Status, trends, key issues and strategic directions for Aichi Biodiversity Targets

Bogis-Bossey Dialogue for Biodiversity
Château de Bossey - The Ecumenical Institute, Bogis-Bossey
12-14 November 2017

HIGH-LEVEL STATUS AND TRENDS OF NBSAPS

- Biodiversity loss is accelerating and interacting with climate in ways that are not understood
- The pace of action, level of awareness and scale of finance is not commensurate with the magnitude of loss
- There is a disconnect between NBSAP actions and the Sustainable Development Goals – biodiversity actions are not targeted toward achieving goals on poverty, livelihoods, food security, water security, climate or other essential services, and there is not a recognition by policy makers and decision makers that biodiversity underpins development
- Protection, restoration and sustainable use are not focused on achieving climate goals, and finance for biodiversity remains elusive, while climate finance has accelerated; biodiversity actions have not generally attracted climate funds – nature-based solutions only comprise 2% of Nationally Determined Commitments
- Ecosystem services remain a theoretical concept, and are not well integrated into NBSAPs
- NBSAP actions are not spatialized; NBSAP actions are often not actionable or costable
- Many NBSAPs focus on research and developing 'plans to plans' and not on taking action
- There is a reluctance in NBSAPs to tackle the underlying drivers of biodiversity loss, including commodity production, illegal fisheries, illegal logging, illegal wildlife trade, overfishing
- There is a reluctance to tackle biodiversity harmful subsidies, and the pace of incentives is very slow
- Many foundational concepts, such as safe ecological limits and sustainable consumption and production are not operationalized
- NBSAPs are overall not institutionalized through budgets, national plans, national policies
- There are many gaps that exist, including on marine plastics, on indigenous rights to land, on deforestation-free commodities

About this analysis:
This analysis, compiled by UNDP, was based on several documents, including the Global Biodiversity Outlook 4, a comprehensive review of NBSAPs, Global Land Outlook, and relevant articles. To access the powerpoint with active hyperlinks, please click here.

ABT 1: Awareness of biodiversity values

Aware of values

Aware of steps they can take

KEY ISSUES

- Awareness campaigns are not targeted to drivers of loss; few are strategic
- Many global awareness campaigns, while popular, do not lead to action
- There is no consistent framework for communicating biodiversity values
- Typical valuation studies do not spatialize ecosystem services
- Awareness campaigns not media savvy
- We lack basic data on ecosystem services, biodiversity values
- We lack effective language for communicating biodiversity values

STRATEGIC DIRECTIONS

- Target efforts at drivers of change, e.g., reducing demand for illegal wildlife; increasing demand for sustainable products, supply chains
- Professionalize biodiversity awareness campaigns, build capacity
- Mobilize celebrities globally
- Create warehouse for biodiversity valuation results
- Spatialize ecosystem values globally
- Create viral social media campaigns
- Encourage citizen monitoring as part of awareness campaigns

ABT 2: Integration of values

Poverty, development integration

National, local planning

National accounting

Reporting systems

KEY ISSUES

- Only 1/3 of poverty plans include biodiversity
- ½ of countries have environmental accounting systems
- Biodiversity values are not spatialized
- Major gaps in NBSAPs for water security plans, food security plans, integrated watershed basin plans, integrated coastal zone management, energy, infrastructure – are all largely absent in post-2010 NBSAPs
- Inadequate valuation is a key driver of biodiversity loss

STRATEGIC DIRECTIONS

- Widely share information on biodiversity values
- Support environmental statistics and natural capital accounting
- Provide accessible maps and spatial data on ecosystem services
- Identify key areas for biodiversity actions to alleviate poverty
- Support EIA/SEA processes
- Support capacity to integrate biodiversity values into sectoral and national development plans
- Promote transparency and enable citizen monitoring

ABT 3: Incentives, subsidies

Harmful subsidies removed

Positive subsidies created

KEY ISSUES

- Subsidies drive biodiversity loss
- Fossil fuels subsidies are $550 billion, agricultural subsides are $500 billion, fisheries subsidies are $35 billion
- 16% of timber is FSC certified; 7% of fish is MSC certified, 22% of palm is certified sustainable
- Key gaps in post-2010 NBSAPs include the creation of incentive schemes, the expansion of market-based incentives such as certification, and the removal of pervasive harmful subsidies – these actions were largely absent

