Transforming Biodiversity Finance:

A quick guide for assessing and mobilizing financial resources to achieve the Aichi Targets and to implement National Biodiversity Strategies and Action Plans

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INTRODUCTION

In October, 2010, the world's governments agreed to an ambitious global strategic plan, comprised of 20 'Aichi Targets.' Of these, Target 17 calls for each country to revise their National Biodiversity Strategies and Action Plans (NBSAPs) in line with the Aichi Targets; and Target 20 calls for countries to assess the financial resource needs and mobilize financial resources for effectively implementing the Strategic Plan. This Quick Guide provides guidance to countries on how to assess financial needs and how to mobilize the financial resources required to fully implement their revised NBSAPs, and thereby achieve the Aichi Targets at a national level.

NBSAPs, while most closely related to the Convention on Biological Diversity (CBD), also include strategies that are derived from other international conventions, including: the Convention on Migratory Species (CMS); the Convention on International Trade of Endangered Species (CITES); the Ramsar Convention on Wetlands; The United Nations Educational Scientific and Cultural Organization World Heritage Convention; the United Nations Convention to Combat Desertification (UNCCD); and the United Nations Framework Convention on Climate Change (UNFCC). See also www.tematea.org for an overview of the elements of all seven conventions.

The process of assessing financial needs and mobilizing financial resources is closely tied to the development of an NBSAP. The overall aim of this Quick Guide is to provide planners with an approach to assessing the costs of implementing their NBSAPs, and to mobilizing financial resources in order to fill financial gaps. This Quick Guide provides a structured way to integrate the results of these steps, and to systematically understand the cost implications for implementing the strategies within the revised NBSAP.

The approach to resource mobilization described in this Quick Guide includes 3 parts. Part I is a review of biodiversity-related policies, institutions and expenditures. This information provides the basis for understanding a) the underlying policies and practices that drive biodiversity and ecosystem change; b) the key institutions involved, their role in biodiversity finance and planning, and their capacities; and c) the baseline of existing biodiversity-related expenditures, including both positive and negative expenditures, and the effectiveness of those expenditures.

Part II is an estimation of the full costs of implementing each of the biodiversity strategies within the revised NBSAP. These strategies are grouped into 5 main categories: a) biodiversity mainstreaming strategies (Aichi Targets 1 – 10); b) protection strategies (Aichi Targets 11-13); c) restoration strategies (Aichi Targets 14 and 15); d) access and benefits sharing strategies (Aichi Target 16); and e) enabling strategies (Aichi Targets 17 – 20). Part II also includes an assessment of finance gaps, based on a comparison of the 'business as usual' finance scenarios versus the total estimated costs of implementing new biodiversity strategies.

Part III includes the identification and prioritization of potential finance actors and mechanisms, and the development of specific resource mobilization strategies and actions to fill the finance gap.

The basic steps in the NBSAP development process, shown below, correspond closely with the steps in assessing financial needs and mobilizing financial resources. The purpose of the BIOFIN Workbook is to provide step-by-step guidance in undertaking those steps that are directly related to assessing financial needs and mobilizing financial resources required to implement the NBSAP.

Steps in developing an NBSAP	Steps in assessing financial needs and mobilizing financial resources (the BIOFIN Workbook)
1. **Get organized** – organize logistics and take stock of past NBSAPs	1. **Get organized** – organize the logistics of the BIOFIN assessment process
2. **Engage and communicate with stakeholders** – identify relevant stakeholders and develop a communication and outreach plan	2. **Engage and communicate with stakeholders** – identify relevant finance stakeholders and engage them in the BIOFIN assessment process
3. **Gather key information** – including status and trends of biodiversity; linkages between society and biodiversity; legal, institutional and policy environment; biodiversity finance; status of public awareness; and knowledge gaps	3. **Gather key information** -- gather information on linkages between society and biodiversity; on legal, institutional and policy environment; and on biodiversity finance
4. **Develop strategies and actions** – establish a national vision; set national targets; identify specific strategies and actions	4. **Develop strategies and actions** – Ensure that all related strategies within the NBSAP are accounted for in the costing exercise (Workbooks 2a – 2f)
5. **Develop implementation and resource mobilization plans** – identify specific actors, timelines and costs for each action; develop resource mobilization plan; ensure strategies are incorporated into national frameworks; finalize indicators and implement clearinghouse mechanism	5. **Develop implementation and resource mobilization plans** – identify costs for specific actions (Workbooks 2a – 2e); identify financial gap between business as usual finance and full annual and recurring costs of NBSAP strategies and actions; develop resource mobilization plan (Workbooks 3a and 3b)
6. **Implement the NBSAP** – Engage stakeholders; implement key strategies and actions; and mobilize financial resources	6. **Implement the NBSAP** – implement the resource mobilization plan; mobilize financial resources
7. **Monitor and report** – Develop national reports; communicate the results of the NBSAP implementation; and review and adapt priorities based on implementation results	7. **Monitor and report** – review the effectiveness of resource mobilization strategies and adapt the approach accordingly

The goal of this Quick Guide is to assist countries in transforming national biodiversity finance, and thereby enabling them to implement their NBSAP and achieve the Aichi Targets. NBSAPs are more than a set of plans; they are a pathway to national and global sustainable development, and they are our best hope for fully integrating biodiversity into sectoral development and poverty alleviation efforts, and for transforming the unsustainable trajectory of development. NBSAPs are the national articulation of the future vision that each country desires, and this Quick Guide describes an approach to help countries achieve this vision.

AICHI TARGETS

Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society

- **Target 1**: By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.
- **Target 2**: By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.
- **Target 3**: By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.
- **Target 4**: By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.

Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use

- **Target 5**: By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.
- **Target 6**: By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.
- **Target 7**: By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.
- **Target 8:** By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.
- **Target 9**:By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.
- **Target 10**: By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.

Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity

- **Target 11**: By 2020, at least 17 percent of terrestrial and inland water, and 10 percent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.
- **Target 12**: By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.
- **Target 13**: By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.

Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services

- **Target 14**: By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.
- **Target 15**: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.
- **Target 16**: By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.

Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building

- **Target 17**: By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.
- **Target 18**: By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.
- **Target 19**: By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.
- **Target 20**; By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.

