Mainstreaming Climate Change
in National Development Processes and UN Country Programming

A guide to assist UN Country Teams in integrating climate change risks and opportunities
UNDP partners with people at all levels of society to help build nations that can withstand crisis, and drive and sustain the kind of growth that improves the quality of life for everyone. On the ground in 177 countries and territories, we offer global perspective and local insight to help empower lives and build resilient nations.

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Authors: Marjolaine Côté, UNDP Climate Change Project Coordinator, and Sérgio Teixeira Santos, TerraSystemics

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1. Introduction

Climate change poses a serious challenge to the attainment of the Millennium Development Goals. Changing rainfall and climate patterns and rising sea levels will exacerbate existing economic, political and humanitarian stresses and affect human development in all parts of the world. This is especially true for countries that rely heavily on climate-vulnerable sectors such as agriculture, water resources, forests and biodiversity to maintain and improve the living conditions of their populations.

It is therefore important to manage climate change risks as part of our development approach. Integrating climate change as a cross-cutting issue in development plans will protect hard-won advances made to date--and to be made in the future--in reducing poverty worldwide. Such an integrated approach will make development more resilient by reducing climate impacts and identifying development opportunities that may otherwise be overlooked. For instance, an integrated approach would highlight the risk of rising sea levels in the development of a national strategy on coastal tourism.

The United Nations Development Programme (UNDP) provides policy and capacity development services on climate change to support developing countries to respond to climate change impacts and to integrate climate risks into national planning and UN programming. Through these services, UNDP supports national and sub-national governments to transform their development path to a low-emission and ecologically sustainable future.

Mainstreaming (or integrating) climate change in planning and decision-making processes is a crucial tool to ensure climate change adaptation and poverty reduction are implemented hand-in-hand. This approach involves taking into account risks and opportunities while putting in place adaptation measures that are attuned to the long-term vision of development.

Mainstreaming climate change into national policies, plans, and development projects contributes to:

- reducing vulnerability to climate impacts and variability,
- increasing the adaptive capacity of communities and national activities facing climate impacts, and
- ensuring sustainable development and avoiding decisions that will generate maladaptation.

In 2009, UNDP’s Environment and Energy Group launched a project entitled Integrating Climate Change Risks and Opportunities into National Development Processes and UN Country Programming (hereon the “Climate Risk Project”), funded by the Government of Spain. The project was implemented in five countries: Cape Verde, Colombia, El Salvador, Malawi, and Nicaragua.

The Climate Risk Project was developed to pilot a process to mainstream climate change in UN and government development planning, as well as build national capacity to do so. The process can be replicated by following six steps:

**Step 1:** Create a Country Climate Profile;

**Step 2:** Prepare an Institutional Map;

**Step 3:** Engage stakeholders and select the document to be assessed for climate risks and opportunities;

**Step 4:** Assess climate change risks and opportunities

**Step 5:** Build the capacity of stakeholders; and

**Step 6:** Mainstream climate change into the revised document.

The purpose of this publication is to describe in a practical manner the six-step process that proved effective in the Project, in order to assist non-climate experts in UN Country Teams to apply the mainstreaming process in their national context. The Guide proposes a set of best practices and identifies crucial issues to consider.
The publication has 5 sections. Concepts used through the Guide are briefly summarized in Section 2. Section 3 presents essential information to replicate the process, including staffing, financial support and time allocation. Section 4 describes each step and provides sample results from the Climate Risk Project. This section also identifies relevant national and international information resources and provides worksheets to help the reader in applying the approach in his/her specific national context. Section 5 offers key lessons and conclusions. The Annexes provide sample terms of reference to procure necessary technical staff.

Reports produced under the Climate Risk Project, including reflections on the experiences in the five countries, can also be downloaded from the Adaptation Learning Mechanism (ALM) website (www.adaptationlearning.net) by visiting the project page of each of the participating countries.

In Cape Verde, food security is an imperative element in poverty reduction strategies, which will be and is increasingly impacted by a changing climate. (Photo courtesy of Sérgio Teixeira Santos)
2. Key Climate Change Terms and Concepts

The following terms and concepts are used regularly in the climate and development field. They are adapted from a range of institutional sources, listed in Section 7.1

Of special attention is the definition of “vulnerability to climate change”, which is a function of the character, magnitude, and rate of climate variation to which a system is exposed, its sensitivity, and its adaptive capacity (IPCC 2007).

Adaptation

Adjustments in human and natural systems, in response to actual or expected climate stimuli and/or their effects, that moderate harm or exploit beneficial opportunities (IPCC 2007). Adaptation may be spontaneous (triggered by ecological changes in natural systems and by market or welfare changes in human systems) or planned (a result of a deliberate policy decision, based on an awareness that conditions have changed or are about to change and that action is required). It can also be in response to (‘ex post’), or in anticipation of (‘ex ante’), changes in climatic conditions. Adaptation entails a process by which measures and behaviors to prevent, moderate, cope with, and take advantage of the consequences of climate events are planned, enhanced, developed, and implemented (UNDP 2005).

Adaptive Capacity

The ability of a system to adjust to climate change (including climate variability and extremes), to moderate potential damages, to take advantage of opportunities, and/or to cope with the consequences. It can also be defined as the property of a system to adjust its characteristics or behavior, in order to expand its coping range under existing climate variability or future climatic conditions (IPCC 2007). A “system” can take the form of a country, a community, a family, or an individual.

Climate Change

Any change in climate over time, whether due to natural variability or because of human activity (UNDP 2005).

Climate Change Mainstreaming

The integration of priority climate change adaptation responses into development, so as to reduce potential development risks and take advantage of opportunities. The objective is for adaptation measures to be implemented “as part of a broader suite of measures within existing development processes and decision cycles” (OECD 2009, p. 60).

Climate Proofing

The process of guarantying the viability of investments in property or infrastructure by taking climate change into account. Its purpose is to reduce climate risks to “acceptable levels through long-lasting and environmentally sound, economically viable, and socially acceptable changes” (ADB 2005).

Climate Risks

The probability of harmful consequences or expected losses (deaths, injuries, property, disruption to livelihoods and economic activities, or environment damaged) resulting from interactions between climate-related hazards and vulnerable conditions.

Climate Risk Assessment or Screening

A systematic process to determine the nature and extent to which existing development projects and programmes already consider climate change risks and opportunities, so as to identify opportunities for incorporating climate...
change explicitly into future projects (Klein et al. 2007). It involves analyzing potential impacts on activities, outputs, and programmes, while evaluating existing conditions of vulnerability that could pose a potential threat or harm to people, property, and/or livelihood, not to mention the environment on which these depend (UNISDR 2004).

**Climate Risk Management (CRM)**

A body of work that bridges the topics of climate change adaptation, disaster management, and development. Hellmuth et al. (2007) describe CRM as an approach to promote sustainable development by reducing vulnerability associated with climate risks. This approach involves implementing proactive 'no regrets' strategies, aimed at maximizing positive and minimizing negative outcomes in climate-sensitive areas such as agriculture, food security, water resources, and health, across communities and larger societies. 'No regrets' decisions or actions are those that are expected to lead to positive development outcomes regardless of whether a specific climate threat actually materializes in the future.

**Exposure**

The nature and degree of climatic stress upon a system, including long-term changes in climate conditions and changes in climate variability. To assess exposure, one must consider how humans and materials may be affected by change, as well as the change in climate itself (sea level rise, precipitation, and temperature change) (IPCC 2001).

**Maladaptation**

An action or process that increases vulnerability or exposure to climate change-related impacts. Maladaptive actions and processes often include planned development policies and measures that deliver short-term gains or economic benefits, but lead to exacerbated vulnerability in the medium to long-term.

**Resilience**

The capacity of communities to absorb external tensions and disturbances as a result of social, political or environmental changes. Three conditions enable a social or ecological system to absorb change: ability to self-organize, ability to buffer disturbance, and capacity for learning and adapting (Trosper 2002).

**Sensitivity**

The degree to which a system is affected – either adversely/beneficially, directly/indirectly – by climate variability and/or change (IPCC 2007).