STRATEGIC DIRECTIONS

- Identify the full costs of subsidies; many have perverse impacts that countermand the SDGs
- Provide tools for prioritizing incentives and subsidies for expansion, reform and removal
- Promote voluntary carbon markets, consistent with UNFCCC
- Promote market certification for key commodities, including timber, soy, palm oil, beef, timber, paper, fish, and other commodities that drive biodiversity loss, especially forest loss and unsustainable fisheries

ABT 4: Sustainable consumption, production

SCP plans

Safe ecological limits

KEY ISSUES

- All indicators of resource use are rising
- We have breached 3 of 9 planetary boundaries
- By 2030, food demand will increase by 35%, water by 40% and energy by 50%
- Infrastructure will triple
- Major gaps in post-2010 NBSAPs included: the concept of safe ecological limits was absent, areas important for sustainable production were not identified or mapped, strategies for socially just natural resource production were absent

STRATEGIC DIRECTIONS

- Support land use planning
- Support the development of national sustainable consumption plans
- Provide guidelines on procurement
- Promote corporate sustainable consumption and production
- Help operationalize concept of safe ecological limits for key resources
- Enable citizen monitoring and advocacy on land use planning
- Map areas critically important for managing ecosystems to ensure water security, food security, biofuels
- Map overlap with biodiversity areas

ABT 5: Forest loss, habitat loss

Rate of loss ½ or 0 | Loss of all habitats to 0 | Degradation, fragmentation sign reduced

KEY ISSUES

- Deforestation is major driver of loss
- Logging accelerates fragmentation, cocktail threats, much logging is illegal
- Forests essential to SDGs: 3/5 of world relies on forests for fuel; hundreds of millions of world's poorest depend on forests for livelihoods; forests essential for water goals
- Indigenous peoples control huge stocks of forests, but at risk
- Demand for beef to rise by 30%; total beef consumption by >50%; demand for timber, paper to increase significantly by 2030

STRATEGIC DIRECTIONS

- Consolidate spatial data on forests;
- Link spatial forest data to REDD+
- Promote national commodity round tables on soy, palm oil, coffee, cocoa
- Promote commitments (NYDF)
- Promote beef-reduced diets
- Secure indigenus forest rights
- Promote moral imperative of forest protection
- Increase certification (20% to 80%)
- Promote sophisticated LU monitoring
- Encourage protection of intact blocks
- Mainstream forests into sectors
- PES schemes for landowners

ABT 6: Fisheries

Managed sustainably | Recovery plans | No impacts on RTE species | Safe ecological limits

KEY ISSUES

- Destructive fishing practices continue (e.g., dynamite fishing, bottom trawling, unselective gear, bycatch)
- Illegal fishing continues to be a major problem
- 90% of fisheries stocks have been fully exploited, over-exploited or collapsed
- There is an increase of 400% of MSC-certified fisheries, but still just a fraction
- Only a handful of NBSAPs include tackling conventional fisheries
- Only a tiny handful identify socially beneficial fisheries
- Fisheries habitat is largely unmapped; no overlay of fisheries and MPAs

STRATEGIC DIRECTIONS

- Utilize new technologies, such as the Global Fishing Watch, to increase transparency, monitoring and action on illegal fishing, and increase global efforts on curbing illegal fisheries
- Remove harmful fisheries subsidies
- Target new MPAs around areas important sites for key fisheries life cycle functions, such as fish aggregation sites
- Identify opportunities to scale up locally managed marine areas, to increase socially inclusive fisheries
- Support global demand for MSC-certified fisheries

ABT 7: Sustainable agriculture, aquaculture, forestry

Sustainable agriculture | Sustainable aquaculture | Sustainable forestry

STATUS, TRENDS, ISSUES

- Food demand will grow 45% by 2030
- 3 food commodities drive deforestation: soy, palm, beef
- Sustainable certification growing, but mostly to developed countries
- 80% of food produced Africa is by smallholders; 80% on < 2 hectares
- Almost no NBSAPs included tackling illegal logging as an action; very few actions on community forestry; very few include sustainable aquaculture
- Almost no countries included map of agricultural expansion/biodiversity