Part Ia: Policy and practice drivers of biodiversity and ecosystem change

The first step is to identify the drivers of biodiversity change. This section includes an analysis of practices and policies related to biodiversity mainstreaming, protected areas, restoration, and access and benefits sharing. The questions below allow planners to identify the sectoral practices and policies that contribute to both negative and positive biodiversity trends, and to assess the broader policy environment that either promotes or inhibits sustainable policies and practices. By identifying the key policies and practices that drive biodiversity change, planners can better determining the costs of transitioning from unsustainable to sustainable policies and practices. The best practices included in this section provide a checklist for planners to consider when assessing existing practices.

BIODIVERSITY MAINSTREAMING POLICIES AND PRACTICES

Biodiversity mainstreaming is defined as:

- **The integration of biodiversity components**: e.g., reduce threats, restore integrity, improve protection
- **and biodiversity goals**: e.g., genetic diversity, species and habitats, ecological processes, ecosystem services
- **into key sectoral and development plans and policies**: e.g., natural resource policies such as agriculture, forestry, fisheries; and development policies, such as transportation, tourism, energy, mining, manufacturing
- **through a variety of mainstreaming approaches**: e.g., policy reform, protected areas, management plans, public-private partnerships, market-based certification, payments for ecosystem services, biodiversity offsets

Key questions for policies and practices related to biodiversity mainstreaming

- Which economic and development sectors are the most important in driving both negative and positive biodiversity trends?
- What are the most important practices and policies within each sector that are driving these trends?
- What are the market forces and policy factors that contribute to these sectoral practices?

Checklist of key sectors to consider when assessing policies and practices

- **Industrial manufacturing and processing:** Manufacturing that results in water or air pollution
- **Forestry :** Timber and non-timber products, plantations, charcoal, bushmeat
- **Agriculture (including subsistence, commodity): C**attle, grazing, Irrigated and non-irrigated agriculture
- **Tourism and recreation:** Nature-based tourism and ecotourism, mass tourism, motorized recreation
- **Energy (including exploration, extraction):** Hydropower, solar infrastructure, oil, gas and natural gas, coal
- **Transportation and infrastructure:** Shipping lanes, roads, buildings, dams
- **Water management:** Management of rivers, dam releases, groundwater withdrawal
- **Fisheries**: Commercial and artisanal aquaculture, freshwater, coastal and open ocean fisheries
- **Mining and extraction of materials: D**iamonds, gold, silver, bauxite, coastal sand, other materials
- **Waste management:** Terrestrial landfills, permitted releases of effluent, illegal dumping in river ways

Checklist of best practices and policies for biodiversity mainstreaming

Sustainable forestry practices	**Sustainable agricultural practices**
• Ensure clear management unit boundaries; • Create a strong legal framework • Maintain landscape patterns, functioning, community guild structures, species richness • Use native species in enrichment planting and avoid genetically modified organisms; • Conserve forest genetic diversity; • Maintain soil productivity, and avoid erosion • Ensure sustainable annual allowable harvest; • Ensure adequate riparian buffer zones; • Use a rational forest management plan; • Maintain landscape-level connectivity • Avoid conversion of natural forests and damage to high conservation value forests. (FSC, 2012; Prabhu et al., 1998)	• Avoid the conversion of natural habitats • Ensure sustainable management of water through crop selection; water management, storage and irrigation systems; the use of mulch and cover crops; and the reduction of runoff of pesticides, fertilizers • Ensure early detection and prevention of invasive species • Maintain soil productivity by rotating crops, practicing low-tillage, leaving crop residues, adding organic matter, using targeted amounts of fertilizers, and fixing nitrogen; • Using wind breaks to avoid erosion; • Attract beneficial predators, including bats, birds, insects; • Avoid genetically modified organisms • Practice integrated pest management; • Promote energy efficiency and renewable energy (Glover et al., 2007; Gold, 2009)
Sustainable aquacultural practices	**Sustainable water management practices**
• Use sustainably produced fish feeds and reduce or eliminate unsustainable feed sources • Ensure no net loss in fish protein yield in the life cycle of the fisheries; • Avoid the use of wild-caught juveniles; • Prevent discharges and effluents • Prevent negative effects to local populations; • Avoid genetically engineered fish and feed; • Minimizing the risk of disease transmission; • Avoid the depletion of local water resources; • Safeguard the health of wild fish populations (USAID, 2012)	• Develop a comprehensive, water management plan at the watershed scale and integrate with land use plans • Create cross-jurisdictional partnerships to manage water; • Promote widespread water efficiency and conservation; • Practice storm water management in urban areas; • Minimize or eliminate non-point source pollutants; • Reduce losses in municipal water distribution systems; • Use water treatment technologies that limit impacts; • Reduce pollutants entering the water system; • Ensure the removal of pollutants and pathogens from wastewater treatment by-products. (Sustainable Cities Institute, 2013)
Sustainable fisheries practices	**Sustainable grazing and rangeland practices**
• Maintain productivity of target populations • Avoid altering trophic structures; • Maintain structure, productivity, function and diversity of key fisheries ecosystems • Greatly reduce or eliminate by-catch; • Minimize adverse impacts on habitat, especially in spawning and nursing areas; • All laws and standards are followed; • Establishment no-take zones in key areas; • Avoid destructive fishing methods,; • Avoid pollution by controlling wastes, fuels; • Use of precautionary principle; and • Promote sustainable practices with incentives (MSC, 2012; CBD, 2013)	• Maintain high organic matter, soil productivity functioning of groundwater systems and water quality; • Reduce bare ground and erosion; • Avoid channelization of streams; • Maintain natural fire and hydrological regimes; • number and distribution of key species and communities; • Reduce fragmentation, and minimize road density; • Prevent and control of invasive alien species; • Maintain optimal density of livestock and wildlife functional groups; • Promote incentives for conservation, such as easements; • Ensure legal, institutional and economic frameworks for rangeland conservation and sustainable management. (Mitchell, 2010; Beetz and Rinehart, 2006).

