Portfolio Screening for Mainstreaming Adaptation to Climate Change

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Abstract

The need to mainstream climate change adaptation into development assistance is increasingly recognised, yet most bilateral and multilateral development agencies are only just starting to take an interest. Over the past five years a few development agencies have screened their project portfolios, generally with two goals in mind: (*i*) to ascertain the extent to which existing development projects already consider climate risks or address vulnerability to climate variability and change, and (*ii*) to identify opportunities for incorporating climate change explicitly into future projects. As each portfolio screening was conducted independently, the broader lessons emerging from the screenings have not been systematically analysed. This paper assesses the screening activities to date, focusing on both the results and the methods applied. Based on this assessment, we identify an opportunity for development agencies to expand their current focus on climate-development linkages and to make adaptation mainstreaming operational. Most agencies already consider climate change as a real yet uncertain threat to future development. However, less attention has been given to how different development pathways might affect vulnerability to climate change. We present a portfolio-screening tool that is currently under development, which will allow agencies to assess systematically the relevance of climate change and adaptation to their ongoing and planned development projects. The tool will be compatible with agencies' institutional procedures, planning mechanisms and modes of operation, allowing screenings to be conducted with relatively little effort.

1. Introduction

Linkages between climate change and development are increasingly recognised, as evidenced by the theme of this conference. There is now little doubt that human-induced emissions of greenhouse gases are causing changes to the global climate (McCarthy *et al.*, 2001). These changes are driven by socio-economic development patters. Climate change is largely the result of human-induced greenhouse gas emissions that are driven by socio-economic development patterns. These patterns also influence people's vulnerability to climate change, including their capacity for mitigation of greenhouse gas emissions and adaptation to the impacts of climate change. These impacts on human and natural systems in turn influence socio-economic development and thereby greenhouse gas emissions.

The links between greenhouse gas emissions, mitigation and development have been subject of intense study (for an overview see Markandya and Halsnæs, 2002). More recently, the links between adaptation and development are also being increasingly highlighted. It is recognised that climate change poses a threat to important development issues such as water supply, food security, human health, natural resources and protection against natural hazards, and that adaptation responses should be consistent with development priorities (*e.g.*, Sperling, 2003).

This recognition has moved adaptation from being the "handmaiden to impacts research in the mitigation context" (Burton *et al.*, 2002) to an activity that is considered crucial within the broader context of sustainable development. The link between adaptation and sustainable development is particularly relevant when seeking to enhance the capacity of countries and communities to adapt to climate change, which is often limited by a lack of resources, poor institutions and inadequate infrastructure, amongst other things (Smith *et al.*, 2003). Vulnerability to climate change is therefore reduced not only by mitigation of climate change or by adaptation to its impacts, but also by development aimed at improving the living conditions and access to resources for those experiencing the impacts.

True as this may be, it raises the question as to whether reducing vulnerability to climate change by means of development is a strategy that can be pursued within the context of the United Nations Framework Convention on Climate Change (UNFCCC), even if several UNFCCC articles set out the provision for considering sustainable development in climate policy. There is concern that scarce funds for mitigation and adaptation in developing countries might be diverted into more general development activities, which offers little opportunity to evaluate their benefits with respect to climate change. On the other hand there is concern that funding for mitigation and adaptation diverts money from official development assistance that addresses challenges that are seen as being more urgent than climate change, including water and food supply, sanitation, education and health care.

The World Summit on Sustainable Development in Johannesburg (August/September 2002) provided a strong impetus to the discourse supporting links between climate policy and development. This impetus has given rise to exploring and developing the concept of "mainstreaming". Mainstreaming involves the integration of policies and measures to address climate change into development planning and ongoing local and sectoral decision-making, so as to ensure the long-term sustainability of investments as well as to reduce the sensitivity of development activities to both today's and tomorrow's climate (Klein, 2002; Huq *et al.*, 2003; Agrawala, 2004a). The concept has been borrowed from the development discourse, where the mainstreaming of gender issues has long been understood as an effective way of ensuring gender equity in development policies. By its very nature, energy-based mitigation (*e.g.*, fuel switch and energy conservation) can only be effective when mainstreamed into energy policy. For adaptation, however, this link has not appeared as self-evident until recently.