STRATEGIC DIRECTIONS

- Expand market, supply for certified agriculture, aquaculture, forestry
- Reduce food waste across the entire supply chain
- Promote sustainable diets, including meat-free diets, local food
- Promote sustainable consumption through procurement policies
- Promote integrated landscape-level planning to account for role of ecosystem services
- Promote mapping of ecosystem services for sustainable agriculture, aquaculture, forestry

ABT 8: Pollution

Non-detrimental pollutants | Excessive nutrients

STATUS, TRENDS, ISSUES

- Nitrogen and phosphorous loading have passed planetary boundaries
- Areas of future growth: Asia, South & Central America, sub-Saharan Africa
- NBSAP actions from post-2020 NBSAPs are very limited on pollution – there are almost no actions on hazardous, solid, organic, industrial, municipal
- There is only one action identified across >100 NBSAPs on illegal pollution and waste dumping
- Marine plastics not at all addressed
- 95% marine plastics from 10 rivers

STRATEGIC DIRECTIONS

- Improve efficiency of nutrient use
- Minimize emissions from animal housing/feedlots
- Eliminate phosphates from detergents
- Target hotspots of sources for marine plastic; promote plastic reduction
- Target new protected areas for wetlands and filtering ecosystems
- Increase efforts on treating and recycling of sewage, industrial waste
- Map areas of hotspots of different types of pollution, nutrients
- Enforce pollution/emission laws

ABT 9: Invasive alien species

IAS identified, prioritized

Identify, prioritize pathways

Control, eradicate key IAS

Prevent introduction

STATUS, TRENDS, ISSUES

- Invasive species continue to expand globally: terrestrial, marine, freshwater
- Weak border controls allow spread
- >50% of countries include national policies on invasive species
- Climate change accelerates invasives
- Post-2010 NBSAPs show concentration of actions on invasive species
- There are some striking successes (e.g., New Zealand)
- However, there is a major gap in marine and freshwater invasives
- No one mapped invasive hotspots in 5th National Reports

STRATEGIC DIRECTIONS

- Make the business case for tackling invasive species; help link with impact investors
- Promote increased border control
- Develop lists of IAS and promote; increase public awareness efforts
- Increase efforts for early detection and rapid response globally; target bid data analyses
- Target efforts on IAS with largest impact on biodiversity; ecosystem functioning and provision of services
- Map hotspots of invasive species
- Promote Global IAS info partnership

ABT 10: Coral reefs

Maintain integrity, minimize threats

Minimize threats on other vulnerable ecosystems

STATUS, TRENDS, ISSUES

- Great Barrier Reef under partial collapse
- Overfishing/destructive fishing affects 55% of reefs
- MPA growth has greatly accelerated, but only 15% reduce fishing
- Multiple efforts on overfishing, pollution needed to control acidification
- Limited NBSAP actions that identify vulnerable ecosystems; and few NBSAP actions on reducing multiple efforts
- Almost no maps of vulnerable ecosystems

STRATEGIC DIRECTIONS

- Map vulnerable ecosystems; hotspots in vulnerability
- Increase spatial coverage and effectiveness of coastal protection
- Identify and map reefs that are significant for ecosystem services
- Promote finance mechanisms such as insurance of coastal reefs
- Promote integrated measures to tackle multiple reef degradation drivers
- Promote integrated coastal zone management

ABT 11: Protected areas

17% terrestrial

10% marine

Important areas

Representative

Effective, equitable

Connected, integrated

STATUS, TRENDS, ISSUES

- Nearly ¼ countries have > 17% target, and on track to meet 17% target
- MPAs have grown significantly, but mostly through very large MPAs
- -- <1/2 of 823 terrestrial ecoregions have 17% of their area in PAs; 1/3 232 marine ecoregions have 10% protection
- Less than 20% of Key Biodiversity Areas are completely protected
- PAs not linked explicitly to ecosystem services, avoiding extinctions, poverty reduction, or SDGs in general
- Infrastructure threatens connectivity

STRATEGIC DIRECTIONS

- Promote overlay of protected areas and SDGs, especially food, water, livelihoods, poverty, disaster reduction, health
- Promote new protected areas to target SDG delivery
- Expand efforts on connectivity
- Identify and address major threats to connectivity (e.g., infrastructure)
- Target new PAs to improve representativeness, connectivity
- Identify opportunities for alternative governance, LMMAs, ICCAs

