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RESEARCH ARTICLE

A perspective on climate-resilient development and national adaptation planning based on USAID's experience

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National adaptation planning has evolved from a focus on short-term, project-level interventions to mainstreaming adaptation into broader development goals. Initial adaptation efforts tended to focus on climate science and project-level assessments and measures. In contrast, National Adaptation Plans (NAPs) provide an opportunity to take a longer-term, more strategic approach to adaptation. A “development-first” approach, rather than a “climate-first” or climate stressor-driven approach, enables climate change to be more effectively integrated into development planning and decision-making. The United States Agency for International Development’s (USAID’s) Climate-Resilient Development framework, as applied to NAPs, begins with a workshop attended by a broad array of government and non-government stakeholders. During the workshop, participants take a comprehensive view of a country’s social and economic development goals and key climate and non-climate risks to those goals. Participants also identify potential adaptations that can reduce the most significant climate risks to development. USAID has applied this approach in stakeholder workshops in Jamaica, West Africa, and Tanzania, and these workshops have helped to catalyse NAP processes in the countries. Lessons learned from these applications include the importance of stakeholder ownership and buy-in at an early stage of the NAP process, the value of embedding NAPs in an existing planning process such as long-term economic development planning to promote more effective mainstreaming, and the key role that NAPs can play in the coordination of financial and technical support by development agencies and other institutions.

Keywords: national adaptation plans; NAPs; adaptation; capacity building; climate change; climate policy; development; mainstreaming; sustainable development; UNFCCC; USAID

1. Introduction

The impacts of climate change have been found potentially to limit economic growth in developing and developed countries, thus resulting in significant implications for achieving development goals (e.g. Arendt et al., 2014). Some countries are trapped in poverty partly because of climate factors, and climate change can restrict efforts for economic development. In addition, the poorest segments of societies tend to be most vulnerable to climate change, as poverty limits their access to resources needed to adapt to climate variability and change (e.g. Arendt et al., 2014). Poor populations also tend to be marginalized in decision-making and access to rights, services, and resources (von Braun & Gatzweiler, 2014). Recent efforts to address the impacts of climate change in developing countries have

emphasized National Adaptation Plans (NAPs), authorized under the United Nations Framework Convention on Climate Change (UNFCCC). NAPs provide an opportunity for countries to develop strategic, longer-term plans for adaptation.

This paper presents the United States Agency for International Development’s (USAID’s) approach to NAPs based on its Climate-Resilient Development (CRD) framework, which it has used to support a number of countries in initiating their NAP processes. Section 2 provides context on NAPs and examines the shift in national adaptation planning from a “climate-first” approach to a “development-first” approach, focusing on the experience of USAID. Section 3 discusses USAID’s CRD framework in detail. Section 4 explores

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USAID's application of the CRD framework in support of NAPs through three examples. Section 5 highlights lessons learned based on USAID's experience, and Section 6 provides conclusions.

2. Moving from a climate-first approach to a development-first approach to national-level adaptation planning

Initial efforts to address national adaptation planning often took a climate-first approach. Detailed information about climate vulnerability drove the planning efforts (e.g. Carter, Parry, Harasawa, & Nishioka, 1994), with plans focusing on project-level interventions that did not necessarily address a country's most important national development concerns.

In recent years, the adaptation community has shifted toward an approach that emphasizes development needs first, and then considers climate change risks to those needs. A development-first approach more effectively supports mainstreaming – the integration of climate¹ considerations, both current risks that are likely to be exacerbated by climate change as well as new risks that climate change may introduce, into existing decision-making, policy, and planning processes (Dessai, Hulme, Lempert, & Pielke, 2009). A development-first approach places development goals and priorities, rather than potential climate change impacts, at the centre of the process (e.g. Fröde, Scholze, & Manasfi, 2013; Pervin et al., 2013; USAID, 2014). The International Institute for Environment and Development (IIED) notes that in a development-first approach, climate resilience is considered in the development planning process from the outset to ensure that development investments can deliver desired outcomes despite climate change (Pervin et al., 2013). Davidson et al. (2003) state that “development can be shaped in such a way as to achieve its goals and at the same time reduce vulnerability to climate change, thereby facilitating sustainable development that realizes economic, social, local and global environmental goals.”

2.1. UNFCCC: from national adaptation programmes of action to NAPs

The first significant attempt by the UNFCCC to address adaptation in the 2000s focused on a climate-first, project-level approach. A programme asking least-developed countries to prepare National Adaptation Programmes of Action (NAPAs) was approved at the Seventh Session of the Conference of the Parties (COP) in Marrakesh, Morocco, in 2001. NAPAs were efforts by least-developed countries, defined as countries with low income, weak human assets, high economic vulnerability, and a population of less than 75 million (UNFCCC, 2009), to identify priority activities to “address urgent and immediate needs

[on adaptation]” (UNFCCC, 2002). Based on climate vulnerability assessments, NAPAs identified specific adaptation projects that were considered to be urgent and “for which further delay could increase vulnerability or lead to increased costs at a later stage” (UNFCCC, 2014). As of November 2013, 50 countries had prepared NAPAs (UNFCCC, 2013). Since NAPAs emphasized addressing “urgent and immediate needs,” there was an implicit disincentive to conduct strategic planning and consider longer-term development goals, the climate risks to meeting those goals, and adaptation actions to support meeting those goals.