**Vulnerability**

The degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change, including climate variability and extreme events. Vulnerability is a function of the character, magnitude, and rate of climate variation to which a system is exposed, its sensitivity, and its adaptive capacity (IPCC 2007).

\[
\text{Vulnerability} = \text{Exposure} + \text{Sensitivity} - \text{Adaptive capacity}
\]

Please refer to UNDP’s Screening Tools and Guidelines to Support the Mainstreaming of Climate Change Adaptation into Development Assistance: A Stocktaking Report (2010) for a more extensive discussion of climate change adaptation and mainstreaming concepts, as well as UNPEI’s Guide for Practitioners (2011) and the Adaptation Policy Framework (UNDP 2005).
3. Considerations for Implementing the Six-Step Process

Implementation Team

This Guide suggests that the Implementation Team consist of a UNDP Country Focal Point, a National Climate Change Coordinator, and a Climate Change Risk Expert. This three-person team was effective and sufficient in the Climate Risk Project, although needs will vary depending on national contexts. The complementary nature of these three individuals ensures that the climate assessment and mainstreaming exercise is appropriately supported on the technical and administrative sides. The quality of the Implementation Team will determine the quality of the outcome.

The National Climate Change Coordinator should be a national of the country where the mainstreaming process is being implemented, and have some previous experience in climate change. S/he should have a strong track record of implementing projects, organising workshops, and be a self-sufficient and motivated individual. Annex 1 offers a sample ‘Terms of Reference’ for the procurement of such an individual.

The Climate Change Risk Expert should have extensive experience in assessing climate change risks. S/he should understand the science of climate change, have excellent analytical and writing skills, be able to take into consideration the uncertainties of climate projections, and integrate knowledge of the interplay between environment, society, economy, policy, and other disciplines. Previous experience in the country is an asset. Annex 2 offers a sample ‘Terms of Reference’ for the procurement of such an individual.

Both individuals should have the standing to enable interaction with a broad range of stakeholders – from technical staff to high-level government authorities and UN representatives – on both a one-on-one basis in meetings and as trainer/communicator in workshop settings.

If such individuals are not available in-house, the expertise may be found in the form of national and international consultants. A small roster of experts has been built up as a result of the Climate Risk Project. Please contact the Environment and Energy Group for references to experienced international consultants (marjolaine.cote@undp.org).

Time and Budget Estimates

The time needed to implement all six steps described below will depend on a variety of factors. These include: identification and agreement on the document(s), project(s), and/or programme(s) to be assessed (including the scope of each assessment); quantity of documents to be assessed; previous awareness and manifest interest of national authorities; availability of relevant information sources; celerity of consultant procurement procedures; availability of the UN Country Team and other stakeholders; and, the time needed for the Country Team to actually engage the government stakeholders, which can vary greatly depending on the country.

The experience of the Climate Risk Project indicates that at least 6 months should be dedicated to implementing Steps 1 to 5 for the assessment of a single development document. Additional time should be set aside if more than one document is assessed, and to implement Step 6.

The necessary budget may differ from country to country. In the Climate Risk Project, each country was allocated a budget of USD 100,000, which was ample for assessing two or three development documents, organising one to three workshops, and hiring a National Climate Change Coordinator and a Climate Change Risk Expert. Additional resources were available for global knowledge dissemination, organizing events, lesson-sharing, south-south collaboration, travel, and a Global Project Coordinator who provided overall quality assurance for the five countries.
4. Integrating Climate Change into Development Plans

There is an important intersection between development and climate change adaptation in that they both aim to reduce the root causes of vulnerability. The integration of climate change risks and opportunities in development activities is one way to engage directly at this intersection. Its purpose is not only to enhance resilience to climate change, but also to ensure that ‘no-regret’ development is implemented and no maladaptive actions are taken.

While it is useful to “screen” (assess) existing development plans, projects, and programmes so as to have a reference point to work from, such analyses are only useful to the extent that the conclusions and recommendations are adopted in revised versions of the development documents and are implemented as part of future activities. This, in turn, can only be possible if stakeholders associated with the drafting, implementation and monitoring of the development documents are directly engaged in the mainstreaming process. Furthermore, as stated in other publications, climate risk screenings (or assessments) are only one part of the mainstreaming process, which may also include: (i) awareness-raising, (ii) identification, prioritization and selection of appropriate adaptation measures, (iii) implementation, and (iv) monitoring and evaluation (UNDP 2010; UNPEI 2011).

Taking this into account, the Climate Risk Project was developed to pilot a process that not only mainstreams climate change in UN and government development planning, but also builds national capacity to do so.

The mainstreaming approach comprises the following six steps:

- **Step 1:** Create a Country Climate Profile;
- **Step 2:** Prepare an Institutional Map;
- **Step 3:** Engage stakeholders and select the document to be assessed for climate risks and opportunities;
- **Step 4:** Assess climate change risks and opportunities;
- **Step 5:** Build the capacity of stakeholders; and
- **Step 6:** Mainstream climate change into the revised document.

These steps are recommended to achieve a thorough integration of climate change into the selected national policies, plans, and development projects. Nevertheless, countries may choose to tailor this approach to national circumstances and context.

Each of these steps will now be presented in detail.
Step 1: Create a Country Climate Profile

A Country Climate Profile is a succinct, easy-to-understand document that outlines the most relevant information on historic, present, and projected climate contexts, as well as the potential impacts of climate change and climate variability. The preparation of the Country Climate Profile involves identifying and compiling existing information, then synthesising it into a document that can serve as an initial reference guide for those who are not climate experts.

The Climate Profile should nonetheless remain technical and substantive. It should therefore be prepared by an expert in the area of climate change. Identifying and obtaining national documentation or gaining access to datasets may take some time, which makes the support of a National Climate Change Coordinator instrumental in navigating the information channels.

The Country Climate Profile can then be summarized into a leaflet that can be used in discussions with government and other national stakeholders. This leaflet is a useful document to highlight (in an easy-to-read, bulleted format) the most striking climate information, such as:

1. the projected climate change impacts,
2. the expected socio-economic impacts,
3. the historical disaster risks,
4. the primary vulnerable population and sectors, and
5. the potential adaptation measures.

Box 1 provides examples of possible Climate Profile outlines, taken from the Nicaragua and Malawi projects. Box 2 presents some available resources that can serve as a basis for the preparation of the Country Climate Profile.

**Step 1: Create a Country Climate Profile**

**Objective:** Produce a summary of the available national climate information for an audience that includes the country's non-experts in climate issues.

**Responsible person:** Climate Change Risk Expert, with support from the National Climate Change Coordinator.

**Effort level:** 4-5 days to produce a 10-12 page report.

**Tasks involved:**

1. **Review** relevant international and national literature for information on past, current, and projected climate context (see Box 2).
2. **Write a report** that includes the following sections:
   - **General situation:** Description of relevant factors such as geography, seasonality, present climate characteristics of the country, temperature/precipitation ranges and peaks.
   - **Historical trends:** Relevant trends in meteorological observation; frequency, intensity, and emergence of patterns regarding droughts, floods, storms, El Niño /La Niña events; evidence of sea level change. Based on scientific datasets and enriched with other registries (e.g. elders’ recollections; evidence of change due to alterations in customs or practices).
   - **Future climate change:** Projected changes in relevant parameters, such as precipitation, air and soil humidity, sea level, climate variability, frequency and intensity of extreme events; uncertainty of projections.
   - **Potential impacts of climate change and variability:** Sensitive and/or vulnerable sectors (useful if presented as a table, and when reporting specific national impacts). If available, may include potentially viable adaptation responses.
   - **Adaptation measures** (these may have already been identified in the literature).
3. **Produce an Executive Summary** (no more than 4 pages) of the most relevant information/issues. May be used in other reports or as a stand-alone document.
Box 1: Examples of Climate Profiles in Nicaragua and Malawi

Outline of the Nicaragua Country Climate Profile

The Country Climate Profile carried out in Nicaragua (Cigarán et al. 2009) emphasised climate change vulnerability and impacts at the sectoral level:

1. Introduction
2. Climate Profile: Vulnerability & Projections
   2.1 Climate
   2.2 Climate Projections
   2.3 Vulnerability & Impacts (coastal zones, agriculture, rural areas, health, water resources, ecosystems, energy)
3. Climate Sensitivity of Development
   3.1 Employment
   3.2 Food security & poverty
   3.3 Governance and sustainable development
4. Bibliography

Nicaragua’s Climate Profile is available on the ALM.

