

Submission on the Nairobi Work Programme

United Nations Framework Convention on Climate Change (UNFCCC)

SBSTA 41, Lima, Peru, 2014

The decision for the Nairobi Work Programme (NWP) agreed at COP19 in Warsaw provides a clear, strengthened, and enhanced mandate for the programme, recognizing the evolving needs of the Convention and adaptation practitioners. Important consensus was reached on the need to provide better linkages between the activities of the NWP and increasingly urgent adaptation planning processes, particularly National Adaptation Plans (NAPs). At the 41st Subsidiary Body for Scientific and Technological Advice (SBSTA) session, Parties will consider submissions from Parties and observer organizations on “information on good practices in and lessons learned from national adaptation planning.” SBSTA40 expanded on this request, “invit[ing] Parties and [NWP] partner organizations, including regional centres and networks, to include information on the following, as appropriate, in their submissions requested at SBSTA 39:

(a) Available and implemented tools and methods for adaptation planning processes addressing the four issues of ecosystems, human settlements, water resources and health;

(b) Good practices and lessons learned in relation to adaptation planning processes, including on monitoring and evaluation, addressing the four issues of ecosystems, human settlements, water resources and health;

(c) Good practices and lessons learned related to processes and structures for linking national and local adaptation planning.”

Accordingly, this submission intends to provide guidance towards the discussions on the NWP at SBSTA41. Conservation International hopes that case studies and examples from the field on adaptation planning, particularly in the ecosystem and water sectors, will assist with stocktaking of extant experience of adaptation planning, inform the support through which the NWP will assist countries with their adaptation practice, and guide the selection of activities that will further capacitate countries for the range of activities inherent in adaptation planning and implementation. Specifically for the ecosystems and water sectors, several resources, tools, and methodologies are identified in the following submission, demonstrating the importance, benefit, and strength of integrated approaches.

It is understood that the synthesis of information received, along with the SBSTA's discussions on national adaptation planning, will also inform the NAP process.

(a) Available and implemented tools and methods for adaptation planning processes addressing the four issues of ecosystems, human settlements, water resources and health

Conservation International is preparing a tool to aid national governments in integrating ecosystems into their NAP planning process. Specifically, the tool aims to help adaptation planners to prioritize areas of capacity building and information gathering by offering a step-by-step process that is focused on both the phasing of their planning and their local policy priorities with respect to ecosystem interactions. The draft tool will be launched during COP20 in Lima, Peru.

Other tools that are available for ecosystems, among other aims, are listed below:

Name/Author	Relevant Areas
Provia Guidance on Assessing Vulnerability (2013)	<ul style="list-style-type: none"> The 'mapping adaptation challenges to salient approaches' section describes general issues, but does not discuss specific capacities. Discusses the skill of 'facilitation' in detail Includes description of a number of relevant tools (Cristal, CARE Method) but no tools specific to integration of the environment into the process. Section 3 (on methods) does not describe any tools specific to the consideration of the environment.
Draft Principles and Guidelines for Integrating Ecosystem-based Approaches to Adaptation in Project and Policy Design: A discussion document (2011) - Andrade et al/draft	<ul style="list-style-type: none"> Acknowledges the need for multi-stakeholder teams (p8) – this tool could help to form those teams
Operational Guidelines on Ecosystem-based Approaches to Adaptation (2012) - GEF Secretariat/final	<ul style="list-style-type: none"> High level guidelines, that need operational tools for local interpretation. Begins with the "identification of communities or development programs vulnerable to climate change".
Climate Smart Conservation (2014) National Wildlife Federation	<ul style="list-style-type: none"> Defines a 'climate smart' conservation cycle to guide planning, consistent with NAP. Does not include a discrete discussion of necessary capacities or information types.
Ecosystem-based Adaptation Guidance: A Decision Support Framework (2012) - UNEP/working paper, currently being applied in relevant UNEP projects	<ul style="list-style-type: none"> Project oriented (i.e. rather than policy or planning focus) Include reference to a wide range of tools for the consideration of the environment in Annex.
Environment and Social Safeguards (2013) The Adaptation Fund.	<ul style="list-style-type: none"> High level guidelines, that need operational tools for local interpretation. Describes relevance of existing social and environmental safeguards in adaptation context to avoid maladaptation. Includes the provision: <i>Describe how the project/programme provides economic, social and environmental benefits, with particular reference to the most vulnerable communities, and vulnerable groups within communities, including gender considerations</i>
Long Term Adaptation Scenarios development (2014) , South Africa	<ul style="list-style-type: none"> Includes a methodology fact sheet for development of the Long Term Adaptation Scenarios for South Africa and a Summary for policy makers (for phase 1). Phase 2 scenarios and additional economics and sector reports are still under development. Ecosystem based Adaptation has been integrated into approaches as relevant. All phase 1 products are available online
Adapting to Coastal Climate Change (2009) , USAID Surviving Climate Change in Small Islands (2005) , Tyndall Centre	<ul style="list-style-type: none"> Guidebooks for development planners and practitioners Assists with assessing vulnerability, appraising options, mainstreaming, and implementation
Climate Vulnerability Monitor (2010) , DARA	<ul style="list-style-type: none"> Provides a useful overview of climate vulnerability from a series of indicators Links economic cost of climate change and development in concrete terms
A Framework for Social Adaptation to Climate Change (2009) , IUCN	<ul style="list-style-type: none"> Specific to tropical and coastal communities Provides specific tools and resources for linking socio-economic factors and tropical/coastal ecosystems
Indicators to Assess Community-level Social Vulnerability to Climate Change (2011) , NOAA (SOCMON)	<ul style="list-style-type: none"> Set of concrete tools for assessing social vulnerability to climate change
Vulnerability Assessment Tools For Coastal Ecosystems: A Guidebook (2013) , (USAID, CTSP, DOST-PCAARRD, NEDA)	<ul style="list-style-type: none"> Coastal and Marine Ecosystems
Integrated Coastal Sensitivity, Exposure, and Adaptive Capacity to Climate Change (ICSEA Change) (2013)	<ul style="list-style-type: none"> Coastal Sensitivity, Exposure, and Adaptive Capacity Tool developed for the Philippines