In acknowledgement of the limitations of NAPAs' short-term focus and the need to continue and enhance work on adaptation, the COP identified and discussed NAPs during the 2010 UNFCCC negotiations in Cancun, Mexico. In the Cancun decision, the COP established

a process to enable least developed country Parties to formulate and implement national adaptation plans, building upon their experience in preparing and implementing national adaptation programmes of action, as a means of identifying medium- and long-term adaptation needs and developing and implementing strategies and programmes to address those needs. (UNFCCC, 2011, FCCC/CP/2010/7/Add.1)

The following year in Durban, South Africa, the COP agreed that

the objectives of the national adaptation plan process are as follows: (a) To reduce vulnerability to the impacts of climate change, by building adaptive capacity and resilience; (b) To facilitate the integration of climate change adaptation, in a coherent manner, into relevant new and existing policies, programmes and activities, in particular development planning processes and strategies, within all relevant sectors and at different levels, as appropriate. (UNFCCC, 2011, Decision 5/CP.17, in FCCC/CP/2011/9/Add.1)

In promoting NAPs, the COP recognized the role they could play in facilitating mainstreaming of adaptation considerations. The UNFCCC's more recent endorsement of a NAP process also suggests that countries should focus first on developing a strategic approach to adaptation, and then identify and invest in specific projects in both the near- and long-term. The NAP process emphasizes the creation of structures and systems for integrating adaptation into development planning and updating NAPs in an ongoing, iterative way (UNFCCC, 2012). The NAP process also seeks to engage a broad set of stakeholders and to leverage existing structures in order to promote country ownership (UNFCCC, 2012). To support the development of NAPs, the Least Developed Countries Expert Group (LEG)² developed guidelines on the NAP process (UNFCCC, 2012).

Despite the UNFCCC's endorsement of a shift toward NAPs, only a handful of countries have actually produced NAPs to date, with some starting the process before the UNFCCC explicitly called for NAPs. Bangladesh was one of the first developing countries to prepare a NAP, publishing the Bangladesh Climate Change Strategy and Action Plan in 2009 (Rai, Huq, & Huq, 2014). Since then, Ghana and Kenya have also prepared NAPs, with each country setting up mechanisms for national-level coordination and identifying specific adaptation actions in their NAPs (Government of Kenya, 2010; UNEP and UNDP, n.d.).

2.2. USAID: developing a CRD framework

At approximately the same time that the UNFCCC shifted from project-focused NAPAs to more strategic, development-focused NAPs, USAID's approach to adaptation also evolved (USAID, 2007). Informed by the challenges and results of applying a climate-first approach in its early adaptation activities, USAID began to move from a climate-first approach to a development-first approach. Other bi-lateral and multi-lateral development agencies such as the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ) (Germany), the United Kingdom Department for International Development (DFID), the United Nations Development Programme (UNDP), and the United Nations Environment Programme (UNEP) also began to emphasize development in their support for adaptation. For example, GIZ developed a "Climate Proofing for Development" approach (Fröde et al., 2013), which integrates climate change adaptation into development.

In USAID's case, two adaptation planning efforts – in Madagascar and the Eastern Caribbean region – helped inform this evolution, which ultimately led to the development of the CRD framework.

2.2.1. Madagascar

USAID's initial emphasis on a climate-first, project-level approach is exemplified in an adaptation planning project that the agency supported in 2008. The agency played a small role in a MacArthur Foundation-funded activity in Madagascar that the World Wildlife Fund and Conservation International co-led; the project examined direct climate impacts on terrestrial and marine protected areas (Conservation International and World Wildlife Fund, n.d.). USAID provided support to examine how climate stressors affected human behaviours that contributed additional and immediate stress to the protected areas. The assessment identified areas in Madagascar that were particularly important for biodiversity, that were threatened by climate change, and that needed to be protected from development. However, at a workshop held toward the end of the

assessment, stakeholders identified many of these same areas as being important not just for conservation, but also for development. Thus, the best places for conservation were also ideal for agricultural development priorities such as horticulture, rice, and livestock production. This experience demonstrated that adaptation efforts should begin with some consideration of development priorities and subsequently examine potential tradeoffs with conservation goals.

In response to stakeholders' inputs highlighting potentially conflicting priorities for land use, USAID reviewed the Madagascar Action Plan 2007–2012 (MAP) (Government of Madagascar, n.d.), which identified development priorities for the country. USAID learned that a number of the MAP's goals would each contribute to development, but were not compatible with one another. For example, the document described plans for increasing tourist visits, transport infrastructure, agricultural and livestock production, and protected-area acreage, but seemed to assume that Madagascar's remaining forested lands could be used for multiple competing purposes. The components of the plan appeared to have been developed in isolation from one another, and the plan itself had not been considered in its entirety to see if all of the goals would be in competition for scarce resources. (The MAP's role was diminished by the coup in Madagascar in 2009.)

Partly because of its experiences in Madagascar, USAID began to favour an approach that started by systematically examining all of a country's national development goals, rather than by focusing on individual climate-driven projects. The agency believed that this type of development-first approach would drive a better planning process and would ensure that limited adaptation funds supported the highest-priority needs and did not create or exacerbate tradeoffs.

2.2.2. Eastern Caribbean

The Madagascar experience, together with similar results in other cases, highlighted the need for USAID to approach adaptation in a more strategic way that would better account for the development context, stakeholder priorities, and existing planning and decision-making processes – and would *then* integrate consideration of climate risks. Under this approach, countries would consider climate stressors that threaten key development priorities and goals, as well as identify priorities for adaptation actions that support better development planning and decision-making.

USAID's first effort to articulate such a development-first approach to adaptation took place in July 2010. To inform the formulation of the five-year strategic framework for USAID's climate change adaptation activities in the Eastern Caribbean region, USAID conducted stakeholder workshops in St. Lucia and Barbados. At each of the workshops, participants identified their country's development

goals, the inputs needed to achieve the goals, and the climate and non-climate stressors that could impede the attainment of the goals. Participants then identified actions that could decrease vulnerability and increase resilience in the Eastern Caribbean region. Although the stakeholder workshops were not part of a national-level adaptation planning effort, the process highlighted the importance of starting adaptation planning from the perspective of development goals.