Outline of the Malawi Country Climate Profile

The Malawi study (Linddal 2009) followed a driver-pressure-state-impacts-response framework, emphasising the relationship between vulnerability and adaptation:

1. Climate change exposure, sensitivity and vulnerability
   1.1 Sensitivity in different sectors (agriculture, food security, human health, energy, fisheries, wildlife, water resources, forestry, gender)
2. Exposure: Climate change and variability in Malawi
   2.1 Climate of Malawi
   2.2 Climate trends, variability and hazards
   2.3 Climate forecasts and projections
   2.4 Summary of potential climate risks
3. Sensitivity: coping with climate change in Malawi
   3.1 Sensitivity in different sectors (agriculture, food security, human health, energy, fisheries, wildlife, water resources, forestry, gender)
4. Potential climate change impact
5. Vulnerability: Adaptation to climate change and variability in Malawi
   4.1 A driver-pressure-state-impacts-response framework to vulnerability and adaptation
   4.2. Disaster risk reduction and climate change adaptation
   4.3. Summary of climate change vulnerability

Malawi’s Climate Profile is available on the ALM.

Box 2: National and International Sources of Information

Finding the right information quickly is extremely important in conducting reviews. Following is a list of information resources – specific and generic – which can be useful to characterize factors at a national or sub-national level (e.g. rainfall) as well as at a global level (e.g. sea level rise). It is possible that a country has already had its climate profile summarized (see the links below). The National Communication will be a key source of information.

National sources:

• National Adaptation Programme of Action (NAPA) submitted to the UNFCCC
  http://unfccc.int/cooperation_support/least_developed_countries_portal/submitted_napas/items/4585.php
• National Communication to the UNFCCC
  http://unfccc.int/national_reports/non-annex_i_natcom/items/2979.php
• Previous climate profiling carried out as part of national reports commissioned under bilateral or multilateral project funding
• Ministry of Environment “State of the Environment Report(s)” and/or sectoral reports, with relevant information published by other Ministries/Directorate Generals
• Reports from Meteorology and/or Geophysics agencies/departments

International sources:

• UNDP Adaptation Learning Network
  http://www.adaptationlearning.net/country-profiles
• UNDP / Oxford University Climate Change Country Profiles
  http://country-profiles.geog.ox.ac.uk/
• Tyndall Center for Climate Change Research
  http://www.tyndall.ac.uk/biblio/technical-reports
• GRID ARENDAL (UNEP) http://maps.grida.no/
• Press releases on new scientific discoveries in quality media
  Ex: http://www.guardian.co.uk/environment/2010/jan/15/sea-level-climate-change
• World Bank’s Climate Change Knowledge Portal
  http://sdwebx.worldbank.org/climateportal/
Working Ideas 1

What are some potential impacts of climate change and variability in your country?
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

What are the likely groups of people and sectors vulnerable to these impacts?
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

What are relevant sources of climate information that you would review?
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Climate change is expected to increase the incidence of drought, dry spells and irregular distribution of rainfall in Malawi. Women are particularly vulnerable to these hazards since they often have the burden of collecting water and fuel for their household. (Photo courtesy of Adam Rogers.)
Step 2: Prepare an Institutional Map

An Institutional Map provides an overview of the institutions and other stakeholders involved in national climate change activities. It is a valuable resource to inform the mainstreaming process team, as well as for a wider audience at the national level (such as the UN Country Team, government representatives, officials from other international organizations, and national stakeholders). The document should be succinct and assume that the reader is already familiar with the institutions and stakeholders at play.

More than simply identifying or describing key institutional structures involved in climate change, the Institutional Map should provide a critical assessment of how climate change issues are coordinated between government bodies and with other stakeholders. It should discuss all relevant actors in the country, such as government, bilateral, and multilateral donors, NGOs, and the private sector. Since this type of national overview is difficult to find, an illustration or ‘map’ that demonstrates the linkages and relationships between the institutions is extremely useful.

The document should include a brief overview of the relevant regulatory and institutional frameworks for climate change, as well as present the coverage, scale, and coordination of climate change interventions. This will provide an indication of the priority given to climate change within the country. Identification of technical, institutional, or organizational gaps should ideally be followed by concrete and pragmatic recommendations for improvements. Links to websites or other sources of information are also helpful.

An Institutional Map can be prepared based on a desk review of relevant national policy documents, strategies, and research reports on climate change. Specific reports, such as the National Adaptation Programme for Action (NAPA) and National Communications to the United Nations Framework Convention on Climate Change (UNFCCC), are good starting points. The analysis can then be supplemented by interviewing stakeholders who are able to confirm, complement, and/or correct the desk review.

Box 3 provides examples of illustrations that map institutions and other stakeholders involved in climate change in Malawi, Cape Verde, and Colombia. Box 4 offers resources to create such illustrations.

Step 2: Prepare an Institutional Map

Objective: Provide a snapshot of the different stakeholders involved in climate change at the national level. Includes not only a description of the institutions and their projects, but a sense of the linkages and collaboration between them.

Responsible person: National Climate Change Coordinator.

Effort level: 4-5 days to produce a 12-15 page document.

Tasks involved:
1. Review the official national information on climate change activities available from ministries, national institutions, and development actors.
2. Consider interviewing main institutions, to complement and corroborate information.
3. Write a report that includes:
   - Introduction to climate change in the national context.
   - Description of institutional and regulatory frameworks, including strengths and weaknesses.
   - List of institutions and an illustration or “map” of climate change stakeholders, including national institutions (Ministries, committees, associations, etc), UN, bilateral, and multilateral organizations, NGOs, and other entities. This should describe the role, significance, and influence of each stakeholder.
   - List and describe climate change projects and programmes, including the executing institutions.
   - Discussion of institutional capacity, such as strengths, gaps, and opportunities (e.g. expertise in technical fields/negotiations, deficits in knowledge sharing, physical equipment, sourcing of finance, research and training, legislation and enforcement).
   - Discussion of institutional cooperation and coordination of interventions, including concrete recommendations and effective entry points to improve integration of climate change risks and opportunity.
   - General observations and conclusions
4. Produce an Executive Summary (even if in ‘outline-style’ it is a useful sub-product).
Box 3: Illustrations of Institutional Maps

There is no definitive way to “map” the relationships between institutions, and many approaches have been used within and outside the Climate Risk Project.

In Cape Verde, the Institutional Map (Santos 2010) (below) highlighted key public, private, and other institutional stakeholders by sector on an ‘onion-ring’ graphic. This plotted the stakeholders according to whether they were judged to exert primary or secondary influence on climate change matters in the country.

The illustration used in Colombia (Cardona 2009) (right, top) focused on the interlinks between stakeholders. The size of the triangles (UN) or rectangles (Government) indicates the importance or influence of the stakeholder institution (blue) or initiative (red) in relation to climate change adaptation.

As a third format, an organigram was provided in the Malawi report (Jumbe 2009) (right, bottom).
Box 4: Examples of resources to create an Institutional Map

Typically, an Institutional Map will be mostly – and in some cases entirely – text based. However, graphic projections are useful to quickly and easily show relationships between institutions and/or stakeholders, hierarchies, classifications, and other orders of information. As referred in Box 3, there are numerous ways to illustrate institutional maps, depending on the approach and message to be conveyed.

The examples in Box 3 take advantage of different software which are either readily available on most computers or which can be downloaded from the internet. Following are just a few examples:

- **Office suites:** Software usually available on most computers, whether commercial (ex Microsoft Office – [http://office.microsoft.com](http://office.microsoft.com)) or free (OpenOffice – [www.openoffice.org](http://www.openoffice.org)), have applications for preparing documents and presentations. These have facilities for drawing shapes and connectors that can include text, and come prepared with templates for preparing organizational charts, flowcharts, and process flows, that enable the illustration of most institutional relationships. The Institutional Map examples from Cape Verde and Malawi, in Box 3 above, were created using such simple software.

- **Social network data analysis:** For a more complex mapping of different entities and decision points, the UCINET ([www.analytictech.com/ucinet/](http://www.analytictech.com/ucinet/)) package may be appropriate. This software was used to produce the Colombian Institutional Map example in Box 3. In addition to downloading and installing this commercial software, it will take some time to learn to use it properly.

- **Specialized visual processors:** Software such as Smartdraw ([www.smartdraw.com](http://www.smartdraw.com)), CorelDraw ([www.corel.com](http://www.corel.com)), and Adobe InDesign ([www.adobe.com](http://www.adobe.com)) can be very useful for preparing just about any visual or graphical element. Although they have a wide range of applications, their templates include decision trees, organizational charts, flowcharts, and cause-and-effects charts, all of which may be ideal. Some of these software sometimes have time- or function-limited editions which are free to download and use.

