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Convention on Biological Diversity





# Adaptation

# Under the Frameworks of the CBD, the UNCCD and the UNFCCC

Joint Liaison Group of the Rio Conventions



# 1. Introduction

The Intergovernmental Panel on Climate Change (IPCC), in its Fourth Assessment Report, re-emphasized the need for adaptation to address the impacts of climate change on lives and livelihoods across all sectors.

The main characteristics of climate change include rising temperatures, changes in rainfall pattern, melting of glaciers and sea ice, sea level rise and an increased intensity and/or frequency of extreme events. These changes in physical processes have impacts on biological and socio-economic factors such as: shifts in crop growing seasons; changes in disease vectors; increased rates of extinction for many species; severe water shortages; and heavy deluges and flooding. Furthermore, rising sea levels will increase the risk of storm surges, inundations and wave damage to coastlines.

Photo courtesy of S.J. Watts

The more intense and far-reaching the impacts of climate change are, the greater the loss of plant and animal species will be, and the greater the deterioration of drylands around the world.

With regards to impacts on species, climate change is causing habitats to shift and species to experience changes in life cycles, the development of new physical traits, and, in extreme cases, die-offs and extinctions.

In combination with other stressors, climate change is also increasing the vulnerability of drylands to desertification, particularly as a result of changing rainfall patterns and prolonged droughts. Currently, some 10 to 20% of drylands are degraded, and about 20 to 120 million people live in areas affected by desertification.



The Rio Conventions – the United Nations Convention on Biological Diversity (CBD), the United Nations Convention to Combat Desertification (UNCCD), and the United Nations Framework Convention on Climate Change (UNFCCC) – are addressing adaptation to climate change in their activities and are working together to enhance synergies in the area of adaptation.

A Joint Liaison Group (JLG) between the secretariats of the CBD, UNCCD and UNFCCC was established in 2001 with the aim of enhancing coordination between the three Conventions, including cooperation on adaptation.

This information note is the first step to enhancing collaboration towards linking climate change adaptation, combating desertification, and biodiversity conservation and sustainable use.



### **Adaptation**

The IPCC defines adaptation as an adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.

Adaptation is important to all countries, particularly least developed countries (LDCs) and small island developing States (SIDS), whose economies are heavily dependent on climate-vulnerable sectors, such as agriculture, tourism and fisheries, and which have limited ability to adapt.

Adaptation activities can be technological (such as increased sea defences), policy-based (such as improved risk management), behavioural (such as the sparing use of water in times of drought) or managerial (such as improved forest management).

Using climate change as a driver to undertake activities with multiple benefits, including combating desertification and conserving biodiversity, can catalyse progress in achieving sustainable development goals.

Maintaining biodiversity is an important component of adaptation as biodiversity contributes to the provision of many ecosystem services. However, enormous pressures have been put on ecosystems to support the ever-growing demand for natural resources over recent years. Ecosystem services that are central to adaptation include goods, such as food, fodder and pharmaceutical products, and services, such as nutrient cycling and hydrological flows. Biodiversity resources that can further contribute to adaptation include land races of common crops, wetlands and resilience through diversity. For example, in the face of sea level rise and the projected increase in extreme events and storm surges, coastal wetlands can provide protection to inland infrastructure and important habitats for fish and birds.

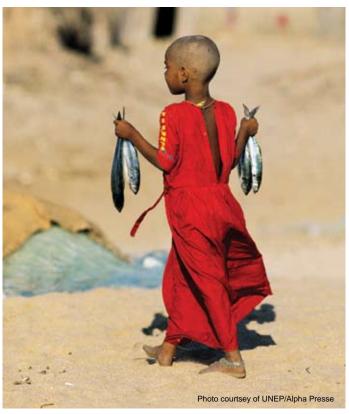
Possible adaptation activities to reduce the vulnerability of biodiversity to the impacts of climate change range from the development of biodiversity corridors to the adoption of invasive species management plans and the identification of species resistant to climate change.