(b) Good practices and lessons learned in relation to adaptation planning processes, including on monitoring and evaluation, addressing the four issues of ecosystems, human settlements, water resources and health

Planned adaptation is necessary because the projected impacts of climate change present an unprecedented challenge to communities and regions with limited capacity to invest resources beyond existing development burdens. While autonomous climate change adaptation has occurred in a decentralized manner in the past and will continue to do so, recent efforts have sought to integrate adaptation into existing and correlated development or sectoral plans, taking into account the considerable research that has been conducted on climate change impacts and the costs of and opportunities for adaptation within a national development context.

The way in which adaptation is planned has important implications for project design, human and economic development, funding mechanisms, and mainstreaming. Therefore, given the global nature of climate change and the need to unite sometimes fragmented development efforts, an integrated approach to climate change response and development is vital to ensure both efficiency and efficacy. Inherent within integration is the harmonization of adaptation planning and practice across sectors and at different timescales of impacts. This has implications especially for tradeoffs which may be required between sectors and also for timescales of project planning. Agriculture, for instance, tends to have short or medium-term adaptation goals. On the other hand, energy or urban issues tend to have longer-term goals, primarily because the solutions are more costly and have longer lifetimes, although systemic planning shifts may be required in the short-term even for those sectors with longer-term goals. An integrated and planned approach can balance these perspectives more easily, ensuring an effective and equitable allocation of resources.

It is therefore important to ensure that it is not only the climate change impacts within sectors that are assessed, but also cross sectoral implications, both negative and positive, and short, medium and long term impacts. Coherent and well planned cross-sectoral and regional planning will enable the effective management of necessary trade-offs to prioritize interventions and allocation of resources.

Case study: South Africa

South Africa's Long Term Adaptation Scenarios (LTAS) development process offers a useful example of cross-sectoral integration. The LTAS were enabled through the National White Paper in support of a research adaptation flagship programme that assessed adaptation costs, benefits and integrated approaches into the long term. These scenarios include long term climate projections to 2100 (but focused most urgently on the relatively short and medium term timeframes of 2020-2030 and 2050). Risk assessments on impacts across the sectors water, biodiversity, agriculture and forestry, human health, marine fisheries, infrastructure, human settlements and disaster management were completed by teams of national experts. Brought together under a range of archetypical potential climate futures, cross sectoral implications with various developmental pathways that may be taken in future can be identified. These scenarios allow for planning of short term and no regret options across sectors as well as indicating the potential for long term transformative adaptation where systemic changes are required. This integrated and cross sectoral approach also raises the consideration of tradeoffs that might need to be made between sectors, changes in water allocations for example. Financial resources also need to be allocated accordingly among sectors for effective implementation, but in a way that does not preclude flexible allocations that can be adjusted as the future climate unfolds.