- **Mind and idea relationship mapping:** The Brain ([www.thebrain.com](http://www.thebrain.com/)) is free downloadable software that helps organise and create links between ideas. It is important to first be clear about the objective of the visual representation for your institutional map, then determine whether already available software can easily render it and, if not, seek other software packages as necessary.
Step 3: Engage Stakeholders and Select the Document to be Assessed for Climate Risks and Opportunities

In keeping with UNDP’s own policy on integrating climate change into development assistance, strategies such as the United Nations Development Assistance Framework (UNDAF), One UN Programme, and Common Country Assessments are obvious targets for an evaluation of climate risks that may affect a country’s development trajectory. Similarly, there are a number of equivalent national development strategies and plans that can be assessed at government level.

The exercise can also focus on processes, policies, frameworks, projects, budgets, and any other programming documents. Identifying an adequate subject for the climate risk and opportunity assessment plays a large role in the success of the analysis and the mainstreaming exercise as a whole. A consultative process with decision-makers and technical staff from different governmental entities and UN agencies should guide the selection process, taking into account a list of factors (presented on the right of this page).

A crucial factor in the selection should be the life or cycle of the document(s). Stakeholders should consider from the onset how and when the results of the climate risk assessment could be taken into account in a revised version. The same is true for the cycle of the ‘owner’ of the document, be it a specific institution or a group of organisations.

The quantity of documents selected to undergo a climate risk assessment will have an impact on the depth of those assessments (assuming the same budget and timeline). In the Climate Risk Project, Colombia chose to analyse 12 development documents; as a result, the assessments provided more of an overview of the risks and opportunities for each document as opposed to the detailed, activity-by-activity reports produced when only one or two documents screened in the other pilot countries.

Box 5 describes the processes followed in Cape Verde and El Salvador to identify appropriate development strategies and programming documents. Box 6 shows the wide range of documents that can be selected for the climate risk and opportunity assessment.
Box 5: Selecting the Object of Climate Screening in Cape Verde and El Salvador

In Cape Verde, the UNDP Country Focal Point consulted with Ministry representatives to select an appropriate document for the assessment. Based on the following considerations, the 2008 Strategic Document on Growth and Poverty Reduction (DECRP for the Portuguese translation) was identified as the most relevant national development document:

- The DECRP addressed the sectors identified as vulnerable in Cape Verde’s National Communication to the UNFCCC, i.e. water, forests, coastal development, and agriculture & livestock.
- The DECRP was expected to be revised in the coming year to adjust to new government priorities. This provided an opportunity to influence the content of the future DECRP and therefore ensures that climate change considerations are integrated.
- National authorities involved in the DECRP were sensitive to the need for integrating climate change and were available to engage with the implementation team.
- The DECRP is the principal operational document at the national level. Developed by the Government following a participatory process, it is then discussed with bi- and multilateral development partners, guiding future Indicative Cooperation Programmes.

Given the extent of document, the implementation team identified the following sectors of the DECRP to be assessed, due to their particular sensitivity to climate change: Tourism and the Tertiary Sector, Integrated Rural Development, Urbanization and Urban Renewal, Road and Maritime Transport, Energy, and Integrated Management of Water Resources.

In El Salvador, the implementation team used the illustration of its Institutional Map to identify an initial list of potential institutions that could become partners in the Climate Risk Project. Then, the team organised a workshop and invited technical and decision-making staff from 16 of these institutions. In one session, participants were asked to propose institutions and documents that could be considered for a climate risk assessment, and to rank their suggestion against the criteria listed in Step 3 Box on the previous page to reduce it to a manageable size. This list should then be discussed with UN and government stakeholders.

*Refer Box 6 for ideas on the types of documents that could be relevant.

<table>
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<tr>
<th>Potential Documents</th>
<th>Relative Importance to National Development</th>
<th>Year Last Published</th>
<th>Year Expected to be Revised</th>
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Which institution(s) is already a good candidate to champion this exercise?

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Working Ideas 3

To begin the selection process, list the potential documents that could be relevant for a climate risk assessment. With this initial list in hand, look at the factors in the Step 3 Box on the previous page to reduce it to a manageable size. This list should then be discussed with UN and government stakeholders.
Box 6: Examples of Documents Assessed for Climate Risks and Opportunities

In addition to assessing the UNDAF, the Climate Risk Project pilot countries assessed a wide array of policies, plans, and projects. The respective screening reports and other related documents can be found on the Adaptation Learning Mechanism website (www.adaptationlearning.net).

Cape Verde:
- The “Strategy Document on Growth and Poverty Reduction” (PRSP), focusing on 10 priority sectors.

Colombia:
- Project “Local Millennium Development Goals” (UNDP)
- Project “Capacity-Building for Food and Nutritional Security in Colombia” (FAO)
- Project “Territorial Strategy for Development and Peace - ArtRedes” (UNDP)
- Project “Capacity-Building for Alternative Development Projects within the Framework of Regional Sustainable Programmes in Colombia” (UNODC)
- Project “Capacity-Building of Territorial Development and Strategy of Healthy Environments” (WHO/PAHO)
- National Policy Goal and Strategies for the Achievement of the MDGs for Colombia
- National Policy on Social Protection Network Against Extreme Poverty
- National Policy on Food and Nutritional Security (PSAN)
- National Guidelines for the Formulation of a Comprehensive Environmental Health Policy, including Air Quality, Water Quality, and Chemical Safety
- Development Plan for the Department of Cauca
- Development Plan for the City of Bogota, Capital District

El Salvador:
- Intersectoral Programme on Food and Nutritional Security in El Salvador (ISAN)
- The Rules of Funding Eligibility of the Fondo de la Iniciativa para las Américas, El Salvador (FIAES).

Malawi:
- The Agricultural Sector Wide Approach (ASWAp)
- The Malawi Growth and Development Strategy (MGDS).

Nicaragua:
- The National Human Development Plan (focusing on five sectors).

The assessment of the FAO project on Food and National Security in Colombia highlighted the vulnerability of small-scale farmers to climate risks. (Photo courtesy of Piedad Martin)
Step 4: Assess Climate Risks and Opportunities

Several methodologies and tools exist to assess climate change risks in development processes. Most are agency-specific and specialized in terms of audience, scope, and objective. The array of methodologies available should be considered with an eye to employing the best method for the selected document and the objective at hand.2

In the Climate Risk Project, UNDP applied its draft generic guidelines Quality Standards for the Integration of Adaptation to Climate Change into Development Programming (2009) (hereon the “UNDP Quality Standards”). The tool provides an overarching analytical approach that can be applied to strategy documents, programmes, plans, and policies or projects, whether these already exist or are under development. Moreover, it is applicable to the national, regional or local scales and can be used by UN and UNDP staff, national authorities, or other development partners.

Using a list of questions, the UNDP Quality Standards assists the user to identify climate risks, risks of maladaptation, adaptation opportunities, and adaptation measures to appropriately mainstream climate change considerations. The methodology is based on four principles or quality standards:3

1. Identification of Climate Change Risks to Programmes and Projects

Programme and project components are assessed to determine whether their viability or longer-term sustainability is threatened by climate change. This involves the identification of components that are sensitive or vulnerable to emerging or anticipated manifestations of climate change (e.g. changes in extreme events, or longer term changes in average climatic or environmental conditions).

2. Identification of Risks that May Result in Maladaptation

Unintended and unforeseen increases in vulnerability may result from project activities that do not consider changing climatic conditions. Programme and project components are assessed for their potential to increase long-term environmental or societal vulnerability to climate change. This might require a cross-evaluation between sectors, for actions that might be contradictory between them.

3. Identification of Adaptation Opportunities

Adaptation opportunities may include entry points to: (i) facilitate adaptation through synergies with existing or planned initiatives, (ii) combine mitigation (reductions in greenhouse gas emissions) and adaptation, (iii) deliver additional development benefits, and/or (iv) exploit potentially beneficial changes in climatic or environmental conditions.

4. Assessment and Integration of Potential Adaptation Measures

Programme and project developers and managers translate the identified adaptation opportunities into changes that can be brought to a programme or project. These measures may include the re-evaluation of programme or project objectives and intended outcomes, changes to outputs and activities, or policy recommendations. Adaptation measures are assessed and prioritized on the basis of feasibility, efficacy, and acceptability, and then integrated into the programme or project.