Efforts to combat desertification have potential co-benefits for adaptation through protecting and restoring the productive potential in drylands. This is particularly

important since many of those most vulnerable to climate change are poor people, with a high dependence on biodiversity-based livelihoods, living in sensitive dryland areas.

Possible adaptation activities to reduce the vulnerability of drylands include: rainwater harvesting, the development of drought resistant crop varieties and integrated land and water management. Adaptation actions in drylands typically focus attention on particular development issues, such as strengthening alternative livelihoods.





# 2. Adaptation activities, plans and programmes adopted in the framework of the CBD, the UNCCD and the UNFCCC

#### **CBD**

Given that biodiversity both impacts and is impacted by climate change, Parties to the CBD first committed to adaptation activities during the fifth session of the Conference of the Parties (COP) in May 2000. In particular, decision V/3 on marine and coastal biodiversity included adaptation within the framework of "priority areas for action on coral bleaching".

Adaptation is also integrated within the programmes of work on mountain biodiversity, forest biodiversity, inland waters biodiversity, island biodiversity, and protected areas. The programme of work on the biodiversity of dry and sub-humid lands refers specifically to vulnerability to climate change.

Parties to the CBD have acknowledged both the need to facilitate biodiversity adaptation, such as in the case of mountain biodiversity, and the contribution of biodiversity to broader adaptation activities, such as peatlands within the inland waters biodiversity programme.

The CBD process also includes specific activities on biodiversity and climate change, which link to work on impacts, vulnerability and adaptation to climate change. Decision VIII/30 of the CBD COP acknowledged that this work, including through the Nairobi work programme on impacts, vulnerability and adaptation to climate change (Nairobi work programme), could facilitate communication and cooperation between relevant organizations. The same decision also encourages the development of rapid assessment tools for the design and implementation of biodiversity conservation and sustainable use activities that contribute to adaptation.

The COP further promotes research on climate change response activities related to biodiversity, in the context of the ecosystem approach, environmental impact assessments, and principles of sustainable use. It also calls for the mainstreaming, to the extent possible, of biodiversity considerations into the design, implementation and monitoring of adaptation activities.

Finally, Parties to the CBD are requested to consider the needs of the most vulnerable regions and ecosystems, and of their indigenous and local communities, in order to support the preparation of adaptation activities and plans.

The CBD Secretariat has published two technical series on biodiversity and climate change to support the implementation of relevant adaptation activities. These publications identify possible impacts of adaptation activities on biodiversity and suggest ways to minimize negative impacts while maximizing benefits.

Technical Series No. 10 – Interlinkages between Biological Diversity and Climate Change;

Technical Series No. 25 – Guidance for Promoting Synergy among Activities Addressing Biological Diversity, Desertification, Land Degradation and Climate Change.



#### **UNCCD**

From its inception, the UNCCD has been engaged in enhancing the adaptive capacities of dryland populations to highly variable environmental conditions. Some sectors, regions and social groups are more vulnerable to climate change than others due to prevailing ecological and social contexts. Therefore, adaptation measures form a continuum, ranging from simple vulnerability reduction measures, to long-term sustainable adaptation measures that are required in the poorest, and therefore most vulnerable regions such as drylands.

Existing action plans related to the UNCCD may, therefore, provide an entry point to addressing adaptation in a way that is internalized with a corresponding focus on livelihoods.

Article 10 of the Convention provides for the formulation of National Action Programmes (NAPs), which address, in a concerted manner, poverty reduction and vulnerability to climate change in developing countries, as well as the specific societal factors and conditions that make poor people vulnerable. This leads to identification of the factors contributing to desertification, practical measures necessary to combat it, and measures to mitigate the effects of drought, thereby contributing fully to adaptation efforts. NAPs are the main instrument for implementation of the Convention. They are designed from the bottom up and consider both ecological and societal factors. The NAPs link up with Subregional Action Programmes (SRAPs) and Regional Action Programmes (RAPs).

