ecosystem services.

Understanding the Value of Ecosystem Services

Namibia has undertaken initiatives to better understand its ecosystem services. A [notable project aimed to demonstrate the economic value of ecosystems and their services](#), emphasizing the importance of preventing over-exploitation and degradation.

Opportunities and Response Options

To enhance IAS management, Namibia is advancing:

- **Early detection and rapid response systems**, integrating community-led monitoring.
- **Sustainable financing mechanisms**, linking IAS control with biodiversity conservation funds.
- **Gender-inclusive approaches**, ensuring women's active participation in IAS governance.
- **Regional coordination** with the SADC countries for transboundary IAS control.

Namibia's action plan, shaped by Trialogue discussions, aligns with national biodiversity strategies, ecosystem restoration goals, and sustainable development priorities. The following table (*Table 4*) outlines the key strategies and implementation frameworks for strengthening IAS management in Namibia.



Table 4: Strategic Actions and Stakeholders for Managing Invasive Species and Promoting Sustainable Use of Wild Species in Namibia

Strategy	Action	Level (Regional / National / Local)	Champion(s)	Stakeholder(s)	Timeline
Enhancing institutional coordination and financial resilience for sustainable governance	Develop and align policies on Community Based Natural Resource Management (CBNRM)	National, Local	Ministry of Environment, Forestry and Tourism	Civil Society, NGOs, Local Communities	2025-2027
	Improve consultation during policy formulation to ensure synergy.	National, Regional	Ministry of Finance, National Planning Commission	Academia, Conservation Organizations	

Strategy	Action	Level (Regional / National / Local)	Champion(s)	Stakeholder(s)	Timeline
	Proactively mobilize financial and technical support for regional and local levels.	National, Regional		Development Partners, Private Sector	
	Improve financial planning for climate resilience and disaster preparedness.		Office of the Prime Minister and/ in collaboration with other partners	Ministry of Agriculture, Water and Land Reform, Local Authorities, Conservation Organizations	
Ecosystem restoration and sustainable water management	Implement land restoration programs and co-management of protected areas.	National	Ministry of Environment, Forestry and Tourism	Local Authorities, Conservation NGOs	2025-2027
	Improve water quality and strengthen hydrological monitoring systems.	National	Ministry of Agriculture, Water and Land Reform	Research Institutions, Local Communities	
	Implement proactive IAS control and management programs in line with NBSAP and GBF.	National	Ministry of Environment, Forestry and Tourism	NGOs, Civil Society, Academia, Private Sector	
Integrated knowledge, policy, and community support for effective IAS and ecosystem management	Conduct studies to inform decision-making and conservation actions.	National, Regional	Ministry of Environment, Forestry, and Tourism	Research Institutions, Academia, NGOs	Short-term
	Conduct workshops, campaigns, and advocacy for local communities.	Regional, National	Ministry of Environment, Forestry and Tourism	Local Authorities, NGOs, Media	Ongoing

Strategy	Action	Level (Regional / National / Local)	Champion(s)	Stakeholder(s)	Timeline
	Provide resources for local capacity-building initiatives.	National, Local	Ministry of Finance, National Planning Commission	Development Partners, Private Sector	Ongoing
Empowering women for inclusive and environmental governance.	Advocate for increased women's participation in conservation programs.	National, Local	Ministry of Gender, Ministry of Environment, Forestry, and Tourism	Women's Organizations, Local Communities, NGOs	Short to Mid-term
	Provide capacity-building programs for women in natural resource management.	National, Local	Ministry of Gender, Local Authorities	NGOs, Civil Society	





» Tanzania

Challenges

Tanzania faces increasing threats from IAS, affecting biodiversity, agriculture, and water resources. The spread of species such as *Prosopis juliflora* and *Eichhornia crassipes* (water hyacinth) has degraded key ecosystems, reducing agricultural productivity and fishery yields. IAS encroachment threatens rangelands, limiting grazing areas and impacting pastoralist communities (Ngondya & Munishi, 2021). Invasive aquatic plants have also reduced freshwater availability in major water bodies, increasing the cost of water management and affecting local livelihoods.

