

Human Development Report Office
A Guidance Note for Human Development Report Teams



Linking Climate Change Policies To Human Development Analysis and Advocacy



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Foreword

It is with great pleasure that the Human Development Report Office (HDRO) and the Bureau of Development Policy's Environment and Energy Group (EEG) present this guidance note for regional, national and sub-national human development report teams on linking climate change policies to human development analysis and advocacy.

Since the launch of the global *Human Development Report 2007/2008* on climate change and the formulation of UNDP's Climate Change Strategy, several regional and national human development reports have been initiated, targeting a wide range of human development challenges brought about by climate change events.

This note has been prepared in response to the growing demand for guidelines to support the work of report teams and partners in integrating human development analysis and advocacy into more equitable, sustainable and climate-resilient development planning and policy debates. The note is not prescriptive; rather, it explores each stage of report preparation—from initial options for report objectives and partnerships, through research and consultation, to dissemination and follow up—while highlighting key conceptual, data, analytical, policy and advocacy issues for teams to adapt according to regional and national contexts.

The note provides practical suggestions on ways that reports can complement existing climate change responses and broader development initiatives supported by UNDP and its partners, and offers country examples and references to cutting-edge research and literature.

This is the latest in a series of guidance notes produced by HDRO and the Bureau for Development Policy that address such topics as the environment, gender, HIV and AIDS, human security and decentralization. The [series](http://hdr.undp.org/nhdr/thematic_clusters/) is online at: http://hdr.undp.org/nhdr/thematic_clusters/. More information on UNDP's work on climate change and sustainable human development is at the [UNDP Climate Community](http://www.undpcc.org) platform: www.undpcc.org.

We hope you find this guidance note useful and wish you success in our common efforts to link climate change policies to human development analysis and advocacy.



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Acronyms

BCPR: Bureau for Crisis Prevention and Recovery	NGO: Non-governmental organization
CDM: Clean Development Mechanism	MDG: Millennium Development Goal
EEG: Environment and Energy Group	OECD: Organisation for Economic Co-operation and Development
GDI: Gender-related development index	REDD: Reducing Emissions from Deforestation and Degradation
GEF: Global Environment Facility	UNDG: UN Development Group
GEM: Gender empowerment measure	UNDP: UN Development Programme
GHGs: Greenhouse gases	UNEP: UN Environment Programme
HDI: Human development index	UNFCCC: United Nations Framework Convention on Climate Change
HDRO: Human Development Report Office	UNHCR: UN High Commissioner for Refugees
HPI: Human poverty index	UNICEF: UN Children's Fund
ILO: International Labour Organization	UNIFEM: UN Development Fund for Women
IOM: International Organization for Migration	UNITAR: UN Institute for Training and Research
IPCC: Intergovernmental Panel on Climate Change	WHO: World Health Organization
IWRM: Integrated water resource management	WMO: World Meteorological Organization
LDC: Least-developed country	
NAPA: National adaptation programme of action	
NCSA: National capacity self-assessments	

Introduction

Climate change represents one of the world's greatest human development challenges. Global temperatures and sea levels are rising and will continue to do so throughout the 21st century. Human activity, particularly deforestation and the burning of fossil fuels, is driving this change by increasing atmospheric concentrations of carbon dioxide and other greenhouse gases (GHGs).

As a result, the world is experiencing greater weather extremes, changes in rainfall patterns, heat and cold waves, and increasing droughts and floods. These phenomena have a negative impact on the environment and on people's lives and livelihoods. Marginalized groups in the poorest regions are particularly affected, even as they are least responsible for these changes.

As discussed in the [global Human Development Report 2007/2008](#), short-term disasters and the longer-term effects of climate change can threaten people's abilities to lead long and healthy lives, to be knowledgeable, to have a decent standard of living, and to participate in community life with dignity and self-respect. Climate change not only threatens efforts to reach the Millennium Development Goals (MDGs), but could also lead to major reversals for certain groups in terms of income, health and education outcomes, while increasing global inequities. Climate change responses can also perpetuate inequality if not carefully designed.

Action must be taken now by all national and international stakeholders to find sustainable win-win solutions to adapt to the effects of climate change, many of which are already inevitable. Efforts must simultaneously be made to curb future risks through emission reductions, while ensuring sustainable, climate-resilient growth and greater energy access for the poor.

Most governments are already undertaking efforts to alleviate the negative impacts of climate change and increase the adaptive capacities of governance systems and institutions, often in collaboration with UNDP and other international partners. To develop a strategic policy base, detailed analyses of issues related to climate change have taken place, including through national communi-

cations under the United Nations Framework Convention on Climate Change (UNFCCC), national adaptation programmes of action (NAPAs) in the least-developed countries (LDCs), national capacity self-assessments (NCSAs), national energy plans, and "Stern-style" economic reports, based on the 2006 Stern review. Environmental concerns also feature in other strategic exercises such as poverty reduction strategies and MDG reports.

These processes do not automatically focus on human development and such key human development principles as equity, efficiency, empowerment and sustainability. Their policy impact can be strengthened through greater societal debate around human development and climate change impacts on different groups, as well as independent multistakeholder reviews of policy options. Presenting the science of technical debates in language that is accessible to non-expert audiences can enhance the advocacy potential of different policy processes.

In these instances, regional, national and sub-national human development reports can offer an effective model for looking at the impacts of climate change on people. They can be used to explore adaptation and mitigation policy trade-offs, and sustainable win-win solutions, especially for the most vulnerable groups.

The human development report approach involves multisectoral research, evidence-based analysis, and inclusive stakeholder consultations to review findings and policy recommendations. Although the focus of reports varies, those that are more successful in influencing policy tend to adhere to the recommended core principles of national ownership; consultative preparation; independent, objective data and analysis; and sustained advocacy. Human development reports are best understood as part of ongoing capacity development and advocacy processes in which the published report itself represents only one important activity.

The primary audiences of this guidance note are regional, national and sub-national report teams, as well as others wishing to incorporate climate change into other report themes.

The note introduces human development analysis of the impacts of climate change events, and key human development report steps, options and guidelines. It explores the report process—from initial objectives and theme selection to launch and follow up—and highlights important conceptual, data, analytical, policy and advocacy issues. It also provides examples for report teams to consider.

Although it touches on many climate change topics, this guidance note is not intended to provide a comprehensive discussion or prescriptive directions. Report teams are expected to apply the note's guidelines to their respective country and regional contexts.

The note is one of a series prepared for human development report teams. Others are on the environment, gender, decentralization, conflict and human security. Report teams are encouraged to use this guide with them. Additional human development and climate change resources include:

- [The Intergovernmental Panel on Climate Change \(IPCC\) Fourth Assessment Report](#)
- [Global Human Development Report 2007/2008 on climate change](#)
- [UNDP Bali Road Map: Key Issues Under Negotiation](#)
- [UNDP Resource Guide on Gender and Climate Change](#)
- UN Development Group (UNDG) Note on Climate Change and UN Country Teams
- UNDP Capacity Development for Environmental Sustainability Practice Note
- [National Communications Support Programme Resource Kit](#)
- UNDG guidance on mainstreaming environmental sustainability, forthcoming

Additional materials include the [HDR Toolkit](#), [Measuring Human Development: A Primer](#) and the [HDR Timeline](#), all available at hdr.undp.org/en/nhdr/support/.

Stage 1: Preparations

First: Deciding When to Produce A Climate Change Report

Substantial climate change research, analysis and policy advocacy initiatives already exist at national and regional levels. Before deciding to undertake a human development report on climate change, UNDP offices should understand the role and requirements of the report, and be sure of the value and national ownership of such a process, which usually spans up to two years.

Many governments, together with other national, regional and international actors, are already doing much to address the negative impacts of climate change and take advantage of human development opportunities. UNDP, sister UN agencies and other development agencies are supporting national and regional initiatives in many ways.

A human development report should only be undertaken if it can complement existing national and regional efforts to address the impacts of climate change.

The decision to prepare a human development report means ensuring that there are sufficient UNDP technical and financial resources to back a process that engages national and/or regional actors throughout, including in follow up after the launch. A series of inclusive, evidence-based policy debates and consultations that draw on national/regional expertise and help develop national capacities are needed.

If UNDP's goal is to support technical research on climate change scenarios and economic analyses led by international expertise, a human development report is likely not the best instrument. In these cases, UNDP offices can consider undertaking other types of climate change and human development research and advocacy initiatives.

Technical papers and other reports can be commissioned that look at human development issues, but involve a shorter preparation period, and may rely less on consultative and capacity development activities. For example, over a relatively short time span, UNDP Indonesia commissioned an advocacy study on climate change impacts and responses in the run up to the 2007 Bali negotiations.

(See [“The other half of climate change: why Indonesia must adapt to protect its poorest people.”](#))

Key Steps

Once UNDP and key partners have made the initial decision to draft a human development report on climate change, several preparatory steps must be taken. These include: agreeing on the report's objectives and themes; defining partnerships and resource mobilization strategies; building the report team and consultation mechanisms; training and orientation; and advocacy, outreach and communication planning.

These steps are essential to a successful report process. They can take six or more months to complete.

Selecting Objectives and Themes

The ability of human development reports to inform and influence climate change policy debates greatly depends on the degree to which the report process is nationally/regionally owned and supports national development priorities. National ownership starts with engaging national partners in a discussion of report objectives, themes, and the core human development report principles of consultative preparation; independent, objective data and analysis; and sustained advocacy.

As a policy advocacy tool, human development reports on climate change can support national and regional initiatives by adopting one or more of the following objectives:

- To inform and influence national and regional policies, programmes and measures for climate mitigation and adaptation, using the human development lens and independent analysis to focus on equity, empowerment, efficiency, and sustainable, inclusive growth;
- To support better integration of climate change and environmental policies into broader development and sectoral policy planning;

- To bridge the gap between the climate change and development communities by bringing together a wide range of national and international stakeholders;
- To support local, national and regional forums for debate on adaptation and mitigation policy trade-offs, and win-win solutions based on data and other forms of empirical evidence;
- To support advocacy initiatives that influence individual and societal behavioural change;
- To develop capacities for longer-term human development policy research, debates and advocacy; and/or
- In some cases, to reinvigorate and strengthen the national communications process.

It is important to obtain explicit consensus about the objectives at the outset.

How should a human development report on climate change begin?

UNDP bureaus and country offices need to identify critical stakeholders, and to agree on report objectives and how the report process can add value to ongoing climate change and related research, debate and advocacy initiatives. Broad engagement and buy-in of central and local governments and partners, including civil society and the private sector across all levels of society, should be sought from the beginning.

Human development reports should not duplicate or replace the work of existing national or regional institutions addressing climate change and other human development topics, but rather complement and support their initiatives.

What are the options for climate change themes?

Bureaus and country offices should consult with key stakeholders on selecting either a broader or a more focused report theme. The trade-offs and implications of addressing different thematic options should be carefully considered.

Given the crosscutting impact of climate change on a wide range of human development dimensions, including equality within and across groups, the selection of a more

comprehensive approach covering multiple sectors can be useful. A more focused theme, however, may prove practical in terms of demands on expertise, consultations, time and financing, while allowing for more targeted advocacy and a stronger catalytic role.

The advantages of pursuing a report with a broader approach include:

- An analysis of human development issues affected by climate change can be combined with other crosscutting themes such as human security, inclusive growth, social exclusion, the MDGs, etc.. In Thailand, for example, the report team has selected human security as its theme. The report explores several human security issues related to economic, food, health, political, personal and environmental security, as well as links to climate change.
- An analysis of a broad range of environmental, energy, land use and sustainable development issues can be pursued, with climate change as one important facet. For example, in Mongolia, the report team has selected the environment as its overall theme. The report explores several issues related to sustainable development, including climate change, as well as other environmental issues, such as mining.

Human development reports with a more focused approach to climate change can offer:

- More specific analysis and policy recommendations building on national communications, NAPAs in LDCs, NCSAs, technology needs assessments, and other adaptation and migration studies; and reports on topics related to poverty, governance, health, agriculture, water resources, land management, energy, communities and livelihoods; or
- A more comprehensive analysis of national and regional climate change issues, including adaptation and mitigation, if such analysis is not already available or planned through national communications, NAPAs and related initiatives.

Sub-regional reports add value where:

- Climate change events and human development impacts are cross-border in nature, e.g., droughts, floods, food insecurity and climate-induced migration;
- One country's policies and actions impact neighbouring and/or nearby countries, e.g., energy, security and trade policies;

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- There is the potential and/or need for regional cooperation to design and implement policy solutions, e.g., the monitoring and collection of technical and human development impact data, the management of shared river basins and reservoirs, decisions on the location of industrial development and infrastructure, etc.; and/or
- Opportunities exist to improve policy outcomes through sharing good adaptation and mitigation practices, and comparing different policy and institutional responses to common human development and climate change challenges, e.g., for energy and land use that support sustainable human development growth.

As part of initial preparations for a sub-regional report, a comprehensive scoping of common sub-regional climate change and human development conditions and synergies should be conducted.

The rationale for undertaking reports covering a larger number of countries—for example, an entire region as per UNDP classifications—should be considered carefully. These can make an important contribution, but the analytical and advocacy objectives need to be well planned, given the diversity of issues at such a broad level, and associated challenges of adequately covering so many countries with respect to data, analysis and participation. Regional bureaus and centres should weigh the trade-off between conducting less in-depth coverage of a range of issues, and exploring in some depth a key regional aspect of climate change through the human development lens.

How can the team facilitate national ownership?

National ownership of the process to agree on and select the objectives and themes of a report can be bolstered in a number of ways.

The objectives and themes can be proposed by national/regional partners and/or by UNDP at workshops, conferences or other public forums addressing climate change, economic growth, poverty reduction and similar issues. Ideas can also be exchanged in smaller-scale meetings with government and other national partners.

During the earliest preparation stages, report objectives and themes should be discussed with senior policy officials and climate change focal points responsible for national policies and reporting under the UNFCCC pro-

cess—e.g., climate change committees, national communications teams, institutions raising public awareness on climate change and designated national authorities for the Clean Development Mechanism (CDM).

UNDP can then facilitate an extended series of stakeholder meetings to discuss the themes, objectives and human development report process in more detail, including team composition and consultative review mechanisms. To support the discussions, UNDP should prepare a three-to-five page concept note outlining risk areas for adverse impacts of climate change on human development, and how a human development perspective can support climate change policy processes.

The stakeholder meetings should also highlight the core principles of the human development approach and reports, including the independence of report analysis. While various government and other national partners are engaged to the greatest degree possible, a human development report does not necessarily require full political endorsement prior to publishing, unlike national communications. It is not a consensus document. Ultimately, it reflects the informed views of the human development team comprised largely of national experts.

In some cases, it is useful to organize larger workshops on objectives and theme selection at which options for climate change human development reports can be discussed.

For example, broad cooperation from a variety of stakeholders was critical to shaping the messages of the 2009 *Croatia Human Development Report* and defining the value it would bring to existing knowledge on climate change in Croatia. An initial meeting with more than 30 representatives of the Government, academia, businesses, donors and non-governmental organizations (NGOs) helped to ensure that the report could target gaps in existing knowledge and take advantage of ongoing research. In this meeting and a series of consultations that preceded it, stakeholders identified adaptation as a key area because of the overall lack of information at the national level and the potential importance of the findings to policy-making in important economic sectors. Stakeholders also identified “critical sectors” that merited extra analysis in terms of potential socio-economic impacts, namely, coastal zones and water, agriculture and tourism.