3. The CRD framework

Because of experiences like those in Madagascar and the Eastern Caribbean region, USAID began to shift from a climate-first approach to adaptation planning, to a development-first approach. To encapsulate this approach, USAID developed a five-stage CRD framework, depicted in Figure 1 (USAID, 2014). The framework starts with understanding the development context in the Scope stage. It moves on to evaluating vulnerability in the Assess stage, and identifying, assessing, and selecting appropriate adaptation actions to address the impacts of both climate and non-climate stressors in the Design stage. The identified actions are implemented in the Implement and Manage stage, and necessary adjustments based on new information and/or learning are made in the Evaluate and Adjust stage. The CRD framework has been used to test a development-first approach within various sectors, such as agriculture, water, and infrastructure, and at different levels of planning, including national, regional, and local.



Figure 1. USAID's climate-resilient development framework contains five sequential steps.

Although the CRD framework is grounded in conventional development practice, it differs in a few key ways. To protect current and future development, the framework explicitly considers how climate stressors may affect development and focuses on developing flexible interventions that reduce vulnerability to a range of climate and non-climate stressors. The framework also encourages an integrated approach to considering the ways that climate risks affect development by addressing those risks at a national level and across multiple sectors.

The CRD framework begins with a participatory process to establish the development context and uses climate and sector expert knowledge of climate and non-climate stressors to identify the most significant threats to development. A workshop is used to engage key stakeholders including representatives from government, NGOs, civil society, and the private sector. Participants are asked to identify the major development objectives and key assets needed to meet those objectives. Assets include such factors as land, labour, capital, infrastructure, and natural resources. Participants then identify climate and non-climate stressors that affect the assets. This information later helps guide more detailed assessments of climate vulnerabilities and potential adaptation actions. Information on climate risks (e.g. projections from climate models) is introduced at an appropriate level of detail and timescale to support planning. Assessments typically apply evaluation criteria that are important for stakeholders, such as relative risk to development, feasibility, and cost of adaptations.

Note that the CRD framework described here addresses both *climate* stressors, including current climate variability and future climate change, as well as *non-climate* stressors, including poverty, unsustainable natural resource management, weak governance, and other development challenges. Indeed, weak governance is often a critical stressor limiting development (Klein et al., 2014; Vogel et al., 2013). Examining the relationship between climate and non-climate stressors is critical for understanding how climate stressors may affect development goals, either positively through co-benefits or negatively through adverse impacts, as well as identifying a broader set of interventions that increase resilience to climate risks and support the achievement of development goals.

4. Application of the CRD Framework to NAPs

USAID has applied the CRD framework to help several developing countries advance their NAP processes. Specifically, in response to partner countries' needs, USAID has focused on catalysing action by supporting countries in the preliminary stage of their NAP process, which is part of Element A "Lay the Groundwork and Address Gaps," in the LEG Guidance on preparing NAPs (UNFCCC, 2012). The emphasis on participatory scoping

helps stakeholders establish the development context, identify current and future stressors, and assess vulnerability at an appropriate level of detail to facilitate the identification of key risks to development. USAID's goals have been to help countries lay the foundation for their NAP processes by identifying the most important threats to development, and to create a sense of ownership of the process among multiple stakeholders in a country.

To help countries undertake their NAP process, USAID refined the workshop approach that the agency originally tested in the Eastern Caribbean in 2010. The first workshops that USAID carried out under the rubric of the CRD framework took place in Jamaica, Tanzania, and West Africa, with a focus on the *Scope* stage of the framework (Element A in the LEG Guidance): facilitating long-term visioning of adaptation in support of development. A wide array of stakeholders from inside and outside government attended the workshops, including multi-lateral and bi-lateral development agencies. The goals were to: (1) identify development goals, (2) determine the key inputs and enabling conditions required to achieve these goals, (3) identify climate and non-climate stressors that may put key inputs to development at risk and undermine the enabling environment, (4) determine the most important climate stressors to address, and (5) identify potentially appropriate risk-reducing adaptation measures and the institutional support needed to undertake them. The workshops used a series of small-group interactive exercises, technical presentations, and plenary discussions to help countries articulate the development context, including what decisions are being made, their timeframe, the key institutions involved, and whether these decisions can

actually be influenced by this process. The small-group exercises facilitate stakeholders' setting of priorities for the NAP process. Figure 2 provides an example of the results of workshop exercises that participants used to identify important development sectors, key inputs and conditions, climate and non-climate stressors, potential adaptation actions, and needed institutional support.

These workshops not only play a substantive role in identifying key climate risks to development, but also serve as a means to build support for the NAP process inside and outside governments and to establish linkages and promote dialogue across relevant sectors and institutions. Stakeholder participation in policy development can substantially benefit the quality, legitimacy, and implementation of the policy (Bijlsma, Bots, Wolters, & Hoekstra, 2011). When representatives of key constituencies and interests participate in the initial stages of the NAP process, they are more likely to become invested in the process, and thus committed to it. Without the buy-in of these groups, constituencies could later block or render ineffective efforts to adopt and implement adaptation actions. Therefore, it is critical that these workshops involve important stakeholders from across different government ministries and agencies, as well as representatives from the private sector, non-governmental organizations (NGOs), and development agencies.

The workshop process can help the overall NAP process by creating awareness and shared ownership across a broad array of stakeholders. By linking adaptation and the NAP to national development goals, the workshop can help create much broader buy-in into the process than there would be with a focus on climate change alone.