Despite existing policies, gaps in inter-agency coordination and resource mobilization hinder effective IAS management. Limited surveillance and early detection further exacerbate the issue, leading to unchecked IAS spread.

Trends and Threats

Tanzania's rapid economic growth and trade expansion have contributed to increased IAS introductions through ports, border crossings, and agricultural imports. Climate variability is expected to accelerate IAS spread, especially in wetlands and forest ecosystems, where altered rainfall patterns create conditions favourable for their establishment. Without intervention, IAS could reduce agricultural yields by up to 10% in key farming areas over the next decade, exacerbating food insecurity (Bukombe et al., 2021).

Ecosystem-Based Adaptation Initiatives

While a comprehensive National Ecosystem Assessment is not explicitly documented, Tanzania has engaged in [ecosystem-based adaptation projects](#). These initiatives support rural communities and livelihoods that depend on healthy ecosystems to adapt to climate change, addressing impacts such as temperature increases, altered rainfall patterns, and increased frequency of floods and droughts.



Opportunities and Response Options

To enhance IAS management, Tanzania through their [National Invasive Species Strategy and Action Plan 2019–2029 \(NISSAP\)](#) is advancing:

- **Strengthened inter-agency coordination** – Improving collaboration between environmental, agricultural, and trade sectors for a unified IAS response.
- **Long-term IAS control programs** – Implementing multi-year strategies aligned with NISSAP.
- **Early detection and monitoring** – Expanding national surveillance networks to increase IAS monitoring coverage by 40% in high-risk ecosystems.
- **Sustainable IAS utilization** – Exploring commercial uses of IAS for bioenergy, animal feed, and construction materials to mitigate their impact.
- **Regional collaboration** – Strengthening transboundary efforts with neighbouring countries, aligning with SADC biodiversity goals to manage shared IAS challenges.



Tanzania's IAS action plan, shaped during the Trialogue, aligns with national biodiversity strategies, conservation targets, and socio-economic priorities. The following action table outlines key strategies and implementation frameworks for strengthening IAS management in Tanzania.



*Table 5: Tanzania's Plan for Invasive Species Control:
Key Actions, Implementation Levels, and Responsible Actors*

Strategy	Action	Level (Regional / National / Local)	Champion(s)	Stakeholder(s)	Timeline
Ambition: Increased efforts and priorities for Management of Invasive Alien Species (IAS) in Tanzania					
Operationalize the National Invasive Species Strategy and Action Plan (NISSAP) 2019-2029 for Tanzania by empowering stakeholders (communities, decision-makers) with integrated, simplified but adaptive governance framework tailored to manage different stages of biological invasion.	<p>Raise awareness on the impacts of IAS.</p> <p>Develop and implement evidence-based and locally led governance structures for managing IAS</p> <p>Establish community-based groups for managing IAS</p> <p>Integrate IAS management actions in the livelihood activities</p> <p>Harness indigenous knowledge for IAS</p> <p>Support communities by providing relevant toolkit for managing IAS</p> <p>Uptake, promotion and scaling up of research results relevant for IAS management</p>	National, Regional, sectoral, Local	Vice-President's Office Sectoral ministries, Research and development institutions, Funding organizations and Development partners	Media, Private Sector, IPLCs, International Organizations, Academia	2019-2029 (NISSAP timeline)