Partnerships and Resource Mobilization

As part of selecting report objectives and themes, it is essential to identify and establish partnerships with a wide range of stakeholders assessing, addressing and affected by climate change. Partnerships can help build national ownership, and support capacity development and better follow up.

A diverse set of national and international partners can be targeted, representing central and local level governments, marginalized groups, civil society, universities, the media, the private sector, the UN country team, donors and other development institutions.

Report teams should conduct a simple, rapid assessment of the key players and stakeholders on climate change and related development issues, and any institutional and consultative processes in place. They should determine the status of the NAPA, NCSA and national communications, and whether or not there has been a “Stern-style” report on economic costs. It is important to know who is taking the lead on climate change in the ministry of economy/finance or office of the president/prime minister, and understand the official negotiating position on mitigation, on the need for adaptation and related topics. Other relevant pieces of information include studies on national or regional impacts.

This mapping can be based on information collected through:

- Informal expert group briefings;
- Semi-structured and open-ended questionnaires;
- National, regional and international e-networks, such as the human development, and environment and energy networks; and/or
- Existing scopings, e.g., those conducted for the CDM.

More detailed stakeholder surveys looking at an in-depth set of policy questions can also be considered depending on time and resource constraints. For example, in Croatia, an institutional assessment questionnaire was used to collect information on actors involved in climate change and related policy processes.

Who are key partners for climate change reports?

Specific partners who may be key to report preparation and follow up at the national and sub-national levels include:

- UNFCCC climate change focal point teams preparing national communications, NAPAs and NCSAs, or designated national authorities on the CDM;
- Interministerial climate change committees and related coordination bodies;
- Institutions involved in poverty reduction strategies, other sectoral plans and disaster risk management, including the offices of the president/prime minister; ministry of planning; ministry of economy/finance; line ministries, including environment and natural resources, energy, agriculture, infrastructure, transportation, industry and home affairs; ministries for other relevant sectors; national statistics offices and parliaments;
- Other institutions responsible for raising public awareness on climate change, including local governments;
- Groups most vulnerable to the risks of climate change events, e.g., rural farmers facing drought, coastal populations at greater risk to the threat of flooding, indigenous populations dependent on the use of local ecosystems, etc.;
- Actors involved in other projects funded by the Global Environment Facility (GEF) and Small Grants Programme;
- Major public and/or private energy and industrial entities, water companies/utilities, hydro-meteorological service providers and environmental protection agencies;
- Environment, human rights, gender and other development NGOs;
- Youth organizations and the education sector;
- Scientific research centres, academia and think tanks;
- The media, including print, radio, television, web-based, etc.;
- UN agencies, and other bilateral and multilateral development organizations; and/or
- Other parts of UNDP country offices and regional centres.

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Depending on the report's themes, certain groups can play more critical roles. As part of efforts to integrate climate change and human development issues as effectively as possible in national planning, and to ensure the highest levels of government support for follow up on report advocacy messages, the involvement of ministries of planning/economy/finance and the office of the president/prime minister is critical throughout the report process. Efforts to include representatives of vulnerable groups are also paramount.

Given the complexity of analysis on climate change and human development, the visibility of reports on these issues and their value for policy debates, there should be a minimum level of coherence across different reports in terms of approaches to common topics, methodologies for assessing human development impacts and steps to ensure inclusive preparation.

How can partnerships support resource mobilization?

Sufficient levels of financing need to be mobilized to ensure that the report meets the Minimum Standards for the [HDR Corporate Principles](#): national/regional ownership, participatory and inclusive preparation, independence of analysis, quality of analysis, flexibility and creativity in presentation, and sustained follow up throughout the report process. Funds can also support innovation in report analysis and advocacy.

Most reports are financed with UNDP core resources. Efforts should be made where possible to leverage additional financial and technical resources for activities that can support existing efforts to address climate change and related awareness campaigns, integrated strategies, national communications, etc..

Report teams are encouraged to explore other resource mobilization opportunities through:

- National government partners;
- UNDP global trust funds and programmes;
- UN system agencies and initiatives, including the GEF, UNEP, the UN Development Fund for Women (UNIFEM), UNICEF, the International Labour Organization (ILO), the World Bank, the UN High Commissioner for Refugees (UNHCR), the World Health Organization

(WHO), the World Meteorological Organization (WMO), the UN Institute for Training and Research (UNITAR), UN country teams and the International Organization for Migration (IOM);

- Bilateral donors (from the North and South);
- Regional banks and other multilateral development agencies;
- International foundations and other development partners; and/or
- Private sector organizations, including chambers of commerce and business councils.

With each partner, report teams should exercise special care to ensure real and perceived independence, objectivity and national ownership of the report's contents and process, especially if partners are providing technical inputs.

Depending on the specific needs of the country and report, partners can fund new research, surveys, parts of a chapter, capacity development events, public awareness campaigns and other advocacy initiatives, post-launch activities, etc.. In Kazakhstan, for example, the Ministry of Foreign Affairs provided US \$35,000 to finance the printing of the report and launch activities in the capital and two other major cities.

Beyond financial support, partners can also be called on to offer in-kind contributions through seconded staff, peer reviews, consultant references, premises for events, and the use of existing data and research.

Early involvement of partners in the initial planning and funding of a report can increase the likelihood that they will provide financial and in-kind support for follow-up capacity development activities and other projects recommended in the report.

What is needed for budgets and project documents?

Report teams should formulate a budget comprising core components, and areas requiring additional financing and their possible sources. Teams may also prepare more tailored funding and partnership proposals.

Report budgets should include sufficient funds for:

- A series of inclusive consultations;

- The services of an editor and/or copy-editor, and translation; and
- Launch and post-launch follow-up activities.

The budget should be included in the report project document, which should also encompass a timeline, work plan, monitoring and evaluation criteria, and terms of reference, following the standard UNDP project document template. It should be shared among report partners.

Ideally, report activities should be included within a larger project or programme document. This can help increase national ownership, especially under a national execution/national implementation modality; leverage synergies with the related work of UNDP and UN agencies; and ensure better follow up on any report recommendations.

Building the Report Team and Consultation Mechanisms

Preparatory discussions in support of theme selection and climate change partnerships should also focus on the composition of the report team and mechanisms for inclusive preparation. Membership can overlap in consultation mechanisms. The following groups can be streamlined to match national and regional needs:

Steering committee: It usually comprises a relatively small group of high-level policy makers from the ministry of economy, environment and/or energy, and other line ministries, as well as senior civil society and private sector leaders, and international partners. It can include members of the national climate change committee, if one has been established, and senior members of national communication and NAPA processes. The steering committee is responsible for discussing strategic aspects of the report process and contents, including themes, capacity development, consultations and advocacy. Its engagement throughout the report process is essential.

Advisory committee: It can encompass a larger group of slightly less political, more technical experts, and other stakeholders who can help shape the contents of the report. Advisory committee members may represent some of the same institutions that are on the steering committee, but may offer more detailed comments throughout the report process, e.g., on methodologies, outlines, drafts, etc.. The advisory committee can meet on a regular basis in person and/or through email.

Advisory committees and other consultation mechanisms can be adjusted to fit national contexts. For example, in Cambodia, a single senior advisory group has been established to support the report process. It has members from the government (the Supreme National Economic Council, National Committee on Climate Change, Ministry of Health and Ministry of Women's Affairs); civil society (the Royal University of Phnom Penh, the Cambodia Centre for Study and Development in Agriculture, Star Kampuchea and Oxfam America); the private sector (the ACLEDA Bank and Cambodia Development Resource Institute); the UN country team and the donor community (the Danish International Development Agency).

Core team: It brings together the main authors, researchers and experts to produce the report and support its consultations, advocacy and capacity development work. The core team usually involves one or a consortium of key national research institutes and/or individual experts, including the lead and overall report authors and editors. There are several contractual models available for retaining their services.

Given the diverse human development issues and policies that climate change encompasses, the core team should include a full range of relevant research and analytical expertise. This depends on the report, but may entail knowledge on statistics, the environment, energy, gender, economics, land use, agriculture, public policy, health, education, social safety nets, culture, advocacy, etc..

There should be a balance between climate change experts with knowledge of broader development issues, and development experts knowledgeable on climate change. Ensuring this balance is the job of the UNDP offices at each stage of preparation.

Ideally, report team members and institutions should be independent and perceived as likely to produce objective, empirically based research and findings, without political or other bias. To the greatest extent possible, the core team should reflect sub-national, gender and ethnic diversity.

Peer reviewers: Independent peer reviewers, national and international, should be identified at the start of a report process and used for comments at key stages. They ideally possess a diverse set of skills, like the members of the core team. To be eligible as independent peer reviewers, they cannot otherwise have been already involved in the report drafting process. Depending on national busi-

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ness practices, some reviewers may receive remuneration. UNDP regional human development, environment and climate change focal points can suggest experts on a case-by-case basis.

Other consultation mechanisms: Other climate change consultation mechanisms should also be considered. These can comprise surveys and public debates with local stakeholders, such as representatives of marginalized groups, public citizens and NGOs. They might also involve expert panels and workshops with people working on statistics, the environment, energy and/or infrastructure, and in the media and civil society. These activities can be supported through meetings, web pages, blogs, and virtual networks at national and regional levels, including the UNDP environment and energy, and human development report networks.

For example, the Croatia report established a dedicated web page and email group to share, collect and discuss ongoing steps and contents of the report. The Human Development Report Unit in the UNDP Regional Centre in Colombo has developed a series of consultation mechanisms, including network discussions, to support its regional reports. (See the note summarizing this process at <http://hdr.undp.org/en/nhdr/support/>.)

Terms of reference should be prepared for each consultation mechanism.

When should a team use expertise from outside the country or region?

Human development reports are meant to support national capacity development. This means drawing on national expertise, as well as providing opportunities to expand it. In some areas of expertise related to climate change, human development and other report activities—such as the use of statistical surveys, human development index calculation, human-development-oriented policy recommendations, advocacy campaigns, peer reviews and language editing—it may be useful to consider drawing on expertise from other countries and regions.

Report teams should rely not only on expertise from developed countries, but also from other transition and developing countries facing similar climate change challenges through South-South modalities.

Drawing on expertise from outside the country requires building enough time and funding into work plans

and budgets to allow for these experts to work with local experts on concepts, data, methodologies and analysis as part of larger national capacity development efforts.

Training and Orientation

Once the core report team has been identified, team members should receive training and a general orientation under the lead and facilitation of the UNDP country office on:

- Human development concepts, including links to climate change and the environment;
- Local climate change sectoral, thematic and crosscutting issues, including gender;
- Human development measurement, including human development indices, and other quantitative and qualitative data;
- Human development policy applications; and
- HDR Corporate Principles and Minimum Standards.

Such training is essential, as environmental experts may not have human development expertise, while those with human development report experience will often be lacking climate change knowledge. Sectoral experts may not be familiar with gender issues, and so on. Without such orientation, subsequent decisions on outlines, research and advocacy may be less well informed.

Choices related to the scope and duration of the initial training and orientation depend on resources. At a minimum, informal orientations should take place with as many team members as possible. With additional time and financial resources, larger workshops can be considered for the core team and other stakeholders.

Several technical resources are available to support training, in addition to this guidance note. Many are listed in annexes 1 and 2 of this guidance note. Some can also be found at the NHDR Workspace [<http://hdr.undp.org/en/nhdr/support/>]. They include the:

- [Global Human Development Report 2007/2008](#) on climate change
- [UNDP Bali Road Map: Key Issues Under Negotiation](#)
- [UNDP Resource Guide on Gender and Climate Change](#)
- UNDG Note on Climate Change and UN Country Teams

- UNDP Capacity Development for Environmental Sustainability Practice Note
- [National Communications Support Programme Resource Kit](#)
- Human development report resources including the [HDR Toolkit](#), [Measuring Human Development: A Primer](#), the [HDR Timeline](#) and [Environment Thematic Guidance Note](#).

Advocacy, Outreach and Communications Planning

One of the main objectives of climate change human development reports is to inform, influence and infuse development policy with human development perspectives on climate change issues and solutions through advocacy, outreach and communication activities. To maximize the potential for success, report teams should begin planning advocacy, outreach and communication strategies during the report preparation stage. These plans should start to identify:

- The different target audiences (central/local government, civil society, general public, marginalized groups, private sector, donor community, etc.);
- Key issues and human development climate change advocacy messages;
- Pre-launch, launch and post-launch follow-up activities that build on, support and complement existing climate change processes; and
- The financial, institutional and human resources needed for implementation.

One of the key challenges faced by climate change teams is the need to present important scientific data in ways that enhance understanding and interpretation of more human-centered advocacy messages.

Advocacy, outreach and communication plans should be expanded during the second stage of the report process: research, analysis, consultation and drafting.

Stage 2: Research, Analysis, Consultation and Drafting

Key Steps

Once preparatory steps are largely completed, report teams can embark on research, analysis, consultation and drafting. Several activities need to be planned and completed during this stage, building on and feeding into existing national and regional climate change processes. Report teams can:

- Brainstorm and develop the report's concept note with key partners;
- Conduct data and literature reviews;
- Identify existing data and knowledge gaps, and the scope of research;
- If needed, commission new data collection, e.g., surveys (quantitative and qualitative) and research, policy reviews and capacity development needs assessments;
- Plan and implement participatory consultations and capacity development exercises;
- Plan and implement ongoing advocacy, outreach and communication activities;
- Create detailed chapter outlines for discussion and revision;
- Initiate drafting and revisions based on internal and/or external reviews and consultations—two, three or more drafts may be needed to ensure adequate review and ownership; and
- Organize final peer reviews, including by experts in the fields of statistics, gender, and other relevant sectoral and crosscutting themes explored by the team.

The overall goal of this stage is not only to produce a high-quality report, but also to ensure national ownership, and support capacity development and advocacy among partners responsible for considering and acting on the report's policy recommendations. The consultative mechanisms described in the previous chapter should be closely

involved throughout this stage, which usually requires six months or longer.

Specific climate change and human development issues vary across and even within countries. The following section offers a non-prescriptive summary of some of the conceptual, measurement and policy areas that can be explored by report teams during the research, analysis, drafting and consultation stages. These can help shape the final report text and advocacy messages.

A Conceptual Framework

One report objective is to support ongoing national and sub-national efforts to inform and mobilize policy makers and public opinion. Some key stakeholders may view climate change as more of a technical environmental issue, rather than as a topic requiring priority consideration and integration across all development policies.

Report teams can partially address this challenge through an explanation of the conceptual framework linking human development and climate change. This framework should form the basis of the report's analysis and support broader advocacy strategies.

Some links to explore include:

Capabilities, freedoms and choices

Human development is ultimately both a goal and a process of empowering people to lead the lives they value by expanding their capabilities, freedoms and choices. Climate change events, such as more frequent and intense periods of drought and rain, are already having a negative impact on people's ability to lead long and healthy lives without fear and threats, to be knowledgeable, to have a decent standard of living, and to participate in community life with dignity and self-respect. Climate change may not only delay reaching the MDGs, but could also cause major reversals in human development achievements over

the longer-term. Please see Annex 7 for more on connecting climate change and the MDGs.