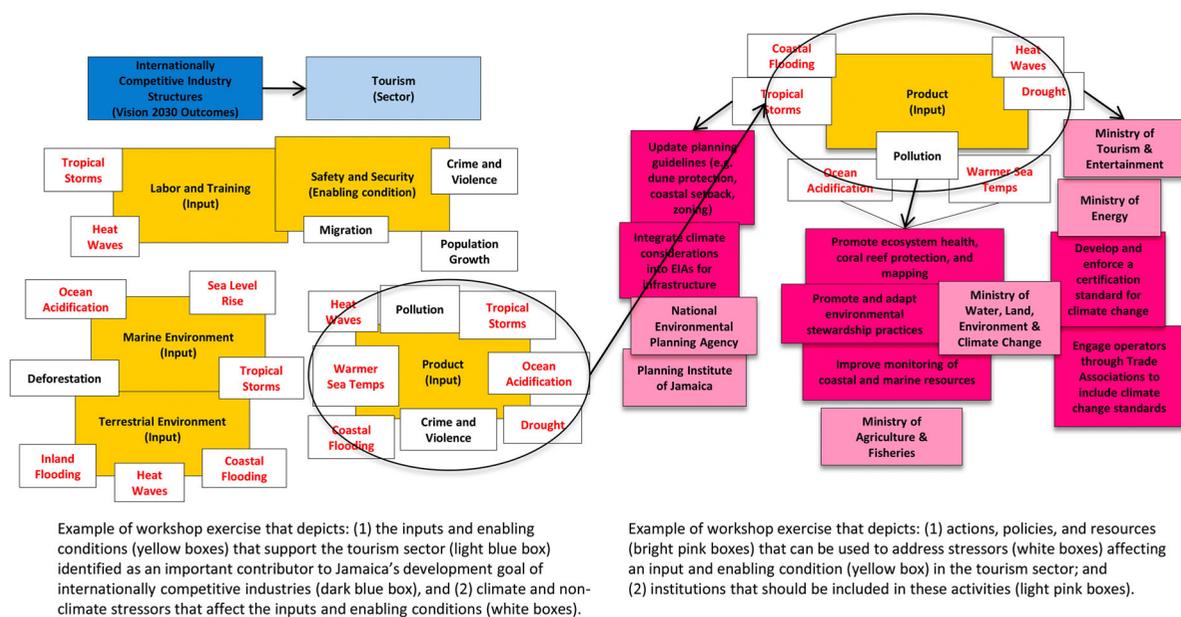


Figure 2. Example outputs from workshop conducted in Jamaica in July 2012.

This broad-based buy-in will be important throughout the NAP process. In addition, the cross-sectoral interactions fostered through the workshop can lead to relationships that will serve the entire NAP process. The NAP processes supported by USAID are still in the early stages; other examples of how the workshops contribute to the broader process may emerge over time.

USAID has supported the following countries in applying a development-first approach during the preliminary stages of their NAP processes:

- Jamaica launched its NAP process with a workshop called “Climate Change: Toward the Development of a Policy Framework for Jamaica” in Kingston in July 2012. One hundred and fifty people attended, representing government ministries and agencies, academia, NGOs, the private sector, and bi-lateral and multi-lateral development agencies (Cote, Hurley, & Pratt, 2014). Participants were practitioners and decision-makers representing a range of sectors, including water, land, energy, tourism, agriculture, fisheries, mining, gender, transport, housing, forestry, rural development, and urban development.

The discussions led to a key conclusion: that a number of sectors rely on the same assets, such as water and energy; are affected by the same enabling conditions, such as particular legal and regulatory frameworks; and face threats from the same climate and non-climate stressors, such as drought and pollution. This conclusion underscored the importance of a cross-sectoral approach to climate change. For example, the group that focused on agriculture noted the importance of engaging with the water sector because shifts in water availability could have significant implications for success in the agriculture sector. As a result, a number of the agriculture group’s proposed adaptation actions were related to water, such as rainwater harvesting and drip irrigation.

Stakeholders also discussed how to address climate risks while achieving the goals of the country’s *Vision 2030 Jamaica – National Development Plan* (Planning Institute of Jamaica, 2009). This plan has a goal of Jamaica becoming a developed country by 2030. Building on the momentum from the workshop, Jamaica created a national Climate Change Policy and Action Plan that allocates responsibilities for addressing climate risks across sector ministries. Those responsibilities will be codified in updated sector plans.

- Tanzania’s NAP process began with a focus on development priorities in the coastal zone. Forty-four representatives of government ministries and departments, academic and research institutes, NGOs, the private sector, and bi-lateral and multi-

lateral development agencies met in Bagamoyo in March 2013 for the “Coastal Climate Change National Adaptation Planning Workshop” (Cote et al., 2014). The Tanzanian government and USAID organized the workshop with the objective of laying the groundwork for Tanzania’s NAP process. A second objective was to test a development-first approach for mainstreaming climate considerations into development and sector planning that the Tanzanian government could apply to other sectors, as well as more broadly at the national level.

As in Jamaica, a key issue that emerged at the workshop was that common stressors and potential impacts of climate change affect multiple sectors. For example, participants identified the reduction of freshwater supplies during droughts as a potential impact for the agriculture, energy, and tourism sectors. The participants identified adaptation actions that would have benefits in multiple sectors, as well as key actors to implement these adaptations, such as the Department of Agriculture, Marine Parks and Reserves; and the National Land Use Planning Commission. Since the meeting in Bagamoyo, Tanzania has prepared a roadmap for its broader NAP process; key ministries, such as water and agriculture, have begun developing climate change action plans.