Strategy	Action	Level (Regional / National / Local)	Champion(s)	Stakeholder(s)	Timeline
Mobilize financial and technical resources for IAS control and management.	<p>Develop funding strategies and partnerships.</p> <p>Explore opportunities for funding that when implemented will at the same time address the problem of IAS</p> <p>Sectoral ministries to dedicate funds for managing IAS in the annual budget allocations</p>	National, Regional	<p>Vice-President's Office</p> <p>Research and Development organizations</p> <p>Sectoral ministries</p> <p>International organizations (e.g. UNP, WWF, UNEP, GBF, CDKN, GEF)</p>	Development Partners, NGOs	
Strengthen capacity for IAS research and monitoring.	<p>Support academic and institutional research programs.</p> <p>Develop and implement monitoring and evaluation mechanisms relevant to IAS</p>	Local, National, Regional, Continental	Academia, Research Institutions	Government Agencies, Conservation Organizations	
Enhance transboundary collaboration on IAS management.	<p>Establish joint frameworks and knowledge exchange with neighbouring countries.</p> <p>Joint implementation of IAS management around borders and border posts</p> <p>Harmonize and integrate IAS policies and strategies into regional framework</p>	Regional	<p>Vice-President's Office</p> <p>East African Community Headquarters</p> <p>Sectoral Ministries such as home Affairs, Foreign affairs</p>	Neighbouring Governments	



» Uganda

Developing Ecosystem Accounts

Uganda has made significant strides in ecosystem accounting. The Uganda Bureau of Statistics (UBOS) has developed ecosystem service and asset accounts for the period 1990 to 2015, providing valuable data on ecosystem extent, condition, and services. Additionally, collaborations with international organizations have focused on integrating natural capital accounting into national statistics, aiding in policy formulation for sustainable development.

Challenges

Uganda faces serious threats from IAS, disrupting biodiversity, ecosystems, and sustainable land use. The spread of species like *Mimosa pigra*, *Parthenium hysterophorus*, *Lantana camara*, and *Salvinia molesta* threatens wetlands, rangelands, and fisheries. Non-native fish species further endanger aquatic ecosystems, affecting local fisheries and water quality. If left unchecked, IAS will continue to reduce agricultural productivity, harm conservation efforts, and impact livelihoods. A key challenge is low public awareness and engagement in early detection and response, limited monitoring systems, inconsistent enforcement of environmental laws, and land-use changes that accelerate IAS spread. Many affected communities lack technical capacity and resources, making it difficult to implement effective management solutions. Cross-border IAS management also remains limited, requiring stronger regional collaboration.

Trends and Threats

IAS pose an increasing environmental, economic, and social challenge, affecting public health, agriculture, and water security. Invasive plants in wetlands reduce water filtration, worsening pollution and affecting clean water availability. IAS expansion in rangelands reduces grazing land, threatening pastoral livelihoods and food security. Human-wildlife conflict continues to escalate as habitat loss forces wildlife into closer contact with communities, leading to crop destruction, livestock predation, and retaliatory killings. Without proactive measures, IAS will further degrade ecosystems, disrupt food production, and increase pressure on already vulnerable communities collaboration.



Opportunities and Response Options

- **Integrating One Health approaches** – Strengthening biodiversity and public health management through cross-sectoral strategies.
- **Ecosystem restoration and water quality improvement**
 - Conserving wetlands, enforcing environmental laws, and enhancing water filtration to mitigate IAS-related degradation.
- **Proactive human-wildlife conflict mitigation** – Implementing electric fencing, land-use planning, and alternative livelihoods to reduce conflict.
- **Stronger environmental law enforcement** – Enhancing compliance with IAS control measures and conservation policies.
- **Regional collaboration** – Partnering with neighbouring countries for coordinated IAS management and resource-sharing.
- **Policy alignment** – Ensuring IAS strategies align with Uganda's National Development Plan (NDP4) (2025-2030) and SDG reporting (2030) for long-term sustainability.



The following table (Table 6), created based on agreements by the Ugandan delegation to the Trialogue, outlines key strategies and implementation actions for strengthening IAS management while aligning with national biodiversity goals, ecosystem restoration efforts, and sustainable resource management priorities.