Checklist of sectoral best practices and policies – continued

Sustainable waste management practices • Waste is sorted into different waste streams • Toxic waste is separated and stored safely • Illegal dumping is prevented; • Septic systems prevent wastes contamination; • Leaking decomposition gases are prevented; • Heavy metals and contaminants are prevented from entering aquifers and ground water; • Waste streams, excessive packaging and toxic materials are minimized and discouraged; (Unnisa and Rav, 2013)	**Sustainable industrial, manufacturing and processing** • Replace harmful materials with alternatives; • Increase renewable, recycled and recyclable products • Reduce waste, including packaging, energy, water; • Minimize, avoid and eliminate sources of pollution; • Establish comprehensive recycling program; • Improve on-site biodiversity and habitat management; • Reduce greenhouse gases and promote renewables; • Ensure proper waste disposal; • Conduct life-cycle and 'cradle-to-grave' analyse (OECD, 2009)
Sustainable transportation and infrastructure • Plan for transportation at the landscape scale; • Coordinate with multiple agencies; • Use offsets to mitigate transportation impacts; • Avoid fragmentation of natural ecosystems and areas important for seasonal migration; • Minimize transportation through protected areas except as part of the protected area plan; • Avoid sensitive areas, such as wetlands; • Avoid areas of key biodiversity importance, e.g., key areas of breeding, feeding, migration • Build wildlife crossings to restore connectivity; • Use native species for roadside vegetation; • Avoid alterations to hydrological regimes; • Avoid the introduction of invasive alien species; • Minimize light pollution, runoff, soil erosion; • Minimize use of chemical pesticides. (Byron, H. 2000, NBW, 2011; White and Ernst, 2007)	**Sustainable tourism and recreation** • Control wildlife interactions; • Delineate areas for recreation (e.g., hiking, camping); • Avoid sensitive areas (e.g., nesting); • Control and monitor motorized recreational activities; • Ensure levels of visitation are within carrying capacity; • Maintain viability of key species; • Monitor and reduce impacts from lighting, sound; • Maintain water quality; • Ensure fish stocking does not endanger native species; • Manage tourism according to management plan • Ensure the national tourism plan that is aligned with national biodiversity and protected area goals; • Minimize use of scarce resources (e.g., wood, water); • Prevent the introduction of invasive alien species; • Monitor all key tourism impacts (Drumm et al, 2011; Global Sustainable Tourism Council, 2013)
Sustainable energy and mining practices • Minimize impacts in exploration and operations; • Prevent soil and water contamination, invasive alien species, sedimentation, soil erosion, noise impacts, habitat fragmentation and disturbance; • Avoid sensitive areas and key periods, such as migration, nesting and mating; • Conduct environmental impact assessments; • Ensure full restoration plans are implemented, including top soil replacement, revegetation, remediation measures; • Prevent spills of gas and oil on land and water; • Detect and remove illegal mining operations. (Energy and Biodiversity Initiative, 2013; ICMM, 2012);	**Sustainable land use planning practices** • Include sustainability goals and incentives for concentrated growth centers, and provide guidance on the development of urban and ex-urban areas; • Incorporate a strategic environmental assessment during project planning, permitting and approval; • Incorporate protected areas, connectivity corridors, riparian and land use buffer zones as a core component of land use plans; • Include natural climate change resilience and adaptation plans in land use planning; • Account for the maintenance of key ecosystem services in land use plans, including water provisioning, agricultural productivity and other services; (Salkin, 2009; Stein 2012).

BIODIVERSITY PROTECTION POLICIES AND PRACTICES

Protection is an umbrella term for any action that secures the long-term health and security of species and ecosystems. In this section, planners identify the extent to which existing *in situ* and *ex situ* protection practices and policies affect trends in biodiversity and ecosystem change.

Key questions for identifying policies and practices related to protected areas

- Which protection practices are the most important in driving negative and positive biodiversity trends?
- What are the most important social, economic and policy factors that contribute to these practices?

Checklist of best practices and policies for biodiversity protection

Ecologically representative • The protected area system fully represents key biodiversity and ecosystems across multiple scales • The protected area system ensures full functioning of species and key ecological processes • The protected area system is designed to maximize climate resiliency and adaptation (see Dudley and Parish, 2006; Corrigan et al., 2008)	**Diverse, effective, equitable governance** • There are diverse types and categories of protected areas • Principles of effective governance are followed (e.g., transparency, fairness, inclusiveness, accountability) • There is fair compensation from economic uses of traditional knowledge, and access to benefits from genetic resources (see Borrini Feyerabend et al., 2007; Laird et al., 2003; Gonzalez and Martin, 2006; Dudley et al., 2010
Landscape and seascape connectivity • There are adequate corridors and stepping stones to allow for species movement • There is a network of buffer zones that ensures effective protection within protected areas • Ecological processes are managed at landscape and seascape scales (see Dudley et al. 2008)	**Protected area integration and benefits** • The goals of key economic and development sectors are aligned with the goals of the protected areas system • The benefits of protected areas are well known, and used in decision making in key economic sectors • Land use planning efforts are compatible and aligned with protected area plans (see Ervin et al., 2009
Management effectiveness • There is adequate threat prevention and mitigation • There is adequate boundary demarcation, management plan and clear legal status • There is adequate local communication efforts (Hockings et al., 2009; Ervin, 2003; Stolton et al., 2009	**Capacity** • Capacities to address threats, (e.g., invasive species, poaching • Adequate capacities to undertake key management actions, such as threat mitigation, visitor management, monitoring • Capacity efforts focus on individuals and broader institutions (see Ervin et al., 2007)
Sustainable finance • Finance needs for protection are clearly identified • There are diverse finance mechanisms in place • Major protected areas have a business plan (see Flores et al., 2009)	**Protected area policies** • Protected area policies promote a comprehensive protected area network, ensure effective management, reduce threats and secure long-term finance
Trade • Species in Appendices I, II and III are not traded except in accordance with CITES • Illegal trade in species is closely monitored • Prevention and detection measures are effective (see CITES, 2013)	**Genetic diversity** • Centers of wild crop relatives are protected • Gene banks, seed banks and other ex situ are established • Gene management zones are created within key sectors and within key protected areas(see Smith, 2012)

BIODIVERSITY RESTORATION POLICIES AND PRACTICES

In this section, planners identify the extent to which existing restoration practices and policies affect trends in biodiversity and ecosystem change. Restoration is the process of intentionally returning a damaged species or ecological system to a stable, healthy, and sustainable state, either through active or passive management techniques.

Key questions for policies and practices related to restoration

- Which restoration practices on government, private and community-owned lands and waters are the most important in driving negative and positive trends in biodiversity?
- What are the most important social, economic and policy factors that contribute to these restoration practices?

