# UN System Supporting Adaptation in an Enhanced Adaptation Regime

The global climate is changing and will continue to change at rates unprecedented in recent human history. The impacts and risks associated with these changes are real and are already felt in many countries and communities. The current and projected impacts on many systems and sectors essential for human livelihood, such as water resources, agriculture, food security, sustainable land management, human settlements and infrastructure, coastal zones and health, threaten global efforts of achieving the Millennium Development Goals (MDGs) and sustainable development. But for many, particularly the most vulnerable, it is an issue of sheer survival.

Parties to the United Nations Framework Convention on Climate Change (UNFCCC) have been deliberating since 2007 on developing an Adaptation Framework to enhance international cooperation and action on adaptation aimed at reducing vulnerability and building resilience in all countries, with a focus on developing countries, especially those that are particularly vulnerable to the adverse effects of climate change. Given the complexity and long-term nature of climate change, Parties foresee adaptation to be designed and implemented through a continuous and flexible iterative process, consisting of a full range of actions.

Recognizing that successful cooperation and implementation of adaptation actions depends on a wide engagement of stakeholders, Parties have invited relevant multilateral, international, regional and national organizations, the public and private sectors, civil society and other relevant stakeholders to undertake and support adaptation in a coherent and integrated manner.

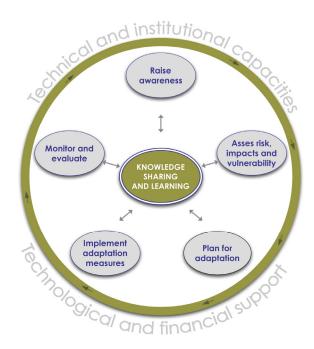


United Nations System
Chief Executives Board for Coordination

#### **UN-system supporting the adaptation cycle**

The UN system has already taken concerted action to assist people and communities in developing countries to adapt. Building on its wealth of expertise and broad partnerships with governments, civil society and other partners, the UN system stands ready to support the implementation of the emerging Adaptation Framework and adaptation process through:

- 1. Sharing of knowledge and facilitating learning,
- 2. Strengthening technical and institutional capacities, and
- 3. Providing financial and technological support.



To showcase their engagement, the following 18 UN system organizations have provided input on how, upon the request and in collaboration with Parties, they can facilitate and support the different components of the adaptation process:<sup>1</sup>

- FAO Food and Agriculture Organization of the United Nations,
- IFAD International Fund for Agricultural Development,
- ILO International Labour Organization,
- ITU International Telecommunication Union
- OHCHR Office of the High Commissioner for Human Rights,
- UNCCD United Nations Convention to Combat Desertification
- UNDP United Nations Development Programme,
- UNEP United Nations Environment Programme,
- UNESCO United Nations Educational, Scientific and Cultural Organization
- UNFCCCC United Nations Framework Convention on Climate Change.
- UNFPA United Nations Population Fund,
- UN-HABITAT United Nations Human Settlements Programme,
- UNISDR United Nations International Strategy for Disaster Reduction,
- UNOOSA United Nations Office for Outer Space Affairs,
- WFP United Nations World Food Programme,
- WHO World Health Organization,
- WMO World Meteorological Organization,
- World Bank.

Inputs for this note were provided in response to a call by the High-Level Committee on Programmes of the CEB to the UN system organizations on their potential to contribute to an enhanced adaptation regime under the UNFCCC.



#### Assess risks, impacts and vulnerability

The UN system supports countries in assessing risks, impacts and vulnerability by researching and observing climatic and socio-economic trends as well as providing data, methods and tools for such assessments.

#### Research, systematic observation and data provision.

To improve the availability and accessibility of adaptation-related knowledge, UNEP, together with WMO and UNESCO, is developing a Programme of Research on Vulnerability, Impacts and Adaptation (PRO-VIA). With regard to climatic information, WMO, for example, through its Agricultural Meteorology Programme, World Climate Research Programme and Climate services information systems, is helping countries to better document, research and package climatic information at different temporal, spatial and sectoral scales. The World Bank is also furthering the development of screening tools and knowledge platforms on climate information, including the Climate Change Portal that allows for the integration, analysis and synthesis of latest modelling outputs and relevant information for decision-makers at the national and subnational levels.