#### NAPs are inclusive and based on:

- Participation of all groups, including the most vulnerable: youth, women;
- Civil society involvement for sustainability;
- National consultations;
- Good governance, including natural resources management; and
- Local area participatory, cross sectoral and integrated programmes responsive to concrete demands

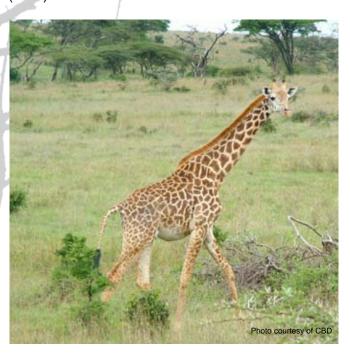
#### They are developed around:

- Partnership agreements (developed–developing countries, affected–non-affected countries);
- Technology transfer (taking due account of traditional knowledge);
- · Capacity-building;
- Integration of NAPs into overall development strategies; and
- Implementation at global, national and local levels.

#### **UNFCCC**

Although in the early days the focus of the UNFCCC was mainly on mitigation, adaptation is now recognised as an important component of any response to climate change. The IPCC Fourth Assessment Report made it clear that accumulated historical emissions have already "committed" the earth to some level of warming and that the impacts of this warming are already being felt. Accordingly, efforts to understand how adaptive capacity might be enhanced and how adaptation might be supported have exponentially increased in the last few years.

Adaptation is well covered by the Convention text. Article 4.1(e), for example, calls on all countries to "cooperate in preparing for adaptation to the impacts of climate change, develop and elaborate appropriate and integrated plans for coastal zone management, water resources and agriculture, and for the protection and rehabilitation of areas, particularly in Africa, affected by drought and desertification, as well as floods." Articles 4.8 and 4.9 also refer to the need to address vulnerability to the adverse effects of climate change and take into account the needs of the LDCs. Adaptation is also addressed under ongoing work relating to national communications, technology transfer, education, training and public awareness, research and systematic observation, and guidance to the Global Environment Facility (GEF).



In 2004, in response to decision 1/CP.10 (also known as the Buenos Aires Programme of Work on Adaptation and Response Measures), the UNFCCC COP set up two complementary tracks for adaptation: the development of a structured programme of work on the scientific, technical and socio-economic aspects of vulnerability and adaptation to climate change under the Subsidiary Body for Scientific and Technological Advice (SBSTA), known as the Nairobi work programme on impacts, vulnerability and adaptation to climate change; and the adoption of concrete implementation measures for furthering information and methodologies, concrete adaptation activities, technology transfer and capacity-building under the Subsidiary Body for Implementation (SBI).

The Nairobi work programme was developed to assist countries to improve their understanding of impacts and increase their ability to make informed decisions on how to successfully adapt. Initial activities were defined for the first two years of the work programme. A revision of the work programme and identification of further activities is expected in June 2008.

Under the SBI, three regional workshops and one expert meeting for SIDS were organized before COP 13 in 2007 to facilitate the exchange of information and integrated assessments to assist in identifying specific adaptation needs and concerns.

In addition to the above, in recognition of the special needs of LDCs and to support their efforts, the COP adopted a comprehensive work programme, which established a process for developing National Adaptation Programmes of Action (NAPAs), whereby LDCs identify priority activities that respond to their urgent and immediate adaptation needs through a multi-stakeholder bottom-up assessment. To provide advice to LDCs in preparing and implementing NAPAs, COP 7 in 2001 established the Least Developed Countries Expert Group (LEG). The experience of developing NAPAs has proven to be very valuable, and a number of non-LDCs have expressed an interest in using the NAPA methodology in their adaptation assessments.

Besides the LEG, two other constituted expert groups under the UNFCCC also contribute to adaptation: the Consultative Group of Experts on National Communications from non-Annex I Parties (CGE) offers technical advice and support in the area of tools, methodologies and process for vulnerability and adaptation assessments in the context of national communications; and the Expert Group on Technology Transfer (EGTT) provides an interface between planning and implementation through guidance on sources of funding and support for pilot projects in the area of the development and transfer of environmentally sound technologies for adaptation.