- In June 2013, 30 policymakers from 11 coastal countries (see Figure 3) within the Economic Community of West African States (ECOWAS) gathered in Accra, Ghana, with representatives of regional organizations for a workshop to promote action on the NAP processes in their countries, as well as to enhance regional cooperation on coastal planning and NAP development (Cote et al., 2014). Workshop participants included two representatives from each of the 11 coastal ECOWAS countries: the UNFCCC focal point, when possible, and a second representative working on coastal issues. Several representatives of relevant regional research and scientific organizations also attended.

Participants applied the CRD framework to the NAP process by first identifying preliminary coastal adaptation priorities and then developing a common regional roadmap for addressing those priorities through the NAP process. The results of small-group exercises emphasized the reliance of many sectors across West Africa and beyond on coastal systems, as well as on the same inputs and enabling conditions within those systems. Participants also found that many climate threats and impacts are either commonly experienced across a number of countries or have transboundary elements, highlighting opportunities for coordinating and for sharing lessons learned. For example, participants from Senegal and The Gambia



Figure 3. Map of countries participating in the ECOWAS workshop.

noted that damages to infrastructure and beaches were common and important climate-related impacts; these participants identified communication and information-sharing on these issues as a priority for the two countries. Following the workshop, USAID worked with ECOWAS and country participants to draft a policy brief, which has drawn the attention of leaders and decision-makers across the region to the importance of mainstreaming climate change adaptation into coastal development planning.

5. Findings: lessons learned from applying a development-first approach to the NAP process

Based on USAID's experience in applying its CRD framework to NAP processes in Jamaica, Tanzania, and West Africa, the authors have identified several lessons learned that should be relevant for countries engaged in the development and implementation of their NAP processes as well as for other entities and practitioners supporting NAP processes. These are:

A development-first approach initiated through stakeholder workshops can catalyse the NAP process and help ensure that adaptation efforts are embedded in development objectives.

The workshops in Jamaica and Tanzania demonstrated that a development-first approach could be used to catalyse the NAP process. In Jamaica, the workshop helped integrate adaptation into long-term planning, creating a process to address climate risks within the objectives outlined in the country's *Vision 2030 Jamaica – National Development Plan* document. Because the NAP process and *Vision 2030* planning were not previously well-integrated, the workshop helped improve synergy and ensure that

adaptation efforts will support the goals articulated in this document.

However, countries that are already engaged in the NAP process may not require a stakeholder workshop to initiate the process. For countries such as Bangladesh, which began its national adaptation process by 2009 and is further along in its mainstreaming efforts (Ministry of Environment and Forests, 2009), such a workshop would be less relevant from the perspective of informing an overall approach to their NAP process. Nonetheless, in countries that have a NAP process underway, workshops can still be an effective means to engage stakeholders in the analysis of sector-specific vulnerabilities and adaptations, foster cross-sectoral dialogue, and/or facilitate buy-in for future action.

Ownership and buy-in are critical, particularly at an early stage.

Key stakeholders, including those from government ministries, development agencies, and civil society, should participate in the initial stages of developing a NAP, as well as throughout the NAP process in order to generate sufficient support (e.g. Bijlsma et al., 2011; Brugha & Varbasovsky, 2000). Traditionally, adaptation planning has been housed in environment ministries despite the cross-sectoral implications of climate change. In some cases, this has made it more difficult to secure ownership and buy-in of the resulting actions from other, more powerful ministries and agencies. One way to overcome this is to gain the support and involvement of a powerful entity such as the Prime Minister's Office, Vice President's Office, or Ministry of Finance or Planning.

Typically, stakeholders who have a hand in shaping a NAP process from the outset are more likely to support the process. All key sectors must participate, including

government, the private sector, civil society, and NGOs, and collaborate from the beginning to help in identifying synergies and tradeoffs between sectors and avoid maladaptations or actions that inadvertently increase climate vulnerabilities. Obtaining the participation of important stakeholders requires raising awareness of adaptation issues and the importance and potential value of the NAP process.

In Jamaica, the Prime Minister called for a new national climate policy in 2012 and asked USAID to work with the new Ministry of Water, Land, Environment, and Climate Change (WLECC). Jamaica's Planning Institute (PIOJ), an agency of the Ministry of Finance and Planning, plays an important role in policy, plan, and programme formulation to support Jamaica's economic and social development, and had begun a climate policy prior to the creation of WLECC. PIOJ collaborated with USAID and WLECC from an early stage of developing and preparing for the stakeholder workshop. The Minister of Finance and Planning and the Minister of WLECC co-hosted and participated in the workshop. Other sectors critical to the country's economic development were engaged through the workshop process, which was used to launch Jamaica's NAP process. The Prime Minister's endorsement solidified broad-based support. These factors helped to secure buy-in from important stakeholders and to promote progress on Jamaica's NAP.

Grounding the NAP process in an existing development planning process is likely to promote greater efficacy of mainstreaming efforts.

While stand-alone processes can be useful for increasing awareness of adaptation issues and for piloting adaptation approaches to inform the allocation of resources (Pervin et al., 2013), embedding the NAP process within an existing development planning process can help integrate climate change considerations into development activities and thus facilitate more effective, sustainable, and meaningful action. Indeed, the CRD framework has worked best when used to introduce climate resilience into ongoing long-term development planning. It is easier to consider how climate affects national development planning than to begin the process without a planning framework. Therefore, an important early step is to identify a relevant existing planning framework that reflects a country's development priorities and resonates with key stakeholders. In Jamaica, a development-first approach to adaptation planning was linked directly to the country's existing *Vision 2030 Jamaica – National Development Plan*. This helped make the NAP process more immediately relevant to stakeholders and the country's development priorities; the NAP process is seen as a complement to action on the *Vision 2030*, rather than a distraction from it. Furthermore, by building on *Vision 2030*, the NAP process is able to take advantage of the systems and

platforms created to implement the *Vision 2030*; the NAP should lead to implementing the *Vision 2030* in a climate-smart way.