The results of the climate risk assessment are presented in a report that highlights concrete, viable ideas and recommendations for measures to increase adaptation and avoid maladaptation. The more practical the recommendations

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2 Olhoff and Schaer’s Screening Tools and Guidelines to Support the Mainstreaming of Climate Change Adaptation into Development Assistance – A Stocktaking Report (2010) provides a good summary and analysis of the main tools that exist.

3 The UNDP Quality Standards are being revised based on the experience of the Climate Risk Project. The revised publication will be available 2012.
(including, if possible, an indication of costs implied), the more likely they are to be clearly understood and effectively integrated.

Boxes 7 to 9 provide examples of result matrices from the Climate Risk Project. This format is useful to record the analysis, and as a communication tool to decision-makers and technical staff.

Particular attention should be paid to the analysis on maladaptation. The climate risk assessment may indeed identify activities or objectives that could be incompatible with adaptation or appear unviable under future climate scenarios. For instance, policy objectives to significantly increase tourism facilities in a location requiring groundwater abstraction may be incompatible with other policy objectives of promoting irrigation to achieve agricultural self-sufficiency under a future climate scenario that indicates less rainfall, less humidity, and hotter mean temperatures. Although technically the conclusion may seem straightforward, there could be resistance at a political level to accept difficult choices.

Furthermore, the Implementation Team and the stakeholders should be aware that actions or policies that would reduce vulnerability or increase adaptive capacity to climate change may not be aligned with subjacent political or strategic objectives. There may be political implications to the adaptation measures/actions identified, the recommendations provided, and any prioritization of certain measures or actions. For instance, a recommendation may counsel reducing or ceasing an economic activity, which may contrast with a specific government policy or objective. Although the medium- to long-term benefits are envisaged, they may be incompatible with the political cycles’ need for immediate returns.

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**Step 4: Assess Climate Change Risks and Opportunities**

**Objective:** Undertake a risk screening analysis of a UN Country Team or government development plan, strategy, policy, or programme.

**Responsible person:** Climate Change Risk Expert.

**Work effort:** 10 – 20 days per document.*

**Tasks involved:**

1. Assess each selected document component for climate change risks, using if appropriate the UNDP Quality Standards. In its most basic form, the assessment report should include the following points:
   - How and where risks and opportunities are already incorporated into the document, and propose improvements if necessary.
   - Risks of maladaptation.
   - Adaptation opportunities.
   - Adaptation measures and/or entry points to better manage climate change risks/opportunities, and a set of priority actions to be implemented by the national entity.

2. Obtain feedback from the document’s stakeholders on the draft findings, potentially during a workshop to build capacity and raise awareness.

3. Refine the findings based on these comments and finalise a report.

**Climate Risk and Opportunities Report outline:**

Since this report is to be shared widely with stakeholders, it is useful to include the following sections:

- Executive Summary
- Background to the climate risk and opportunity assessment, including rationale for selecting the object of the analysis
- Methodological Approach (including introduction to UNDP Quality Standards)
- Climate risk assessment results
- Recommendations and identification of priority actions
- Conclusions
- References / Acronyms / Annexes

*The work effort will be higher for the first climate risk assessment undertaken and then lower for any subsequent ones. The time required will also depend on the scope of the selected document.*
Box 7: Sample Climate Risk Assessment: Malawi’s Agriculture Sector Wide Approach (ASWAp)

Below is the example of the Climate Risk Assessment of the Agriculture Sector Wide Approach (Linddal 2009) focus area on ‘Food Security’. Here the implementation team used a simple matrix to highlight the risks and the opportunities for each component.

<table>
<thead>
<tr>
<th>Area Components</th>
<th>Climate Change Risks</th>
<th>Adaptation Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.1 Maize self-sufficiency through increased maize productivity and reduced post harvest losses</strong></td>
<td>Direct consequence on maize production of rainfall amount and distribution. Risk of mal-adaptation if the risks of a single-crop emphasis are not addressed.</td>
<td>Increased food security through: promotion of crop diversification; drought tolerant varieties; genetic variation; early warnings for weather and pests; and data gathering.</td>
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<tr>
<td><strong>1.2 Diversification of food production and dietary diversification for improved nutrition at household level with focus on Crops, Livestock, and Fisheries</strong></td>
<td>Potential direct risks on all agricultural production from extreme weather events.</td>
<td>Increased food security and crop risk distribution through diversification.</td>
</tr>
<tr>
<td><strong>1.3 Risk management for food stability at national level</strong></td>
<td>Risk from drought and insufficient availability of food (production and distribution).</td>
<td>Risk management to include: climate variability and climate change; improved food security; weather risk insurance (which has been attempted with weather index in Malawi but thus far has failed).</td>
</tr>
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Adaptation measures from the Malawi ASWAp:

- **Develop climate change projection scenarios** for the agriculture sector in Malawi, after systematically gathering information on current climate variability. This may improve the awareness on the links between climate variability and agricultural production.

- **Support research on climate change vulnerability factors**, which may improve decision-making at both household and national levels, especially with regards to their potential need and capacity for adaptation measures.

- **Assess climate change in combination with other stressors** to map vulnerability to climate change. Climate change impacts, in combination with unsustainable land-use practices and areas with a prevalence of HIV/AIDS amongst the population may add up and undermine the objectives of the ASWAp. Such a mapping exercise would accentuate the role of climate change as a risk amplifier and could guide the identification of relevant adaptation measures.

- **Encourage capacity development** for mainstreaming climate change risk management and adaptation in development programmes.

- **Explore options for additional sources of climate adaptation funds.** Although almost half of the funding for the ASWAp is secured there is no mention of supplementary means of funding, although there has already been such interest from the donor community (e.g. AfDB).

- **Support systems for early warning** could be relevant for the agricultural sector. This includes not only further development of the ongoing seasonal forecasts (mainly of precipitation) but also localised early warning for weather and pests influenced by climate variables. Some of these early warning and data gathering could involve communities, e.g. through farmer-field schools.
Risks
Tourism infrastructure, in low-lying coastal areas in particular, runs risks of gradual damage through shore erosion and sea level rise. Extreme events can cause damage to access roads, buildings, equipment, and amenities. Climate impacts bring various indirect risks to tourism, such as frequent maintenance and repair work on buildings, ports, and other recreation facilities, and price hikes in energy and water. Insurance costs will likely see increased premiums.

Avoiding Maladaptation
The measures identified above are not likely to foster “losers” with their implementation. On the contrary, directing tourism activities to locally or regionally naturally abundant resources will likely create economic added value by stimulating downstream supply sectors (e.g. cultural offerings, aquatic sports, catering).

The measures identified above are cost effective and conservative, even in the absence of aggravated climate change effects. Well implemented, these measures should provide a more competitive economic sector under any possible future climate change scenario.
Box 9: Sample Climate Risk Assessment: El Salvador’s UNDAF

The El Salvador UNDAF 2007-2011 section on ‘Improving Basic Social Services’ was assessed against seven ‘screening’ questions (Gutiérrez and Cigarán 2009).

Climate Change Risks

1. Are the effects of climate change referred to explicitly in this UNDAF Expected Result?
The document makes no mention of climate risks, climate change (CC), or extreme events.

2. What climate change risks are relevant to the achievement of this Expected Result?
CC threats include temperature variations, increases in the intensity and/or frequency of extreme climate events, and general climatic stress. These climate events will exacerbate cases of diseases (e.g. malaria, diarrhoea, and dengue fever) with significant consequences on economic growth, social development, and security. Likewise CC will negatively affect the livelihoods of the poorest people in terms of health, access to water, housing, and infrastructure.

3. Are there risks of maladaptation?
Yes, if the construction of infrastructure designed to provide basic services is vulnerable to CC and climate variability; or if CC vulnerability increases organically (e.g. when people occupy areas at risk, such as riverbanks with fluctuating flows and water levels).

Adaptation Measures and Opportunities

4. What modifications can be made to achieve the Expected Result? What adaptation measures could help reduce vulnerability to climate change?
• Threats caused by CC should be incorporated in the concept of vulnerability.
• Prioritise prevention measures and climate risk management for highly vulnerable groups.
• Develop the capacities and raise the awareness of national and local representatives that work on providing basic social services.
• Provide additional resources to health systems, improve the monitoring and control of diseases exacerbated by CC, and improve the hospital infrastructure to accommodate an increasing number of emergencies arising from extreme climate events.