Ecosystems, vulnerability, and adaptation planning

An effective entry point for sound adaptation planning is the vulnerability assessment (VA). A climate change VA is an evaluation of how a given area is likely to be impacted by climate change and to respond to those impacts, and should consider the exposure, sensitivity, and adaptive capacity of both people and ecosystems. Vulnerability assessments are an important tool for identifying vulnerable groups/areas and informing policy development and adaptation plans, thus forming the basis of climate change risk reduction strategies. Comprehensive climate change vulnerability assessments are an important first step and tool for integrated adaptation planning to guide local climate change responses.

Particularly for ecosystems, linking top-down (i.e., downscaling broad climatic and development parameters to local conditions) and bottom-up approaches (i.e., looking at inherent system vulnerabilities and opportunities) to assessing risk is critical, particularly because many ecological impacts are difficult to predict even when climate impacts are already well known and described. Integrated VAs provide a means of seeing virtual or embedded connections between resources (e.g., the freshwater resources “embedded” within agriculture, the natural ecological capital embedded in water quality and livelihoods such as fisheries and forestry), as well as approaches that may be potentially in conflict with one another (climate mitigation vs climate adaptation, private sector vs public sector). One way of undertaking a vulnerability assessment is to consider the ability of the natural resource base to provide critical ecosystem services and to underpin climate resilience as the basis for the assessment, interpreting projected climate change impacts and social, institutional and economic vulnerabilities in terms of this natural resource base, on which people are directly or indirectly dependent.

There are many different approaches to vulnerability assessments, ranging from narrative approaches (Conservation International’s [VA for Discovery coast and Abrolhos region – Brazil](#)) to index- and GIS-based approaches (Conservation South Africa’s [VA for Namakwaland - South Africa](#)). They can be undertaken at different scales from regional, to national, to local, depending on the desired level of information. Regardless of the approach, the VA is a powerful tool. For instance, Conservation International’s VA recommendations in the Philippines and Ecuador were adopted by the Ministry of Climate Change and integrated into the National Adaptation Plan respectively.

Case study: Colombia

In Colombia, a vulnerability assessment at subnational level for the Bogota-Cundinamarca region was carried out, based on an ecosystem-based approach. The assessment focused on key ecosystem services, such as water quantity, water quality, water regulation, and biodiversity conservation, among other services. The assessment was developed using eco-hydrological models such as “Water World” and “Costing Nature”, as well as population models; analyzed for the year 2050 using GIS based approaches. The results of this assessment have been adopted by the regional environmental authorities, as well as the Government of the Department of Cundinamarca, and the City of Bogotá, as more than 10 million people are affected by impacts on these key ecosystem services. This assessment includes an evaluation of the adaptive capacity of the population, and a proposal of most relevant adaptation actions to address the already identified climate change impacts on socio-ecological systems. Most of the adaptation measures proposed are “no regrets” actions, based on ecosystem based adaptation approaches.

All documents are available [online](#).

Case study: Philippines

In the Philippines, vulnerability assessment tools for coastal systems were developed through Conservation International- Philippines in response to the need to incorporate climate change impacts in conservation planning and coastal resources management programs. In 2008, one of the first vulnerability assessments in the country which focused on marine biodiversity was conducted in the Verde Island Passage. Initial and novel methods to evaluate vulnerabilities of coastal habitats, fisheries, and human well-being to different climate exposure scenarios and potential impacts were developed and applied to evaluate vulnerabilities of coastal habitats, fisheries, and human well-being to different climate exposure scenarios and potential impacts.

The tools were further refined through the Remote Sensing Information for Living Environments and Nationwide Tools for Sentinel Ecosystems in our Archipelagic Seas” (ReSILiENT SEAS) project in a form that can be used by non-experts and local stakeholders.

Moreover, CI-Philippines through the USAID Coral Triangle Support Program, provided support to complete the two existing tools on fisheries and coastal integrity and improve its documentation. In coordination with the Commission on Higher Education, a third tool termed as the ICSEA-C-Change which incorporates marine biodiversity, fisheries and coastal integrity vulnerabilities at a coarser but integrated level was also developed.

Integrated VAs can identify suites of potential decision pathways, which can allow for more effective long-term actions in the face of future uncertainty. Some types of measures may be very expensive to implement, require long lead times, be irreversible themselves, or limit other future actions if there is insufficient understanding of climate change impacts. VAs allow for consideration of the various tradeoffs between investing resources in the short vs. long term, and aid in decision-making in resource-constrained conditions.