**Table 6: Uganda's Approach to IAS Management and Sustainability:
Actions, Key Players, and Implementation Frameworks**

Strategy	Action	Level (Regional / National / Local)	Champion(s)	Stakeholder(s)	Timeline
Ambition 1: Improve IAS management and improve wildlife conservation					
Develop an integrated implementation plan for IAS control.	Implement control and removal of IAS in protected areas and key biodiversity hotspots.	National	Uganda Wildlife Authority (UWA)	National Forest Authority, Local Governments, Academia	2025-2030
Restore areas affected by IAS.	Conduct enrichment planting of native species in degraded ecosystems.	National, Local	UWA	Conservation NGOs, Local Communities	
Improve knowledge/understanding of IAS	Conduct stakeholder engagement for IAS management and biodiversity conservation.	National, Local	UWA, National Environment Management Authority (NEMA)	Local Communities, Civil Society Organizations	
	Develop a national assessment on IAS distribution and impact.	National	NEMA, Academia	Government Departments, Conservation Organizations	
Improve policy integration on IAS and wildlife conservation	Implement capacity-building programs for biodiversity conservation.	National, Regional	UWA, Ministry of Water and Environment	Research Institutions, Academia, NGOs	
	Align action plans with Uganda's National Development Plan (NDP4) and SDG goals.	National	Office of the Prime Minister	Government Ministries, Parliament	

Strategy	Action	Level (Regional / National / Local)	Champion(s)	Stakeholder(s)	Timeline
Ambition 2: Reduce human-wildlife conflict					
Map human-wildlife conflict hotspots and develop targeted interventions.	Construct electric fencing, trenches, and stone walls to reduce wildlife intrusion into community lands.	Local, National	UWA	Local Governments, Indigenous Peoples, Local Communities	2025-2030
Implement land-use planning to minimize conflict zones.	Align land-use plans with wildlife corridors and conservation areas.	National, Local	Ministry of Agriculture	Local Governments, Development Agencies	
Ambition 3: Improve water quality					
Conserve wetlands to enhance water filtration and quality.	Implement wetland restoration and conservation programs.	National, Local	Ministry of Water and Environment	Local Governments, Environmental NGOs	2025-2030
Strengthen enforcement of environmental laws on water bodies.	Implement laws regulating lake shore and riverbank management.	National, Local	NEMA	Local Governments, Civil Society Organizations	
Ambition 4: Improve ecosystem health					
Develop a transboundary coordination mechanism for IAS management.	Establish collaborative regional frameworks to prevent IAS spread across borders.	National, Regional	Ministry of Water and Environment	East African Community, Regional Governments	2025-2030
Promote a One Health approach to address wildlife-related diseases.	Integrate wildlife health monitoring with public health strategies.	National	UWA, NEMA	Ministry of Health, Academia	
Strengthen IAS management through control and utilization strategies.	Develop and implement sustainable IAS control and use programs.	National, Regional	NEMA	Research Institutions, Conservation Agencies	



» Zimbabwe

Challenges

Zimbabwe faces increasing threats from IAS, particularly *Prosopis juliflora* and *Lantana camara*, which degrade rangelands and agricultural areas. A [IUCN report](#) states that a significant portion of Zimbabwe's rangelands is now infested, reducing grazing capacity and affecting 40% of rural households reliant on livestock (Melesse et al., 2023). Invasive aquatic plants disrupt wetland ecosystems, threatening inland fisheries that support a large percentage of Zimbabwe's animal protein intake (Maulu et al., 2024). Additionally, the potential spread of alien rodents and reptiles poses risks to native biodiversity.

Trends and Threats

As per Zimbabwe's [report on the status of biodiversity economy](#), Zimbabwe has strengthened environmental policy enforcement, yet only 30% of affected ecosystems have structured IAS management plans. Unsustainable land-use practices accelerate IAS spread, particularly in wetland and soil degradation zones. Rapid urbanization and shifting agricultural patterns have increased IAS pressure on conservation areas, with encroachment affecting a significant area of national parks and reserves. [World bank's report on Zimbabwe's agriculture sector disaster risk assessment](#) warns that without stronger interventions, IAS could lead to a 10–15% decline in agricultural yields within the next decade, exacerbating food insecurity and economic instability. Fragile transboundary IAS management with neighbouring countries also contributes to persistent invasion risks.