Checklist of best practices and policies for restoration

Restoration of natural disturbances efforts:	***Control of harmful invasive species efforts:***
• Mimic the frequency and intensity of natural disturbances, such as fires, floods • Reestablishment nutrient cycling • Maintain or reinstate cultural practices that contribute to ecological integrity	• Are consistent with national invasive alien species plans • Aim at removing invasive species that threaten ecological integrity • Identify native species as competitors with invasive species • Focus on avoiding the introduction of invasive species
Species reintroductions efforts:	***Recreation of native communities or habitats efforts:***
• Focus on restoring components of food webs that foster resilience • Use native species in re-introduction programs • Are consistent with species recovery plans • Aim at sufficient genetic diversity to maintain viable populations	• Allow areas to recover naturally where degradation is minor • Stabilize soil surfaces, stream banks and shorelines through re-initiation of natural processes • Favor a mix of species and genotypes that will facilitate establishment of other native species • Use native genetic material
Management of over-abundant populations	***Hydrology restoration efforts:***
• Aim at identifying and rectifying the cause of over-abundant populations • Duplicate the role of natural processes	• Maintain or restore natural hydrologic flow regimes • Restore features, such as woody debris, gravel bars, pools Remove structures such as dams and artificial channels
Water and soil quality	***Efforts to improve the abiotic environment***
• Restoration efforts use in-situ techniques (e.g., phytoremediation) where practical • Restoration efforts restore quality of surface waters, groundwater and soil	• Restoration efforts remove constructed features (e.g., roads, buildings) • Restoration efforts amend soil with local, natural organic material
Landscapes and seascapes efforts	
• Foster ecosystem connectivity and reduce fragmentation • Ensure redundancy at all trophic levels	

Source: Wong, M. 2009

BIODIVERSITY ACCESS AND BENEFITS SHARING POLICIES AND PRACTICES

In this section, planners identify the extent to which existing access and benefits sharing (ABS) practices and policies affect trends in biodiversity and ecosystem change. Access and benefits sharing refers to the fair and equitable sharing of the benefits arising from the utilization of genetic resources.

Key questions for policies and practices related to access and benefits sharing

- Which ABS practices are most important in driving negative and positive biodiversity trends and/or in driving inequitable sharing of benefits?
- What are the most important contributing factors to these ABS practices?

Checklist of best practices and policies for access and benefits sharing

Prior Informed Consent	***Mutually Agreed Terms***
○ Obtain and comply with all applicable laws and regulations regarding prior informed consent ○ Identify the national competent authority and determine ownership of genetic resources ○ Establish consultation processes with key stakeholders ○ Ensure that genetic resources are only used as outlined in the prior informed consent agreement ○ For *ex situ* collections, obtain prior informed consent from the competent national authority	○ Comply with all applicable laws and regulations regarding benefit-sharing in the country ○ Ensure mutually agreed terms are established in a written agreement ○ Include any conditions, procedures, types, timing and mechanisms to be shared ○ Include the source of material, country of origin and provider of genetic resources, along with associated traditional knowledge
Benefit sharing	***Traditional knowledge***
○ Consider possible monetary and non-monetary benefits ○ Determine benefit-sharing mechanisms jointly ○ Provide appropriate benefits to research and conservation groups ○ Identify opportunities in the collection location for participation in value-added processes ○ Seek the original provides for re-supplying material ○ Establish appropriate monitoring, tracking and reporting mechanisms in the legal arrangements	○ Establish a process to promote participation of indigenous and local communities ○ Identify all holders of traditional knowledge, local competent authorities and other key groups ○ Consider benefit-sharing mechanisms for knowledge stakeholders not participating in access negotiations ○ Suspend collection if traditional knowledge holders decide that the research is not acceptable ○ Demonstrate respect for traditional knowledge
Conservation and sustainable use	
○ Assess the current conservation status of the species and populations to be sampled or collected, according to the IUCN Red List ○ Assess current habitat status and any critical environmental concerns, using a combination of scientific methods and local/traditional knowledge ○ Assess genetic diversity of species of interest for domestication and cultivation ○ Monitor the status of the resources to ensure harvest does not exceed sustainable yield levels	

Source: IISD, 2012

BROADER ENABLING FACTORS AND ENABLING POLICY ENVIRONMENT

The table below shows some of the many factors that planners might consider when understanding how broader enabling factors that influence policies and practices, which in turn influence biodiversity. Planners may also want to consider broader policy environment factors, such as political will, leadership, lobbying by interest groups, public media, inter-sectoral coordination, public participation and inter-agency alignment, among other factors.

	Contributing factors for biodiversity mainstreaming	Contributing factors for protection	Contributing factors for restoration	Contributing factors for access and benefits sharing
Laws and policies	○ Laws related to each sector ○ Enforcement and prosecution of illegal practices	○ Protected areas laws ○ Enforcement of illegal activities ○ Laws related to illegal trade of species	○ Laws related to restoration ○ Enforcement of restoration requirements	○ Laws related to access and benefits sharing ○ Enforcement of ABS agreements
Subsidies and incentives	○ Incentives for sectoral practices ○ Perverse subsidies that drive unsustainable practices	○ Incentives for the creation of new private protected areas, corridors ○ Fees, taxes, fines and other instruments	○ Incentives for restoration ○ Restoration fees, taxes, fines	○ Incentives for activities related to access and benefits sharing
Policy and planning	○ Quality and use of existing land use plans ○ Sectoral policies and plans that promote sustainable sectoral practices	○ Degree of existing protection ○ System- and site-level protection policies ○ Status of key protected area assessments	○ Existing restoration plans, identification of degraded areas ○ Extent to which key ecosystem services and climate resilience sites are identified	○ National policies and plans related to ABS ○ Degree of prior informed consent ○ Existence of mutually agreed terms
Soci0o-economic conditions	○ Poverty ○ Awareness of the value of biodiversity to key sectors	○ Awareness of the value of protection ○ Dependence on protected areas for livelihoods, subsistence	○ Poverty, inequity and other conditions that drive degradation ○ Awareness the value of restoration to key sectors	○ Awareness of key sectors of the importance of ABS ○ Degree of recognition of traditional knowledge
Market forces	○ Independent certification of ○ Market competition ○ International trade ○ Market prices, stability and volatility	○ Market demand for products within protected areas ○ Market demand for protected area ecosystem services	○ Market demand for ecosystem services provided through restoration ○ Degree of existing degradation	○ Market demand for products falling under ABS agreements

Part Ib: Biodiversity Institutional Review

The purpose of a biodiversity institutional review is to clearly identify the specific institutions involved in policies, practices, expenditures and strategies related to biodiversity mainstreaming, protection, restoration and access and benefits sharing. By identifying these key institutions and by analyzing the alignment with sustainable development and biodiversity goals, planners can pinpoint key areas for fiscal reform and resource mobilization.