Equity and multidimensional poverty

The human development approach calls for looking at issues of equity within and across national borders in identifying development challenges and solutions. Who is benefiting or being left behind, and why? Human development places a focus on the poor and other socially, politically and/or economically excluded groups defined by sex, age, income, ethnicity, location, physical/mental ability, etc.. It is these groups, and future generations, who are most vulnerable to the risks of climate change, while being least responsible for them. They may also be subject to negative fallout from climate change policy responses. At the same time, some of the groups and regions that have historically contributed most to global emissions, while benefiting from growth, are least vulnerable to its impacts. Targeted policies and increased investments need to reach vulnerable people if climate responses are to support a new development paradigm that also seeks to reduce poverty and inequity.

Empowerment and participation

The empowerment and participation of vulnerable groups, and other stakeholders, is both a goal of human development and a means to address climate change. Empowerment is achieved when stakeholders are given the resources and opportunities to participate in the development process. Participation and social inclusion also have intrinsic value. Developing the adaptive capacity of individuals, groups and organizations to help themselves and others to respond to and prevent climate change shocks is key to adaptation and mitigation. Participation can improve the effectiveness of climate change solutions by supporting informed debates and decision-making, policy implementation and revision. Access to credible, authoritative and independent information is fundamental to allowing people to make informed decisions and choose behaviours that could change the course of climate change and its impact on their lives.

Efficiency

All countries face the challenge of limited capacities and financing to varying degrees. Economic efficiency involves looking at whether people and institutions can be made better off by reallocating resources or goods, without making others worse off over time or across locations. For example, what are the medium- and long-term costs and returns of investing in greener technologies or in disaster risk management institutions, compared with the possible costs of not investing, or of investing more or less up front? How might investments or other policy responses in one industry or sector lead to reduced competitiveness and unemployment in other industries? Policy makers also confront multiple and sometimes competing priorities, such as the need to finance increased access to energy for the poor and for sustainable economic growth, while also funding technologies to reduce emissions. It is necessary to consider more efficient uses of resources when looking at policy options, trade-offs and the possibility of win-win solutions, including their impact on different sectors, income groups and other areas influencing inequality.

Sustainability

Solutions to the current and future threats posed by climate change require careful discussion of the environmental, social, economic and political sustainability of policies. Climate change policies need to be planned for the short (1 to 5 years), medium (5 to 10 years) and long term (10 to 50 years). Economic growth does not have to be at odds with environmental protection. Policy options can be explored that offer win-win solutions by being sustainable across the dimensions of the environment, growth and human development. The combination of certain types of pro-poor economic growth and sustainable climate-resilient development can lead to better human development outcomes. For example, climate change responses may bring benefits in sectors such as agriculture, while leading to better energy security or improved disaster preparedness. Enhanced capacities among governance systems and institutions to design and implement climate change policies are also key to supporting a broader range of sustainable human development priorities.

For more on links between climate change, the environment, sustainability and human development, see:

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- The work of the [Commission on Sustainable Development](#)
- Chapter 20 of “[Perspectives on Climate Change and Sustainability](#)” by Working Group II of the IPCC’s *Fourth Assessment Report*
- The findings and recommendations of the [Millennium Ecosystem Assessment](#)

Related conceptual frameworks

Other human development concepts can be highlighted in climate change reports, including human security, human rights, and local values, religious beliefs and intellectual traditions.

The human security approach highlights climate change risks and vulnerability. It complements the human development objective of growth with equity by emphasizing deprivations that may occur as a result of short-term disasters and longer-term impacts from climate change, such as growing food insecurity and health threats. It considers as well the impacts of development and response policies on equity and risk.

For more on the human security approach, see:

- The work of the [UN Trust Fund for Human Security](#)
- The [UNICEF study on the effects of climate change on children](#)

The human rights-based approach looks at the threats posed to marginalized groups, and underscores the responsibility of the public sector and other actors to address these. Governments have specific obligations under international human rights law to protect those who are affected by the impacts of climate change and policies related to them. Human rights standards and principles can in some contexts be used to strengthen advocacy arguments, and support more clearly defined and better targeted policy responses across a range of social, economic, political, cultural and civic arenas. For more, please see the [analytical study on climate change and human rights of the Office of the High Commissioner for Human Rights](#).

Special Data Topics

Critical to progress in human development is measurement and monitoring. Sound statistical analysis and objective empirical evidence form the foundations of human development research, informed policy debate and advocacy.

Guiding data standards

Report teams should adhere to data standards from the start of the report process. Rigorous statistical principles must be used to ensure that data are, to the greatest degree possible, representative, relevant, comparable, timely, sourced and used as the basis of analysis, rather than to selectively support pre-fashioned conclusions.

In cases of poor and/or conflicting data and interpretations, such limitations should be discussed within the report and during consultations. This is especially important given the uncertainty of some aspects of climate change data. For more on quality assurance and statistical principles, see the primer *Measuring Human Development* on the HDR website.

To help ensure high-quality data, report teams should take advantage of statistical advisory groups and independent statistical peer reviewers.

What data are available—and where?

A variety of quantitative and qualitative data comes from various national and international sources. Existing data from ongoing national communications, NAPAs, the CDM and other processes should be used whenever possible. In some cases, new data can be collected.

Given the range of human development issues climate change touches upon, and vice versa, there is a vast array of possible data sets. One of the first tasks is to define the scope and type of research required. This should be based on a review of existing data and literature, the identification of data gaps, and possibilities for commissioning new research and data, given available time, financial resources and statistical expertise.

Depending on the country context, quantitative and qualitative data can include:

Technical data on environmental indicators: As part of efforts to map the effects of climate change, report

teams can draw on existing technical data at sub-national, national, regional and global levels. While these data are key to supporting analysis of human development impacts and policy responses, they should not be overused in the actual text of the report. A human development report is not meant to be a technical publication.

Instead, the following types of data can be referenced and/or published as an annex: greenhouse gas inventory (CO₂ concentrations, emissions, etc.); temperature patterns; rainfall/storm and drought patterns; coastal water levels, fresh water resources and fisheries; forest coverage, land degradation and agricultural production; other environmental and ecosystem data; effects of specific weather-related events; and energy-use patterns for industry, services, communities and households.

Where available, this data should be drawn from national communications, national hydro-meteorological studies and [IPCC](#) assessment reports. Global databases and data sets can be found at the [International Development Research Centre](#). Additional climate and regional trend studies are available from the [WMO](#). Recent academic research, including dissertations, may also prove useful.

Broader human development data sets: In addition to the more technical data of climate change, data reflecting past and current human development trends can also be incorporated into analysis and advocacy. These data can encompass a range of statistics reflecting progress or lack thereof towards the MDGs and other local human development objectives. They should support analysis that goes beyond monetary-based poverty to consider multiple dimensions of human development at the macro-, community, household and individual levels.

These data can support climate change analysis across such areas as: demographics and population density; labour, employment and livelihoods; income; health; HIV and AIDS; education; access to public services and migration.

Macroeconomic and sectoral data: As part of the multidisciplinary analysis required for human development research on the impacts of climate change, additional macroeconomic, and relevant sectoral and budgetary data should also be collected. These might cover: the energy sector; agriculture, fishing and forestry; industry; tourism; trade and services; science and technology; transportation; housing, infrastructure and settlements; the informal sector and disaster management.

Choosing sectors to focus on can draw on different criteria, depending on national and regional contexts. Two of the most important considerations include potential impacts on vulnerable groups, and relative importance for sustainable economic growth.

Regional and international data comparisons: Report teams can consider the use of national, regional and international data for comparative analysis, and to support a more informed and comprehensive discussion of policy options.

In Croatia, the report team drew on partnerships with national research institutions and industry research groups, as well as national experts and one international climate change economist, to collect, analyse and present data on: the projected costs of extreme weather events; cardiovascular morbidity and mortality during heat waves; the desirability of tourism destinations; employment, including seasonal and informal; sustainable agriculture and land use; water resources for hydropower and irrigation; poverty and vulnerable groups, especially the elderly; sea level rise and coastal zone threats.

Some primary sources for report data include censuses on population and housing, household surveys and administrative entities. Secondary data sources include national and international NGOs; bilateral, regional and multilateral development agencies; MDG reports and other national reports filed under UN conventions and treaties; and existing national and regional human development reports.

If the report team uses a variety of data sources, it may face the challenge of different and/or non-comparable data. Data collectors may use different definitions, and data collection and interpretation techniques. The meta-data for data sets may vary. Teams should assess these discrepancies, and explain them along with other data limitations.

New data collection— as needed

Report teams should draw on existing data sources whenever possible. If data does not exist, or is not reliable, comprehensive or up to date, teams can collect new data. Depending on needs, and financial, institutional and time constraints, this new data can include specially commissioned:

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- Household surveys, e.g., on assets, time use and coping mechanisms;
- Perception surveys, e.g., on climate change threats and the quality of public services;
- Expert and other stakeholder surveys, e.g., on policy options and trade-offs; and/or
- Case studies, e.g., local examples of climate change impacts and solutions.

Report teams can also consider collecting data to assess capacity development needs, such as for households to adapt to climate change risks, for institutions to design and implement adaptation and mitigation policies, and for civil society to influence policy debates.

By including a combination of qualitative and quantitative sources, report teams can more easily translate technical data into human-centered stories and advocacy messages.

In Croatia, the UNDP Country Office commissioned both a public opinion survey and a rapid institutional capacity assessment. The public opinion survey polled 1,000 Croatians, finding that 96 percent believe climate change is a “serious” problem. The data were relatively inexpensive but important. They shaped the report’s recommendations and became an important “hook” for journalists writing about the report. The exercise included a telephone survey structured to produce data for comparison with European data, and a series of structured interviews of key policy makers and climate change experts.

It may be more helpful for teams to identify multi-year research and development priorities for governments and other partners, rather than to attempt to carry out in-depth research on a limited budget and timetable. In Kazakhstan, for example, the report team faced a dearth of information on the impact of climate change on human development, especially in the Russian and Kazakh languages. Even though the report and the 2nd Kazakhstan National Communication to the UNFCCC coincided, there was limited background information on national and sub-national monitoring indicators. The quality of data collection and availability of historical data was constrained further by insufficient funding and expert capacity. For these reasons, a decision was made not to invest in extensive studies on ecosystem adaptation capacity and valuation of impact, but rather to highlight these topics

as requiring more in-depth and regular government-led research.

Data analysis

Report teams can consider several techniques for data analysis. Decisions regarding the scope of such work are determined in part by the availability of data and existing expertise for data analysis. It is important to work with what is available, while maintaining an awareness of what data can and cannot say.

Despite potential constraints, teams can use this stage of the report preparation process as an opportunity to strengthen national capacity for climate change data analysis. Some key areas of data work are:

Uncovering inequality and marginalization through data disaggregation: Report analysis should explore and identify possible occurrences of inequality, vulnerability and marginalization, which may be more apparent through disaggregating data. Some of the most important dimensions of disaggregation are by sex, age, income, physical/mental ability, geographic location, ethnicity, livelihood and education (see Table 1).

In some communities, the people least able to adapt to increased temperatures, droughts and limited access to clean water include women, the elderly, children and indigenous groups. Other marginalized groups might include people living in rural areas with low income and education levels, lower-skilled laborers and their families, or urban slum-dwellers in cities susceptible to typhoons and coastal flooding.

Risk and vulnerability assessments: Assessing the climate change vulnerabilities of different geographic locations and the communities living there is an important measurement and analysis technique. The results of such assessments can allow for more effective advocacy, improved decision-making and better targeted adaptation programmes. Such assessments should include at least three elements.

First, they should identify the correlates of vulnerability. For example, programmes that help households cope with unexpected shocks are better targeted to areas of high vulnerability but low poverty, while programmes targeted to structural poverty are better placed in areas with high poverty but low vulnerability.

Second, assessments should examine the sources of vulnerability by characterizing the risks and shocks faced by populations and their distribution.

Third, they should determine gaps between risks and risk management mechanisms, including household and public social safety net measures related to consumption, health, education and employment programmes, as well as cash transfers, crisis-related transfers and insurance-related transfers.¹

Vulnerability mapping can draw on quantitative and qualitative indicators, including focus group discussions to assess vulnerabilities. Research can explore the ways in which certain livelihoods are linked to climate change risk and vulnerability, and what coping strategies and resources are available to address these risks.

This information can be combined with other data. For example, vulnerability to droughts can be indicated by data on rainfall, crop types, seasonal migration, etc.. Additional information on research tools to support vulnerability assessments and mapping can be found in

Risks, Shocks and Human Development.

Mainstreaming gender data for analysis and advocacy: To identify inequities related to gender and corresponding options for better policies, report teams can consider a wide range of gender data. Disaggregating indicators by sex is an important aspect. Researchers, however, should go further to examine the underlying causes of gender inequities, how power relations influence these, and the links to human development outcomes for women, men and society as a whole.

Data can reveal gender vulnerabilities that are exacerbated by climate change events, including those related to income, decision-making power, access to meteorological data, health choices and outcomes, education and training. They can also reveal more specific cases of discrimination and risk related to climate change events and policy responses, such as higher rates of gender-based violence, different school enrolment rates, unequal access to public services, and poorly targeted assistance in the aftermath of climate shocks.

Table 1: Dimensions of Disaggregation for Uncovering Inequality

Individual characteristics	Spatial dimensions
Sex Physical/mental ability Age group (children, youth, elderly, etc.) Ethnic group Migrant/non-migrant Head of household status	National Regional Provincial District level Urban/rural Urban slum/non-slum
Employment	Income
Sector (agriculture, industry, services) Status (formal, informal)	Wealth quintile Poverty line (above and below poverty line) Access to credit/insurance Land ownership, land use
Education	Other possible dimensions
Attainment (primary school, secondary school, university) Literacy	Other minority groups Conflict-prone areas Other economic classes requiring special policy guidance

Source: Adapted from Measuring Human Development.

What about the use of composite indices?

Several climate change and more general environmental indices have already been developed, including the [Ecological Footprint](#). Despite the many limitations of composite indices (technical complexity, misinterpretation, over-aggregation, etc.), their careful use can lead to a better understanding of key climate change and human development issues, and support stronger advocacy campaigns for solutions to address these issues. Report teams can use existing composite indices, adapt them, or in some contexts, create new ones. Additional information on the use and limitations of these indices is available from the primer *Measuring Human Development*.

As part of broader analysis on national and regional human development conditions, report teams can calculate the four human development composite indices: the human development index (HDI), gender-related development index (GDI), gender empowerment measure (GEM) and human poverty index (HPI). The global Human Development Report is also reviewing options for incorporating environmental dimensions into existing and/or new global composite indices.

Human Development Questions for Analysis

This section provides a series of questions and topics that report teams can explore to uncover human development concerns, and inform adaptation and mitigation policy recommendations (see Box 1 for a basic definition of adaptation).