Mainstreaming is about making more efficient and effective use of financial and human resources rather than designing, implementing and managing climate policy separately from ongoing activities. As explained in more detail in Section 2 of this paper, prospective efficiency and effectiveness gains provide a rationale to development agencies for analysing the potential of mainstreaming in their development activities. Over the past five years, a few development agencies have taken the initiative to screen their project portfolios, generally with two goals in mind: (*i*) to ascertain the extent to which existing development projects already

consider climate risks or address vulnerability to climate variability and change, and (*ii*) to identify opportunities for incorporating climate change explicitly into future projects. As each portfolio screening was conducted independently, the broader lessons emerging from the screenings have not been systematically analysed.

Section 3 assesses the screening activities to date, focusing on both the results and the methods applied. The lessons learnt are incorporated in a portfolio-screening tool that is currently under development. This tool, the framework for which is presented in Section 4, will allow agencies to assess systematically the relevance of climate change and adaptation to their current and future portfolio of development projects. Section 5 presents preliminary conclusions and proposes next steps of this work in progress.

2. Why Portfolio Screening?

Portfolio screening involves the systematic examination of an agency's portfolio of projects or programmes, with a view to identifying (*i*) the extent to which current projects or programmes address climate change and (*ii*) opportunities for incorporating climate change in future projects or programmes. In so doing, a portfolio screening identifies the linkages between climate change and an agency's development priorities, such as poverty reduction, institutional development and capacity building. Once identified, these linkages are then made operational through entry points into existing development strategies and planning of an agency. Even if linkages between adaptation to climate change and development goals or strategies are generally understood, their concrete manifestations at the national, sub-national and local levels are not always clear.

There are several challenges in identifying these linkages, which makes a tool to guide the screening process particularly important. One of the fundamental reasons for carrying out screenings is the fact that developing countries are considered to be the most vulnerable to climate change (McCarthy *et al.*, 2001). This vulnerability has been ascribed to a lack of financial, institutional and technological capacity (Smith *et al.*, 2003); however, less is known about the specific linkages. In the traditional view of adaptation, which assumes the development and implementation of adaptation measures (such as dams, early-warning systems, irrigation schemes and introducing drought-resistant crops) by a national government based on specific knowledge of future climate conditions, adaptive capacity refers to the capacity of (largely) government institutions to develop such measures.

However, there is an increasing awareness that such a technological and managerial approach to adaptation alone is unlikely to solve the problem. First, defining the extent and impact of human-induced climate change is difficult and uncertain. An important uncertainty of all climate scenarios relates to the effect of a changing climate on the frequency, magnitude and spatial occurrence of extreme weather events such as floods, cyclones and droughts. Planning adaptation under such uncertainty presents a great challenge to developing countries. Second, development strategies in developing countries are often based on the need to meet short-term priorities such as employment creation, debt payment or infrastructure supply. Strategies in many developing countries often do not consider environmental issues as a priority. This is particularly true for long-term climate change and related expensive technological adaptation measures. Robledo and Forner (2005) presented some examples on how developing strategies may increase the vulnerability of natural and social systems to climate change, offering a clear rationale to incorporating climate change considerations into developing strategies.

In addition to specific adaptation measures, however, there is an increasing focus on the multitude of local strategies that exist as an integral part of how developing-country populations manage their natural resources and secure livelihoods in a variable climate (Adams *et al.*, 1998; Adger and Kelly, 1999). Local knowledge, social networks and informal institutions are critical elements of adaptation that need to be strengthened as part of efforts to address climate change. Furthermore, vulnerability can be considered an inherent or pre-existing state shaped by processes of political and economic marginalisation (Kelly and Adger, 2000; O'Brien *et al.*, 2004). In order to address vulnerability, much broader measures are required than those aimed at reducing sensitivity to very specific changes in climatic parameters. Characteristics of low development include high dependence of natural resources, accentuation of non-sustainable management practices and resource degradation as well as reduced satisfaction of basic needs and lack of capacity and information increase vulnerability in developing countries (Sperling, 2003).