Key questions for an institutional review include:

- **Role in biodiversity planning and finance:**
  - What specific role does the institution play in biodiversity-related finance?
  - In what ways does the institution influence biodiversity finance decisions?
  - How stable is this role?
  - How clear are roles and responsibilities for biodiversity conservation, sustainable use and equitable benefits sharing between different government departments and within and between ministries?
- **Biodiversity impacts and dependencies**:
  - To what extent does the institution have a negative and positive impact on biodiversity?
  - How dependent is this sector on healthy and functioning biodiversity and ecosystem services?
- **Alignment with national biodiversity-related objectives:**
  - Does institutional collaboration and coordination on biodiversity need to be strengthened? If so, how?
  - Are the organizational structures compatible with biodiversity policies and strategies, as well as their legal mandates?
  - How consistent are the institution's policies with national biodiversity policies? Are there areas of conflict?
- **Overall institutional capacity:**
  - What is the capacity of local government to fulfil any service delivery role related to biodiversity?

Source: Bird et al., 2012

Checklist of key institutions to consider

Public actors: ○ Central government & ministries ○ District/local government ○ Governmental institutions ○ Public research institutions and academia	**Private actors:** ○ Private foundations ○ Private communities ○ Private associations
Private sector/business actors: ○ Business ○ Industry ○ Private research institutions and academia ○ Private sector foundations	**Implementing agencies and donors:** ○ Multilateral institutions ○ Bilateral donors

Part Ic: Biodiversity Expenditure Review

A biodiversity expenditure review is an analysis of the key biodiversity-related expenditures, including both positive and negative expenditures, by public and private financial actors, agencies, investors and institutions. A biodiversity expenditure review is the basis for setting a financial baseline, as well as for developing a 'business as usual' finance projection for the future.

Key questions for a biodiversity expenditure review include:

- What is the total government budget for the past 4-8 years?
- What is the total government expenditure for the past 4-8 years?
- What is the total amount of foreign loans and grants for the past 4-8 years?
- What has the gross domestic product been for the past 4-8 years?
- What are the key biodiversity finance actors, agents, institutions and investors?
- What are the specific divisions, departments or companies within each finance actor?
- What are the cost codes or cost centers that can be used to determine total biodiversity expenditure?
- What is the total annual budget for the past 4 years for each finance actor?
- What is the total biodiversity-related budget for the past 4 years for each finance actor?
- What is the total actual expenditure for the past 4 years for each finance actor?
- What is the total actual biodiversity expenditure for the past 4 years for each finance actor?
- What is the effectiveness of biodiversity-related expenditures for each finance actor over the past 4-8 years?
- What have been the most significant negative biodiversity expenditures in the past 4-8 years for each actor?
- What is the source of funding for each finance actor, and the breakdown of biodiversity expenditures into each major NBSAP strategy?

Examples of negative biodiversity expenditures include:

- Subsidies for polluting industries and activities, such as fossil fuels, pesticides
- Production practices that are not resource efficient
- Incentives to convert natural ecosystems to agriculture, development
- Expenditures directly connected to the destruction of biodiversity, e.g. logging, over-harvesting of species, conversion of natural ecosystems
- Subsidies for manufacturing industries that pollute waterways
- Subsidies for housing that results in conversion of sensitive habitats
- Investment in roads that result in isolation and fragmentation

Relevancy and effectiveness

Two key issues are expenditure relevancy (the degree to which expenditures are relevant to biodiversity outcomes, whether intended or unintended, and whether positive or negative) and expenditure effectiveness (the degree to which the expenditure achieves the specific intended results).

Guidance on determining relevance and effectiveness of expenditures

- **High relevance**: Expenditures for activities where the primary intended outcome or objective aims at biodiversity conservation, sustainable use or equitable benefits sharing; e.g., a) expenditures for sustainable sectoral practices with the aim of conserving biodiversity; b) the establishment, management or expansion of protected areas, connectivity corridors and buffer zones; c) public awareness programs on biodiversity and associated benefits of conservation
- **Medium relevance**: Expenditures for activities where either the secondary intended outcome or objective is biodiversity conservation, sustainable use or equitable benefits sharing; or there is a mixed range of activities, some of which include primary or secondary intended outcomes for biodiversity objectives; e.g., climate resilience efforts that result in habitat restoration
- **Low relevance**: Expenditures for activities where indirect biodiversity benefits may arise, but not as a direct or indirect objective of the expenditure or activity, e.g., general water quality improvement efforts that lead to some water conservation actions; general institutional capacity strengthening, including for minor components of biodiversity management capacity
- **Marginal relevance**: Expenditures that have only very indirect or theoretical linkages to biodiversity conservation, sustainable use or equitable benefits sharing; e.g., education efforts that have only marginal relevance to biodiversity; efforts to promote general tourism, with only a minor relevance to nature-based tourism

Guidance on determining effectiveness of expenditures

High	The expenditure fully met the intended objectives, with little or not waste (e.g., funds were spent to create a new protected area, which was successfully established)
Medium	The expenditure partially or mostly met the intended objectives, with some acceptable levels of waste and inefficiency (e.g., funds were spent to eliminate invasive alien species, with partial success)
Low	The expenditure mostly did not meet the intended objective; and/or there were moderate to high levels of waste and inefficiency (e.g., funds were spent to plant trees, with high levels of mortality)
Very low	The expenditure did not meet, or only marginally met, the intended objectives; and/or there were excessive amounts of waste (e.g., funds were spent on training with high staff turnover)

Part 2a: Biodiversity Mainstreaming Strategies, Actions and Costs

Biodiversity mainstreaming is the integration of biodiversity into key economic development sectors, including into development planning, land use planning, sustainable use and management of natural resources, poverty alleviation plans and climate resilience plans, using specific mainstreaming instruments, in order to achieve specific objectives.