The West Africa regional NAP workshop did not have an existing, central development plan to act as the foundation for planning because of its regional nature. However, the workshop demonstrated a development-first approach that could be adopted and applied by individual countries as they begin their NAP processes. To ensure a successful NAP process, each country would need to identify and link its NAP efforts to an existing development planning process. In addition, integrating common issues and priorities into key development plans at the regional level, such as those of ECOWAS (co-convenor of the workshop), will be important.

A comprehensive approach that encompasses a range of geographies and sectors facilitates a NAP process more effectively than a narrow approach.

In Jamaica, adaptation planning started with a comprehensive national process. There were some challenges that needed to be resolved before Jamaica could arrive at a new national policy. First, Jamaica had a newly created ministry, WLECC, with responsibility for climate change, but it was unclear how the new ministry would work with the PIOJ, which had been the previous lead for climate change. The workshop was co-led by the Ministries of Finance and Planning and WLECC, demonstrating both a leading role for the new ministry and a willingness to continue working with all players. The new policy was seen as a good venue to clarify roles and responsibilities, and the endorsement of the Prime Minister supported this approach.

Furthermore, because the NAP workshop engaged stakeholders from a wide range of geographies and sectors from the outset, participants demonstrated a greater awareness of linkages across different areas and sectors and more enthusiasm and dedication for action at the sectoral level. Based on the results of the Jamaica workshop, 26 climate change focal points and working groups representing key line ministries and government agencies, including the Ministry of Finance and Planning, have been tasked with developing sectoral plans to address climate risks and adaptation opportunities in key sectors. The Climate Change Policy Framework and Action Plan identified the institutional roles and responsibilities of each ministry to integrate adaptation planning across the government and address climate-vulnerable components of the *Vision 2030 Jamaica – National Development Plan*. The focal points can serve as “champions” to promote consideration of climate change across all relevant policies and programmes within each ministry, department, or agency. This cross-cutting network has created visibility and momentum for the adaptation effort, particularly given

that the relevant sectoral ministries, rather than the environment ministry, are preparing the sector work plans.

Conversely, in Tanzania, just one geographic area – the coast – was represented in the NAP workshop; the overall NAP process in Tanzania is proceeding more slowly. According to government officials, a few key sectors are now also being engaged to consider adaptation from the perspective of the country's broader geography (Freddy Manyika, Tanzania Vice President's Office, personal communication, 27 February 2014). However, it is our experience that a NAP process that is cross-cutting from the outset avoids the problem of bringing in areas or sectors at a later stage. Stakeholders in those areas or sectors may feel less invested in a process that they did not initiate or that they did not participate in from the beginning. Opportunities for cross-sectoral, cross-geographic action may be missed.

A multi-national or regional approach can help to ensure that NAPs within a region are coordinated, promoting cooperation and avoiding maladaptation.

A regional approach involving multiple countries may be appropriate for achieving certain types of outcomes, such as agreeing on shared regional priorities, identifying and discussing transboundary impacts and common adaptation actions, and developing a regional adaptation plan. West Africa is an example of how the NAP process can stimulate and support regional coordination. As described above, in West Africa, development agencies are working with ECOWAS to coordinate support to NAP processes in a number of countries. Ideally, this effort will build on ECOWAS's role in regional development efforts more generally, and will harness other regional institutions that can provide climate information and technical assistance to countries. We note that this process will likely be more complex to implement successfully because some 11 sovereign host countries are involved.

A NAP process can serve as a platform for a country to coordinate financial and technical support.

Developing countries and development agencies can use the NAP process to set priorities and divide responsibility for adaptation actions. After countries have identified vulnerable sectors, priority adaptation actions, and institutions to implement those actions, the NAP process can be used to coordinate the provision of technical and financial support for adaptation, both within the host country and from development agencies, the private sector, NGOs, and others. The NAP process can also help to avoid duplication of efforts resulting from a lack of coordination between the host country and development agencies. This again demonstrates the importance of involving stakeholders, including development agencies, in the NAP process from the

outset, particularly during discussions of priorities and goals.

The actions taken in Jamaica provide an example of using a NAP process to enable coordination at the national level. Early in the planning of the stakeholder workshop there, USAID engaged other development agencies, including the European Union (EU), the World Bank, and the Inter-American Development Bank (IADB), to map the landscape of adaptation activities for participants and identify opportunities for cooperation and collaboration. Multiple development agencies participated in the workshop. After the USAID workshop, as noted above, each of the 26 agencies participating in implementation of Jamaica's action plan has designated a climate change focal point who will be responsible for both coordinating at a national level and implementing different adaptation activities within each individual agency. In addition, development agencies are leveraging the Jamaica NAP process to share support for implementation: USAID is supporting work planning to address climate risks in half a dozen sectors, and the EU and the IADB will support others. USAID has also coordinated with the IADB to provide support to Jamaica's meteorological service that leverages the IADB's investments. This kind of outcome is an example of how a NAP process can serve as a vehicle to structure development agencies' technical and financial support to ensure broad coverage of initiatives and to reduce duplicated or inconsistent support. Whether the technical and financial support is consistent across development agencies will depend on those agencies' resources and capabilities, as well as the degree of coordination among them.

Consistent, longer-term development agency engagement can play an important role in building the capacity to implement a development-first approach in the NAP process.