These insights provide opportunities, as well as challenges, for development agencies in addressing climate change. First, the focus on local and more immediate development needs means that some adaptation measures can be similar in nature to current development projects. Adaptation measures can therefore benefit from the experience from decades of development assistance, including the realisation that measures targeting local needs are more likely to be successful than large-scale measures implemented through a top-down approach. Second, synergies between adaptation and the aims of important development goals, such as the Millennium Development Goals, become more apparent, with improving health and education, for example, being common to both. At the same time, however, very specific ways in which vulnerability can be reduced have to be identified in order to target measures effectively.

There is a need to go beyond general assumptions that, for example, equate poverty with vulnerability and which use development-type indicators as a proxy measure for vulnerability (Eriksen and Kelly, 2005). Some of the same factors that shape poverty may also shape vulnerability. Vulnerability, however, specifically encompasses the dynamism in which livelihoods and basic needs are secured in a context of a variable and changing climate. In particular, the factors that enable a society to deal with shocks, such as droughts and floods and longer-term climatic shifts, are central to reducing vulnerability. Understanding the way in which livelihoods and basic needs are secured in different social, economic and political contexts within a developing country is a critical ingredient of any adaptation effort. Furthermore, identifying and addressing the causes of vulnerability, such as inequity, processes of political and economic marginalisation, as well as factors that trigger the breakdown of livelihoods, such as the spread of HIV/AIDS or conflict and insecurity, are important. As a result, the type of measures that are mainstreamed into development strategies are far more nuanced, with few one-size-fits-all solutions appropriate for all areas or geographical scales.

Conducting portfolio screening for mainstreaming adaptation to climate change is particularly important because of the important role that development assistance may play in adaptation. The Global Environmental Facility (GEF) is the international entity entrusted with the operation of the financial mechanism of the UNFCCC. The GEF Operational Strategy stipulates that activities need to produce global benefits in order to be eligible for funding. In addition, activities to promote adaptation should diminish negative impacts to climate change, but not to climate variability. These two conditions make it very difficult to formulate projects at the

local level, because it is very difficult to prove global impacts and to directly respond to human-induced climate change.

However, bilateral and multilateral development co-operation is not bound to these requirements. This kind of international co-operation can contribute, if used appropriately, to improve the adaptive capacity at the sub-national and local levels. To do so, development agencies need to have an understanding of the impact of their past and current development efforts on vulnerability to climate variability and change, as well as of opportunities to mainstreaming adaptation into development. Portfolio screening is one analytical tool that has been used for developing such understanding. Results of these screenings are now being used to include systematically adaptation to climate change into development co-operation (*e.g.*, SDC, 2005).

3. Screening Efforts To Date

This section summarises five screening efforts that exemplify the scope, purpose, goals and methods in activities undertaken to date. These include reports for the World Bank (Burton and Van Aalst, 1999; 2004a,b), the German Technical Co-operation Agency GTZ (Klein, 2001), OECD (Agrawala and Berg, 2002; Agrawala, 2004a), the Norwegian Development Co-operation Agency NORAD (Eriksen and Næss, 2003), as well as the draft report to the Swiss Agency for Development Co-operation SDC (Robledo, Werner and Pfund, in prep).[1] A summary of the screenings is given in Table 1.