Given the wide range of issues and specific development contexts, the section is not meant to be prescriptive or comprehensive. In a general fashion, it touches on some key topics related to: the direct impacts of climate change on people, especially vulnerable groups; related sectoral impacts, and adaptation and mitigation issues; links to conflict and migration; integrated development planning; and capacity development.

The questions are intended to help teams better define the scope and focus of their analysis while applying the multidisciplinary human development approach and its principles of equity, efficiency, empowerment and sustainability. Examples from different regions and countries are included to highlight practical challenges and possible policy responses.

Impacts on people, especially vulnerable groups

What are the major climate change risks and their impacts on regional, national and sub-national efforts to achieve the MDGs, and other sustainable growth and human development objectives?

Please see Annex 7 for a general table of links between climate change and the MDGs.

What groups are vulnerable to these risks over what time span and why? Which groups may benefit from climate-related changes over time?

What are the underlying causes and factors behind this “inequality of vulnerabilities”? How can they be addressed?

Although the effects of climate change differ across and within countries, there are several broad categories of possible impacts on human development. See also Boxes 2, 3 and 4 on vulnerability factors and issues for different groups.

Rising sea levels and exposure to extreme weather events: Rising sea levels and weather events such as tropical storms, floods and landslides are already endangering communities in small-island developing states, and along coastal zones and inland flood plains. These events can be devastating, with long-term consequences—often overlooked—that could stall human development progress across generations. If global temperatures increase by 3 degrees to 4 degrees Celsius, 330 million people could be

Box 1: What Adaptation Means

Adaptation is a response to actual or expected climatic conditions or their effects that have a negative impact on human development. It is a broad concept that can be used to describe a variety of ways to reduce vulnerability. Adaptation to the negative impacts of climate change generally takes place in two ways: anticipatory (before impacts take place) and reactive (as a response to initial impacts). Adaptation measures can be implemented by public and private actors.

Source: Adapted from the IPCC Third Assessment Report.

Box 2: The Factors of Vulnerability*

The degree to which climate change affects human development depends on levels of both risk and vulnerability. Vulnerability is different from risk. Whereas risk is about exposure to external hazards over which people have limited control, vulnerability is a measure of people's capacity to manage such hazards—to prepare for, cope with, and recover from them without long-term, potentially irreversible losses of well-being.

When tropical cyclones and floods strike a city like Manila in the Phil-

ippines, they expose the whole city to risks. However, people's vulnerabilities are concentrated among those living in the overcrowded, makeshift homes of the slums along the Pasig River, not in wealthier areas.

In any country, the processes by which risk is converted into vulnerability are shaped by the underlying state of human development, including inequalities in income, opportunity and political power that marginalize the poor. High levels of economic dependence on agriculture, lower aver-

age incomes, already fragile ecological conditions, and location in areas that face more extreme weather patterns are all vulnerability factors.

*There are different definitions used for vulnerability and other climate change-related terms. Teams should carefully assess which definition best fits the scope and goal of their report, and use terms consistently throughout it.

Source: Adapted from the global Human Development Report 2007/2008, Chapter 2.

displaced by flooding, particularly in Bangladesh, Lower Egypt, Viet Nam and the small-island states in the Caribbean and Pacific.

For more on links between climate change and city housing, transport, and energy, please see the [UN Habitat website](#).

Reduced agricultural production and food insecurity: Climate change will affect rainfall, temperature and water availability for agriculture in vulnerable areas, particularly in sub-Saharan Africa, Latin America and South Asia. As a result, the additional number of people affected by malnutrition could rise to 600 million by 2080. Losses in agricultural productivity can reduce income and diminish access to health and education, reinforcing cycles of poverty and vulnerability. By contrast, in certain regions and for some groups over different time spans, climate change may spur agricultural productivity, and improve food security and livelihoods.

For more on food security, please see the work of:

- [The Food and Agricultural Organization](#)
- [The International Fund for Agricultural Development](#)

Water stress and scarcity: In some regions, climate change will mean new rain patterns, droughts and longer-term water shortages. Changed run-off patterns and

glacial melt will add to ecological stress, compromising flows of water for irrigation and human settlements. An additional 1.8 billion people could be living in a water scarce environment by 2080. Central Asia, Northern China, the Middle East, the Andean region and the northern part of South Asia are particularly vulnerable to water scarcity.

For more on the impact of droughts, please see the work of:

- [The UNDP Drylands Development Centre](#)

Box 3: Which Groups May Be Hardest Hit?

In Croatia, the report team looked at several groups vulnerable to the risks of short- and long-term impacts from climate change. These include groups living in parts of the country where livelihoods are more dependent on seasonal weather patterns, such as farmers and fishermen; those with lower education and income; the elderly, especially those susceptible to respiratory and heat-related health threats; and female-headed households. The report recommended additional research on these groups to formulate better responses.

- [The African Drought Risk and Development Network](#)
- [The UN Convention to Combat Desertification](#)

Ecosystems and biodiversity: All communities depend on ecosystem services for a wide range of livelihoods, even as these ecosystems are influenced by human activity. Climate change threatens the existence of ecosystems such as wetlands, the Arctic and coral reefs. The damage already caused to these systems and the biodiversity they support has an instrumental and intrinsic impact on human abilities to fish, hunt and pursue other livelihoods with economic, social and cultural importance.

For more on biodiversity, please see the work of:

- [The Convention on Biological Diversity](#)
- For more on ecosystem-based adaptation responses, such as policies for coastal zone wetland management, please see the work of:
- The [International Union for the Conservation of Nature](#)

Human health: Climate shocks are a potent threat to some of the most valuable assets of people in poverty—their health and labour. Deteriorating nutrition and

falling incomes increase vulnerability to illness and result in fewer resources for medical treatment. Droughts and floods can lead to a variety of health problems, including an increase in diarrhoea among children, cholera, skin problems and acute malnutrition. Changing weather patterns may expose an additional 220 million to 400 million people to malaria. Higher temperatures can lead to greater heat stress risks among vulnerable groups, who also face increased respiratory distress due to increased ozone concentration.

For more on links between health and climate change, please see the work of:

- [WHO](#)
- [The World Bank](#)
- [Studies published by The Lancet](#)

What are the different impacts of climate change on women and men?

To what degree are adaptation and mitigation strategies gender-differentiated?

It is important for report teams to analyse the dif-

Box 4: Reducing Risks for Children

Eight key interventions that will contribute to reductions in climate change risks for children are:

1. Household water supply, sanitation and hygiene—including water treatment, oral rehydration therapy, hygiene education and sanitation.
2. Groundwater recharge and watershed remediation—including rainwater harvesting, run-off catchments, watershed clean-ups, tree planting and restoration of biodiversity.
3. Disaster risk reduction and preparedness—including risk mapping and evacuation plans.
4. Environmental protection and

restoration—such as school and community gardens, tree planting, and clean up of stagnant water and solid waste.

5. Renewable energy solutions—including clean energy for homes, schools, solar and wind, water pumps, and clean and efficient household solutions for cooking and heating.
6. Health-related interventions—including improvements to basic public health infrastructure, environmental health surveillance, insecticide-treated mosquito nets, and malaria prophylaxis and treatment.
7. Community capacity-building—including environmental educa-

tion for child-friendly schools and spaces, microenterprises for women, education for sustainable development, participatory local actions and vocational training/job creation.

8. Social protection and psychosocial support—including life skills and conflict resolution, education and other programmes to support livelihoods and community functioning, “safety net” interventions to help prevent dislocation and exploitation of children, and interventions to address family and individual stress and trauma.

Adapted from [UNICEF’s “Climate Change and Children.”](#)

ferent climate change impacts on women and men, and options for gender-differentiated policy responses.

Such an analysis should examine women's and men's perception of what constitutes risk and their response to it, as well as its impact on health, water availability, time use, food security and income. The roles of women and men in ecosystem management and decision-making are also key. "Gender-neutral" policies sometimes fail to harness women's expertise in ecosystem and natural resource management, given their roles in homes and communities for fuel and water collection, as well as the harvesting of crops.

Teams should also look for evidence of the positive roles women and men can play in terms of disaster preparedness, knowledge of ecosystem services, coping mechanisms, energy and land use, information sharing and participation in debates.

For more on links between climate change and gender, please see:

- The work of the [Women's Environment and Development Organization](#)
- [UNDP Resource Guide on Gender and Climate Change](#)
- [Gender and Development](#), volume 17, Number 1, March 2009 on climate justice

Sectoral impacts, and adaptation and mitigation issues

What are the impacts of climate change events on areas such as water and sanitation, agriculture, forestry, fishing, infrastructure, settlement, tourism, roads and transport, industry, trade, energy and other sectors?

What are the effects on the people and communities depending on these sectors for livelihoods, income, cultural identity, etc.?

In dealing with these questions, teams may want to look at how integrated water resource management (IWRM) frameworks address climate change impacts while linking to other sectoral and crosscutting topics. Adaptation is not just about physical infrastructure, but also about where it is created, who controls it, and who has access.

The principles driving water sector reform, including related to allocation, pollution control, equity, environmental sustainability and economic development, can support better planning and management at national and local levels. The National Integrated Water Resources Management and Water Efficiency Plan in Kazakhstan, for example, aims to set water use levels within the limits of ecological sustainability and provides a coherent planning framework for all water resources.

For more on IWRM and links between climate change, water and human development, please see resources available from:

- The [Water Governance Programme](#)
- The [Waterwiki Net](#)
- [IPCC Special Report on Climate Change and Water](#)
- [UNDP on water management and gender](#)

For more information on other sectoral methodologies, please see:

- The [recommendations of the UNFCCC](#)

For more information on employment, livelihoods and climate change, please see:

- The [work of the ILO on green jobs](#)

How can social safety net programmes better target and empower people to cope with the more immediate and longer-term impacts of climate change, especially marginalized and vulnerable groups?

How can effective adaptation mechanisms and coping strategies already used by vulnerable groups be strengthened?

In addition to the shock of severe weather events, vulnerable groups also face gradually increasing risks caused by climate change. Strengthened social protection programmes can help people cope with those risks while expanding opportunities for employment, nutrition and education. Climate change provides a strong rationale for strengthening safety nets for the poor, especially through employment programmes, cash transfers, crisis-related transfers and insurance-related transfers.²

For more on adaptation issues and updates on strategies, please see:

- [Adaptation Learning Mechanism](#)

- [Linking Climate Change Adaptation Network](#) (Eldis)
- [weADAPT](#)
- [AfricaAdapt](#)
- World Bank [on adaptation](#) and the [2010 World Development Report on climate change](#)
- [UNFCCC](#)

How can disaster risk management institutions and response systems be strengthened?

Climate-related disaster reduction plans need to be integrated into national development strategies and institutions. The Government of Indonesia, for example, has enacted the National Disaster Management Law as a regulatory framework for managing climate risk. With the support of UNDP, the Government has developed a National Climate Change Action Plan that includes improved disaster prevention, protection against malnutrition, and investments in water supply and flood management.

For more on disaster risk management and responses, please see the work of:

- [UNDP's Bureau for Crisis Prevention and Recovery \(BCPR\)](#)
- [International Strategy for Disaster Reduction](#)

For more on the gendered dimensions of disaster risk, management and adaptation to climate change, please see UNDP's "[Stories from the Pacific.](#)"

In addition to looking at issues of adaptation, report teams can also explore a wide range of mitigation topics, including energy and land use, their human development implications, links to adaptation topics discussed above and corresponding policy options (see Box 5).

Analysis can critique existing government plans for adaptation and mitigation. For example, many countries have a national climate change action plan. It can be useful to compare these plans with the country's stated mitigation goals, their international commitments, and the reductions advocated in the global *Human Development Report 2007/2008* and in current discussions about climate change mitigation.

How can government policies and regulations be optimized to balance long-term needs for emissions reductions, while reducing inequity and increasing access to energy for the poor, promoting sustainable growth and supporting other human development priorities?

The energy sector is the biggest generator of greenhouse gases, with approximately 85 per cent of carbon dioxide emissions from fossil fuels.³ Agriculture and land use changes are two other sources.⁴

Report teams can look at the different energy options, their human development implications, trade-offs, and opportunities for sustainable, efficient, equitable and empowering win-win solutions. These can cover a wide range of policy areas including: the setting of a national carbon budget with targets to reduce emissions incorporated into national legislation; tax and/or cap-and-trade programmes; increased energy and fuel efficiency through stronger regulations and their enforcement in industry, transportation, agriculture, buildings and appliances; fiscal incentives for the development and use of alternative renewable energies; development and use of cleaner technologies through participation in the Clean Development Mechanism and related mitigation programmes; advocacy and support for new and expanded "green jobs"; and better targeted social and economic investments for groups, regions and sectors adversely affected by mitigation policies and trade-offs.

How are people and productive sectors meeting their energy needs? What inequities exist in access to and use of energy across groups?

The global *Human Development Report 2007/2008* notes: "(E)xpanded access to affordable electricity for the poor remains an overarching development priority. Current projections show that the number of people relying on biomass will increase over the next decade and beyond, especially in sub-Saharan Africa. This will compromise progress towards several MDGs, including those relating to child and maternal survival, education, poverty reduction and environmental sustainability."

What negative impacts do current forms of energy use have on people and their communities in terms of health, sustainable livelihoods, etc.?

What additional energy is needed to support achievement of the MDGs and related human development objectives?

What alternative forms of energy can be considered: wind, solar, bio-fuels, hydro, etc.? What are the links between a shift to bio-fuels or other alternative energy sources and food prices/food security and livelihoods?

As the Framework for a Post-2012 Agreement on Climate Change: A proposal of the Global Leadership for

Climate Action states: “Energy security and climate security are intertwined and should be addressed at the same time.... Renewable energy is a win-win proposition for all countries:

- It provides opportunities for poverty alleviation and for satisfying the energy needs in rural and remote areas;
- It helps generate employment and creates local economic opportunities;
- It helps curb climate change and contributes to the protection of human health caused by air pollution” (2007, p. 8).

For more on mitigation and related energy issues, please see:

- [UNDP on energy](#)
- The [World Bank on climate change mitigation](#)
- The World Resources Institute, in particular their “Climate, Energy and Transport” section. It presents a [roadmap](#) for a secure, low-carbon energy economy, jointly created with the Centre for Strategic & International Studies. See also the [“Technology, Green Power and Renewable Energy”](#) use section.
- *The Stern Review on the Economics of Climate Change*, especially Part III, Chapter 12, [“Opportunities and wider benefits from climate policies.”](#) See also Part IV, Chapters 14-17, [“Policy responses for mitigation.”](#)

How do land use, agriculture, deforestation and degradation contribute to climate change and related human development impacts? What are some of the key issues for more sustainable, equitable human development solutions?

Box 5: What Mitigation Means

Mitigation refers to all human interventions that reduce the sources of or enhance the sinks for greenhouse gases (adapted from the IPCC *Third Assessment Report*; see also the IPCC *Fourth Assessment Report*).

What climate change mitigation means: reducing the extent (pace, rate, magnitude, probability, scope) of human induced global climate change.

What climate change mitigation does not mean: disaster mitigation.

What is the governance capacity to control illegal logging and define indigenous land tenure? What are the links between rising commodity prices, and the demand for agricultural land use and deforestation?