5. Will the measures be beneficial, irrespective of climate change? (“no-regret”)
Yes, since in general these activities are ones that promote sustainable development.

6. Are there opportunities to encourage adaptation to climate change? (opportunities that are a direct result of climate change, synergies with other projects, links to mitigation)
Opportunities and possible synergies exist within the Fondo de Inversión Social para el Desarrollo Local. In addition, the Bajo Lempa coastal zone – frequently affected by tidal surges, floods, and hurricanes – is the target of various social projects having to do with risk management and the development of early-warning systems.

7. What are the priority adaptation measures?
Incorporate the theme of CC threats into the concept of vulnerability and define the most vulnerable groups and settlements. CC must be a higher priority in the national agenda.

Working Ideas 4

Use the following basic matrix to assess the climate change risks and opportunities related to your selected development document:

<table>
<thead>
<tr>
<th>Programme Components</th>
<th>Climate Change Risks</th>
<th>Adaptation Opportunities</th>
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Step 5: Build the Capacity of Stakeholders

Capacity building is an essential part of the mainstreaming process. In the Climate Risk Project, capacity was built through workshops in each of the participating countries, individual consultations, and more contextualised mainstreaming support when requested. This section concentrates on the organisation of workshops. Individual consultations were an integral part of each step of the process and are therefore addressed throughout this Guide; the dedicated mainstreaming support is described in Step 6.

The workshop is an important project event as it provides the chance to inform stakeholders associated with the drafting, implementation and monitoring of the selected development plan or strategy on the issue of climate change, its impacts, and adaptation opportunities, while receiving invaluable feedback from participants. Meanwhile, it also strengthens inter-institutional cooperation, which is essential for effective decision-making on climate change. The event can fulfill the following objectives:

- Enhance participants’ understanding of climate change concepts and specific scenarios for the country.
- Present the summary results of the Country Climate Profile.
- Present the climate risk assessment methodology.
- Share and validate the draft results of the climate risk assessment.
- Enhance participant’s capacity to identify climate change risks and opportunities, as well as adaptation measures.
- Raise awareness of national authority stakeholders on the importance of integrating climate change into development processes.
- Encourage inter-institutional collaboration through the exchange of tools, data and experience.
- Identify other documents, projects and programmes that undergo a climate risk assessment, and prioritise these.

The specific agenda should be established in collaboration with key stakeholders, to reflect the national context as well as the agreed objectives of the partnership, so that it may be a catalyst for national priority setting and climate change mainstreaming. The agenda should also take into consideration the duration of the event and level of participation (wider and generalised, or more focused and technical).

Sessions that focus specifically on ‘hands-on’ exercises are always popular in the workshops. In these sessions, participants discuss in groups the main climate change concepts and go through case studies to assess the projected climate change events, the risks to livelihoods, and the adaptation measures in a particular community. Such exercises allow for a real integration of the material presented, and for participants to exchange and reflect on their own experiences. For an example of such exercise, please visit the Malawi project page on the Adaptation Learning Mechanism website.

Box 10 describes the set of workshops that were organised at the end of the Colombia project. Box 11 provides an example of one day-and-a-half workshop, which took place in Cape Verde.
Step 5: Build the Capacity of Stakeholders

Objective: Host a workshop to build capacity of stakeholders to assess and manage climate change risks and opportunities.

Responsible person: National Climate Change Coordinator, with support from the Implementation Team and engagement of national institutions.

Workshop length: 1-2 days.

Tasks involved:
1. Engage key national institutions.
2. Consider carrying out a capacity needs assessment early on in the process to identify gaps, establish a baseline for future monitoring and evaluation, and promote institutional learning and empowerment.
3. Establish workshop objectives and agenda, and identify sessions that national institutions can lead. Some effective sessions used in the Climate Risk Project:
   a. Introduction to the main climate change terms and concepts (see Section 2).
   b. Overview of historical climate data and projections for the country/region (best presented by technical staff from the meteorological institution).
   c. A group exercise to test the understanding of climate change concepts. Participants read background climate data to a real national case study and are asked to discuss climate change vulnerability and adaptation. For example, group discussions can focus on identifying:
      (i) pre-existing vulnerabilities,
      (ii) direct and indirect risks,
      (iii) factors that will increase vulnerability,
      (iv) groups of population likely to be affected by climate change and variability,
      (v) top sectors particularly sensitive to climate change,
      (vi) factors that determine adaptive capacity,
      (vii) traditional coping measures to climate variability, and/or
      (viii) constraints to climate change adaptation;
   d. Hold a group exercise to deepen the understanding of climate change impacts in a particular sector relevant to the country. In the same discussion groups as above, participants first read through a section of a national development plan, policy, or project pertaining to a high-priority sector (possibly one that was previously assessed for climate risks), e.g. tourism. Using a results matrix similar to those presented in Step 4, participants are then asked to identify:
      (i) climate risks that could affect the completion of the stated objectives,
      (ii) risks of maladaptation as a result of the plan, policy, or project,
      (iii) adaptation measures or activities that could be implemented to ensure the attainment of the said objectives, and
      (iv) opportunities that exist to support the implementation of such adaptation measures.
   e. Hold a session dedicated to advance particular national context, e.g.: to enhance institutional collaboration; to map out institutional expertise; to agree on national priority interventions; to identify inputs for a national action plan to integrate climate change into national development plans and programmes.
4. Prepare workshop materials, including: presentations, exercises, reference documents, and USB keys.
5. Bring in logistical support, as necessary, to ensure:
   a. A suitable venue is contracted (one that meets seating requirements, has space for simultaneous group discussion, and has access to outdoors during breaks).
   b. Appropriate catering is provided (light meals, coffee breaks accompanied with snacks).
   c. The necessary equipment is rented and set up (laptop computer, projector, microphone, flip charts and paper, tape or tack to stick workgroup results on walls for future reference).
6. Invite appropriate high-level individuals to deliver the opening and closing statements.

It is important to engage the relevant national stakeholders in the preparation and delivery of workshops and ensure the objectives of the event meet the needs of the audience. (Photo courtesy of Piedad Martin)
Box 10: Climate Week in Colombia

To engage the many different stakeholders involved in the multitude of documents assessed under the Climate Risk Project in Colombia, three distinct events were planned over the course of four days:

- “Short Training Course on Mainstreaming Climate Risks”. This involved 16 people from 10 UN organizations and 14 government officials from 11 national entities.
- “Discussion Workshop on the Results of the Climate Change Risks and Opportunities Screened in the UNDAF”, where high-level UN representatives discussed the results so far and round-tabled next steps.
- “National Dialogue: Fight Against Poverty and Adaptation to Climate Change”. This event gathered 80 individuals, two-thirds of whom were from national entities, to discuss four areas highly at risk to climate change in Colombia.

The National Dialogue event was organized by UNDP with the support of the National Planning Department, the Ministry of Environment, Housing and Territorial Development, and the Institute of Hydrology, Meteorology and Environmental Studies. It was held in Bogotá, and received media attention from newspapers, television, and online blogs.

Box 11: Agenda for Cape Verde’s Workshop on Climate Risk Screening

In Cape Verde, the 1.5 day Seminar and Workshop used the following agenda:

**Day 1**

Seminar for High Level National Authorities

09:00 – 09:30 Welcome notes, presentation, and agenda for the Workshop
09:30 – 09:50 The Climate Risk Project
09:50 – 10:10 Climate Change Terms and Concepts
10:10 – 10:40 Cape Verde’s Climate, and Projections for the Future
10:40 – 11:00 Coffee break
11:00 – 11:15 Contextualization of the DECRP-II (presented by national authority members directly involved in the DECRP revision process).
11:15 – 12:15 Summary presentation of results of the climate risk screening
12:15 – 12:45 Questions & Answers session, and summary of the morning session
12:45 – 14:00 Lunch

Climate Change Mainstreaming Workshop

14:00 – 14:10 Agenda and objectives for the afternoon session
14:10 – 15:40 *Group Exercise: “Concepts” + Discussion in plenary
15:40 – 16:00 Methodology for Climate Risk Screening (UNDP Quality Standards)
16:00 – 16:10 Coffee break
16:10 – 17:10 *Group Exercise: “Climate Change Impacts in Select Sectors” + Discussion in Plenary

**Day 2**

Moving Forward in Responding to Climate Change in Cape Verde

09:30 – 09:40 Agenda and objectives for the morning
09:40 – 10.30 Main findings of the UNDAF Climate Risk Evaluation
10:30 – 11:00 *Plenary Exercise: “Mapping of Specialists and Resources on Climate Change Related Issues”
11:15 – 11:30 Coffee break
11:30 – 12:15 *Plenary Discussion: “Prioritization of Climate Change Issues at the National Level”
12:15 – 12:30 Closing comments and workshop evaluation
12:30 Lunch

UN Country Team participants in El Salvador’s workshop assess the climate risks that could jeopardize the achievement of the UNDAF’s Expected Results.
Step 6: Mainstream Climate Change into the Revised Document

Based on the recommendations made in the climate risk and opportunity assessment, the next step is to mainstream these considerations into the chosen document(s), project(s) or programme(s). Whether such mainstreaming is possible (and, if so, how it can be achieved) is necessarily case dependent. Several factors are important to consider, including: the characteristics of the document(s) selected, the institutions involved, timing, degree of interest, commitment and consideration of priority by decision-makers, and the effectiveness and viability of the recommendations to be integrated.