Key questions for *all* strategies, actions and costs include:

- What are the main strategies and sub-strategies for biodiversity mainstreaming, protection, restoration, ABS and enabling implementation?
- What are the specific actions within each sub-strategy?
- What are the capacities required to undertake each action?
- What are the specific cost elements for each action?
- What is the distribution of these costs to different actors?
- What are the low, medium and high ranges of the total estimated costs of implementing each action?

Examples of the range of biodiversity mainstreaming parameters

Integrating biodiversity…		**…into sectoral plans and policies…**		**…through a variety of approaches**	
Biodiversity goal	Components of biodiversity	Natural resource sectoral plans	Development and sectoral plans	Policy and planning	Economic, education
• Minimize or mitigate threats • Restore, improve or maintain ecological integrity • Improve protection status • Ensure ecological resilience and adaptation	• Genetic diversity • Species and species habitats • Populations • Ecological processes, functions Landscapes • Ecosystems • Ecosystem services	• Agriculture • Forestry • Fisheries • Freshwater management • Grazing, grassland management • Wildlife management	• Trans-portation • Poverty alleviation • Tourism and recreation • Energy • Climate adaptation • Manu-facturing • Infrastructure • Mining and minerals	• Policy and legal reform • Protected areas, corridors, buffer zones • Managemen t practices and policies • Strategic environ-mental assessments (SEA/EIA) • Spatial planning and land use planning	• Public-private partner-ships • Market-based certification • Voluntary best practices • Economic valuation • Payment for ecosystem services • Technical support • Biodiversity offsets

Summary of a matrix outlining the range of biodiversity mainstreaming strategies

ECONOMIC AND DEVELOPMENT SECTORS	Financial mainstreaming instruments										Policy and planning instruments				
	Market-based certification	Offsets	Fines, levies fees	Easements	Voluntary fees	Incentives (tax, tax credits, etc.)	Dedicated funds	Subsidies	Trade caps, limits	PES	Planning and practices	Policies, laws, ordinances	Strategic environmental assessment	Public private partnerships	Voluntary best practices
Agriculture															
Fisheries															
Forestry															
Infrastructure															
Energy															
Tourism															
Mining															
Water															
Waste															
Transportation															
Manufacturing															

Based on this approach, there is a wide array of potential biodiversity mainstreaming approaches, including:

- Protecting native fish species from invasive rainbow trout by reforming policies on fish stocking for recreational fisheries;
- Mitigating the impacts of sage grouse habitat by working with gas companies to create biodiversity offsets in order to establish new protected areas;
- Improving habitat connectivity by creating public-private partnerships with private game reserves;
- Safeguarding key marine habitat by reforming policies for ballast discharge of cargo container ships;
- Promoting water security by establishing a payment for ecosystem services for forest owners;
- Minimizing water pollution from farms by creating incentives for environmentally friendly practices.

Part 2b: Biodiversity Protection Strategies, Actions and Costs

The majority of protection strategies focus on protected areas, and most governments have extensive protected area networks. Protection strategies also include ex situ approaches, such as gene banks and control of poaching and illegal trade.

An indicative sample of specific protection strategies includes:

Improve protected area network:

- Revise protected area designations
- Create protected area zonation
- Create alternative governance models
- Create new protected areas
- Expand existing protected areas
- Create ecological corridors
- Restore protected areas

Improve protected area management:

- Develop management plans
- Increase staff numbers
- Demarcate boundaries
- Develop and implement staff capacity-strengthening program
- Improve visitor management
- Address invasive alien species within protected areas
- Strengthen anti-poaching efforts
- Implement education and outreach efforts
- Address human-wildlife conflicts
- Improve protected area monitoring
- Improve law enforcement

Improve protected area policies, administration and legal environment:

- Improve protected area administration
- Develop new protected area laws and policies
- Strengthen legal status of protected areas
- Improve protected area financial management systems and processes

Ex situ protection:

- Create gene banks
- Reintroduction programs of captive-bred species
- Comply with 'non-detriment findings' required by CITES
- Prevent illegal trade outside of protected areas

Part 2c: Biodiversity Restoration Strategies, Actions and Costs

As with mainstreaming, there is a simple three-part equation that can describe most restoration strategies. The table below shows this three-part equation, along with indicative elements.

Restoration action	Restoration subject	Restoration goal
• Introduce • Plant • Remove • Limit • Manage • Install or place • Use • Release	• Plant and animal species (e.g., tree seedlings, seagrass seedlings, invasive species, animal groups) • Abiotic structures (e.g., dams, concrete, boulders, fences) • Biotic structures (e.g., large trees) • Fire, floods • Mechanical devices	• Maintain genetic viability • Maintain connectivity • Mimic natural disturbance • Increase habitat • Recreate habitat • Eradicate or control invasive species • Restore connectivity • Improve ecological integrity

An indicative sample of specific restoration strategies includes:

- Creation of coral reef habitat by installing prefabricated concrete modules that mimic natural reefs
- Expansion of habitat connectivity bottlenecks by reestablishing forest cover in degraded areas
- Removal of Ponderosa pine and Douglas fir plantations and reestablishment of native tree species
- Mimic natural disturbance from grazing through mechanical disturbance
- Re-establish native forest on retired bauxite mines to increase habitat
- Culture and planting of seagrass bed seedlings on degraded seagrass bed
- Tree planting on old agricultural fields using native species to reconnect isolated forest fragments
- Using termites and mulch to restore soil fertility and quality
- Reintroduction of prescribed flooding to restore regeneration of riparian flood-dependent species
- Anchor course woody debris and placement of gravel in streams to recreate spawning habitat
- Re-vegetation of native tree species on steep slopes to reduce erosion
- Reintroduce fire regimes to reestablish fire-dependent species and native communities
- Reintroduction of wolves to maintain predator-prey relationships and restore the trophic balance
- Translocate individuals to a protected area to maintain genetic viability of an elephant population
- Create artificial nesting boxes for wetland bird species in decline
- Enclose forest area to keep out grazers and promote regeneration

Source for examples, and detailed case studies, available at www.globalrestorationnetwork.org

Part 2d: Access and Benefits Sharing Strategies, Actions and Costs

Based on the best practices for access and benefits sharing identified earlier, the list below outlines some potential ABS strategies.