Deforestation releases sequestered carbon into the atmosphere as a result of burning and loss of biomass. According to the IPCC, about 11 to 28 percent of total emissions are caused annually from deforestation. Healthy forests are critical to food security and the sustainable livelihoods of an estimated 1.6 billion people globally, including about 60 million indigenous people who are almost wholly dependent on them.

Afforestation and Reforestation and Reducing Emissions from Deforestation and Degradation (REDD) represent major opportunities for countries to reduce their overall emissions. So that poverty reduction efforts are also supported, greater attention needs to be given to the involvement of local and often poor communities depending on these resources for their livelihoods.

Report teams can explore how conservation, sustainable forest management and other forms of land use, biodiversity, protected areas, payment for ecosystem services and ecotourism can empower local people and advance mitigation efforts.

For more information on REDD, agriculture and land use, please see the work of:

- The [UN REDD Programme](#)
- The [World Bank on forests and forestry](#)
- [Global Canopy Programme](#)

Links to conflict and migration

What are the links between climate change and conflict?

Climate change can exacerbate existing inequalities that can increase conflict and threats to local, national and regional stability and security. Increased competition over unequal access to land, water and other key natural resources, for example, can erupt in violence.⁵ This has been the case in countries such as Chad, Kenya and Sudan, where desertification and drought have heightened competition for land between settled cultivators and nomadic pastoralists.

Report teams can consider the role of climate change in conflict, and explore solutions to address underlying

causes and prevent future risks.

For more on crisis, conflict and climate change links, please see the work of:

- [BCPR](#)
- The [Governance & Social Development Resource Centre](#), a consortium including the UK Department for International Development and the Institute of Development Studies

*What are the links between climate change, migration (internal and international) and human development?*⁶

In addition to looking at ways in which climate change events can lead to new or different migration patterns, report teams can also examine how the movement of people can have a positive or negative impact on ongoing adaptation measures.

What is the impact of internal/international migration on the environment, the economy, rural/urban planning and land use?

What measures can be taken to lessen negative impacts and ensure more positive human development outcomes and successful, equitable adaptation measures?

Report teams can look at how the effects of climate change are already causing people to leave their homes in search of better livelihoods, water, health and food security. In the early stages of droughts and changing rainfall patterns, farmers may reap fewer crops and pastoralists may find less pasture for their cattle.

Households that previously engaged in temporary migration as a coping strategy may reach a tipping point and choose to leave permanently. Those with the best resources, skills, contacts and opportunities will probably leave first. Undocumented migrants and refugees can be among the most affected vulnerable groups.

For more information on migration and climate change, please see:

- The work of [IOM](#), including its [2008 report](#)
- A [June 2009 report](#) by a consortium including CARE, UNHCR and the UN University
- [Global Human Development Report 2009](#)

Integrated development planning

To what degree are adaptation and mitigation part of wider growth and poverty reduction strategies, national development planning and budgeting, sectoral strategies and crosscutting strategies such as decentralization?

How are these issues addressed in provincial, municipal and community development plans and budgets?

How can a focus on vulnerabilities and inequalities be emphasized within these frameworks, and the frameworks linked with a country's NAPA and related adaptation and mitigation responses?

There is no one set of rules that can guarantee the integration of adaptation policies. Country contexts differ. Effective integration depends on the ability to identify current and future risks and vulnerabilities, as well as corresponding adaptation strategies.

The UNDP Adaptation Policy Framework provides guidance on designing and implementing programmes that reduce vulnerability to climate change by both diminishing potentially negative impacts and enhancing any beneficial consequences of a changing climate. It recognizes the importance of integrating national policy-making efforts and “bottom-up” civil society movements.

The framework emphasizes five principles:

- Adaptation policies and measures are assessed in a developmental context;
- Adaptation to short-term climate variability and extreme events is explicitly included as a step towards reducing vulnerability to long-term change;
- Adaptation occurs at different levels in society, including the local level;
- Both the adaptation strategy and its implementation process are equally important; and
- Building adaptive capacity to cope with the current climate is one way of preparing to better cope with the future climate.

The framework focuses on the involvement of stakeholders at all stages. It recognizes the need for wide public awareness, advocacy, communications and outreach strategies.

For more on integrating adaptation strategies, see:

- [The Adaptation Learning Mechanism](#)

For more on integrating adaptation and the broader environmental considerations of climate change risks and opportunities into strategic planning, please see:

- The Organisation for Economic Co-operation and Development (OECD): [“Policy Guidance on Integrating Climate Change into Development Co-operation”](#)
- [“Strategic Environmental Assessment and Adaptation to Climate Change”](#)

What is the level of involvement of different groups in national and local adaptation, energy and mitigation policy debates, and the planning, implementation, review and evaluation of related initiatives?

How can their informed and meaningful participation be increased and institutionalized?

Participatory debates and consultations on the human development impacts of climate change and policy responses have both intrinsic and instrumental value. When planning consultative events, report teams should consider the benefits and potential drawbacks of different types of consultations related to timing, human resources, funding and knowledge needed for coordinators to facilitate and participants to contribute meaningfully (see Table 2).

For more information on participatory tools, see:

- [Enabling Environmental Justice: Assessment of Participatory Tools](#)
- The [World Bank on an enabling environment for civic engagement](#)

Capacity development

What actions can improve national capacities at the central and local levels to address climate change?

Capacity development is essential to climate change adaptation and mitigation efforts, as well as broader environmental sustainability activities at regional, national and sub-national levels.

Examples of requisite capacities would be: to collect, assess and share climate change information, including meteorological and socioeconomic data on human development risks and vulnerabilities; to support new public-private partnerships, and cross-border and regional cooperation; and to lobby, negotiate, and coordinate financial and technical assistance, and other post-Kyoto

framework priorities.

Report teams can explore capacities in several areas:

Core drivers of capacity change: There are four main drivers that mutually reinforce each other:

- Leadership, which ranges from getting buy-in from political leaders in promoting climate change issues, to unleashing collective capacities at the local level;
- Institutional arrangements, including intra- and inter-agency coordination, and clarity of functions and responsibilities;
- Knowledge, including the effective capture and utilization of local knowledge while facilitating access to emerging scientific knowledge; and
- Accountability, in terms of holding government agencies and leaders to account for national and regional commitments, and strengthening institutions with oversight functions.

Functional capacities: Capacities for designing, implementing and evaluating climate change and related environmental sustainability initiatives include to:

- Assess a situation, define goals, and analyse and choose options;
- Formulate policies, legislation, plans and strategies;
- Budget, manage and implement, including mobilizing resources;
- Monitor, evaluate, report and learn;
- Engage stakeholders and undertake multisectoral collaboration;
- Generate, manage, use, and communicate information and knowledge; and
- Design and/or reform climate change and environmental institutional arrangements.

Technical capacities: These are needed to carry out adaptation, mitigation, and environmental and natural resource management policies, and to mainstream environmental sustainability across sectors. They comprise capacities to:

- Protect, manage and sustainably use ecological goods and services;
- Design and manage pollution prevention, abatement and control programmes;

Table 2: Weighing the Merits of Consultations

Advantages

- Improved quality of decisions
- More ownership of decisions, and follow up
- Increased fairness and equity
- Increased legitimacy
- More democratic
- Develops capacity of participants
- Early identification of potential pitfalls

Challenges

- Ineffective public involvement
- Powerful groups dominate process
- Participants may be unable to agree
- Final outcomes can be less predictable
- Unsustainable over time

- Protect, manage and sustainably use natural resources;
- Assess, reduce and manage climate change and environment-related risks;
- Use laws and regulations, awareness and education, economic instruments, and voluntary instruments as tools for environmental sustainability;
- Mainstream climate change and environmental issues across development sectors; and
- Implement climate change and related multilateral environmental agreements, and international environmental cooperation programmes and policies.

For example, based on its analysis, the Croatia report team offered a series of recommendations on ways to build capacities to better predict climate change and to incorporate this knowledge in decision-making. These include the capacities for:

- Short-term forecasting, especially oriented towards extreme weather events;
- Seasonal forecasting to help actors predict variables for upcoming seasons;
- Longer-term climate modeling to help in estimating climate change impacts; and

- Sharing this knowledge for better use in early warning systems, and better coordination of data sets and policies at the national and regional levels, e.g., through the formation of an inter-ministerial working group on climate change coordinated by the Ministry of Environmental Protection, Physical Planning and Construction.

For more on assessing national and regional capacities, please see:

- [UNDP on supporting capacity development](#)

Consider Trade-offs and Identify Win-Win Policy Options

Based on a review of existing and, in some cases, new data, report teams can establish context-driven criteria for evaluating policy trade-offs and opportunities for win-win scenarios across different groups, sectors, and time scales. Evaluation criteria should incorporate the human development principles of equity, efficiency, empowerment, participation and sustainability.

For example, HDR teams can explore how the regressive nature of some “green” taxes presents a large trade-off that needs to be corrected with additional policy instruments, such as better-targeted social programs. Teams can look at the sustainability of new green jobs created through fiscal stimulus, as well as the positive and negative effects over time of carbon dioxide abatement on different sectors.

For more on these and related examples of policy examples, please see:

- Studies by the N. Stern group, in particular Bowen et al. 2009, “An Outline of the Case for a ‘Green’ Stimulus”
- [Studies by McKinsey](#) on the sectoral impact of CO₂ abatement for several countries
- The [IPCC’s Fourth Assessment Report](#) with summary tables of adaptation and mitigation policy options by sector

Teams should then offer policy options and/or recommendations that:

- Prioritize policy responses;
- Outline short-, medium-, and long-term responses, making reference to other climate change events and timelines at the national, regional and international levels;
- Identify specific policies and next steps needed for their

implementation, rather than only general adaptation and mitigation objectives or standalone projects;

- Include policies that are gender-based and target specific vulnerable groups;
- Reference existing adaptation and mitigation policy frameworks, and their institutional implementation mechanisms;
- Suggest specific actors responsible for each area of policy follow up (including specific public sector institutions at all levels, civil society, private sector organizations, donors, etc.);
- Estimate costs and possible sources of financing, where possible; and
- Identify the need for additional data, research and policy debate where relevant.

In Croatia, the team provided a cost-benefit analysis of a range of policy options. Recommendations covered the need for additional research as well as strengthened policies and improved institutional capacities. Specific stakeholders were targeted, including the Ministry of Sea, Transport and Infrastructure; the Ministry of Agriculture, Forestry and Water Management; the Ministry of Economy, Labour and Entrepreneurship; and the Croatian Agricultural Extension Institute. The report offers short-, medium- and long-term recommendations related specifically to current and ongoing development initiatives, such as the country's 2008 Energy Strategy.

NOTES

¹ *Risks, Shocks and Human Development*

² *Global Human Development Report 2007/2008*.

³ *Ibid.*

⁴ Adapted from the global *Human Development Report 2007/2008* questions and answers.

⁵ *Global Human Development Report 2007/2008*.

⁶ Frank Lazcko, IOM HDRO Seminar.

Stage 3: Finalization, Launch, Advocacy and Follow Up

Even the most thorough climate change research and carefully prepared human development policy recommendations are limited in value unless relevant audiences know about and understand them. For this reason, careful finalization of the report and related launch and follow-up advocacy are just as crucial as the initial preparatory, research, analysis, consultation and drafting stages.

Key Steps

Some of the steps that climate change report teams should consider are as follows.

Finalize the report

Once the main text has been drafted, there are still several steps to turn the draft into a high-quality advocacy publication:

- Revise and prepare a near final draft, drawing on participatory consultations with the main climate change stakeholders, steering committees, advisory groups, etc.;
- Submit the draft to independent peer reviewers with climate change, gender, and other thematic and sectoral human development expertise, as well as to statistical peer reviewers;
- Complete overall editing for clear advocacy messaging, logical flow and consistent tone of the main text and related contents including an executive summary, foreword(s), introduction (including a full description of the report process, team composition, nationally owned participatory mechanisms, links to other human development and related reports, etc.), final chapter of policy messages and recommendations, and annexes (including statistical tables, references /bibliography, technical notes, glossary, etc.);
- Complete the document design and layout for a clear, creative, professional presentation;

- Copy-edit the final document and subsequent publisher proofs; and

- Translate the report into national and other relevant languages.

This portion of the preparation process can take three months or more.

To be most effective, report teams should start planning and implementing advocacy and outreach strategies from the very beginning of the report preparation. Teams should plan enough time and resources for translation, editing, designing and printing.

Prepare for a high-impact launch

Teams have several steps to consider when planning for the launch of the report, each requiring different advocacy, communication and media skills, and close collaboration with national climate change partners. They may need to:

- Fine-tune an advocacy strategy, including media, communications and outreach plans;
- Identify and sharpen key advocacy messages;
- Consider different nationally owned launch events: press conferences, policy seminars or public debates in the capital, and other local and/or regional locations;
- Prepare press kits including: a summary of the report, press releases targeting different audiences and detailing different climate change messages, frequently asked questions and answers, data fact sheets, CD-ROMs and DVDs;
- Organize pre-launch briefings for print, radio, TV and electronic media;
- Offer media coaching to report team members and other launchers;
- Plan for ways effectively to deal with politically sensitive issues; and/or

- Consider different launch timings, taking into consideration national political events and related climate change processes.

This portion of the HDR process can take one or two months or more. Teams generally should not wait until the report is finalized to start launch preparations.

Conduct post-launch follow-up activities

Regardless of how successful a launch event is, a series of post-launch activities should also be considered to achieve the greatest possible impact. These should draw on and support existing national climate change processes, aiming to:

- Ensure broad marketing and dissemination of the report and advocacy materials;
- Organize dissemination seminars or workshops for specific target audiences, e.g., civil society, in rural as well as urban areas;
- Organize television and/or radio debates with the participation of high-level government, civil society, development agency and other prominent personalities;
- Conduct public awareness campaigns, building on the initial national launch(es);
- Organize media field trips to key adaptation and mitigation programmes that illustrate successful initiatives and/or areas in need of additional support;
- Support other creative and longer-term advocacy initiatives; and/or
- Support UNDP and UN country team follow up through value-added programming, e.g. more detailed mitigation assessments and costing, sector-specific technical studies, capacity development programmes, support for post-Kyoto negotiations, etc..

Monitor, assess and evaluate impact

Evaluation is a key aspect of any long-term, evidence-based research and policy cycle. Report teams can consider numerous ways to evaluate advocacy and use the results to feed back into new research and advocacy initiatives:

- Establish indicators and related criteria for assessing cli-

mate change policy impact at the beginning of the report process (for more information on indicators, please see the GEF M&E Resource Kit, GEF Tools and Guidelines, UNEP Project Evaluation Manual);

- Design and fund methods for gathering feedback from stakeholders;
- Monitor public debates and media;
- Track the influence of report advocacy on national and local adaptation and mitigation policies, capacity development programmes, legislation, budget allocations, parliamentary and public debates, data collection and research, educational curricula, donor priorities and climate change partnerships;
- Share information gathered with other climate change stakeholders; and
- Use this information to inform new research, advocacy and policy initiatives.

Climate Change Advocacy

Advocating for possible solutions to the many human development challenges of climate change is one of the key objectives of climate change reports.