Burton and Van Aalst (1999) conducted a review of climate change considerations in World Bank operations, examining six projects and six countries. The projects and countries were selected so as to "(…) illustrate a wide range of situations both with respect to the nature of climate risks and the level of development, as well as regional diversity." (p. v). The aim was to examine what climate change would mean to World Bank operations. Three issues were given particular emphasis: first, the vulnerability of projects to climate change, second, the impacts of projects on vulnerability, and three, implications of roles within the UNFCCC and GEF for the Bank's activities. The projects were examined on the basis of whether and how they discussed climate risk, "[comparing] the project reports with known climate risks facing the project or the country" (p.11). The country review discussed criteria for assessing climate exposure vis-à-vis climate change, the sensitivity of the Bank's portfolio to climate change and the coverage of climate change in the Country Assistance Strategies (CAS). At the project level, Burton and Van Aalst (1999) found that climate risks were not well assessed. They were rarely mentioned in the project documents, even in areas with high current climate risks, such as floods and cyclones. Interestingly, climate risks often emerged in implementation documents, which the authors suggest is because climate is "seen as a risk to project implementation rather than to long-term sustainable operation" (p.12). In the countries reviewed, climate change was not discussed at all within the CAS.

Klein (2001) reviewed German-funded ODA projects in Africa within the area of natural resources management, with the aim to (*i*) identify to what extent projects already considered the risk of climate change, as well as opportunities for adaptation, (*ii*) explore opportunities to incorporate adaptation to climate change in future projects, and (*iii*) serve as a starting point for awareness raising on the needs and opportunities for adaptation among government staff. A total of 136 projects were reviewed for whether or not they considered climate change in

[1] Four of the authors of this paper were involved in these reviews (Eriksen, Næss, Klein and Robledo,).

their project documents, as well as the attention to weather and climate-related stresses. None of the project documents referred explicitly to climate change, and attention to weather and climate-related stresses was found to be low and primarily reactive. Five projects were selected for in-depth review of project documents and interviews with project managers. These projects were selected on the basis of their no-regret adaptation potential and their opportunities for generating secondary benefits. The project review showed, among other things, that climate change consideration was lacking even in areas where climate factors posed obvious risks today. Feedback indicated that project staff did not consider climate change to be important for development projects. For example, one project co-ordinator said that climate change was "(…) primarily considered an issue for climatologists and energy experts." (p.32). The feedback from project managers suggested that climate change was not considered relevant to immediate concerns such as health and clean water, and that some considered it an "unnecessary burden on their projects." (p. 30). The study concluded that "[the] limited consideration of climate-related stress is striking in light of the intricate balance between the productivity of Africa's natural resources and prevailing climate conditions." (p.9).

A review by Eriksen and Næss (2003) for the Norwegian Agency for International Development (NORAD) aimed at assessing the current level of consideration to climate change within Norwegian development policies and strategies, identifying linkages and entry points at the strategic and operational level, as well as recommending strategies for future integration. Overall, the direct reference to climate change in development policies and strategies was found to be negligible, and largely framed as a mitigation concern. For example, Norway's poverty reduction action plan under the Millennium Development Goals (MDGs) only mentions climate change in relation to the country's moral obligation towards developing countries for the responsible management of the climate as a global public good. No further details are given on what this might mean in practice. The review did not look at specific programmes or projects, but feedback from senior staff suggest that there had as yet been little or no discussion of climate change in relation to NORADs work. The report identified a number of areas where climate change could be integrated without any major changes to current goals or working modes.

The Development and Climate Change project of OECD seeks to identify synergies and tradeoffs involved in mainstreaming climate change in development efforts. The project has, among other things, carried out country case studies in Bangladesh, Egypt, Fiji, Nepal, Tanzania and Uruguay, with a main focus on adaptation (Agrawala *et al.*, 2004a,b; Agrawala *et al.*, 2003a-d). The reports identified key priorities for adaptation on the basis of assessments of recent trends, climate change scenarios and potential sectoral impacts. Further, donor portfolios were analysed for the proportion affected by climate risks, using the Creditor Reporting System (CRS) Database. Third, the studies conducted in-depth analyses of key resources potentially affected by climate changes. Among the findings were that climate risks and climate change are largely missing in project documents, despite a significant proportion (commonly 20-30% or more of the monetary value and number of projects) was considered to be affected by climate risks. In Bangladesh it was found that climate change had been given a "fair degree of interest" by sectoral planners (Agrawala *et al.*, 2003b, p. 28). However, attention to climate change was largely absent in higher-level policy documents, including the World Bank's Country Assistance Strategy (CAS). Key recommendations included, first, that adaptation should be part of the "core development activity" rather than financed separately from the climate regime. Secondly, adaptation needs to move beyond improving the ability to adapt to current weather extremes and climate variability. Policy coherence and the need for operational tools also remain key concerns (Agrawala, 2004a).