Sample strategies for Access and Benefits Sharing

Strategies related to Prior Informed Consent ○ Identify the national competent authority, indigenous and local communities ○ Determine ownership of genetic resources ○ Establish consultation processes and information exchanges with key stakeholder groups ○ Obtain prior informed consent	***Mutually Agreed Terms*** ○ Gather information about all applicable laws and regulations regarding benefit-sharing in the country ○ Establish mutually agreed terms
Benefit sharing ○ Develop a comprehensive menu from possible monetary and non-monetary benefits ○ Determine benefit-sharing mechanisms ○ Provide appropriate monetary benefits to research and conservation groups ○ Identify opportunities for participation in commercialization and value-added processes ○ Establish appropriate monitoring, tracking and reporting mechanisms ○ Implement benefit sharing mechanism	***Traditional knowledge*** ○ Establish a process to obtain traditional knowledge and promote participation of indigenous and local communities ○ Ensuring that research activities and collection do not violate customary law and practices; ○ Support documentation and registration requirements ○ Establish appropriate contractual mechanisms regarding traditional knowledge
Conservation and sustainable use ○ Assess the current conservation status of the species and populations to be sampled or collected ○ Assess current habitat status and any critical environmental concerns ○ Assess genetic diversity of species of interest for domestication and cultivation ○ Monitor the status of the resources to ensure harvest does not exceed sustainable yield levels	

Source: Adapted from IISD, 2012

Part 2e: Enabling Implementation Strategies, Actions and Costs

The following is an indicative list of enabling implementation strategies:

Communication, education and public awareness strategies • Develop targeted communication strategy for each key stakeholder group • Develop communication materials and messages (e.g., brochures, billboards, radio and television materials, posters, bookmarks, comics, exhibits, videos, newspapers, facebook and social media, among many others) • Broadcast materials and messages through a variety of public awareness venues • Develop and implement lobbying strategy for key stakeholder groups	***Develop individual capacity*** • Assess key capacity gaps • Develop core competencies and standards • Develop training materials to address key capacity gaps (including education and teaching, biodiversity planning, project management, management effectiveness assessment, facilitation, financial resources management, human resources management, protected area policy and planning, recreation and tourism management, site management, enforcement, ecosystem assessment, gender sensitization, sustainable land management, among many others). • Conduct key trainings
Develop institutional and systemic capacity • Identify and map biodiversity-related responsibilities across all institutions • Form and strengthen inter-agency groups and committees	***Research, science and knowledge*** • Assess key research needs • Establish and strengthen key research institutions (biodiversity center, ecotourism center, biodiversity training and livelihood center, botanical gardens, gene banks, refuge centers, information centers)

Examples from: Government of Timor Leste. 2013. The National Biodiversity Strategy and Action Plan of Timor-Leste (2011-2020). Available at www.cbd.int/reports

Part 2f: Total Costs of Strategies and Actions, and Finance Gaps

Once the costs for all strategies and actions have been identified, the next step is to summarize all of these costs. These costs can then be compared with the past financial baseline, as well as the projected future.

Key questions for a biodiversity expenditure review (for *all* strategies and actions) include:

- What are the projected recurring costs of implementing new biodiversity mainstreaming, protection, restoration, ABS and enabling implementation strategies?
- What are the projected one-time costs of implementing new biodiversity mainstreaming, protection, restoration, ABS and enabling implementation strategies?
- What is the annual projected expenditure in the 'business as usual' finance scenario for existing biodiversity mainstreaming, protection, restoration, ABS and enabling implementation strategies?
- What is the total financial gap between the business as usual finance scenario, and the combined one-time and recurring costs for each strategy?

Sample of high, medium and low costs for a specific strategy and actions

Create connectivity corridor	Cost elements	High	Med	Low
Land acquisition	Staff, materials, travel, land acquisition	250K	175K	125K
Inventory and site analysis	Staff, materials, travel	125K	100K	75K
Community training program	Staff, materials, travel	450K	350K	250K

Sample spreadsheet showing elements that should be captured at this stage:

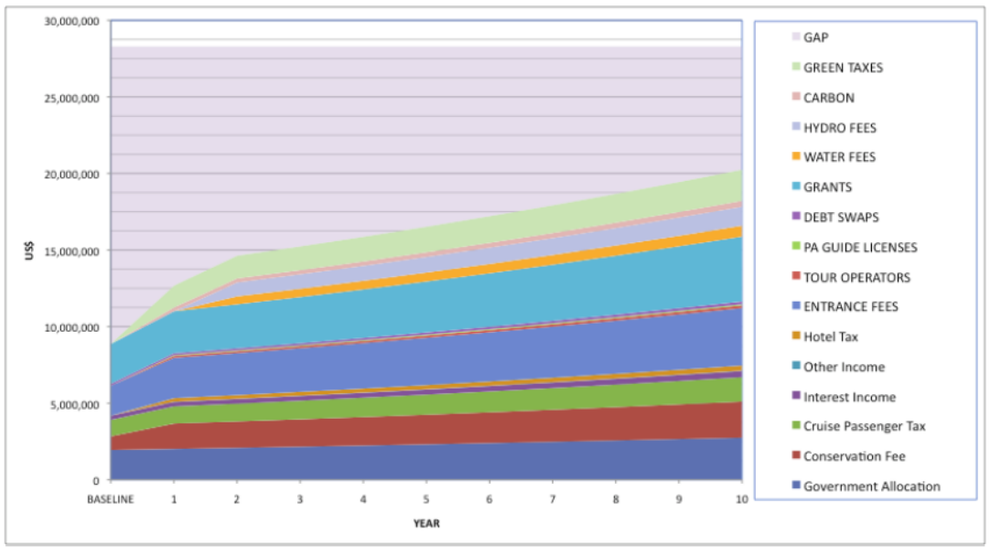
COST OF IMPLEMENTING NEW NBSAP STRATEGIES – RECURRING COSTS									
	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Total
TOTAL RECURRING COSTS OF ALL STRATEGIES									
COST OF IMPLEMENTING NEW NBSAP STRATEGIES – ONE-TIME COSTS									
	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Total
ONE-TIME COSTS OF STRATEGIES									
PROJECTED "BUSINESS AS USUAL" FINANCE SCENARIO FOR BIODIVERSITY									
	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Total
PROTECTED "BUSINESS AS USUAL" SCENARIO									
SECTION 4: FINANCIAL GAP BY STRATEGY									
	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Total
TOTAL FINANCIAL GAP FOR ALL COSTS									

Some useful definitions include:

- ***One-time costs:*** Expenditures which will only occur once, such as acquisition of land when establishing a protected areas, or the construction of infrastructure such as a building or road.
- ***Recurring costs:*** expenditures which occur regularly (typically annually, although not always). Examples include operational costs (staff, travel, fees) and maintenance (equipment replacement, software, repair)
- ***Business as usual finance scenario:*** The projected level of public and private expenditure based on estimates of past funding, and based on any additional information, such as political commitments to increase funding.