Initiating Ecosystem Assessment Efforts

In April 2021, Zimbabwe, along with Botswana and Zambia, undertook the NEA scoping exercises. This initiative focused on mapping stakeholders, identifying key policy questions on biodiversity and ecosystem services, and establishing National Science-Policy Platforms to enhance decision-making and knowledge exchange.





Opportunities and Response Options

To enhance IAS control, Zimbabwe is implementing:

- **Area-based conservation measures** – Expanding protected areas with stronger enforcement, targeting a 20% increase in ecosystem integrity measures by 2030, as captured in the African Wildlife Foundation's (AWF) strategy for Zimbabwe. ([Zimbabwe Country Strategy 2020-2030](#)).
- **Wetland, inland water, and soil restoration** – Strengthening rehabilitation programs, with a goal of restoring at least 50,000 hectares of degraded ecosystems by 2030¹ ([Farmonaut, 2025](#)).
- **Sustainable fisheries and agroecology** – Integrating IAS management into fisheries and agricultural practices, benefiting smallholder farmers (Mujaju et al., 2021).
- **Spatial planning for sustainable land use** – Embedding IAS management into national development plans to reduce IAS-related habitat loss.
- **Regional collaboration** – Aligning IAS management with the SADC biodiversity goals, improving cross-border coordination for prevention and early detection (CABI, 2020).



Zimbabwe's IAS action plan aims to enhance long-term sustainability while balancing conservation with livelihoods. The following table outlines key strategies, actions, and implementation frameworks to strengthen IAS management in Zimbabwe.

1. Farmonaut. (n.d.). Safeguarding Zimbabwe's wetlands: Sustainable management for climate resilience and biodiversity. Retrieved from <https://farmonaut.com/africa/safeguarding-zimbabwes-wetlands-sustainable-management-for-climate-resilience-and-biodiversity>

Table 7: Zimbabwe's Strategy for Tackling Invasive Species and Ensuring Sustainable Resource Use: Who, What, and When

Strategy	Action	Level (Regional / National / Local)	Champion(s)	Stakeholder(s)	Timeline
Ambition 1: Conserved ecosystems					
Strengthen area-based conservation initiatives.	Implement conservation projects in protected and high-biodiversity areas.	Local, National, Regional	Ministry of Environment	Environmental Management Agency (EMA), Zimbabwe Parks (ZIMPARKS), Forestry Commission, Local Authorities, Indigenous Peoples & Local Communities (IPLCs), NGOs, Academia, Private Sector	2025-2030
Minimize degradation of intact ecosystems.	Strengthen policies to protect forests and maintain ecosystem health.	National, Regional	Ministry of Environment	Local Authorities, EMA, Forestry Commission, Ministry of Agriculture, Ministry of Mines, IPLCs, Private Sector, Academia	Short to Mid-term
Ambition 2: Restored degraded ecosystems					
Restore forest landscapes.	Implement afforestation and reforestation programs.	Local, National	Ministry of Environment	Forestry Commission, IPLCs, NGOs, Local Authorities, Private Sector	2025-2030
Manage and restore wetlands.	Strengthen wetland conservation programs.	Local, National	Ministry of Environment	Environmental Management Agency (EMA), Local Authorities, Local Communities, Ministry of Agriculture	2025-2030