Monitoring and evaluation:

Effective monitoring and evaluation of the impact of adaptation actions taken at the national scale begins with a clear theory of change. The goals of the adaptation actions, the planned activities, and the expected impact/s should be clearly articulated. Assumptions should be clearly stated, monitoring indicators should be determined, and targets should be set. Progress can then be periodically reviewed against this logic model or plan. Conservation International has developed a [guidance document](#) to construct theories of change for ecosystem-based adaptation projects that outlines basic concepts of the theory of change approach, describes the key characteristics of the approach, and defines the steps to constructing the theory of change.

Indicators for monitoring progress should be robust and measurable, clearly linked to available or acquirable data sets, and clearly linked to climate change exposure, sensitivity, and adaptive capacity. For example, if socio-economic sensitivity to climate change is measured in terms of percentage of the population directly dependent on natural resources such as water from rivers or wood for fuel, then progress in terms of resilience through building human development can be measured over time and often found within national census data. Stakeholder consultation is critical in the development of a set of appropriate indicators for adaptation. It also requires institutional coordination across all sectors to ensure that a full representation of all adaptation activities and indicators also captures cross-sectoral activities (i.e. water, energy, and agriculture).

Effective evaluation of impact relies on the collection of good relevant baseline information, tracking of the planned and implemented resilience-building activities against the defined indicators, and the occurrence of a climate/weather-related (extreme) event, after which effectiveness of the interventions can be assessed. Monitoring and evaluation of adaptation is complicated by a shifting baseline, the presence of many confounding factors, and a perceived need to demonstrate additionality.

A significant risk with ecosystem approaches is to assume that species, ecological communities, and ecological processes *should* remain essentially unchanged, with a “conservation” (i.e., past reference state) goal for resource management. Species, ecological communities, and ecosystems are remarkably complex and dynamic in response to climate impacts, and determining effective monitoring guidelines for ecosystems in such conditions is challenging. We recommend developing and using both traditional reference-state monitoring and evaluation systems and approaches that help track the dynamic qualities of resilience inherent to ecological systems and that enable auto-adaptation, such as connectivity, integrity of the disturbance regime (e.g., fire, monsoon, tropical cyclone, or flow regime), and habitat heterogeneity.

Example: South Africa is currently developing a National Monitoring and Evaluation system for adaptation. Starting with a comprehensive database and stakeholder engagement, the Department of Environmental Affairs in collaboration with other departments is in the process of developing a framework with appropriate indicators for assessing how the country is contributing to adaptation and how climate change is being effective in terms of building resilience.

(c) Good practices and lessons learned related to processes and structures for linking national and local adaptation planning

To aim towards institutionalizing adaptation, investment in management systems and capacity building can be especially useful because climate change amplifies existing problems that would need to be addressed even if climate change did not occur. Investment in promoting local leadership (through, for example, education programs and training on mainstreaming adaptation) empowers individuals in vulnerable communities and countries to identify and plan the most appropriate and beneficial set of projects or response programmes.

For instance, policy processes enabled and encouraged by the UNFCCC have been significant contributors to capacity development at the national scale. The National Adaptation Programmes of Action (NAPAs) were designed for least developed countries to underscore their main climate vulnerabilities and propose solutions that not only alleviate the effects of climate change on vulnerable communities, but also build adaptive capacity via synergies with other national plans, the dissemination of information, and the institutionalization of adaptation. The NAPAs provided a framework for addressing vulnerabilities or the consequential impacts of climate change with a view towards a coherent and targeted adaptation portfolio of projects over the short to medium term. The projects were identified at the local level and have provided a selection of projects from which to learn and expand the body of knowledge on adaptation.

Drawing and building on the lessons of the NAPAs, the National Adaptation Plans (NAPs) are currently being designed at the national level in developing countries for medium to long term adaptation prioritization. The NAPs offer a key opportunity for countries to link national planning processes to local knowledge and experiences, many of which have begun to be discussed through the NAPAs. What are needed, however, are specific guidance, measures, and mechanisms to link local level experiences to the national priority-setting process and vice versa.

Case study: South Africa

The information from the flagship programme of the Long Term Adaptation Scenarios (LTAS) is beginning to be integrated into sector response plans, supporting a more cross sectoral approach to planning, and better informing national level integrating structures such as the National Committee on Climate Change. The information is also a basis for downscaling to the local level through integration into provincial climate change

response strategies. These response strategies can then provide the guiding framework in which local integrated development planning is being done. The process requires active engagement and input from local and provincial stakeholders. The LTAS is also now providing the platform for South Africa to develop a National Framework and Strategy for Adaptation that will become their National Adaptation Plan to be submitted under the UNFCCC.