Besides the GEF Trust Fund, which has predominantly supported mitigation projects since its inception, three special funds, two under the UNFCCC and one under the Kyoto Protocol, were set up to provide additional support. Under the UNFCCC, the Special Climate Change Fund (SCCF) was established to finance projects related to, inter alia, adaptation, while the Least Developed Countries Fund (LDCF) was created to support a work programme for LDCs that includes the preparation and implementation of NAPAs. Both are currently operated by the GEF. Under the Kyoto Protocol, the Adaptation Fund is designed to support concrete adaptation projects and programmes, financed from a share of proceeds from the Clean Development Mechanism (CDM) and other voluntary sources.



# 3. Examples of activities related to adaptation

#### **CBD**

Activities in support of climate change adaptation within the framework of the CBD are implemented through the programmes of work of the Convention and the cross-cutting issue on biodiversity and climate change. At the national and local levels, in particular, Parties design, implement and report on activities based on national circumstances and priorities. Examples of such activities, as well as programmes and projects implemented by Parties, include the following:

# Examples of activities implemented by the Secretariat

# Integration of biodiversity within climate change adaptation planning

The Secretariat prepared web-based guidance on the integration of biodiversity considerations within climate change adaptation planning. The webbased guidance is available in English, French and Spanish.

<a href="http://adaptation.biodiv.org">http://adaptation.biodiv.org</a>

# Ad Hoc Technical Expert Group (AHTEG) on biodiversity and climate change

Four AHTEG meetings on biodiversity and climate change were held between 2002 and 2005. The reports were published as Technical Series No. 10 and Technical Series No. 25.

#### Round-table on the interlinkages between biodiversity and climate change

The round-table was convened in March 2007 in order to enhance information and build additional knowledge on the interlinkages between biodiversity and climate change and related emerging issues.

# Round-table on water, wetlands, biodiversity and climate change

The objective of the round-table, held in March 2007, was to enhance the availability of scientific and technical information on the linkages between biodiversity, wetlands and climate change.

# Examples of activities implemented by Parties

#### Local

## **Conservation of Traditional Plant Varieties in India**

Tribal communities of the Jeypore district in India have started working to preserve local plant varieties. The maintenance of traditional plant varieties is an important tool in adapting to climate change, ensuring that varieties suitable for different conditions are available.

<a href="http://mssrf.org/index.htm">http://mssrf.org/index.htm</a>

#### National

# Australia National Biodiversity and Climate Change Action Plan 2004–2007

The goal of the action plan is to better equip Australia to face the impacts of climate change through adaptation for biodiversity conservation.

<a href="http://www.environment.gov.au/biodiversity/publications/nbccap/pubs/nbccap.pdf">http://www.environment.gov.au/biodiversity/publications/nbccap/pubs/nbccap.pdf</a>

#### Regional

#### The Arctic Climate Impact Assessment (ACIA)

The ACIA was produced to evaluate and synthesize knowledge on climate change and its consequences including a focus on adaptation planning among indigenous people.

<a href="http://www.acia.uaf.edu">http://www.acia.uaf.edu</a>



#### **UNCCD**

Recently the UNCCD Secretariat has been proactive in highlighting the link between the UNCCD process and adaptation to climate change. Examples of such activities, as well as programmes and projects implemented by Parties, include the following:

# Examples of activities implemented by the Secretariat

Contributing to the African Ministerial Conference on Environment (AMCEN) meeting, held from 24–25 April 2007, which led to the Ouagadougou Declaration advocating the linking of NAPs and NAPAs.

Convening the high-level round-table discussion on desertification and adaptation to climate change during UNCCD COP 8, Madrid, 3–14 September 2007.

Issuing a publication entitled "Opportunities for Synergy among the Environmental Conventions: Results of national and local level workshops" which was prepared under the auspices of the Committee on Science and Technology (CST).