The success of the climate mainstreaming effort can be enhanced by taking the following lessons into consideration:

- The process, including Step 5, should be as participatory as possible, involving stakeholders for comments beyond the direct document ‘owners’ and Implementation Team.
- Both the stakeholders and the Implementation Team involved in the mainstreaming effort should have a clear mandate and sense of priority from high-level authorities. There must be an indication that time and resources to conduct the work have been allocated.
- The Implementation Team should be available to support the stakeholders throughout the process.
- If identified as a requirement, or specifically requested, the Implementation Team may need to consider the concentrated capacity building/training of stakeholders involved in the mainstreaming process. This would then enable stakeholders to provide everything from general support to the answering of detailed queries.

Box 12 presents the case of El Salvador’s Fondo de la Iniciativa para las Américas (FIAES) to illustrate how climate change considerations can be mainstreamed into a programming document.

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**Step 6: Mainstream Climate Change into the Revised Document**

**Objective:** Integrate priority climate change adaptation responses into the selected development document, to reduce risks and take advantage of potential opportunities.

**Responsible person:** The process will be led by a member of the Implementation Team with support from others, as appropriate and agreed with by the stakeholders. National stakeholders may be involved.

**Process involved:**
At the initial stages of the process, the Implementation Team and the stakeholders will have established whether the objective of the process is a climate risk assessment in the form of a report, or if it is appropriate to revise the document to incorporate climate change concerns.

The mainstreaming effort can be carried out in two ways:

- In the “active” way, the Implementation Team and relevant stakeholders are engaged in a process through a technical group or series of meetings focused on the mainstreaming of the recommendations into the respective document. In this case the Implementation Team holds the role of facilitator in the process.
- In the “passive” way, the climate risk assessment is completed externally and submitted to relevant stakeholders or document “owners” for integration through their own processes. In this case, the Implementation Team provides the technical input and is on standby for support, or response to queries.

In most cases, the context and timing of the process will dictate whether it will be possible to support an “active” mainstreaming exercise.

It is crucial to follow the lead of, and be aware of, the signals sent by the partner institution, as to whether they constitute a suitable match in terms of time and resources.

The objective of the process described here is to build the capacity of national government and UN stakeholders to assess and manage the risks and opportunities that climate change can pose to development. Therefore, the ‘active’ route of assessing and mainstreaming climate change in collaboration with the stakeholders of the selected document will lead to stronger long-term capacity.
The Fondo de la Iniciativa para las Américas de El Salvador (FIAES) finances projects that fall within four Strategic Areas: 1) Ecosystems Management, 2) Territorial Management, 3) Pollution Prevention and Control, and 4) Renewable Energy. As part of a public tender process, projects submitted by NGOs, community development associations, and other local associations compete annually for FIAES funding (USD 100,000 per project). Project proposals must be submitted according to specific guidelines laid out in its Rules of Funding Eligibility. Every year, FIAES invests an average of USD 3.5 million in Salvadorian community development and environmental projects. Box 2 explains how the FIAES became a partner with the Climate Risk Project in El Salvador.

Methodological approach
A strong technical team was identified within FIAES, which included its Managing Director and Project Officers, and a representative of the Ministry of Environment and Natural Resources (MARN) Climate Change Unit. The Managing director committed to having this technical team available for 10 half-day-long meetings over a period of six months. First, the technical team, with support from the Implementation Team, identified the most relevant entry points for mainstreaming climate change. Second, stakeholders undertook the climate risk and opportunity assessment for each Strategic Area, using the following four questions based on UNDP Quality Standards:

1. Are there risks of not achieving the Strategic Area’s objectives due to present or future climate risks?
2. Are eligible activities under this Strategic Area at risk of maladaptation?
3. What changes should be made to ensure the Strategic Areas’ objectives are met?
4. What adaptation measures could reduce vulnerability?

Third, the technical team proceeded with updating and revising the Rules of Funding Eligibility based on decisions made as part of the Climate Risk Project. This ensured the full mainstreaming of the recommendations in time for the new tender process to be launched.

Results of the mainstreaming effort
- Climate change mainstreamed into FIAES’ Strategic Areas: Activities likely to lead to maladaptation were identified and eliminated. New eligible activities that contributed to enhanced adaptive capacity were added, e.g. research to reduce climate vulnerability and improve adaptive capacity was included as an eligible activity.
- A new cross-cutting principle on climate change added: The “Management of Socio-environmental Risks and Adaptation to Climate Change” supports activities that strengthen the social and ecological resilience of communities, benefiting, in particular: women, children, and those struggling with poverty and other vulnerabilities.
- Climate and environmental data gathering added: As part of FIAES’s diagnosis requirement for each project, all executing entities are now obliged to compile and submit climate and environmental data. Projects also contribute to the body of knowledge available on climate change and its impacts.
- Prioritization of project locations updated to include climate change variables: Adaptation activities in highly vulnerable locations (e.g. coastal and marine conservation areas) are now prioritized.

Two months after the conclusion of the work by the mainstreaming team, the new revised FIAES 2010 Rules of Funding Eligibility were released to the public, in which both climate change concerns and the Ministry’s new vision and strategy were duly integrated. 40 projects were selected and funded from the 2010 tender process. A review of these projects found that 75% (30) of the funded projects contain at least one activity related to climate change adaptation, selected from the list of eligible activities proposed as part of the mainstreaming process.

Top Lessons
- Undertaking the climate risk assessment and mainstreaming process with the implementing institution requires ongoing and specific efforts, so as to strengthen the capacity of the individuals involved. It also puts the onus on the successful exchange of information between the Implementation Team and the stakeholders.
- An “active” mainstreaming process requires more time, work, and technical resources from the institution involved, but the process is highly rewarding and constitutes a long-term investment in the staff’s ability to support the work.
5. Lessons Learned and Conclusions

There is an urgent need to build the capacity of UN and government stakeholders on climate change risks and opportunities, and to provide the knowledge to assist them to manage these risks.

Workshop participants and high-level stakeholders in all five countries raised the need to have case studies to build upon, so as to benefit from the experiences and the lessons learned from technical staff that have supported mainstreaming efforts. The present document lays the foundation to undertake such work by highlighting the critical steps to follow and sharing notable best practices.

The basic 6-step process outlined here arose from the experiences in the five pilot countries. Although it varied somewhat in sequence and scope, the approach was highly successful in producing valuable technical climate assessments, building the capacity of the stakeholders, and laying the foundation for a lasting impact in each of the countries.

A few final lessons that can be shared with those who would like to replicate this process or parts of it:

- **CHAMPION:** The underlying necessity of partnering with an institution that is fully dedicated to the exercise, and is already convinced of the need to integrate climate change into its programming and strategies, cannot be overstated. It is crucial that there be a committed engagement between the Implementation Team and the stakeholder institution.

- **TIMING:** The activities described in this document will only be successful if they are developed and aligned with the pre-existing cycles of the selected documents and partner institutions. The Implementation Team should be flexible and opportunistic.

- **ESTABLISHING A FORMAL BODY TO OVERSEE MAINSTREAMING:** One of the outcomes of the project in Colombia was the establishment of an official UN climate change coordination committee, which now has the mandate to mainstream climate change considerations in the UN Country Team activities, further raise awareness, and enhance collaboration between agencies. Such a body can ensure that follow-up actions are implemented, activities at the country level are coordinated, and synergies between development activities are leveraged.