USAID has found that longer-term collaboration with countries leads to the capacity-building that they need to successfully implement a NAP process. USAID's collaboration with Jamaica provides an example of the success of longer-term engagement. Well before the 2012 stakeholder workshop, USAID worked closely with the Jamaican government. USAID briefed stakeholders on the purpose of the proposed workshop and conducted a series of consultations, learning that although many people in the government saw potential value in developing a national approach to climate change, they also noted a number of policies in various stages of development. The challenge for Jamaica was not developing policies, but completing them and moving from policy to action. During the course of the year, USAID shared lessons from its earlier work in the Eastern Caribbean, convincing many of the initially reluctant stakeholders to support a new process, provided it was outcome-oriented.

Next, USAID supported WLECC in developing the workshop agenda and in planning the workshop. USAID's involvement as a development agency may have helped overcome potential inter-agency turf battles within the government and provided the convening power that a single ministry might have lacked.

Finally, following the workshop, USAID continued to work with the Jamaican government as it developed its plan to operationalize the policy. USAID facilitated exchanges with representatives from the Colombian government, which had been through similar processes; this exchange enabled Jamaica to take advantage of lessons from Colombia. USAID also held a one-day training for the focal point network to help individuals understand how climate risks related to line-ministry responsibilities.

USAID also helped the Meteorological Service of Jamaica convene a stakeholder workshop to identify needs for new climate information products to support important sectors of the economy. Stakeholders agreed that a seasonal drought forecast for farmers would enhance planning and resilience in that sector. The forecast tool was developed by the Jamaican Meteorological Service and the Rural Agricultural Development Authority and released to the public in January 2014.

6. Conclusions

USAID's experience working with developing countries to catalyse their NAP processes demonstrates that a development-first approach is a sound way for a country to set priorities for adaptation and to ensure that it addresses the most significant threats to development. USAID's CRD framework applies a development-first approach to the development of NAPs.

A proven and effective way to initiate the process is through a cross-sector stakeholder workshop with wide-reaching participation. Bringing host country ministries, development agencies, and other stakeholders together enables key individuals to work together to identify problems, set priorities, and define the steps needed to prepare a NAP. Most importantly, such workshops help countries develop a shared vision for their NAPs – a vision that fits within their development priorities and existing planning processes. The scoping phase of the CRD framework, as initiated through these workshops, is a way to build momentum and obtain buy-in. This empowers countries to begin developing their NAPs and to address climate impacts around issues, sectors, and geographies that support future development gains. In addition, it enables host countries and development agencies to better coordinate technical and financial support for implementing adaptation plans.

Many developing countries are in the early stages of developing their NAPs. With NAPs authorized and emphasized by the UNFCCC, and supported by the LEG and a number of multi-lateral and bi-lateral development

agencies, including USAID, GIZ, DFID, UNDP, and UNEP, this trend is likely to continue. The NAP process can provide a common vision for addressing climate risks that can be shared by both international development agencies and domestic institutions, providing a natural way of aligning and coordinating multiple investments in support of broader development goals. With the development of more NAPs in the coming years, there will be additional opportunities to apply and improve upon a development-first approach to adaptation planning at the national and other levels.

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Notes

1. In many cases adaptations can be effective in reducing risks from current climate such as extreme weather as well as climate change. Thus, focusing only on climate change with regard to adaptation may be arbitrary because so many adaptations have the desirable property of reducing current and future risks.
2. The LEG was established in 2001 by the COP to assist LDCs in the preparation of NAPAs. More recently, it has been tasked with providing technical guidance and support to LDCs in implementing NAP processes (UNFCCC, n.d.).

References

- Arendt, D., Tol, R. S. J., Faust, E., Hella, J. P., Kumar, S., Strzepek, K. M., ... Yan, D. (2014). Key economic sectors and services. In C. B. Field, V. R. Barros, D. J. Dokken, K. J. Mach, M. D. Mastrandea, T. E. Bilir, ... L. L. White (Eds.), *Climate change 2014: Impacts, adaptation and vulnerability* (pp. 659–708). New York: Cambridge University Press.
- Bijlsma, R. M., Bots, P. W. G., Wolters, H. A., & Hoekstra, A. Y. (2011). An empirical analysis of stakeholders' influence on policy development: The role of uncertainty handling. *Ecology and Society*, 16(1), 51. Retrieved from <http://www.ecologyandsociety.org/vol16/iss1/art51/>
- von Braun, J., & Gatzweiler, F. W. (2014). Marginality – an overview and implications for policy. In J. von Braun, & F. Gatzweiler (Eds.), *Marginality – Addressing the nexus of poverty, exclusion and ecology* (pp. 1–23). New York: Springer Dordrecht Heidelberg. doi:10.1007/978-94-007-7061-4
- Brugha, R., & Varbasovsky, Z. (2000). Stakeholder analysis: A review. *Health Policy and Planning*, 15(3), 239–246.