The Global Climate Observing System and UNOOSA facilitate access to and provision of free and unrestricted exchange of climatic and space-based information. FAO monitors biodiversity trends at regional and global level and develops standards for terrestrial climate-related observations under the Global Terrestrial Observing System. Coordinated by UNESCO's Intergovernmental Oceanographic Commission, the Global Ocean Observing System provides a permanent global system for observations, modelling and analysis of marine and ocean variables to support operational ocean services worldwide. With regard to socio-economic information, UNFPA, for example, provides support and capacity-building, including manuals and software, for the use of census and other population data, and ILO develops GREEN JOBS indicators.

#### Methods and tools for assessments.

For assessments crossing sectors and levels, organizations such as ILO and FAO have developed a Livelihood assessment toolkit and guidance for assessments for agricultural systems/food security and associated livelihoods. UNEP provides guidance for preparing environment and climate change outlooks at different levels. The World Bank, with the support of UNEP, UN-HABITAT and UNFPA, developed an Urban Risk Assessment methodology, which assesses urban risk incorporating climate projections, remote sensing inputs and socio-economic and demographic inputs. WMO, through its Regional Climate Outlook Forums, provides guidance information useful for assessments in different sectors.

For assessments that are system and sector-specific, UNISDR and partners developed guidance for risk and vulnerability assessments specific to various sectors, scales or populations. FAO provides an integrated toolbox to assess climate change impacts on agriculture, and WFP offers guidance for assessments of climate change impacts on food security such as the comprehensive Food Security and Vulnerability Analysis or the Food Security Monitoring Systems. WHO developed guidance for qualitative and quantitative assessment of health risks and vulnerability. UN-HABITAT supports cities to undertake assessments of urban hazards, vulnerabilities and adaptive capacities. For industrial sectors, other agencies, such as ITU, have developed toolkits such as the e-Environment Readiness Index, which provides policymakers with principles and guidelines for evaluating the e-Environment readiness of a country to use Information and Communication Technologies (ICTs) for adjusting to the impacts of climate change.



# Plan for adaptation, including creating an enabling environment

The UN system supports countries in planning and creating an enabling environment for adaptation by facilitating institutional capacity-building, plans for and mainstreaming of adaptation, identification and prioritization of adaptation options, and access to funding.

#### Building institutional capacities and enabling environments.

UNDP and UNEP, for example, have a portfolio of projects and programmes such as the Climate Change Adaptation and Development Initiative, the Poverty–Environment Initiative, the Low Emission Climate Resilient Development initiatives, the Capacity Development for Policy Makers to Address Climate Change, or the Africa Adaptation Programme to develop national and subnational capacities within key line Ministries. Through the Capacity for Disaster Reduction Initiative, UNDP, the UN Office for the Coordination of Humanitarian Affairs (OCHA) and UNISDR provide training and capacity building for national institutional mechanisms, such as national platforms for disaster risk reduction. FAO strengthens capacities in research, extension and communication services and rural institutions and facilitates improved access of vulnerable groups to natural resources and related decision-making through developing voluntary guidelines for land tenure and climate change. WFP assists national governments in building capacities in sectors relevant to hunger and in designing and running safety nets that serve as platforms for the deployment and dissemination of pro-poor adaptation practices and technologies.

ILO supports the development of Green employment and enterprise policies, the early identification of needed skills and vocational training programmes for adaptation. WHO provides policy support to link health, environment and development processes (e.g. National Environmental Health Action plans, regional Health and Environment Ministerial processes). UNFPA strengthens the links between Ministries of Environment and National Statistical Offices to build capacity for the analysis of population data in conjunction with climate projections and remote sensing data. In collaboration with urban planning associations and local government academies, UN-HABITAT strengthens the capacity of local government actors in adaptation planning through the development of climate action planning tools and training courses.

#### Planning for and mainstreaming adaptation into national and sectoral policies.

UNEP implements programmes aimed at mainstreaming adaptation into national development planning processes. UNDP is currently providing support to local governments to formulate integrated low-emission, climate-resilient development strategies to identify priority adaptation action, and develop portfolios of viable climate change projects that build upon existing local and national development plans. The World Bank's Pilot Program for Climate Resilience (PPCR) promotes the integration of climate resilience considerations into national development planning and implementation that are consistent with poverty reduction and sustainable development goals.