Advocacy, and related communications and outreach strategies should be planned with sufficient financial and technical expertise from the early stages of the report process and continued throughout the launch and sustained follow-up activities. This work should help leverage and complement related advocacy efforts also being organized as part of other national, regional and international events through the next post-Kyoto framework.

Two of the most important aspects of this advocacy work involve:

- Tailoring climate change messages to different groups, including the vulnerable; and
- “Translating” the science of climate change into easily understandable, people-centered human development messages.

HDR teams can also consider other launch and longer-term climate change data, and advocacy, outreach and communications initiatives, including:

- Publications of background studies and data not included in the report;

STAGE 3

- Policy briefs for national and regional partners;
- Simple summaries of key messages;
- Web-pages with report and related resources, and interactive features;
- Public awareness campaigns, including posters, plays, cross-country advocacy “caravans,” and radio and TV programmes; and/or
- Support for human development and climate change curricula.

Targeting Different Groups

Depending on local contexts and objectives, report teams can target a variety of climate change stakeholders who ideally will be involved throughout the report process:

- Teams preparing national communications under the UNFCCC, NAPAs and NCSAs;
- National and local institutions involved in MDG-based poverty reduction strategies, other national sectoral plans and disaster risk management, including offices of the president/prime minister; ministries of planning, and economy/finance; line ministries, such as for the environment; statistics offices and parliaments;
- The donor community;
- Major energy and industrial entities, public and/or private;
- Advocacy, human rights, gender and other development NGOs;
- Scientific research centres and think tanks;
- Groups most vulnerable to the risks of climate change events;
- The general public; and/or
- Local, regional and international media.

For example, for the Kazakhstan national report on climate change, the UNDP Country Office targeted high-level Kazakh decision-makers at the ministries of environment, economy and foreign affairs, and among parliamentarians. The report was launched in three languages (Kazakh, Russian and English) in the capital, Astana, and two other major administrative centres, Almaty and Semey. As a result of the advocacy activities throughout

the process, the level of awareness about climate change impacts was raised. This in turn led indirectly to the Government’s ratification of the Kyoto Protocol.

The media are among the most important avenues for advocacy, comprising print, radio, television and the Internet at regional, national and local levels. Given the limited time and financial resources of most report teams, the strategic use of various media to help spread information and support debate on climate change topics is essential.

Youth represent another critical audience. Youth—and the many youth sub-groupings based on sex, location, education, ethnicity, etc.—can be important participants in public debates and can serve as strong advocates. Report teams can prepare and/or support special youth publications and youth outreach events, such as through television shows and the use of celebrity spokespeople.

[Peace Child International](#) developed a youth booklet with the HDRO to follow the global *Human Development Report 2007/2008*. [“Two degrees of separation between hope and despair: A young people’s summary of the United Nations Human Development Report 2007/2008.”](#) was launched on Youth Day 2008. The booklet was produced by young people, and included drawings, poems, and stories on climate change and development. A diary of the editing process is on Peace Child’s website.

Across all audiences for advocacy, special care should go into crafting effective messages using language and communication methods familiar to each group, and avoiding unnecessary jargon. Messages should be tied to local realities, e.g. jobs, customs, political culture, etc.. Compelling human stories can create interest and strengthen policy messages.

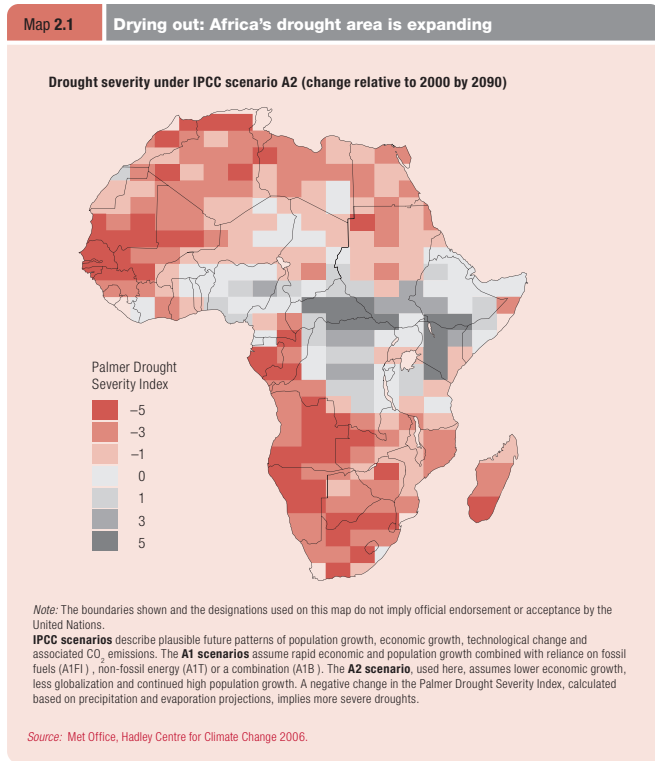
“Translating” Science into Human Stories

While it is important to base adaptation and mitigation policy recommendations on the latest scientific evidence, effectively advocating for these policy responses requires language that is accessible and persuasive. This can be done through creative data presentation (maps, tables, charts, graphics, diagrams, text boxes), quotes, and photographs in the main report and supporting documents, and in advocacy tools such as posters and videos.

Time should be taken to ensure a mix of quantitative and qualitative data clearly presenting empirical evidence and analysis, while showing the human face of issues.

Figure 1: Graphic Displays

Three examples of conveying complex data in ways that can be readily grasped come from the global *Human Development Report 2007/2008* (upper left and right) and an Institute for Energy Technology paper on energy efficiency policies and measures (lower left).



Patterns of Energy Efficiency Measures

“Spider” diagrams show different measures—in this case, policy options—on the spokes of a web. The greater the preference for a certain policy type, the more the pattern will resemble the hands of a watch indicating the preferences. The broader the policy in the sector, the more equally spread the measures on the different axes so that the pattern resembles a pentagon or other polygons depending on the number of categories. The figure here shows energy efficiency measures in the residential sector in Norway.

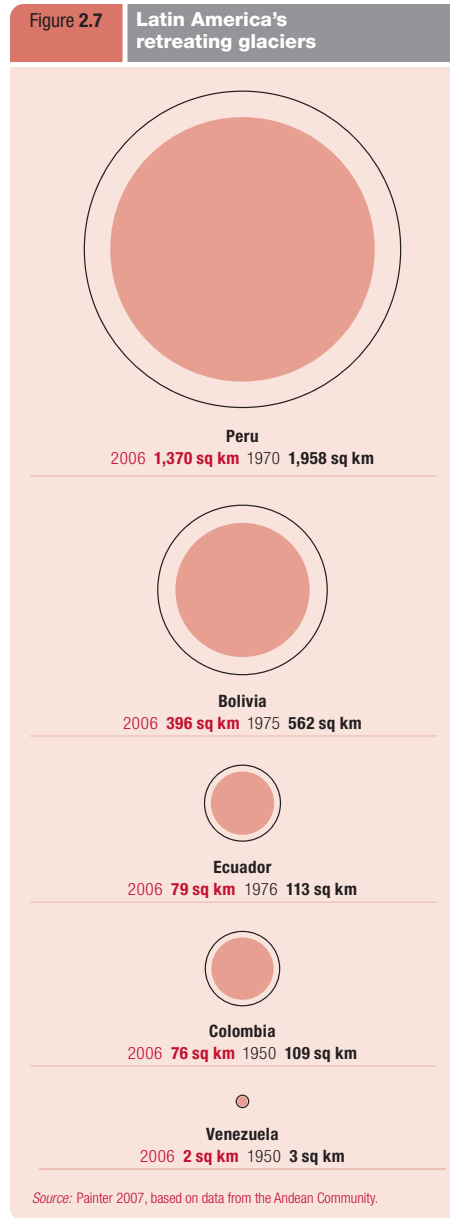
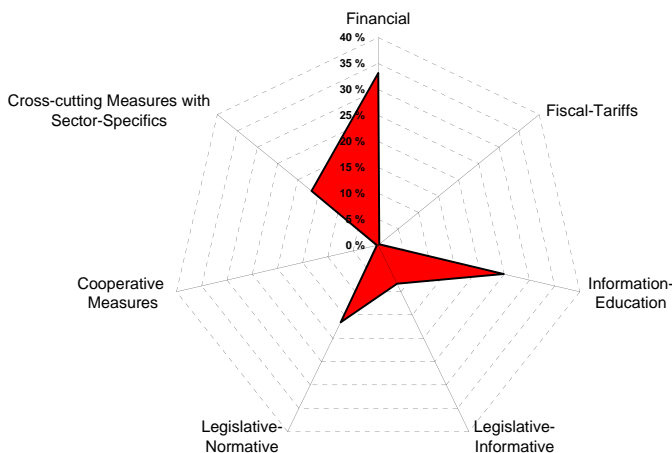
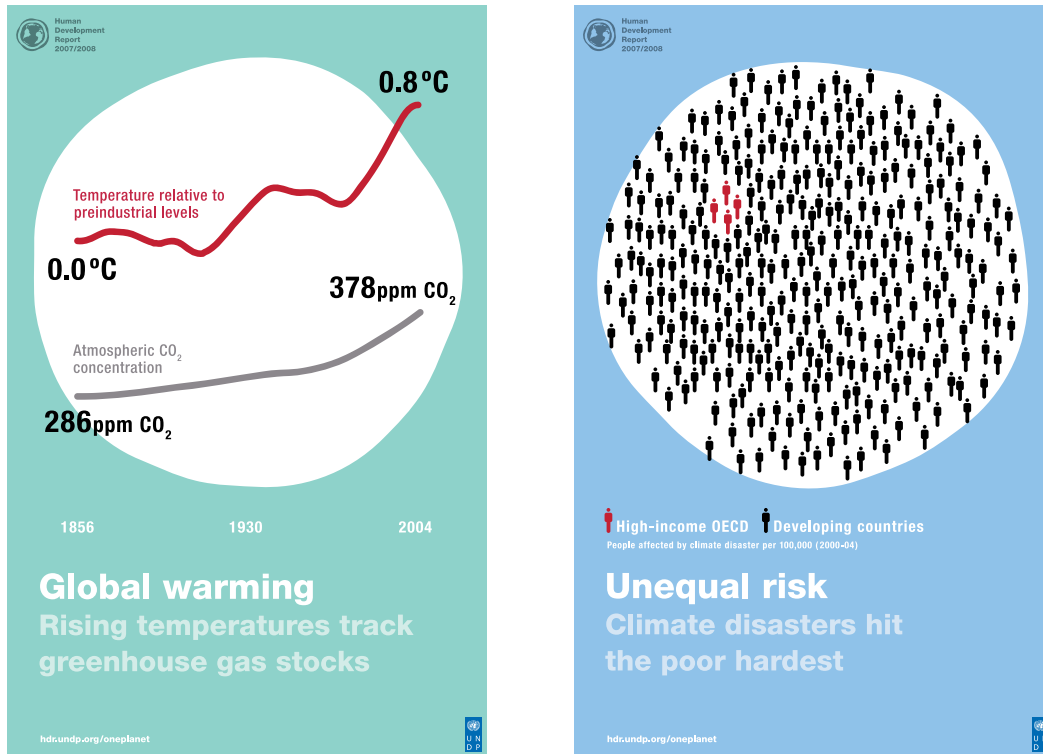


Figure 2: Making Messages Stand Out

For the global *Human Development Report 2007/2008*, a [series of posters](#) conveyed key climate change messages and the data supporting them.



Clear Data Presentation

Climate change discussions cannot avoid the use of some technical data. There are many ways to make such data more easily understood, however, including through clearly labeled and sourced maps, tables, charts, graphics, diagrams and text boxes (see Figures 1 and 2).

For more information on turning technical data into effective advocacy messages, please see the primer *Measuring Human Development*.

Use of Quotes, Traditional Wisdom

As part of efforts to help climate change messages resonate more among local communities and policy makers, report teams can consider including quotes from differ-

ent stakeholders, including representatives of vulnerable groups, as well as influential policy makers and other well-known figures.

Teams can also try to tie their messages to local traditions and customs, by referencing, for example, proverbs and folk sayings. The global *Human Development Report 2007/2008* uses a combination of quotes from different groups, as well as sayings and folk wisdom from various cultures:

“If the rains fail like they did last year we will go hungry. The rich have savings. They have stocks of food. They can sell their oxen for cash. But what do I have? If I sell my ox how will I plant next year? If my crop fails we have nothing. It is always like that. Everything depends on rain.” (Kaseyitu Agumas, Lat Gayin, southern Gonda, Ethiopia, 2007)

“We had never seen such floods before. Lots of houses were destroyed, lots of people died, our agricultural land was submerged... Many livestock were lost too. We were just not prepared to face such big flooding. So we didn’t have any savings of money or food.” (Pulnima Ghosh, Mahishura Gram Panchayat, Nadia District, West Bengal, India, 2007)

“No community with a sense of justice, compassion or respect for basic human rights should accept the current pattern of adaptation. Leaving the world’s poor to sink or swim in their own meager resources in the face of the threat posed by climate change is morally wrong... We are drifting into a world of ‘adaptation apartheid’.” (Desmond Tutu)

“We do not inherit the Earth from our ancestors, we borrow it from our children.” (Native American proverb)

Key Human Development Messages

As part of efforts to advocate adaptation, mitigation and related climate change policy responses based on national contexts and human development report objectives and findings, teams may consider and adapt some of the following sample general advocacy messages.

The human development impacts: Climate change is already affecting millions of people within and across regions, largely the poorest and most vulnerable. In the coming years, the risks of climate change events will increase and affect an even larger number of people, including future generations. Regional, national and local policies must better target vulnerable groups. Human development impacts should be the focus of climate change debates.

The urgency of the issue: The signs of global warming are everywhere, in changing temperatures and consequences such as more frequent and longer droughts, flooding, severe storms, melting glaciers and changes in rainfall patterns. Countries need to act now, but also must think of a long-term horizon. The impact of decisions taken today will still affect people 100 to 150 years from now. Actions need to be long term to match the length of carbon emission cycles, not the short-term political cycles of elected officials.

The need to support adaptation and a comprehensive cross-sectoral response: Climate change adaptation must be placed at the centre of regional, national and lo-

cal partnerships for poverty and disaster risk reduction. Short-, medium- and long-term action is required to help reduce the current and future risks and vulnerabilities of different groups and communities. This action requires strengthened capacities, greater awareness and information, better targeted and more effective policies, and increased financing.

Countries do not have to choose between ecological preservation and resilient, equitable economic growth—there are win-win solutions: Although climate change brings many challenges and difficult policy choices, countries do not have to make a choice between ecological preservation, human development and sustainable, equitable growth. Human development and ecological preservation are part of the same process. They do not represent contradictory ideas or policies. Although certain types of economic and social development can have destructive consequences for the environment—and in turn on different groups—there are win-win climate change responses that can promote a new development model that is good for the environment, supports resilient economic growth and empowers people to lead the lives they value.

The global financial crisis and other emerging global challenges cannot be allowed to slow climate change adaptation and mitigation responses: Despite the clear and growing threats posed by climate change, some groups continue to lobby for other national priorities, especially during times of more short-term political, economic and social crisis. While these may also be important to human development outcomes, a shifting of attention and resources to such events cannot be allowed to lead to a weakening of political will to address climate change issues now and consistently over the long term.