Robledo *et al.* (in prep.) conducted an assessment of the potential effects of projects and programmes financed by the Swiss Agency for Development Cooperation (SDC) on vulnerability and adaptation to climate change and climate[2]. This assessment was based on the thesis that previous projects in natural resource management could have had non-planned, positive effects regarding the two strategies to address climate change (mitigation and adaptation), as well as promoted conservation of biological diversity. According to this thesis and with regard to climate change issues, the assessment addressed three levels: understanding and preparedness at the national level, impacts and vulnerability at the local level, and main barriers to the implementation of mitigation and adaptation measures. Considerations regarding conservation of biological diversity and experiences in promoting environmental services had a complementary character. Robledo *et al.* (in prep.) identified three different levels for mainstreaming adaptation: thematic, methodological and related to the implementation of concrete measures. Regarding the thematic level, the report identified three thematic areas in which it is needed to undertake clear action: institutional development for adaptation, the role of technology transfer in adaptation, and capacity building for affected groups. Regarding the methodological level the report identified the need to improve climate forecasting at the local level, even if there is no differentiation between climate change and variability. Further, the report also recommended investing efforts in the development of tools to plan adaptation measures as a key element into development projects and programmes. Finally, at the level of implementation of adaptation measures the report underlined the importance of promoting pilot experiences that include activities on both the natural and the social system and encouraged the empowerment of local communities.

In summary, there is little difference between the screenings concerning the current attention to climate change in development policies, projects and programmes: in all cases it was found to be low or non-existent. A striking feature is that no link to climate change was made in areas where climate already poses significant risks today, and where comparatively small changes would have potentially large impacts. Not only is this important for the success of projects; Agrawala *et al.* (2003d, p. 27) noted in the case of Nepal that "(…) some opportunities for vulnerability reduction may well be missed" by not considering climate change. A finding common to many of the studies was also that climate change, where mentioned, is framed as a question of mitigation, and for the main part an environmental, not a development issue.

The screenings also gave broadly similar recommendations for the way forward (see Table 1): all advocated mainstreaming and integration in existing procedures rather than separate activities, and all screenings identified several entry points where only minor adjustments are needed to accommodate climate adaptation. A more systematic screening of portfolios, projects and programmes for climate risks was also recommended, in one form or another, emphasising the use of indicators to assess the interactions between development projects and the vulnerability of the target populations. Burton and Van Aalst (2004) outlined a screening tool for World Bank operations. They advocated a routine climate risk management tool similar to environmental impact assessment (EIA), backed up by a knowledge base of available climate information at global, national and sub-national levels. This climate risk man-

[2] All projects and programmes included in the screening were related to natural resource management and implemented by the Swiss Foundation for Development and Cooperation, Intercooperation. Projects and programmes in the following countries were included: Ecuador, Bolivia, Mali, Madagascar, Tunisia, Kyrgyz republic, Bangladesh, India and Bulgaria.

agement tool would, as for EIA procedures, classify projects according to their climate risks, with requirements of full, selective or no climate risk assessment depending on the risk level.