UNISDR and partners have developed guidelines, good practices and other frameworks to support planning processes for coordinating adaptation and disaster reduction efforts based on the Hyogo Framework for Action. FAO and WFP support the integration of adaptation into agriculture sector policies, food security programmes, legislative frameworks, and investment priorities. UN-HABITAT supports cities in developing city adaptation action plans and convening dialogues between national climate focal points and city representatives, with a view to enhancing the connections between city and national adaptation action. WHO supports countries in planning health adaptation; and WMO provides regular guidance material to national authorities for mainstreaming the use and application of climate information into sustainable planning processes. The UN Development Group prepared a guidance note for UN Country Teams on integrating climate change considerations in country analyses and the UN Development Assistance Framework.



#### Identification, assessment and prioritization of adaptation measures.

For example, UNDP through its Capacity Development for Policy Makers project supports countries in assessing the investment and financial flows required to address priority adaptation actions in order to develop adaptation scenarios with sector-specific investment and financial needs. Likewise UNEP has undertaken an analysis of the economics of adaptation. The World Bank has also evaluated adaptation costs at the national, sub-national and sector level, including through its Economics of Adaptation study, which explored different methods of economic assessment of adaptation options in seven countries. In terms of sector-specific evaluations, FAO evaluates adaptation options in the agriculture sector, including gender sensitivity. WHO reviews the existing evidence base on health risks from climate change and on the effectiveness of protective interventions and resources necessary to implement them, and engages in research to fill identified gaps in health and climate guidelines, tools and studies; and WMO, through regional workshops, is promoting the development of regional adaptation frameworks.

# Investment frameworks and access to funding.

UNDP, UNEP and the World Bank have developed a programme to assist countries in meeting accreditation standards and, more importantly, to ensure that countries possess the national institutional capacity to directly access resources from the Adaptation Fund and potentially other climate financing resources. UNDP strengthens capacity to catalyze emerging sources of climate finance by effectively accessing, sequencing and integrating existing public climate finance to advance pro-poor, pro-MDG, climate-resilient development and undertakes a training programme on direct budgetary support (under development for Ibero-America in collaboration with the Economic Commission for Latin America and the Caribbean). UNEP will also provide support for the development of national investment frameworks for adaptation.

#### Implement adaptation measures

Many UN agencies provide support, including technical oversight and technology transfer interventions, to ensure the successful implementation of projects and programmes at different levels and crossing different sectors and systems. For example, UN-HABITAT, in collaboration with state actors, community groups, private sector agents and other UN agencies, supports cities in implementing selected actions that are part of city adaptation plans.

#### Implementation in least developed countries (LDCs).

Many UN agencies support the implementation of national adaptation programmes of action (NAPAs), often with an agency specific focus: UNEP focuses on coastal zones, water management, and early warning; FAO and WFP focus on agriculture and food security; UNFPA focuses on increasing the coverage of reproductive health and population; and WHO on health. UNDP assists LDCs in leveraging financing from multiple sources to address key capacity, policy, institutional and knowledge barriers to adaptation. In addition, UNDP has launched a "Boots on the Ground" initiative that will place national officers on climate change into UNDP Country Offices in 26 LDCs to provide policy support to governments. WMO supports development plans for institutions that provide climate services to meet the LDCs' special needs, through expert services and organization of national coordination and strategic planning workshops/seminars.

# Implementation of adaptation measures targeting socio-economic and social activities, including economic diversification.

ILO implements a variety of programmes such as the Employment Intensive Infrastructure Programme, the Local Economic Development approach, the Green Value Chain Development or the Green Jobs programme aimed at supporting adaptation; and UNESCO supports the establishment of green jobs in biosphere reserves.



FAO supports the diversification of livelihoods and income through integrated systems, small-scale enterprise development, off-farm activities and improving market access. WFP's food-for-asset activities aim at building livelihood resilience through diversification, land and water management, risk management, soil conservation and others; and provide a platform for scaling-up community based adaptation.

# Sustainable management of natural resources and ecosystem-based adaptation.

Many UN agencies such as UNEP and UNDP support sustainable management of natural resources and ecosystem-based adaptation (EBA), which is also a core issue for synergy among the Rio Conventions. UNDP's work on ecosystem management is geared towards addressing key issues such as weaknesses in governance and market failures, including the failure to ascribe value to ecosystem services. The World Bank has produced guidance on the role and application of EBA in development. WFP assists governments in designing and implementing rural development, rehabilitation, conservation and social protection programmes that enable and promote the sustainable and productive use of natural resources and livelihood assets. UNESCO promotes World Heritage Sites and biosphere reserves as priority reference sites for understanding the impacts of climate change on human societies, cultural diversity, biodiversity and ecosystems services as well as possible adaptation and mitigation strategies.