Climate change and sustainable development intersect with all major policy themes: For reports taking a theme other than climate change as their primary focus, one key advocacy message is that climate change and the environmental dimensions of human development need to be considered by all actors as part of major development issues and debates, rather than dealt with through separate planning, budgeting and institutional processes.

Annex 1: UNDP Support for Human Development Reports on Climate Change

UNDP headquarters and some regional centres can provide a wide range of technical support services to country offices working on human development reports with a climate change focus. It is usually not possible, however, to provide direct financial support.

Technical support for reports is coordinated by the EEG of the Bureau for Development Policy as part of the [UNDP Climate Change Strategy](#), the HDRO and regional centres.

The HDRO, EEG and regional centres are able to provide general guidelines and more targeted technical assistance for report content and process management. Depending on team needs, this support can include:

Reviews and consultations: HDRO, EEG and regional advisors can work with teams at each stage of the report process, including plans for theme selection, team selection, concept notes, outlines, statistical work, peer reviews, advocacy, launch and follow up. This support is provided virtually and on a case-by-case basis through in-country missions and regional trainings.

Networks: Teams are encouraged to use the networks facilitated by the HDRO and EEG to share and request examples of draft report documents (terms of reference, concept notes, outlines, drafts, etc.), seek good practices, identify potential thematic and regional experts, and disseminate key findings and innovative work. UNDP can also help teams identify other human development and climate change experts.

EEG offers a broad range of technical resources on climate change including:

[UNDP Climate Community](#) [www.undpcc.org]: This serves as the knowledge platform for the “Capacity Development for Decision Makers to Address Climate Change” project. It includes a library of over 600 documents in six languages that are relevant to the Bali Road Map negotiations, e.g., “The Bali Action Plan: Key Issues Under Negotiation”; the “Summary for Policy Makers”; land use, land-use change and forestry issues with an emphasis on developing country perspectives; etc.. The site is now in three languages—English, Spanish and French, with Russian to be launched in 2009. It allows users to

post documents and discuss them in password-protected groups. There are also public groups for cross-country exchanges of knowledge and lessons learned on specific themes.

[Adaptation Learning Mechanism](#) [www.adaptationlearning.net]: This web-based knowledge-sharing platform contains over 140 country climate profiles, case studies, lessons learned, guidance and tools, and other practical adaptation resources.

[UNDP Climate Change Intranet](#) [<http://practices.undp.org/energy-environment/climatechange/?src=climate>]: UNDP’s intranet webpage on climate change contains a workspace intended to provide the latest information on UNDP’s climate change activities, including resources, web-based training and a calendar of related events.

[Service Platform for Integrating Climate Change into Development](#) [www.undp-adaptation.org/iccd/]: This web-based tool supports integrated national and sub-national climate change strategies. National human development reports on climate change, among other relevant knowledge products, are found in the online database. The platform features an identified pool of national, regional and international experts, and methodologies and tools for socioeconomic and human development assessments. Technical support services include assistance from project staff and UNDP regional technical advisors. A country initiatives section provides details on the scope and status of interventions.

Other important resources are:

[Human Development Report 2007/2008, Fighting climate change: Human solidarity in a divided world](#) [<http://hdr.undp.org/en/reports/global/hdr2007-2008/>]

[“Two degrees of separation between hope and despair: A young people’s summary of the United Nations Human Development Report 2007/2008”](#) [<http://hdr.undp.org/en/humandev/learnmore/title,12016,en.html>]

[UNDP Bali Roadmap: Key Issues under Negotiation](#) [www.undp-adaptation.org/undpcc/files/docs/publications/submitted/Bali_Road_Map_Key_Issues_Under_Negotiation.pdf]

[UNDP Resource Guide on Gender and Climate](#)

[Change](http://content.undp.org/go/cms-service/download/asset/?asset_id=1854911) [http://content.undp.org/go/cms-service/download/asset/?asset_id=1854911]

[UNDP Capacity Development for Environmental Sustainability Practice Note](http://content.undp.org/go/bdp/eeg/Global-Mainstreaming-Strategy-and-Action-Plan/download/?d_id=1791244) [http://content.undp.org/go/bdp/eeg/Global-Mainstreaming-Strategy-and-Action-Plan/download/?d_id=1791244]

[National Communications Support Programme Resource Kit](http://www.energyandenvironment.undp.org/undp/indexAction.cfm?module=Library&action=GetFile&DocumentAttachmentID=2263) [www.energyandenvironment.undp.org/undp/indexAction.cfm?module=Library&action=GetFile&DocumentAttachmentID=2263]

[HDR Toolkit](http://78.136.31.142/external/toolkit/index.html) [http://78.136.31.142/external/toolkit/index.html]

[Measuring Human Development: A Primer](http://hdr.undp.org/en/nhdr/support/primer/) [http://hdr.undp.org/en/nhdr/support/primer/]

[HDR Timeline](http://hdr.undp.org/external/timeline/timeline.htm) [http://hdr.undp.org/external/timeline/timeline.htm]

[Environment Thematic Guidance Note](http://hdr.undp.org/en/media/Environment_GN.pdf) [http://hdr.undp.org/en/media/Environment_GN.pdf]

[Other HDR support resources](http://hdr.undp.org/en/nhdr/support/) [http://hdr.undp.org/en/nhdr/support/].

[UNDP and UNEP: Poverty-Environment Initiative](http://www.unpei.org/) [www.unpei.org/]; [Poverty and Environment Indicators](http://www.st-edmunds.cam.ac.uk/vhi/csc/research/UNDP_UNEPengD.pdf) [www.st-edmunds.cam.ac.uk/vhi/csc/research/UNDP_UNEPengD.pdf]; [“Making the Economic Case: A Primer on the Economic Arguments for Mainstreaming Poverty-Environment Linkages into National Development Planning”](http://hdr.undp.org/docs/network/hdr_net/2009/Mongolia_environment_Making_the_economic_case.pdf) [http://hdr.undp.org/docs/network/hdr_net/2009/Mongolia_environment_Making_the_economic_case.pdf]

[UNDP Drylands Programme](http://www.undp.org/drylands) [www.undp.org/drylands]

[Risks, Shocks and Human Development](#), edited by Ricardo Fuentes-Nieva and Papa A. Seck, Palgrave Macmillan

[African Drought Risk and Development Network](http://www.droughtnet.org) [www.droughtnet.org]

[“The Gendered Dimensions of Disaster Risk Management and Adaptation to Climate Change: Stories from the Pacific.”](#) UNDP and AusAid [www.hazards-climate-environment.org/yahoo_site_admin/assets/docs/GenderDisasterClimateChange_Anderson_UNDP-PC_AusAID.131112806.pdf]

Annex 2: Other Key References and Links

UN Secretariat Bodies and Agreements

[UN Gateway to the UN System's Work on Climate Change](http://www.un.org/climatechange/) [www.un.org/climatechange/] Note: many of the following resources are available on this site.

[Commission on Sustainable Development](http://www.un.org/esa/dsd/dsd_aofw_cc/cc_index.shtml)
[www.un.org/esa/dsd/dsd_aofw_cc/cc_index.shtml]

[IPCC general information](http://www.ipcc.ch/index.htm) [www.ipcc.ch/index.htm]

[IPCC Working Group II contributions to the *Fourth Assessment Report*](http://www.ipcc-wg2.org/) [www.ipcc-wg2.org/]

[IPCC *Fourth Assessment Report*](http://www.ipcc.ch/) [www.ipcc.ch/]

[IPCC Data Distribution Centre](http://www.ipcc-data.org/)
[www.ipcc-data.org/]

[IPCC National Greenhouse Gas Inventories Programme](http://www.ipcc-nggip.iges.or.jp/)
[www.ipcc-nggip.iges.or.jp/]

[UN Convention on Biological Diversity](http://www.cbd.int/cop9)
[www.cbd.int/cop9]

[UN Convention to Combat Desertification](http://www.unccd.int/)
[www.unccd.int/]

[UNFCCC](http://unfccc.int/) [http://unfccc.int/]

UN Agencies

[Food and Agricultural Organization](http://www.fao.org/climatechange/home/en/)
[www.fao.org/climatechange/home/en/]

[ILO](http://www.ilo.org/integration/themes/greenjobs/lang-en/index.htm) [www.ilo.org/integration/themes/greenjobs/lang-en/index.htm]

[International Fund for Agricultural Development](http://www.ifad.org/climate/)
[www.ifad.org/climate/]

[IOM](http://www.iom.int/jahia/Jahia/pid/2068) [www.iom.int/jahia/Jahia/pid/2068]

[Millennium Ecosystem Assessment](http://www.millenniumassessment.org/en/index.aspx)
[www.millenniumassessment.org/en/index.aspx]

[UN Conference on Trade and Development](http://www.unctad.org/climatechange/)
[www.unctad.org/climatechange/]

[UN Department of Economic and Social Affairs](http://www.un.org/esa/desa/climatechange/)
[www.un.org/esa/desa/climatechange/]

[UN Educational, Scientific and Cultural Organization](http://www.unesco.org/en/climatechange)
[www.unesco.org/en/climatechange]

[UN Human Settlements Programme](http://www.unhabitat.org/climate)
[www.unhabitat.org/climate]

[UN Industrial Development Organization](http://www.unido.org/climate-change)
[www.unido.org/climate-change]

[UN Trust Fund for Human Security](http://ochaonline.un.org/Home/tabid/2097/language/en-US/Default.aspx) [http://ochaonline.un.org/Home/tabid/2097/language/en-US/Default.aspx]

UNDG guidance on mainstreaming environmental sustainability, forthcoming

UNDG Note on Climate Change and UN Country Teams

[UNEP](http://www.unep.org/climatechange/) [www.unep.org/climatechange/]

[UNEP "A Global Green New Deal"](http://www.unep.org/greeneconomy/)
[www.unep.org/greeneconomy/]

[UNICEF "Climate Change and Children"](http://www.unicef.org/publications/files/Climate_Change_and_Children.pdf)
[www.unicef.org/publications/files/Climate_Change_and_Children.pdf],

[UNICEF "Climate change and children: a human security challenge"](http://www.unicef-irc.org/publications/pdf/climate_change.pdf) [www.unicef-irc.org/publications/pdf/climate_change.pdf]

[UNITAR Enabling Environmental Justice: Assessment of Participatory Tools](http://web.mit.edu/jcarmin/www/carmin/EnablingEJ.pdf)
[http://web.mit.edu/jcarmin/www/carmin/EnablingEJ.pdf]

ANNEXES

[WHO](http://www.who.int/globalchange/en/) [www.who.int/globalchange/en/]

[WMO Global Climate Observing System](http://www.wmo.ch/pages/prog/gcos/index.php?name=about)
[www.wmo.ch/pages/prog/gcos/index.php?name=about]

[World Food Programme](http://www.wfp.org/english/?ModuleID=137&Key=2542)
[www.wfp.org/english/?ModuleID=137&Key=2542]

Other International Institutions and Initiatives

African Development Bank

Asian Development Bank

European Bank for Reconstruction and Development

[GEF M&E Resource Kit](http://www.undp.org/gef/05/monitoring/policies.html)
[www.undp.org/gef/05/monitoring/policies.html]

[GEF Tools and Guidelines](http://www.thegef.org/gefevaluation.aspx?id=17006)
[www.thegef.org/gefevaluation.aspx?id=17006]

Inter-American Development Bank

[OECD: “Policy Guidance on Integrating Climate Change into Development Co-operation” and “Strategic Environmental Assessment and Adaptation to Climate Change”](http://www.oecd.org/dac/environment)
[www.oecd.org/dac/environment]

[“Natural Resources and Pro-Poor Growth: The Economics and Politics”](http://www.oecdbookshop.org/oecd/display.asp?sf1=identifiers&st1=432008081P1&LANG=EN#TableOfContents) [www.oecdbookshop.org/oecd/display.asp?sf1=identifiers&st1=432008081P1&LANG=EN#TableOfContents]

[World Bank: World Development Reports 2009 and 2010](http://go.worldbank.org/LOTTGBE9I0)
[http://go.worldbank.org/LOTTGBE9I0]

[Linking Climate Change Adaptation Network](http://www.linkingclimateadaptation.org) (Eldis)
[www.linkingclimateadaptation.org]

[weADAPT](http://www.weadapt.org) [www.weadapt.org]

[AfricaAdapt](http://www.africa-adapt.net) [www.africa-adapt.net]

[Gender and Development](http://www.genderanddevelopment.org/current.asp), vol. 17, no. 1, March 2009, on climate change and climate justice
[www.genderanddevelopment.org/current.asp]

Seminal References

S. Barret: *Environment and Statecraft: The strategy of environmental treaty-making*

D. Helm: [Climate-change policy](http://www.dieterhelm.co.uk)
[www.dieterhelm.co.uk]

W. Nordhaus: [A Question of Balance](http://yalepress.yale.edu/book.asp?isbn=9780300137484)
[http://yalepress.yale.edu/book.asp?isbn=9780300137484]

[The Stern Review on the Economics of Climate Change](http://www.hm-treasury.gov.uk/sternreview_index.htm)
[www.hm-treasury.gov.uk/sternreview_index.htm]

Nicholas Stern: *The Global Deal: Climate Change and the Creation of a New Era of Progress and Prosperity*

Annex 3: Lessons Learned from the Croatia Report On Climate Change

Process Recommendations

Staffing

- Remember to include UNDP staff at the regional and global level from both the EEG and the human development report units. Count on the fact that they are busy with their regular tasks and need more time to provide you with inputs. Do not put them on short deadlines.
- Assign a full-time project manager, preferably a national expert who can be hired in advance of the scoping workshop. International staff can help provide direction, but it takes someone working full-time in the country to make sure everything gets done.
- When hiring local consultants who will provide background information, look for people who are very familiar with the sector, know all the players, and have a comprehensive grasp of available research and information. They should have “shortcuts” to official channels, which can otherwise take a long time to provide data. If they are working on economic impacts, they need to have a strong economics background. It is better to identify the right people for a strong applicant pool than to have a blind public announcement. There may be only a few qualified people in the country.
- The number of international experts equipped for economic analysis of adaptation and vulnerability is quite small. Many are fully engaged in other work. It is important to allow more time than usual in recruiting an international expert and in allowing them to schedule a mission and deliver tasks. Leave a buffer-time for that and set a realistic expectation of the time they will need.
- A detailed outline should be provided at the earliest stages to national experts to save time on editing and requests for data.

Stakeholder involvement

- A scoping exercise is critical for focusing the report preparation process, given limited time and funding. Re-

sist the temptation to cover all topics. We tried to do too much, which led to a long report that was much more stressful than it needed to be. It may be possible to consider doing only mitigation or adaptation.

- Stakeholders are important in providing information on ongoing national and regional research for stocktaking. A stakeholder scoping meeting and one-on-one meetings will provide good input on what is already available.
- Readers groups are helpful in making corrections before the report goes to international peer reviewers. This also achieves more institutional “buy-in” from government actors, the research community, businesses, etc..
- We created an e-network and used it to communicate with stakeholders, which was helpful and saved time. Both UNDP and commercial platforms (such as Google-groups) are options, whichever is faster and more practical to set up and use.
- If doing a capacity assessment of institutions involved with climate change, interviews are far more helpful than questionnaires. We developed an overly long questionnaire that some people filled out, but more found it intimidating. It was much more effective to have interviews.
- For interviews to find out about adaptation or mitigation capacities, it makes sense to divide into organizations and individuals engaged in adaptation versus mitigation. While some will be involved in both, most will not be.