Strategy	Action	Level (Regional / National / Local)	Champion(s)	Stakeholder(s)	Timeline
Restore inland water systems.	Implement sustainable fisheries and water conservation programs.	Local, National	Ministry of Environment Ministry of Agriculture	Ministry of Agriculture Resources Production Department (FARD), Fisheries Sector, Local Communities, NGOs	2025-2030
Improve soil health.	Implement sustainable land management and soil conservation programs.	Local, National	Ministry of Agriculture Ministry of Environment	IPLCs, Academia, Conservation Organizations, Local Governments	2025-2030
Ambition 3: Managed ecosystem functions and services					
Promote agroecology for sustainable land use.	Support climate-smart agricultural practices.	National, Local	Ministry of Agriculture	IPLCs, Farmers' Organizations, Academia, NGOs	2025-2030
Ensure sustainable management of fisheries and aquaculture.	Develop and enforce sustainable fishing policies.	National, Local	Ministry of Agriculture Ministry of Environment	FARD, Fisheries Sector, Conservation Organizations	
Strengthen IAS management.	Implement invasive alien species control programs.	National, Regional	Ministry of Environment Ministry of Agriculture	EMA, NGOs, Private Sector, Regional Partners	
Ambition 4: Sustainable use of natural resources					
Strengthen data collection and monitoring systems.	Implement real-time monitoring of natural resource use.	National, Regional	Ministry of Environment	EMA, Conservation NGOs, IPLCs, Private Sector	2025-2030
Promote community-based conservation.	Support local conservation initiatives and incentives.	Local, National	Ministry of Environment	Local Authorities, IPLCs, NGOs	
Ambition 5: Integrated planning and governance					
Improve spatial and land-use planning.	Define and implement clear land-use categories (e.g., rangelands, conservation zones).	National, Regional	Ministry of Environment	Ministry of Agriculture, Local Authorities	2025-2030
Strengthen transboundary environmental planning.	Develop cross-border conservation frameworks with neighboring countries.	Regional	Ministry of Environment	Regional Governments, International Conservation Organizations	

» Trialogue in support of the IPBES Assessments uptake: Advancing Collaborative Action for Sustainability

The Trialogue in Namibia marked a meaningful step forward in strengthening collaboration between policymakers, scientists, Indigenous Peoples, and local communities across East and Southern Africa. By building on the key messages of the IPBES thematic assessments and fostering an inclusive and participatory space, the Trialogue helped to surface common challenges, knowledge gaps, and shared aspirations.

Discussions throughout the three days revealed a collective commitment to addressing the threats posed by invasive alien species and to promoting the sustainable use of wild species in ways that reflect local contexts and knowledge systems. Participants emphasized the importance of aligning global frameworks with national priorities, supporting community-led action, and weaving gender and Indigenous perspectives into policy and practice.

The insights shared during the event culminated in a series of action plans tailored to each participating country, informed by shared regional themes. These strategies aim not only to address ecological pressures but also to advance sustainable development goals through improved governance, financing mechanisms, and cross-border cooperation.

A follow up webinar, jointly organized by the Sub-Global Assessment (SGA) Network and BES-Net, titled "[From the IPBES Nexus Assessment to National Ecosystem Assessments](#)", served to deepen these reflections and highlighted the example of Malawi's integration of the IPBES Nexus Assessment into national planning processes. Such exchanges underscore the value of ongoing dialogue and mutual learning. how

Moving forward, the Action Document will serve as a living reference point—anchored in local realities and supported by regional solidarity. It reflects the participants' shared desire to transform knowledge into action and to forge pathways that are both inclusive and enduring. Continued collaboration will be key to maintaining momentum and ensuring that the vision of sustainable biodiversity management in East and Southern Africa becomes a reality.