Recommendations made by the CST Group of Experts task force on the use of Early Warning Systems for the implementation of the Convention and the "EWS 2000", including a reprint of the reports of the two ad hoc panels reporting to the fourth and fifth sessions of the Conference of Parties on the same issue.

An international workshop on climate and land degradation organized by the World Meteorological Organization, the UNCCD and the Tanzania Meteorological Agency was held in Arusha, United Republic of Tanzania, from 11–15 December 2006. The workshop focused on how climate induces and influences land degradation and what measures need to be taken to enhance the applications of weather and climate information to combat land degradation.

# Examples of activities implemented by Parties

The NAPs, SRAPs and RAPs include:

- National resource management (including activities related to better water infiltration, soil conservation and reforestation):
- Water management (for use in agricultural production to prevent drought episodes during rainy seasons);
- Support for research and development in order to elaborate appropriate technologies;
- Monitoring and early warning systems for drought and desertification control;
- Implementation of new income-generating activities;
- Activities contributing to food security;
- Mobile livestock production for adaptation to fodder scarcity;
- Harmonization of environmental and public policies;
- Promoting environmental mainstreaming;
- Integration of UNCCD issues into programmes and strategies related to climate change mitigation and adaptation;
- Establishment of regional or subregional Drought Management Centres;
- Undertaking preventive measures to reduce occurrences/magnitude of natural catastrophes linked to desertification;
- Reclamation of desert and development of sandy land;
- Control of sand drifts;
- Land Degradation Monitoring and Assessment.



#### UNFCCC

The UNFCCC plays a catalytic role in promoting adaptation strategies and practices. Besides channelling funds to actual adaptation projects through its financial mechanism, several initiatives are undertaken to ensure that knowledge gained from expert meetings, workshops and reports is properly disseminated and of practical use. Examples of such activities, as well as programmes and projects implemented by Parties, include the following:

# Examples of activities implemented by the Secretariat

#### Local coping strategies

The Secretariat has compiled replicable examples of local coping strategies from different parts of the world, and established a database that can be searched by climate hazard, impact and coping strategy.

<a href="http://maindb.unfccc.int/public/adaptation">http://maindb.unfccc.int/public/adaptation</a>

#### Adaptation planning and practices

Under the Nairobi work programme, the Secretariat has created a searchable database where information submitted by Parties and organizations on specific regional, national and local adaptation actions can be found.

<a href="http://maindb.unfccc.int/public/adaptation\_plan-ning">http://maindb.unfccc.int/public/adaptation\_plan-ning</a>

## Compendium of decision tools to evaluate adaptation strategies

Established initially in 1999 and periodically updated, the compendium lists methods and tools to evaluate impacts, vulnerability and adaptation. <a href="http://unfccc.int/2674.php">http://unfccc.int/2674.php</a>

# Calls for Action and Action Pledges under the Nairobi work programme

Based on priority needs identified by Parties and organizations through questionnaires, submissions and workshops, the Secretariat elaborates Calls for Action for wide but targeted dissemination to stimulate adaptation initiatives that respond to stakeholder needs. Through Action Pledges, organizations commit to undertake their own adaptation activities, to share the outcomes and to support the objectives of the Nairobi work programme.

<a href="http://unfccc.int/3920.php">http://unfccc.int/3920.php</a>

# **Examples of activities implemented by Parties**

#### Local

# Reducing climate change induced risks and vulnerabilities from Glacial Lake Outburst Floods in Bhutan

This NAPA project, implemented by UNDP–GEF under the LDC Fund, aims to build disaster risk management capacity and an early warning system in the most vulnerable valleys, and artificially lower the water level in Thortomi Lake.

## Climate Adaptation for Rural Livelihoods and Agriculture in Malawi

This project aims to increase resilience through adaptation strategies, policies, measures and investments that will improve agricultural production and rural livelihoods, from crop diversification and irrigation to policy development and implementation.