In general, do not move forward with translation or design until the entire final product has gone through the following stages:

- Basic scope of the report approved by stakeholders;
- Advanced outline and basic rough draft approved by the Resident Representative and regional office, HDRO included;
- Chapter texts approved by consultants/UNDP environmental governance team (or appropriate department);
- Chapter texts checked for factual accuracy;
- Stakeholder discussions held with appropriate ministries, government agencies, NGOs and businesses;

- Peer reviewer comments integrated (including from relevant UNDP staff inside and outside of the country of office);
- Final content approval by the Resident Representative; and
- If necessary, a final edit by a non-technical native speaker who can make the text reader-friendly and understandable to “ordinary readers.”

We lost a lot of time by combining steps in parallel. We expected this would save time, but in the end, it took longer to harmonize everything.

Content Recommendations

In Croatia, our outline was as follows:

- General importance of the sector: percent of GDP, impact on vulnerable groups, issues related to human development, strategic importance, etc;
- Importance of climate in the sector: climate as a factor in economic “production,” including existing damages from climate variability;
- Addressing climate variability/change in the sector through information for decision-makers to assess vulnerability and adapt to climate conditions and climate change, resources for adaptation and adaptation studies involving institutions and decision-making authorities, analysis of available technological options for adaptation—including, if possible, cost-benefit analysis, low-regret and no-regret measures, etc.; and
- Conclusions/recommendations and next steps.

Be cautious in the use of the terms climate change and climate variability; the latter should be used for current climate-related impacts.

Be cautious about using terms such as “likely” and “unlikely,” which have a numerical connotation for climate experts due to guidelines on describing uncertainty in IPCC reports. The guidelines are available on the IPCC website.

Be aware that climate modeling and development of sectoral economic models are largely beyond report budgets. Available data and literature are important. Any international consultant should spell out very clearly to lo-

cal consultants what data and/or literature is necessary to do economic analysis and physical impact analysis. This begins with what physical impacts climate and climate change will produce, and moves into impacts in economic terms. General studies that speak about climate change impacts without numbers are less helpful.

Be creative in identifying data sources that indicate climate-related impacts. When national data are missing, look for regional data or studies from neighbouring countries that may include your country. This is especially true for downscaled climate models, physical impact studies on crop yields and issues on coastal sea level rise.

A public opinion survey is a relatively inexpensive and easy way to bring new information to the discussion on climate change. It may be most beneficial in countries with Annex B commitments because it provides an opportunity to assess the willingness to support and pay for mitigation measures. Standard questions for the public opinion survey are provided in the Croatia climate change report. There is also a relatively comprehensive [EU climate change survey](#) that came out after the Croatia survey. Contact UNDP Croatia if you would like a copy of the Croatia survey.

Launch Recommendations

- Allow time for a peer review (two weeks) and/or stakeholder review (two weeks plus a workshop), design work (three weeks), translation (three to four weeks, depending on the amount of text), proofreading, editing and printing.
- Have a native speaker edit the English-language version, as the report will likely get attention at the regional level and may be used in international meetings.
- The media will inevitably pick up on the “catastrophic” angle of the report—you can try to direct the focus elsewhere, but be prepared.

Annex 4: Sample Documents from the Croatia Report

The following documents are available either from the UNDP Croatia Country Office and/or web-site. Given differences in local contexts and report objectives, these documents are for sample purposes only and should be adapted as needed.

Preparation

- Information on project development workshop
- Note on timing
- Note on global, regional and national sources of information (general and topic-specific)
- Interview questions for stakeholder consultations
- Invitation, agenda, and write-up from stakeholder project development workshop
- Presentations from project development workshop
- Note on data issues
- List of UNDP experts specifically relevant for climate change reports

Resource Mobilization

- Overview on potential sources of co-financing
- Project work plan for Croatia
- Lessons learned comment

Building the Team

- Mailing list website and lessons learned comment
- List of steering committee members with affiliations
- Terms of reference for international expert
- List of potential international experts in adaptation
- List of experts and institutions with mitigation expertise
- Terms of reference for national experts
- Terms of reference for team leader

- Google document sharing for adaptation work group
- Lessons learned comment on staffing

Research

- Chapter outlines and headings
- Questions for public opinion survey
- Research design for adaptation cost estimates
- Expert note on general data needs
- Questions from institutional capacity survey

First Full Draft

- Stakeholder workshop to review draft and discuss policy options

Annex 5: The Greenhouse Effect and the Carbon Cycle

Life on earth is made possible by energy from the sun, which arrives mainly in the form of visible light. About 30 percent of sunlight is scattered back into space by the outer atmosphere, but the rest reaches the earth's surface, which reflects it in the form of a calmer, more slow-moving type of energy called infrared radiation. Infrared radiation is carried slowly aloft by air currents, and its eventual escape into space is delayed by greenhouse gases such as water vapor, carbon dioxide, ozone and methane.

Greenhouse gases make up only about one percent of the atmosphere, but they act like a blanket around the earth, or like the glass roof of a greenhouse—they trap heat and keep the planet warmer by some 30° C than it would be otherwise.

Human activities are making the blanket “thicker”—the natural levels of these gases are being supplemented by emissions of carbon dioxide from the burning of coal, oil and natural gas; by additional methane and nitrous oxide produced by farming activities and changes in land use; and by long-lived industrial gases that do not occur naturally.

These changes are happening at unprecedented speed. If emissions continue to grow at current rates, it is almost certain that atmospheric levels of carbon dioxide will double from pre-industrial levels during the 21st century. It is possible they will triple.

The result, known as the “enhanced greenhouse effect,” is a warming of the earth's surface and lower atmosphere. The IPCC assesses with very high confidence that the globally averaged net effect of human activities since 1750 has been one of warming. The “best case” computer climate models estimate that the average global temperature will rise by 1.8° C to 4.0° C by the year 2100. A temperature increase of 0.74° C occurred over last century, and for the next two decades, a warming of about 0.2° C per decade is projected should greenhouse gas emissions continue to rise at their current pace and are allowed to double from their pre-industrial level.

A rise in temperature will be accompanied by changes in climate—in such things as cloud cover, precipitation, wind patterns and the duration of seasons. In its 4th Assessment Report, the IPCC projects that heat waves and

heavy precipitation events are very likely to increase in frequency in the 21st century. Millions of people depend on weather patterns, such as monsoon rains, to continue as they have in the past. Changes, at a minimum, will be difficult and disruptive.

Carbon dioxide is responsible for over 60 per cent of the “enhanced greenhouse effect.” Humans are burning coal, oil, and natural gas at a rate that is much faster than the speed at which these fossil fuels were created. This is releasing the carbon stored in the fuels into the atmosphere and upsetting the carbon cycle, the system by which carbon is exchanged between the air, the oceans and land vegetation. Currently, atmospheric levels of carbon dioxide are rising by over 10 percent every 20 years.

Climate change is inevitable because of past and current emissions. The climate does not respond immediately to external changes, but after 150 years of industrialization, global warming has momentum. It will continue to affect the earth's natural systems for hundreds of years even if emissions are reduced and atmospheric levels stop rising.

Source: UNFCCC [http://unfccc.int/essential_background/feeling_the_heat/items/2903.php].

Annex 6: Synergies Between National and UNDP Climate Change Initiatives

NAPAs	National Communications	National and Regional Human Development Reports	Integrating Climate Change Risks into National Development Processes and UN Country Programming (5 pilots)	Capacity Development for Decision Makers on Climate Change
<ul style="list-style-type: none"> • Prioritization of urgent and immediate adaptation strategies, policies and measures • Broad stakeholder consultations and prioritization • National and government ownership • Entry point/ framework for a national strategy on adaptation • Facilitates cross-sectoral dialogue on adaptation • Based on background technical studies • Overview of climate change impacts on key development sectors 	<ul style="list-style-type: none"> • Public information and reporting tool to raise awareness • Lists government policies and programmes relevant to climate change • Technical studies on GHG inventories, mitigation, vulnerability and adaptation • Government ownership endorsed at political level • Government-led analysis • Draws on and feeds into NAPAs, climate change and human development reports, and other national planning processes • Prescribed report format based on guidelines provided by the UNFCCC 	<ul style="list-style-type: none"> • Advocacy document to inform and generate debate, and trigger action with a focus on human development impacts and responses. • Offers recommendations to include human development perspectives in a wide range of policies and programmes • May reference technical studies, but with a focus on human development implications, in accessible language • Broader national/regional ownership • Independence of analysis based on broad consultations, but ultimately the views of report authors • Draws on and feeds into NAPAs, national assessments, and other national and UN country team processes • Flexible report format, can offer more detailed analysis of human development challenges and policy options 	<ul style="list-style-type: none"> • Creates climate profile based on national communication • Maps UN agencies and national institutions/ committees related to climate change • Reviews UN country programming documents and national decision-making policies, plans and measures for climate risks • Provides potential entry points to UN agencies and national institutions to integrate actions for adaptation • Strengthens the capacity of UN country teams, UNDP country offices and national decision makers to integrate climate change in programming, policies and plans • Report includes climate profile, risk screening analysis and suggested integration entry points 	<ul style="list-style-type: none"> • Supports interministerial and stakeholder discussions on climate change and links to national policies • Capacity development for formulating and negotiating positions on climate change • Assessments of investment and financial flows to address climate change mitigation and adaptation options • Draws on, and may feed into, national communications and NAPA follow-on projects • National ownership

Annex 7: Linking Climate Change and the MDGs

MDG 1: Eradicate extreme poverty and hunger

The challenge

Over a billion people are living in poverty. Slow growth of agricultural outputs and expanding populations have led to setbacks in many regions. Since 1990, millions have sunk deeper into poverty, where the poor are getting poorer.

Climate change risk

Agricultural production and food security, access to clean and abundant water resources and employment that underpin the solution to extreme poverty and hunger are affected by climate change. Families can be locked into low human development cycles as a result of climate change disasters, and longer-term changes and weather patterns.

Opportunities

Efforts to adapt to climate change can expand and strengthen existing efforts to empower vulnerable groups, and provide targeted assistance through public and private services. New jobs for the poor can be created that also support a greener, more sustainable model of economic growth.

MDG 2: Ensure that all children remain in school and receive a high-quality education

The challenge

More than 100 million children remain out of school. In many regions, even when children are enrolled, questions related to the quality of education remain.

Climate change risk

Climate change stresses pose additional burdens on agricultural production and other subsistence activities such as water collection, which may burden families enough to remove children from school. Climate change also threatens to destroy infrastructure (e.g., schools), and increase the displacement and migration of families, thus disrupting and limiting education opportunities.

Opportunities

Over time, the participatory, evidence-based policy planning required for climate-resilient development—including safer infrastructure, integrated water resource management, more sustainable access to public services and disaster risk management—can lead to a better environment for school children and provide inputs needed for higher-quality education.

MDG 3: Promote gender equality & empower women

The challenge

Of the 1.3 billion people living in poverty globally, 70 percent are female; women do about 66 percent of the world's work in return for less than 5 percent of its income. There is no region in the developing world where women have rights equal to those of men, including in representation at all levels of government.

Climate change risk

Women are disproportionately vulnerable to climate change because:

- The poor are most vulnerable to climate change risks, and women make up the majority of the world's poor;
- Women's traditional roles as primary users and managers of natural resources, primary caregivers and labourers engaged in unpaid labor mean they are involved in and dependent on livelihoods and resources put most at risk by climate change; and
- Women lack rights and access to resources and information vital to overcoming the challenges posed by climate change.

Opportunities

Climate change debates and policy processes offer opportunities to engage women at all levels of decision-making, adopt gender-sensitive budgeting, provide better targeted public services based on empirical evidence of gender disparities and needs, and address the underlying vulnerabilities and root causes of power relations hindering gender equality and empowerment.

MDGs 4, 5 and 6: Reduce child mortality, improve maternal health, and combat HIV/AIDS, malaria and other diseases

The challenge

More than 9 million children a year—25,000 a day—die from preventable or treatable causes. More than half a million women die each year during pregnancy or childbirth; 20 times that number suffer serious injury or disability. Malaria and tuberculosis together kill nearly as many people as AIDS, and represent a severe drain on national economies.

Climate change risk

Climate change will worsen health primarily through increased vulnerability to poor health due to reduced food and water security; water-borne diseases associated with reduced water quality due to floods and drought; more favourable conditions for the spread of vector-borne and air-borne diseases; and the direct link between temperatures and heat stress.

Opportunities

Through heightened awareness, increased capacities, better public services, information sharing, new and proven technologies, and better targeted financing, campaigns to reduce child mortality, improve maternal health, and combat HIV/AIDS, malaria and other diseases can be reinvigorated and strengthened.

MDG 7: Ensure environmental sustainability

The challenge

Progress to reverse the loss of the world's environmental resources has not been achieved despite commitments by most countries. Half the people in the developing world still lack toilets or other forms of basic sanitation. Nearly 1 billion people live in urban slums because the growth of urban populations is outpacing improvements in housing and the availability of productive jobs.

Climate change risk

Climate change threatens environmental sustainability because it will change the quality and quantity of natural resources, and reduce ecosystem productivity. The poor depend on these resources for their day-to-day survival and livelihoods in many parts of the developing world.

Opportunities

Efforts to address climate change events can be leveraged to better integrate issues of environmental sustainability—those that relate directly to climate change and other concerns—into local, national and regional policy-making processes. Greener technologies key to mitigation and adaptation are also critical for maintaining broader ecosystem services.

MDG 8: Develop a global partnership for development

The challenge

Developed countries have fallen short of targets they have set for themselves to achieve wide-reaching development objectives.

Climate change risk

Climate change threatens to exacerbate current challenges to the achievement of the MDGs. Funding for development, adaptation and mitigation must be greatly increased to meet the needs of the poor. If climate change becomes even more of a divisive international issue, it could jeopardize partnerships in other areas of development such as debt relief, trade, etc..

Opportunities

Although complex and politically sensitive, the processes and lessons learned from creating global climate change partnerships can be used to reinforce and establish new partnerships and raise awareness around achieving the MDGs. A range of more inclusive, public-private and South-South partnership models can be tapped as part of a new development paradigm in which global partnerships foster more equitable, climate-resilient and sustainable growth.

Source: Adapted from the MDG Achievement Fund website.



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This guidance note has been prepared in response to the growing demand for guidelines to support the work of human development report teams and partners in integrating human development analysis and advocacy into more equitable, sustainable and climate-resilient development planning and policy debates. The note explores each stage of report preparation, while highlighting key conceptual, data, analytical, policy and advocacy issues for teams to adapt according to regional and national contexts. It provides practical suggestions on ways that reports can complement existing climate change responses and broader development initiatives supported by UNDP and its partners, and offers country examples and references to cutting-edge research and literature.

For more human development resources: <http://hdr.undp.org>.