FAO facilitates enhancing biodiversity, including genetic resources in production systems. WMO supports agrometeorologists in the National Meteorological and Hydrological Services to work with the Agricultural Research and Extension Services on initiatives and measures to manage natural resources sustainably and reduce the vulnerability of agro-ecosystems. As part of UNISDR's implementation of the Hyogo Framework for Action, the key role of sustainable management of natural resources is highlighted, for example under the thematic platform 'Partnership for Environment and Disaster Risk Reduction'.

# Climate change related disaster risk reduction (DRR) and risk sharing.

UNISDR is tasked with supporting the implementation of the 'Hyogo Framework for Action 2005–2015: Building the Resilience of Nations and Communities to Disasters (HFA)' and the strategic objectives identified therein. Besides UNISDR, many other UN agencies support the implementation of the HFA and seek to enhance synergies between DRR and adaptation. UN-HABITAT promotes processes that encourage the localization of the HFA, in particular at the local urban government level. The World Bank hosts the Global Facility for Disaster Reduction and Recovery (GFDRR) which seeks to mainstream DRR and adaptation in country development strategies by supporting a country-led and managed implementation of the HFA. UNEP supports field-based projects to improve environmental management for DRR and plans to develop practical guidelines and policy toolkits on ecosystems-based management approaches for DRR.

UNDP is engaged in a number of climate risk management programmes, which integrate adaptation and DRR activities. In addition, a global technical assistance project aims at building incountry capacity to analyse, prevent and manage risks related to climate variability and change and define risk management solutions. FAO supports local action for DRR, including sustainable practices to reduce climate risks in the agriculture sector and food systems; expanding emergency response and rehabilitation planning; and integrating DRR strategies into agricultural adaptation and development strategies. WFP supports governments in DRR measures that serve food security and hunger objectives in a range of sectors. Through a recent merger of its DRR and climate change offices, WFP can support approaches that better consider and integrate DRR and adaptation measures. WHO provides technical and policy support to DRR measures with specific focus on health protection through the WHO Health Action in Crisis Cluster. ILO develops financial coping strategies for households, and promotes social security policies to address climate-related risk on employment and livelihoods.



Many UN agencies also support early warning systems in specific sectors and at different levels such as WFP and FAO (medium-term warning system under ClimAfrica Project for improved climate predictions for Sub-Saharan Africa) and WHO (operational climate-based health warnings). WMO, through its global networks, provides integrated multi-hazard early warning systems for disaster risk management and for enhancing societal resilience. With regards to the use of ICTs, ITU is assisting countries in developing their own National Emergency Telecommunications Plans. These plans can enhance early warning systems, allowing relief workers to communicate, wherever they are, through access to radio-receivers, mobile phones and the Internet.

With regard to risk sharing and transfer mechanisms, such as insurance, ILO, for example, supports a Micro-insurance Innovation Facility. WFP and IFAD are working together to increase the access of low-income farmers to weather index-based insurance and other risk-management tools through the IFAD-WFP Weather Risk Management Facility.

#### Climate change induced displacement, migration and planned relocation.

UNEP provides support through the Climate Change, Environment and Migration Alliance, including a policy toolkit on the migration and climate change interface and an interagency initiative on Security in Mobility in the Sahelian Region involving OCHA, the International Organization for Migration and the Institute for Security Studies. WFP's Comprehensive Food Security and Vulnerability Analyses provide governments with an understanding of livelihood interaction and allows for a systematic analysis of climate change and resource scarcity induced migration and displacement. UNFPA provides support to enhance the role of migration as an adaptation strategy, and to draw attention to those who cannot migrate and as a result are more vulnerable. In addition, UNESCO is developing a new policy relevant, action oriented research programme on the social, human, ethical and gender dimensions of climate change.

#### Raise awareness

The UN system supports countries in raising awareness on adaptation by supporting education and training initiatives as well as awareness-raising and outreach programmes.

# Education and training.

Through the Decade of Education for Sustainable Development, which is coordinated by UNESCO, the UN system is collaborating in the promotion of climate change education in the context of sustainable development. Many UN agencies support training and education activities through the development of specific programmes, toolkits and guidance material. ILO, for example, has developed tools to promote and create entrepreneurs on adaptation. FAO supports E-Learning on community-based adaptation for agricultural extensionists. WMO has developed mechanisms for increasing capacity in the use of climate prediction information by users, through regional and national Climate Outlook Forums and specialized training, particularly for climate information and services providers. UNISDR has created an Education Platform that promotes tools and capacity development support in the education sector as well as the construction of safe schools.