Example of strategies to fill finance gaps

Belize recently concluded a project that assessed the existing 'business as usual' scenario for protected areas. The total annual protected area system revenue for 2010 was $10,670,812 (see below). But the total financing need for the protected area system ranged from $18.5 to $28.3 million. The study showed a variety of potential finance mechanisms for closing this financial gap.



Source: Drumm, Echeverría and Almendarez, 2012.

Part 3a: Biodiversity Finance Actors and Mechanisms

The third component of the resource mobilization approach involves identifying biodiversity finance actors (any individual, group or entity that could potentially provide funding for biodiversity objectives through a financial mechanism); and finance mechanisms (any instrument or tool that enables potential revenue to be captured).

Key questions for identifying biodiversity finance actors and mechanisms include:

- Who are the potential finance actors, agents, investors and/or institutions?
- What are the potential biodiversity finance mechanisms?
- What is the total estimated revenue potential from each finance mechanism?
- Which NBSAP strategy or strategies would this finance mechanism target?
- What is the feasibility of the finance mechanism?
- What are the changes that would be required to implement the finance mechanism?
- What is the total estimated new revenue for each NBSAP strategy?

Feasibility screening criteria

Financial considerations • How much money will be needed each year? • How much annual revenue is likely to be generated? • Will the revenues be worth the set up cost? • Could the revenues vary depending on global and national economic and political conditions? • How will a variable revenue flow affect the conservation programs targeted by the mechanism? • What other sources of funds might be available, either on a long-term or a one-time basis?	***Legal considerations*** • Can the proposed financing mechanisms be established under the country's current legal system?. • Will new legislation be required in order to establish the proposed financing mechanism? • How difficult and time-consuming will it be to pass such legislation? • Could the new financing mechanism be established under current legislation, by simply issuing an administrative or executive order?
Administrative • How difficult will it be to administer, enforce, collect, or implement the financing mechanism? • Are there enough trained people to administer it? • Are there too many opportunities for corruption? • Can safeguards be devised to avoid problems? • How difficult will it be to collect, verify, and maintain the data upon which a financing mechanism is based?	***Political*** • Is there government support for the new mechanism? • Will the government spend the new revenues for the purposes intended? • Can application of the mechanism be monitored and ensured by 'watchdog' organizations or by courts?
Social • What will be the social impacts of implementing a particular system? • Who will pay, and what is their capacity to pay? • Will the new financing mechanism be perceived as equitable and legitimate?	***Environmental*** • What will be the environmental impact of implementing the new financing mechanism? (E.g., will the will the desire to increase revenues from tourism compromise conservation objectives?

Source: Spergel and Moye 2004

The following is a checklist of sample financial mechanisms

FINANCIAL MECHANISMS	DESCRIPTION
Positive tax incentives	Develop tax credits and tax deductions for behaviors, products and services that cause positive changes in ecosystem management
Negative tax incentives	Develop taxes on behaviors, products and services that cause positive changes in ecosystem management
Dedicated funds	Develop funds to pay for sustainable management of ecosystems
Reduction of subsidies	Reduce or remove harmful subsidies, such as on fertilizers, and increase subsidies that have beneficial impacts on ecosystems
Caps and limits on trade	Set limits on certain ecosystem goods and services, such as water use
Procurement policies	Design procurement policies for public and private entities to promote the purchase of goods and services that promote sustainable ecosystem management
Payments for ecosystem services	Develop schemes that allow a group of beneficiaries to pay for the costs of maintaining ecosystem services (e.g., water payments for ecosystem services that allow downstream users to pay for forest protection upstream)
Independent certification	Promote market-based certification systems for sustainably produced goods and services using agreed upon standards and verifiable chain-of-custody
Biodiversity offsets and wetlands banking	Biodiversity offsets promote a framework for reducing biodiversity loss by allowing companies from different sectors (e.g., mining) to protect equivalent areas of land and biodiversity using agreed upon standards
Fines and levies	Establish punitive fees and fines that discourage environmentally harmful behavior, such as bottom trawling practices
Conservation easements	Establish long-term agreements between landowners and third-party organizations, such as land trusts, to foster conservation on private lands
Voluntary and mandatory fees	Develop voluntary fees (such as a hotel or tourism fee) that allows individuals to contribute to sustainable management, and develop mandatory fees (such as airport departure fees) that can be directed toward sustainable management

Part 3b: Resource Mobilization Plan

The final stage of the resource mobilization process is to develop a concrete set of strategies and actions to mobilize the financial resources required to implement the full suite of strategies within the NBSAP, and therefore to achieve the Aichi Targets.

Key questions when developing a resource mobilization plan include:

- What are the primary finance mechanisms that will constitute the main resource mobilization plan?
- What are the key actions and steps for implementing each mechanism?
- Who are the lead agencies, institutions and individuals responsible for taking each action?
- What are the key budget considerations involved in taking each action?
- What is the timeframe by which each action will be completed?
- What are the monitoring indicators that will help determine success in implementing the strategies and actions?

After screening and prioritizing the different finance mechanisms and actors, planners can create a realistic, practical strategy for implementing the resource mobilization plan. Below is a simple template showing some elements that could be included.

Finance actors	Finance mechanisms	Key steps in implementing financial mechanism	Lead agency, staff, individuals	Key budget considerations in implementing financial strategy or mechanism	Timeframe	Monitoring indicators
• Finance actor 1	• Finance mechanism 1	• Step 1 • Step 2 • Step 3	• Agency 1 • Agency 2 • Agency 3			
	• Finance mechanism 2	• Step 1 • Step 2 • Step 3	• Agency 1 • Agency 2 • Agency 3			
• Finance actor 1	• Finance mechanism 1	• Step 1 • Step 2 • Step 3	• Agency 1 • Agency 2 • Agency 3			
	• Finance mechanism 2	• Step 1 • Step 2 • Step 3	• Agency 1 • Agency 2 • Agency 3			

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