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» Annexes

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Annex 2: Agenda

DAY01

TUESDAY, 18 FEBRUARY 2025



TIME	SESSION
08:00 – 09:00	Registration
09:00 – 10:00	Inaugural welcome and vision sharing <ul style="list-style-type: none"> • Welcoming Remarks: Mr. Teofilus Ngxitila, Executive Director, Ministry of Environment, Forestry and Tourism, Namibia • Keynote Remarks: Ms. Alka Bhatia, Resident Representative, UNDP Namibia • Keynote Address: H.E. Dr Thorsten Hutter, Ambassador, Embassy of the Federal Republic of Germany Windhoek
	Group Photo Session
10:00–10:20	Coffee Break
10:20-10:35	Security Briefing: Ms. Lucia Stephanus, Field Security Associate, UN Department of Safety and Security (Virtual)
10:35 – 10:50	Setting the stage: What is a Trialogue and why does co-creation matter? An introductory session outlining the purpose and collaborative nature of the Trialogue.
10:50-12.00	Mapping our interconnected realities: A dialogue session to collectively explore the challenges and opportunities in the region.
12.00–13:00	Collaborative exploration: Uncovering shared challenges and opportunities An interactive group exercise to delve into regional realities.
13:00 - 14:00	Lunch
14:00 –17:30	Immersive field exploration and contextual learning Field visits to connect theory with practice through on-the-ground experiences.



DAY02

WEDNESDAY, 19 FEBRUARY 2025

TIME	SESSION
09:00 – 09:30	Reflective debrief: insights from Day 1: A session to consolidate learnings from the previous day.
09:30 – 10:00	Keynote: Regional perspectives on Invasive Species and sustainable use of wildlife An overview of status and trends in the region.
10:00 - 11:00	Panel Discussion on opportunities identified by diversity of voices and solutions calling for diverse voices for inclusive action A conversation featuring multiple perspectives calling for solutions.
11:00 –11:30	Coffee Break
11:30 –12:30	Co-Creation Lab: Designing solutions – Phase I An interactive lab session to start crafting solutions together.
12:30 –13:30	Lunch
13:30 –15:00	Panel Discussion: National policies and processes putting the nexus approach into practice.
15:00 –15:40	Co-creation Lab: Designing Solutions – Phase II A continuation of the lab session to further refine collaborative solutions.
15:40-16:00	Coffee Break
16:00 –17:30	Host Country Spotlight: Innovative practices and local action. Invasive species controlled through integrated management in pilot areas in the Orange–Fish River basin and livelihood options: The case for the Namibia's Prosopis spp management under the UNDP-GEF Project: Support to the Orange-Senqu River Strategic Action Programme Implementation
17:30-18:30	Free Time
18:30 –21:00	Official Dinner Celebrating Our Collective Journey A formal dinner to celebrate the day's progress and foster deeper connections.



DAY03

THURSDAY, 20 FEBRUARY 2025



TIME	SESSION
08:30 – 10:00 [Parallel]	High-Level Breakfast Key messages from the IPBES global assessment and from the Trialogue sessions to be discussed by the policy sector participants and regional dimension
08:30 – 10:00 [Parallel]	Innovation Corner Participants to promote or design prototype innovative project ideas
10:00 – 10:30	Feedback from the High-Level Breakfast and Innovation Corner A joint session to synthesize feedback from the parallel morning sessions.
10:30 – 11:00	Coffee Break
11:00 – 11:30	Country Group Co-Creation Lab: Sharing session Sharing and reflecting on insights from the previous co-creation work.
11:30–12:30	Interactive Session: Co-Creating Regional Synergies A mixed-group lab to further develop the nexus approach through hands-on co-creation. Exercise to the country teams - groups
12:30 – 14:00	Lunch
14:00 – 14:30	Co-Creation Lab: Reviewing Solutions – Phase III
14:30 – 15:30	Closing Dialogue Accelerating Impact & Amplifying Stakeholder Voices A final dialogue focused on how to build on the momentum and effectively communicate key messages to stakeholders in each country.
15:30-16:00	Closing Reflections: Final remarks summarize the collective insights and next steps.
16:00 – 16:30	Farewell Networking & Coffee Break An opportunity to connect one last time before leaving.
16:30	End of the Trialogue





Biodiversity and Ecosystem Services Network