Table 1. Overview of agency reviews and screening efforts to date

Agency (References)	Main goals	Scope	Methodology	Key findings/ lessons	Recommendations on mainstreaming
World Bank (Burton and Van Aalst (1994; 2004a,b)	Examine what climate change would mean to World Bank operations	Policies and programmes, in depth review of six projects and six countries	- Countries and projects selected to illustrate wide range of situations - Projects assessed for whether and how they discussed climate risks - Countries assessed for range of climate risk criteria, sensitivity of portfolio and climate change coverage in CAS	- Little or no attention to climate change at project level, even where climate risks are obvious today - Climate seen as a risk to project implementation, not long term sustainable development - No mention of climate change in CAS	Knowledge base for climate risk management and a routine screening tool for projects
GTZ (Klein, 2001)	Identify current consideration of climate change, opportunities for integration in future projects and awareness raising	Project portfolio on natural resource management in Africa	- Projects selected on basis of potential for no-regrets and secondary benefits - 136 projects reviewed for whether or not they considered climate change - In-depth review of 5 projects; documents and interviews staff	- No explicit consideration of climate change in 136 projects, also in areas with high current climate risks - Climate change not seen as important issue by project staff	Integrate indicators to evaluate climate adaptation in current routines for project design, identifying options that give immediate benefits and increase future flexibility
NORAD (Eriksen and Næss, 2003)	Assess current level of climate change consideration, identify climate-development linkages and recommend future strategies	Development policies and strategy documents,	Review of policy documents for development cooperation, overall and within key priority sectors	Negligible references to climate change. Where mentioned, climate change framed as a mitigation issue Many potential entry points	Detailed review of tools currently in use for project development and approval in order to identify ways to achieve synergies between climate adaptation and poverty reduction
OECD (Agrawala, 2003a-d; 2004a,b)	Explore synergies and trade-offs of "mainstreaming" climate change responses into development assistance, projects and plans	Policies, programmes and projects, in-depth review of six countries	- Recent climate trends and climate change scenarios assessed to establish adaptation priorities - Donor portfolios analysed for proportion affected by climate risks, using CRS Database. - Donor strategies and projects assessed for attention to climate change - In depth analyses of key resources potentially affected by climate change	- Climate risks and climate change largely missing in donor project documents. - Where climate change mentioned, mainly in relation to mitigation - In Bangladesh, significant attention to climate change among sectoral planners, but little mentioning in higher level policy documents or CAS	- Adaptation should be part of core development activities rather than separately funded - Differentiated adaptation strategy with a focus on improving climate change considerations in the implementation process - Adaptation needs to move beyond current variability - Need for policy coherence and for operational tools
SDC (Robledo *et al.*, in prep.)	Assessment of potential effects of projects and programmes on vulnerability and adaptation	Project portfolio in 14 projects and programmes in 9 countries in Latin America, Asia, Africa and East Europe	Assessment of understanding and preparedness at the national level; impacts and vulnerability at the local level and main barriers to implement mitigation or adaptation measures.	Action needed on (*i*) institutional development for adaptation, (*ii*) the role of technology transfer in adaptation and (*iii*) capacity building for affected groups Need to improve climate forecasting at the local level	Consider adaptation as a key element in development co-operation and differentiate recommendations into three levels: - Thematic - Methodological - Concerning implementation of adaptation measures

The screenings also demonstrated some of the key research gaps and challenges ahead. In particular, little attention has so far been given to the identification of conditions required for a successful screening and how these could be incorporated into a portfolio-screening tool. Ultimately, success will depend on a number of factors. An important goal of the screenings was to clarify the need to integrate climate change considerations in development work, the potential benefits of doing so, and the costs of omitting them. While there now seems to be a wide consensus at the policy level for mainstreaming climate change, attitudes at the project management level ranged from a lack of awareness of what it would mean in practice to

scepticism towards an issue not seen as part of their normal mandate or even related to development priorities. Climate change has been seen chiefly as an environmental issue and continues to be the responsibility of environmental departments in development agencies (which also commissioned most of the screenings to date). At a practical level, this may be a challenge of finding indicators closely linked to poverty eradication goals, and also what Burton and Van Aalst (2004b) described as a stepwise process to identify "hotspots", develop pilots to build experience and capacity.

Most reviews find that only minor changes are needed to begin integrating climate risks in current procedures and programme management tools. Nevertheless, introduction of tools would require a change in the way development projects are designed and implemented. Apart from finding ways of identifying where climate risks are important, a perhaps equally important test of the tools would be the ability to identify areas and cases where climate risks are of less or no importance, avoiding potentially costly efforts that overstate the importance of climate risks and that could discredit the screening process.