ABT 12: Threatened species

Extinctions prevented

Secure most threatened species

STATUS, TRENDS, ISSUES

- Populations of >3,000 species have seen >50% decline since 1970
- Extinction rate is 1,000 to 10,000 times background rate, or higher
- Very few NBSAPs included maps of threatened species
- Illegal wildlife trade is a major driver toward extinction
- Most NBSAP actions on threatened species focused on undertaking studies instead of taking actions
- Very few actions on tackling illegal wildlife trade, connectivity
- Very few ex-situ efforts in NBSAPs

STRATEGIC DIRECTIONS

- Identify and map flows of illegal wildlife trade; barriers, opportunities to prevent extinctions
- Promote connectivity efforts that drive extinctions
- Promote widescale adoption of technology, measures to tackle illegal wildlife trade (celebrity campaigns)
- Target new protected areas on avoiding extinctions (e.g., overlay maps of PAs, new PA opportunities, key biodiversity areas)
- Push on species action plans
- Target restoration actions

ABT 13: Genetic diversity

Cultivated plants

Domesticated animals

Wild relatives

Socio-cultural

Minimize genetic erosion

STATUS, TRENDS, ISSUES

- Some initiatives underway on seeds (Global Seed Vault)
- Trend toward genetic simplification, and simplification of food stocks
- Just 3 species (wheat, rice and maize) provide 50% of global calories
- Few if any NBSAP actions focus on purposeful genetic diversity (e.g., climate-ready genetic diversity)
- Wild crop relatives are increasingly threatened, not targeted for protection in NBSAPs; not mapped
- Very few NBSAP actions on ex situ conservation

STRATEGIC DIRECTIONS

- Promote agricultural diversity targeted to climate resilience (e.g., farmer insurance for seed diversity)
- Identify and map crow wild relatives
- Target protection efforts on crop wild relatives
- Promote efforts on incentives to maintain local varieties of crops, indigenous breeds, socio-cultural farming systems
- Maintain support for in situ conservation
- Integrate crop wild relatives in land use, management plans

ABT 14: Essential ecosystem services

Safeguard essential services

Women, IPLCs, poor

STATUS, TRENDS, ISSUES

- We have lost 30% of mangroves globally;
- NBSAP actions do not necessarily target vulnerable communities, indigenous communities
- NBSAP actions have almost no actions on key services, including water provisioning, fisheries habitat, livelihoods, pollution abatement, tourism, disaster risk reduction
- Ecosystem services are not mapped or well understood
- Few financial mechanisms in place beyond PES for water

STRATEGIC DIRECTIONS

- Support global mapping of essential ecosystem services
- Support mapping of economic and social values of ecosystem services
- Target restoration and protection efforts on safeguarding essential ecosystem services
- Emphasize better integration of essential ecosystem services in national development plans
- Promote new markets for ecosystem services (insurance, bonds)
- Link ecosystem services to SDG implementation and reporting

ABT 15: Ecosystem resilience, climate, restoration

Restore, conserve for resilience, carbon

Restore 15% degraded ecosystems

STATUS, TRENDS, ISSUES

- Only 2% of climate finance is targeted at nature-based climate solutions
- Only 8% of NDCs have measurable nature-based actions
- NBSAPs do not identify areas and opportunities for restoration
- NBSAPs do not map carbon stocks, do not reference within actions
- NBSAP actions do not identify areas important for climate-related drought prevention, flood prevention, fire prevention, species adaptation
- ROAM identifies opportunities for restoration

STRATEGIC DIRECTIONS

- Use existing commitments (e.g., Bonn Challenge, NYDF) to push action
- Accelerate land use planning
- Identify and map opportunities for restoration; prioritize for climate benefits, livelihoods, connectivity, water provisioning, disaster risk
- Identify investment and insurance opportunities for restoration
- Identify and map areas important for carbon sequestration
- Emphasize restoration in tropical forests that are now sinks