In South Africa, the National White Paper also supports the mandate for Local Municipalities to respond to climate change. In order to assist in this mandate, the [Let's Respond Toolkit](#) has been developed by the National Departments of Environment (DEA) and Cooperative Governance and Traditional Authority (COGTA) and the South African Local Government Association (SALGA). This toolkit is being used to mainstream climate change into local integrated development plans through an intensive process of facilitation and training supported by organizations such as Conservation South Africa as well as national government. Appropriate adaptation projects are developed through this integrated and cross sectoral planning process and then implemented. The process allows for local government to develop capacities in responding to climate change while providing leadership in building resilience in their respective communities. Accessing finance for climate response can be a challenge and providing sound integrated adaption responses in these local and provincial plans can support the allocation of finance towards adaptation at the local level.

Another key opportunity for linking local and national adaptation processes is through the direct access finance modality, most notably operational through the Adaptation Fund. Through this direct access, countries can get financial resources directly through accredited institutions, or national implementing entities (NIEs). The NIEs often employ practices that enhance stakeholder engagement at the local level, and therefore serve as a vehicle for financing adaptation at this level. This not only offers the opportunity for learning and capacity development, but also for more coherent and integrated programmes at the national level, which can further support the needs at the local scale more effectively. Direct access is already operational in countries like South Africa, in which their NIE, the South African National Biodiversity Institute, has been a pioneer in operationalizing the modality.

Countries have also begun to take the initiative to set up national funds for climate change, with the broad mandate of delivering resources to vulnerable communities from the national to local scale. These initiatives and measures are key avenues and vehicles for national governments to drive their priorities and deliver resources more effectively to the most vulnerable.

Case example of national to local climate change funding: Philippines

The National Framework Strategy for Climate Change (NFSCC) of 2011 is the country's roadmap in creating a climate risk-resilient Philippines, with the general goal of building the country's adaptive capacity and increasing the resilience of natural ecosystems to climate change and optimizing mitigation opportunities. It outlines the basis for planning, research and development, extension and monitoring of activities to protect vulnerable communities from the adverse effects of climate change. Through the Philippine Climate Change Commission (CCC), the NFSCC was translated into the National Climate Change Action Plan (NCCAP), outlining the agenda of adaptation and mitigation for 2011-2028. The NCCAP aims to build the adaptive capacities of women and men in their local communities, increase the resilience of vulnerable sectors and natural ecosystems to climate change, and optimize mitigation opportunities towards gender-responsive and rights-based sustainable development.

To support adaptation actions at the local level, in 2012, the People's Survival Fund (PSF) law amends the Climate Change Act of 2009 to provide long-term finance streams to enable the government to effectively address climate change. The PSF will help local governments' adaptation activities, such as in the areas of land and water resources management, agriculture and fisheries, health, infrastructure development, and natural ecosystems and affirms the Philippines' commitment to building communities' resilience to disasters. The law is a measure that guarantees at least P1 billion annual budget to make the Philippines adaptable to climate change.

Conclusion

Integration demonstrates the value of a country-determined and country-driven effort, informed by local knowledge but in collaboration with key expertise as appropriate. An important first step is that countries should determine their respective national definitions of an adaptation vision. This vision can then be integrated into national development policies and plans that specifically respond to locally felt climate change priorities.

The NWP could provide important benefits to the international community by synthesizing the lessons being learned (as described above), through a series of expert papers and international or regional workshops. These insights could also be usefully filtered in relation to the most recent IPCC WGII chapters on adaptation, to extract the most valuable emerging best practices. In this way, the NWP can complement and supplement the information delivered by the IPCC, which offers conclusions and reports over longer time frames and does not offer frequent guidance to practitioners. The incremental synthesis of best practice, through research or knowledge compilation/processing, would add tremendous value to adaptation planning and practice. This kind of synthesis should be provided for consideration by the Adaptation Committee and the Least Developed Countries Expert Group (LEG) to develop best practices for the development of NAPs, including through building a global expert capacity that is sensitive to national circumstances and can support countries and regions in their endeavors.

The strength of the NWP is that it can foster and inculcate systematic learning and knowledge management that links the lessons from projects at the local level to the national and international levels. It should therefore seek to deliver information more effectively to practitioners through carefully designed activities and products. These activities may include:

- Regional learning workshops and facilitation of south-south learning exchange;
- Collaboration with adaptation financiers to bridge the gap between understanding of adaptation practice and funding trends or mechanisms;
- Systematic coordination between the NWP, the AC, and the NAP process; and
- Guidance and training on implications of long-term climate scenarios and best practices in multi-level adaptation planning.

As a NWP Partner Organization, Conservation International remains committed to contributing to the work of the NWP and lends its support to ensuring enhanced, evolved action on adaptation moving forward.