Ultimately, the most important factor is the ability of tools to make a difference in practical development work, yet the one that has been given least attention so far. Mainstreaming as such is no guarantee for an improved capacity to adapt. For example, environmental impact assessments, while clearly having had considerable positive effects on the way development projects are designed and run, are only as good as their follow-up in practical development work. Challenges persist in ensuring the quality, relevance and independence of EIAs, and in implementing their recommendations. One of the criticisms of EIAs is that they often fail to consider local perspectives. This is important for climate risk assessments as well, as risks identified from meteorological records may be different from those that communities perceive as the biggest climate risks, and where mobilising local experiences could be a key asset for identifying relevant indicators and adaptation options.

4. Towards a Portfolio-Screening Tool

Development projects vary with respect to size, time scale and focus, ranging from large-scale infrastructural projects, institutional support in the host country, to social development activities at the village level. A portfolio-screening tool can give guidance on how to strengthen the extent to which a set of projects address climate change. However, in order to increase the climate change content of individual projects, more specific *project*-screening tools are required that are suited to the type of project in question. Screening at the project level may be formal (based on strict procedures) or informal (based on awareness of development staff of climate change issues as they guide the development of a project) in nature. A portfolio-screening tool is a necessary first step to any form of project level screening. In this section, we present the contours of a *portfolio*-screening tool.

Our framework for a portfolio-screening tool comprises three building blocks/elements/ phases: (*i*) options for defining portfolio-screening parameters, (*ii*) key steps and sample questions involved in the screening process, and (*iii*) conditions for success. The tool is being developed based on experience from past screening studies and present understanding of climate-development linkages. Further development of the tool involves the evaluation of and specific recommendations regarding these choices, an exercise that will be carried out in interaction with agency staff.

4.1. Defining the parameters of the portfolio-screening process

Project portfolios are large and diverse. Any attempt at characterising or analysing an agency's entire project portfolio will be resource- and time-intensive unless systematised in some way. In order to provide some structure to the screening process, it may be useful first to define some parameters. In other words, which element(s) of an agency's programming should be screened? Depending on the agency, programmes may be organised in a number of ways, providing a basis for defining the screening parameters:

- Country (*e.g,*. country strategy in Sri Lanka)
- Geographic region (*e.g.*, co-operation priorities in Central America)
- Sector (*e.g.*, agriculture, business)
- Theme (*e.g.*, education and training)
- Or some combination of the above (*e.g.*, agriculture in sub-Saharan Africa)

The level of evaluation within each of these categories may range from general (*i.e.*, evaluating programme statements) to specific (evaluating specific projects). If the aim of a screening process is to get a broader sense of an agency's overall approach to climate change adaptation, then an evaluation of all programme statements (possibly supplemented with a few project evaluations in each programme, resources permitting) may be most appropriate.

Finally, in screening an agency's project portfolio, the decision will need to be made on whether to focus strictly on vulnerability and adaptation to climate change, mitigation of greenhouse gas emissions, or both. Some development policies, strategies and projects will address both adaptation and mitigation, while others will exclusively address either adaptation or mitigation.

4.2. Key steps and sample questions

Upon defining the parameters for the portfolio screening, the following steps may be used to guide the screening process:

I. Describe the development priority or focus
   a. What is the main development priority or focus of the agency / programme?
   b. What are the relevant targets and timelines?

II. Analyse how this development priority or focus is linked to climate change
   a. How do climate change impacts affect the way in which the development priority can be achieved?
   b. How does the development priority affect the cause of climate change (*i.e.*, greenhouse gas emission pathways)? Examining this linkage may not fall within the parameters of the screening exercise.
   c. How does the development priority affect vulnerability to climate change and adaptive capacity?
   d. What are the main gaps in knowledge regarding the linkages described above?

III. Assess if / to what extent climate change is addressed in current programming
   a. Are any of the links between climate change and development (described above) mentioned in programme and project documents?

b. Are current climate stresses mentioned in programme and project documents? If so, in what context?
c. Is climate change mentioned in programme and project documents? If so, in what context?
d. Do programmes address the vulnerability and adaptation needs and priorities for different regions, countries and sectors (as identified in IPCC reports and National Communications, for example)?