#### National

#### **Guyana Conservancy Adaptation Project**

The specific actions of these projetcs include a comprehensive analytical assessment for upgrading the conservancy and strengthening drainage capacity in the face of increased sea levels and more variable rainfall.

## Integrated Climate Change Adaptation in Samoa

This initiative addresses disaster risk management, food security, health and ecosystems, as established in Samoa's NAPA.

#### Regional

#### Integrating Vulnerability and Adaptation to Climate Change into Sustainable Development Policy Planning and Implementation in Southern and Eastern Africa

This is a land management and water resources project implemented by UNEP in Kenya, Madagascar, Mozambique, Rwanda, and Tanzania.



## 4. The future

#### **CBD**

At the eighth session of the CBD COP and the twelfth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA), Parties called for the enhanced integration of climate change impact and response activities within the programmes of work of the Convention. This enhanced focus on climate change adaptation is based on the following guidance:

- Indications or predictions of climate-change impacts and response activities on relevant ecosystems;
- The most vulnerable components of biodiversity;
- The risks and consequences for ecosystem services and human well-being;
- The threats and likely impacts of climate change and response activities on biodiversity and opportunities they provide for the conservation of biodiversity and its sustainable use;
- Monitoring of the threats and likely climate-change impacts and response activities on biodiversity;
- Appropriate monitoring and evaluation techniques, related technology transfer and capacity building initiatives within the programmes of work;
- Critical knowledge needed to support implementation, including, inter alia, scientific research, availability of data, appropriate measurement and monitoring techniques, technology and traditional knowledge; and
- The ecosystem-approach principles and guidance, and the precautionary approach.

The guidance for the enhanced integration of climate change activities will be applied during the in-depth reviews of implementation of the programmes of work on forest biodiversity and agricultural biodiversity.

The twelfth meeting of SBSTTA also reiterated the links between climate change and biodiversity with regard to peatlands, as outlined in the Global Assessment of Peatlands, Biodiversity and Climate Change, and called for further collaboration to support the conservation and sustainable use of peatlands and other wetlands under changing climatic conditions.

There is also an emerging interest in linking planning and reporting processes within the Conventions, focusing on adaptation and mitigation issues. In particular, future work may be explored on the links between National Biodiversity Strategy and Action Plans (NB-SAPs), NAPs under the UNCCD and NAPAs under the UNFCCC.



Finally, as new scientific knowledge emerges it is becoming increasingly important to ensure that information on the links between biodiversity, desertification and adaptation are fully and effectively communicated to policy-makers and local communities.

#### **UNCCD**

Within the next 10 years, the United Nations University (UNU) has reported that 50 million people could be displaced as a consequence of desertification, unless action is taken. The report claims that climate change is making desertification "the greatest environmental challenge of our times." It says that unless current trends are quickly halted, enough fertile land could turn into desert within the next generation to create an "environmental crisis of global proportions." The UNCCD is at a crossroads. Its ten-year strategic plan and framework to enhance the implementation of the Convention will make it a better-recognized instrument of the international community for addressing environmental and socio-economic challenges.

Synergy between the NAPs under the UNCCD, which are building bridges between development and environment policies, NBSAPs under the CBD and NAPAs under the UNFCCC presents an opportunity to establish comprehensive policy instruments. Such an integrated approach to tackling desertification, biodiversity and climate change will have multiple benefits, especially for the poor in the world's drylands who are suffering most from the double blow of desertification and climate change.

From the perspective of environmental management, linking adaptation activities under the UNFCCC to the activities of the UNCCD, rather than designing, implementing and managing climate policy separately,

augurs well for fostering a holistic approach to identifying and creating the necessary tools, resources and conditions for effective adaptation. Synergies also respond to the present orientations of international environmental governance, as it makes sense from an efficiency and mainstreaming perspective.