ABT 16: Nagoya Protocol

NP in force

NP operational

STATUS, TRENDS, ISSUES

- This component has been met in advance of the deadline
- The Nagoya Protocol entered into force in 2014, following ratification by 51 Parties
- There are numerous efforts to accelerate national actions on ABS, including by UNDP/GEF
- There are many examples of ABS agreements which provide benefits to local communities and indigenous peoples
- Few NBSAP actions focused on access, bioprospecting, genetic resources

STRATEGIC DIRECTIONS

- For countries that have not yet done so, deposit their instrument of ratification, acceptance, approval or accession to the Nagoya Protocol
- Establish legislative, administrative or policy measures and institutional structures for implementing the Nagoya Protocol
- Encourage utilization of the ABS Clearinghouse Mechanism
- Encourage private sector investment in actions to accelerate ABS implementation

ABT 17: National Biodiversity Strategies Action Plans

Submitted

Adopted

Implemented

STATUS, TRENDS, ISSUES

- 189 (of 196) countries have submitted post-2010 NBSAPs
- 137 Parties have post-2010 NBSAP that take the Strategic Plan for Biodiversity (2011-2020) into account
- 12 Parties have post-2010 NBSAP that do not take the Strategic Plan for Biodiversity (2011-2020) into account
- 40 Parties have not yet submitted a post-2010 NBSAP; 7 Parties have not yet submitted an NBSAP
- There is a major implementation gap; a large percentage of NBSAP actions focus on plans and not actions

STRATEGIC DIRECTIONS

- Ensure that NBSAPs are adopted as policy instruments
- Ensure that NBSAPs actions are prioritized, and translated into clear, actionable road maps
- Integrate NBSAP actions into existing national plans, including poverty reduction, Nationally Determined Commitments, food security, water security, disaster risk reduction plans

ABT 18: Traditional knowledge

Respect TK

Integrate TK into implementation

Secure full IPLC participation

STATUS, TRENDS, ISSUES

- Traditional knowledge continues to decline, with large-scale displacement of indigenous and local communities
- Only a handful of post-2010 NBSAPs included actions on traditional knowledge, with the majority of actions focused on developing plans
- Actions on traditional knowledge are not targeted to key areas (e.g., crop genetic diversity for climate resilience)
- Sharing of traditional knowledge is very sporadic, with no global platform for sharing lessons, knowledge

STRATEGIC DIRECTIONS

- Develop guidelines and action plans on recognizing and safeguarding rights of indigenous peoples
- Target efforts on traditional knowledge that enables more effective strategies, particularly for climate adaptation, crop genetic diversity
- Mobilize communication and learning networks of indigenous peoples and local communities

ABT 19: Scientific knowledge

Improve knowledge

Share knowledge

STATUS, TRENDS, ISSUES

- There are urgent gaps in monitoring biodiversity globally;
- GEO BON efforts on Essential Biodiversity Variables is a good step;
- While high-resolution spatial data exists, it is not linked to SDG-relevant data, such as water security
- IPBES is operational
- Countries have invested in the Global Biodiversity Information Facility and national and regional initiatives
-

STRATEGIC DIRECTIONS

- Enable countries to access and use low-cost spatial data that include multiple data layers
- Inventory existing biodiversity information to identify key knowledge gaps
- Strengthen global monitoring systems
- Mobilize and enable community-based monitoring and information
- Target research questions around key issues related to operational gaps (e.g., safe ecological limits, resilience thresholds, climate scenarios)

ABT 20: Resource mobilization

Mobilize resources

STATUS, TRENDS, ISSUES

- The finance gap for SDGs is 2.5 trillion
- The finance gap for Aichi Biodiversity Targets is $150-440 billion, a figure that represents a rounding error in global GDP
- The BIOFIN project has changed discourse about biodiversity finance, and is leading the way in identifying approaches to filling the biodiversity finance gap
- Over 150 finance solutions have been identified and catalogued
- Investment and insurance funds have enormous potenital

STRATEGIC DIRECTIONS

- Build a pipeline of impact investment-ready project
- Bring impact investors to a common investment platform
- Bring insurance markets to the nature-based disaster market
- Greatly upscale the BIOFIN approach
- Access climate finance through nature-based NDCs
- Integrate biodiversity plans into national development plans and annual budgets
- Explore a wide range of finance solutions (e.g., subsidy reform)