- Retrieved from http://www.sihealthpolicy.org/wp-content/uploads/2013/06/stakeholder_analysis.pdf
- Carter, T. R., Parry, M. L., Harasawa, H., & Nishioka, S. (1994). *IPCC technical guidelines for assessing climate change impacts and adaptations*. London: University College London and Tsukuba, Japan, Centre for Global Environmental Research and National Institute for Environmental Studies.
- Conservation International and World Wildlife Fund. (n.d.). *Assessing the impacts of climate change on Madagascar's biodiversity and livelihoods – A workshop report*. Retrieved from http://www.marineclimatechange.com/marineclimatechange/Madagascar_files/CI-WWF%20Madagascar%20Workshop%20Report%20FINAL.pdf
- Cote, M., Hurley, B., & Pratt, J. (2014, February). *National adaptation planning. A report on three workshops*. Washington, DC: Agency for International Development. Retrieved from <https://dec.usaid.gov/dec/content/Detail.aspx?ctID=ODVhZjk4NWQtM2YyMi00YjRmLTkxNjktZTcxMjM2NDNmY2Uy&fD=MzUyNjY5>
- Davidson, O., Halsnæs, K., Huq, S., Kok, M., Metz, B., Sokona, Y., & Verhagen, J. (2003). The development and climate nexus: The case of sub-Saharan Africa. *Climate Policy*, 3(1), S97–S113.
- Dessai, S., Hulme, M., Lempert, R., & Pielke, R. (2009). Climate prediction: A limit to adaptation. In N. Adger, I. Lorenzoni, & K. O'Brien (Eds.), *Adapting to climate change: Thresholds, values, governance* (pp. 64–78). Cambridge: Cambridge University Press.
- Fröde, A., Scholze, M., & Manafsi, N. (2013). Taking a climate perspective on development: GIZ's climate proofing for development approach. *Climate and Development*, 5, 160–164.
- Government of Kenya. (2010, April). *National climate change response strategy*. Retrieved from http://cdkn.org/wp-content/uploads/2012/04/National-Climate-Change-Response-Strategy_April-2010.pdf
- Government of Madagascar. (n.d., February). *Madagascar action plan 2007–2012*. Retrieved from https://www.africaportal.org/sites/default/files/Madagascar%20Action%20Plan%202007-2012_0.pdf
- Klein, R. J. T., Midgley, G. F., Preston, B. L., Alam, M., Berkhout, F. G. H., Dow, K., & Shaw, M. R. (2014). Adaptation opportunities, constraints, and limits. In C. B. Field, V. R. Barros, D. J. Dokken, K. J. Mach, M. D. Mastrandrea, T. E. Bilir, ... L. L. White (Eds.), *Climate change 2014: Impacts, adaptation, and vulnerability, part A: Global and sectoral aspects, contribution of working group II to the Fifth Assessment Report of the intergovernmental panel on climate change* (pp. 899–943). Cambridge: Cambridge University Press.
- Ministry of Environment and Forests. (2009). *Bangladesh climate change strategy and action plan 2009*. Ministry of Environment and Forests, Government of the People's Republic of Bangladesh, Dhaka, Bangladesh, September. Retrieved from http://www.moef.gov.bd/climate_change_strategy2009.pdf
- Pervin, M., Sultana, S., Phirum, A., Camara, I. F., Nzau, V. M., Phonnasane, V., ... Anderson, S. (2013, November). *A framework for mainstreaming climate resilience into development planning*. IIED Climate Change Group Working Paper. Retrieved from <http://pubs.iied.org/pdfs/10050IIED.pdf>
- Planning Institute of Jamaica. (2009). *Vision 2030 Jamaica – National development plan*. Planning for a Secure & Prosperous Future, Kingston, Jamaica, Pear Tree Press. Retrieved from [http://www.vision2030.gov.jm/Portals/0/NDP/Vision%202030%20Jamaica%20NDP%20Full%20No%20Cover%20\(web\).pdf](http://www.vision2030.gov.jm/Portals/0/NDP/Vision%202030%20Jamaica%20NDP%20Full%20No%20Cover%20(web).pdf)
- Rai, N., Huq, S., & Huq, M. J. (2014). Climate resilient planning in Bangladesh: A review of progress and early experiences of moving from planning to implementation. *Development in Practice*, 24(4), 527–543. doi:10.1080/09614524.2014.908822
- UNEP and UNDP. (n.d.). *National climate change adaptation strategy*. Retrieved from http://www.undp-alm.org/sites/default/files/downloads/ghana_national_climate_change_adaptation_strategy_nccas.pdf
- UNFCCC. (2002, January 21). Report of the Conference of the Parties on its seventh session, held at Marrakesh from 29 October to 10 November 2001, Addendum Part Two: Action taken by the Conference of the Parties. United Nations Framework Convention on Climate Change. Retrieved from <http://unfccc.int/resource/docs/cop7/13a04.pdf>
- UNFCCC. (2009). *Least developed countries under the UNFCCC*. United Nations Framework Convention on Climate Change. Retrieved from http://unfccc.int/resource/docs/publications/lde_brochure2009.pdf
- UNFCCC. (2011, March 15). Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010. United Nations Framework Convention on Climate Change. Retrieved from <http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf>
- UNFCCC. (2012). *National adaptation plans: Technical guidelines for the national adaptation plan process*. LDC Expert Group (LEG), United Nations Framework Convention on Climate Change.
- UNFCCC. (2013, May). *NAPAs received by the secretariat*. United Nations Framework Convention on Climate Change. Retrieved from http://unfccc.int/adaptation/workstreams/national_adaptation_programmes_of_action/items/4585.php
- UNFCCC. (2014). *National adaptation programmes of action (NAPAs)*. Retrieved from http://unfccc.int/adaptation/workstreams/national_adaptation_programmes_of_action/items/2679.php
- UNFCCC. (n.d.). *LDC Expert Group (LEG)*. Retrieved from http://unfccc.int/adaptation/groups_committees/lde_expert_group/items/4727.php
- USAID. (2007, August). *Adapting to climate variability and change: A guidance manual for development planning*. United States Agency for International Development. Retrieved from http://pdf.usaid.gov/pdf_docs/PNADJ990.pdf
- USAID. (2014, March). *Climate-resilient development: A framework for understanding and addressing climate change*. United States Agency for International Development Global Climate Change Office. Retrieved from <http://www.usaid.gov/climate/climate-resilient-development-framework>
- Vogel, J. M., Smith, J. B., Brown, P. E., Troell, J., & Ray, A. (2013, February). *An assessment of water security, development, and climate change in Iloilo, Philippines and the Tigum-Aganan Watershed*. Washington, DC: Agency for International Development. Retrieved from http://www.usaid.gov/sites/default/files/documents/1865/WaterSecurityIloilo_Final_March_2013.pdf