- **IMPLEMENTATION TEAM:** It is important to assemble a team of individuals who are competent, dedicated, professional, efficient, and whose skills will be complementary. A weak link in the chain of responsibilities will inevitably affect the overall delivery of the activity.

- **CLIMATE RISK ASSESSMENTS:** The assessment of climate risks is a technical matter that requires inter-disciplinary analysis and a familiarity with climate projections, uncertainties, and national context dynamics. The Climate Risk Project benefited from the support of external consultants who complement the skills of the Implementation Team.

- **PROJECT PRODUCTS:** In many of the Climate Risk Project’s pilot countries, the Institutional Map and the Climate Profile – which were originally thought of as background reports to the climate risk assessment – were much appreciated by stakeholders on their own merit. These documents should be considered as equally fundamental as climate risk assessment(s).

Finally, with the increasing global attention on climate change, governments are requesting more consistent and strategic technical support on how to address climate change and access related funds. In this context, the activities outlined in this document would benefit from being implemented as part of a larger umbrella of support on climate change to governments, NGOs, civil society, and the private sector – such as Low Emission, Climate Resilient Development Strategies. The process should be linked, and synergies found with other relevant initiatives and projects when possible.
Coastal roads built very close to the shoreline, such as this one near Dili in East Timor, are vulnerable to climate change impacts such as sea level rise. Mainstreaming climate change into development planning should ensure that existing infrastructure is adapted and new developments are prepared to withstand predicted mid to long term changes in climate. (Photo courtesy of Sérgio Teixeira Santos).
References

All documents generated as part of the Climate Risk Project are available on each country's page in the Adaptation Learning Mechanism (ALM) webportal (www.adaptationlearning.net).

Follow the hyperlink


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Bridge flooded with runoff water rich in eroded topsoil, San Vicente, El Salvador. In some areas of the globe, climate change is leading to sharp increases in sudden and intense precipitation, which risks overwhelming the land’s capacity to absorb rainwater. (Photo courtesy of UNDP El Salvador)
Annex 1: Terms of Reference for the National Climate Change Coordinator

Post title: National Climate Change Coordinator

Duration: Full time for 6-7 months

Location: Home based in <<country>>

Languages: English and (additional official national language)

I. Background

II. Scope of work

III. Functions and Key Responsibilities

The selected individual will be responsible for providing national context to the work while also coordinating workshop logistics and liaising with national stakeholders, as needed.

A. Undertake a map of institutions involved in climate change at the national level

• Review written materials on stakeholders /institutions engaged in climate change.
• Complement the findings with interviews with relevant decision-makers.
• Produce a report (12-15 pages) that introduces the institutional and regulatory framework; lists and describes the role and influence of these institutions, includes an illustration of the mapping, discusses the institutional capacity, describes the coordination and collaboration mechanisms that exist, and provides recommendations on how to improve the collaboration.

B. Assist the Climate Change Risk Expert by contributing nationally relevant information to the project reports

• Complement the work of the Climate Change Risk Expert on the preparation of the country climate profile (including providing advice on appropriate sources of reference and complementing the information gathered on national vulnerability and risks).
• Produce a 2-page summary leaflet of the Country Climate Profile.
• Comment and supplement the climate risk assessment with national information, e.g. on opportunities for synergies with existing initiatives, and links with institutions.

C. Organise one or two workshops to build the capacity of national and UN stakeholders to assess and mainstream climate change considerations.

• In collaboration with the Climate Change Risk Expert, prepare materials to develop the capacities of stakeholders in climate change and mainstreaming.
• With support from the project team, elaborate a workshop agenda.
• Coordinate the logistical arrangements for the workshop, including venue, invitations, catering, media outreach, any contracts that need to be issued, and training packages.
• Prepare and give PowerPoint presentations during workshops on topics including the Institutional Map and national vulnerabilities and risks.
• Produce brief workshops reports that highlight results, challenges, and lessons.

D. Provide timely management of national project activities

• Prepare work plans and budgets to deliver project results, and provide project delivery and expenditure updates to the UNDP Focal Point.
• Produce a final project report on results, challenges, and lessons learned.

E. Act as national focal point for the project, liaising with a broad group of national stakeholders, as well as regional and global networks if necessary

• Act as focal point for project relations - liaising with national and local governments, UNDP, and other UN representatives and NGOs, as well as regional stakeholders, to raise awareness of the project and climate change mainstreaming.
• Conduct analytical work related to the project.
• Liaise and meet with stakeholders to ensure appropriate engagement in the assessment and mainstreaming process.
• Share the workshop report and project products with stakeholders.

IV. Expected Deliverables

• An Institutional Map of the national climate change actors is produced.
• Contributions are made to the Country Climate Profile and the climate risk assessment.
• A two-page summary of the Country Climate Profile is available.
• One or two workshops are organised.
• Workshop and project reports are produced.

V. Qualifications and Competencies

• A minimum of 7 years of relevant work experience, including on development-, environment-, or climate change adaptation- related projects.
• Experience and ease in working and collaborating with the national government.
• Strong interpersonal and communication skills.
• Commitment to team and cross-disciplinary work.
• Emphasis on delivery of results and client satisfaction.
• Excellent organisational skills and ability to lead participatory processes.
• Reacts well to constructive criticism.
• An understanding of the UN and UNDP – including programming, practices and procedures – is an asset.
• Fluency (written and spoken) in both English and national language (if applicable) is essential.
Annex 2: Terms of Reference for the Climate Change Risk Expert

Post title: Climate Change Risk Expert
Duration: Up to 40 work days over a 6-7 month period
Location: Home based, with 2 possible missions to <<country location>>
Languages: English and (additional official national language)

I. Background

II. Scope of work

III. Functions and Key Responsibilities

The selected individual will be responsible for undertaking the climate risk assessment of selected national development plans, policies, and projects, as well as proposing adaptation measures to the relevant stakeholders.

A. Conduct a climate risk assessment and propose adjustments/entry points
   • Review literature and produce a brief climate change country profile (including expected climate projections, past observed climate change, likely risks, vulnerabilities, and potential impacts) in close coordination with the UNDP Country Office and the project team.
   • Undertake a climate risk assessment of a national or UN development document to be selected by the UNDP Country Office in consultation with government stakeholders. The report should identify:
     o How and where risks and opportunities are already incorporated in the document.
     o Risks of maladaptation.
     o Actions and entry points to manage the climate risks and opportunities to mainstream adaptation.
     o A set of priority actions for the consideration of the national entity.
   • Obtain feedback on the draft findings from stakeholders during a workshop.
   • Refine the findings based on these comments and finalise report.

B. Provide training to selected national stakeholders (decision-makers, technical staff)
   • Adapt existing training materials, including PowerPoint presentations and group exercises, and make them relevant to the national context.
   • Present and facilitate sessions on the science of climate change, important concepts (including vulnerability, adaptation, risks, and maladaptation), the adaptation and development nexus, climate change mainstreaming, and the UNDP methodology.

C. Contribute to lessons learned

Prepare a concise but comprehensive report on the activities undertaken, the products generated, and the lessons learned for the benefit of the Country Office and UNDP HQ.

IV. Expected Deliverables

The main deliverables expected from this consultancy are:
   • A 5-10 page Country Climate Profile.
   • A final validated assessment report on climate risks and opportunities of a national development plan, policy, or project.
   • Final training materials.
   • A brief report with activities, products, and lessons learned from the consultancy.

V. Qualifications and Experience

• Master’s or PhD degree in development/environment/climate change adaptation or a closely related field.
• A minimum of 10 years of relevant work experience in environment, development and/or climate change.
• Established track record in climate risk management and mainstreaming climate change in development assistance.
• Experience conducting research, analytical studies, and producing reports.
• Extensive experience in facilitating workshops and capacity development efforts.
• Focused on client needs, and responds positively to feedback.
• Strong interpersonal and communication skills.
• Strong cultural sensitivity and ability to work in multi-cultural environments; fluency in both English and <<other required language>> (written and spoken).
For further information, please contact:

Mrs. Veerle Vandeweerd
Director
Environment & Energy Group
Bureau for Development Policy
United Nations Development Programme
304 East 45th Street
New York, NY 10017
www.undp.org/climatechange