IV. Identify entry points for enhancing climate change considerations in development programming
   a. Thematic programming areas: How can climate change be incorporated into strategic programming areas (*e.g.*, natural resource management, humanitarian assistance, education and training)?
   b. Programming procedures: Are there any explicit requirements regarding climate change considerations in existing project development procedures?
   c. Tools: How can climate change be incorporated into standard project development, implementation and monitoring tools? (*e.g.*, needs assessments, environmental impact assessment, project evaluation guidelines, *etc.*)

V. Assess the level of awareness and capacity for addressing climate change among agency staff
   a. How is climate change understood among agency staff?
   b. What is the level of understanding regarding the links between climate change and the agency's work?
   c. What are the options for increasing awareness and capacity?

VI. Devise recommendations for mainstreaming adaptation to climate change into programming decisions

4.3. Conditions for success

In order to ensure the screening outputs are integrated into programming considerations, agencies should focus on strengthening institutional linkages within and outside of the agency during the screening process and follow-up activities. Within the agency, this would include:

- Embedding the screening study within the institution
- Involving different departments in the study. Portfolio screenings can focus on separate departments, in which case results should be shared between departments, or the screening exercise could evaluate activities across several departments, encouraging interdepartmental co-operation and dialogue throughout the process.
- Devising a strategy for implementing results of the screening across the agency:
  - Identify follow-up activities, including a progress review
  - Disseminate screening results to country offices
  - Develop tools for project managers to evaluate specific projects in terms of their linkages to climate change adaptation
  - Evaluate existing tools for mainstreaming other issues, such as EIA or gender

Outside of the agency, institutional linkages that would support portfolio screening include:

- Sharing experiences and results from portfolio screenings with other development agencies
- Co-ordinating portfolio screening processes and outputs with other policy processes, such as those related to the NAPAs, GEF, Clean Development Mechanis and UNFCCC-related adaptation funds.

5. Conclusions and Next Steps

This paper is a first attempt to bring together experiences from recent efforts to screen development policies, projects and programmes with regard to climate change, focusing on scope, results and methods applied. Based on the lessons emerging from these screenings, the paper presents an outline for a portfolio-screening tool to promote mainstreaming of climate change in development co-operation. The screenings of development agencies' projects and programmes have shown, first, that climate change is almost absent from the agencies' activities. Where mentioned, it is framed as an issue of mitigation and in the domain of environment ministries and departments. Notably, little connection to long-term climate change has been made in areas where climate already poses a clear risk today.

At the same time, developing-country case studies have shown that a significant proportion of development projects are at risk from climate change (Agrawala *et al.*, 2003a-d; 2004a,b). Further, it is clear that development projects affect the vulnerability of people and communities, and considering climate change could thus be a way of reducing vulnerability today and in the future. The screenings have found considerable scope for mainstreaming within current institutional set-ups and procedures. A number of areas were identified where only minor adjustments would be necessary for inclusion of adaptation considerations.

The portfolio-screening tool that is currently under development outlines different parameters, key questions and conditions for success. A screening tool *per se* is no panacea for ensuring adequate attention to adaptation within development co-operation, but could become one of the key elements for developing a more sophisticated understanding of the complex relationships that determine people's vulnerability to climate change.

The ability to achieve this, however, will depend on a number of factors. A screening tool must be seen as a process rather than a product, taking on board lessons not only from the screenings undertaken to date but also from experiences from the use of environmental impacts assessments and other tools, as well as similar processes of mainstreaming crosscutting issues (such as gender) into development. Other conditions for success include an ability to capture the underlying causes of vulnerability, to address not only the way projects and programmes are carried out but also the underlying development priorities, to utilise the vast experiences of people, communities and development agencies with past climate variability, to co-ordinate with ongoing processes within the international climate regime (such as NAPAs), and to integrate medium- and long-term needs as well as immediate priorities.

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