UNDP has developed guidance and resources on adaptation, including a training manual on Integrated Water Resource Management (IWRM) to assist capacity builders in developing training and educational programmes on the use of IWRM tools and instruments for adaptation to climate change impacts; a User Guidebook on Assessing Investment & Financial Flows to Address Climate Change; and the Adaptation Policy Framework to help design and implement adaptation strategies, policies, and measures. UN-HABITAT encourages relevant departments of national universities to include local/urban adaptation concerns in curricula and research agendas.



#### Awareness-raising and outreach.

UN agencies such as UNEP, UNISDR and WMO are supporting multi-stakeholder dialogues to raise awareness on adaptation and the need for integration with DRR and development. FAO raises awareness on adaptation and agriculture through regional commissions, knowledge sharing events and specially designed stakeholder-based communication strategies for disseminating new technologies and innovations. WHO focuses on web-based outreach on climate change and health. UNISDR supports targeted public awareness campaigns biannually, such as campaigns for safer schools, safer hospitals and safer cities. UN-HABITAT supports local governments in undertaking public awareness campaigns and events focusing on community-based adaptation.

# Share knowledge and facilitate learning

Facilitated by the UNFCCC secretariat, the Nairobi work programme on impacts, vulnerability and adaptation to climate change has become a central platform for knowledge sharing and learning on adaptation, for all Parties to the Convention and the Programme's large number of partner organizations, including over 30 UN system organizations. In addition, many UN agencies have developed networks, platforms and databases to collect and share the emerging adaptation knowledge: FAO documents adaptation strategies and practices through good practice databases such as Technology for Agriculture (TECA). WFP has a vulnerability and hunger-related database. UNEP has been developing the Global Adaptation Network and its Regional Networks for knowledge mobilization and technical support. The World Bank supports South-South-North knowledge sharing, including through its climate change knowledge portal and e-learning modules.

WMO is developing the Global Framework for Climate Services (GFCS), which will strengthen and align institutional arrangements for data, information and knowledge systems. UNDP has created knowledge platforms such as the Adaptation Learning Mechanism. UNISDR also facilitates knowledge and information sharing in the field of DRR through various mechanisms including through PreventionWeb, which supports the development of information exchange tools to facilitate collaboration. UNESCO is developing an Adaptation Forum to inform public and private sector stakeholders of the longer-term climate projections and their potential impacts, and for exchange of lessons learned. ITU has also developed a multi-stakeholder database to promote the exchange of best practices for the use of ICTs.

In addition, UN agencies are supporting regional centres with a view to developing regional institutional capacities to provide long-term support to countries: WMO has established Regional Climate Centres to help countries provide a stronger climate science and operational basis for national studies and for development of national action plans. UNDP works with five regional centres of excellence under the Capacity Development for Policy Makers project. The centres lead the technical backstopping and training on the investment and financial flows assessments conducted in the participating countries.

#### UN system-wide response to climate change

Under the chairmanship of the Secretary-General, the Chief Executives Board (CEB) brings together the leaders of 29 UN system organizations to jointly support Member States in meeting the global challenges faced by the international community. In 2008, the CEB adopted the Climate Change Action Framework, a joint, action-oriented approach in line with the ongoing UNFCCC negotiating processes and the emerging agendas of the Parties of the Convention.

The UN system stands ready to support Member States in implementing their commitments. At COP 16, it is presenting its ongoing work and practical tools available through side events, exhibits and by sharing a joint package with thematic information. For more information on the CEB and its joint work on climate change, please visit http://www.unsceb.org/ceb/priorities/climate-change or contact the CEB Secretariat at ceb@un.org

For additional information on the UN system-wide support to adaptation, please:

- Contact Youssef Nassef, UNFCCC secretariat at secretariat@unfccc.int
- Refer to a comprehensive note produced by the UNFCCC in 2008 on Adaptation-related activities within the United Nations system, available at <a href="http://unfccc.int/resource/docs/2008/awglca4/eng/inf02.pdf">http://unfccc.int/resource/docs/2008/awglca4/eng/inf02.pdf</a>