#### **UNFCCC**

In the ongoing discourse on designing a future climate change regime beyond 2012, adaptation is considered as one of its main building blocks. A number of UNFCCC Parties have pointed out that, although they have well-developed adaptation plans or are in the process of finalising them, more resources, capacities and knowledge are needed for their implementation. Therefore, discussions on adaptation may serve as a significant negotiating interest for these countries to meaningfully engage on a future agreement.

Some of the main challenges facing the implementation of adaptation within the framework of the UNFCCC remain those of the sustainability, sufficiency and predictability of resources available to address climate change. There is also a clear need for more streamlined, innovative and transparent access to resources, and awareness of the different requirements and modalities of the different sources of support.

Significant additional funding for adaptation is envisioned through the operationalization of the Adaptation Fund under the Kyoto Protocol. However, recent estimates from a study commissioned by the UNFCCC Secretariat indicate that an incremental level of annual investment and financial flows of about US\$ 50 billion is needed for adaptation in 2030. This study offers a number of innovative financing options, including extending the carbon market, to close the gap between costs of adaptation and available resources.

Besides financial requirements, future action on adaptation needs to be based on a sound scientific and technical basis. In this regard, the Nairobi work programme has the objective of assisting countries to understand and assess impacts, vulnerability and adaptation, and to make informed decisions on practical adaptation actions and measures.

In addition, the near future will see the implementation of the projects resulting from existing adaptation assessments, such as those undertaken by LDCs in the context of the NAPA process. Lessons learned from this implementation will provide another source of knowledge on planning for future adaptation.

At the UNFCCC regional workshops and expert meeting on adaptation held during 2006 and 2007, a number of areas for future action were identified, including the need to consider adaptation as a development issue and to integrate it into sustainable development planning and practices in all sectors and all aspects of policy-making.

Another emerging area identified as an important component of future action is that of insurance. Innovative risk-sharing mechanisms are needed to respond to the new challenges posed by the adverse effects of climate change, including biodiversity loss and land degradation.

While much progress has been made in recent years on the assessment of impacts and vulnerability, and in the implementation of adaptation activities, there is still a variety of areas which will benefit from synergies through action in the future.



# 5. The call for synergies

There are several challenges to realizing synergy, although many of these could be countered through appropriate planning and the application of tools such as the ecosystem approach. For example, drylands populations often rely on access to ecosystem services in order to cope with drought. However, some desertification measures focus on the absolute protection of vegetation from human use. Continued, sustainable access to indigenous resources in order to support livelihoods during times of climate stress, on the other hand, both promotes biodiversity conservation and sustainable use and enhances adaptive capacity.

Increasing awareness of climate change risks and the need for adaptation should be on the agenda of key sectors and the mass media, including by using current events, such as economic, weather and health crises, as a basis to promote adaptation measures with co-benefits.

Concerted action by the three Rio Conventions in the area of adaptation assessments, planning and implementation is instrumental in fostering a holistic approach to identifying and creating the necessary tools, resources and conditions for effective adaptation in the future.

Further action is also needed to respond to calls from all three Rio Convention bodies, including through the JLG. Some examples include the following:

- The eighth meeting of the CBD COP called on the JLG to present proposals on mutually supportive activities to be conducted by the secretariats of the Rio Conventions, Parties and relevant organizations. These proposals are based on the options for enhanced cooperation among the three Rio Conventions prepared by the JLG at its fifth meeting, in January 2004.
- A UNCCD COP 8 decision on synergies encourages affected country Parties, where applicable, to develop a framework to promote synergies in the implementation of the UNFCCC NAPAs, the CBD NBSAPs and the UNCCD NAPs, including in their financial schemes. The same decision further invites the JLG to advise on ways and means to strengthen the links between these planning instruments.
- In the UNFCCC context, the LEG produced a technical paper on synergies between multilateral environmental agreements in the context of NAPAs, where

it underlines that close cooperation among national MEA focal points is paramount, especially with regard to the implementation of adaptation-related action plans.

• The African Ministerial Conference on Environment (AMCEN), 24–25 April 2007, in Ouagadougou, Burkina Faso, issued the Ouagadougou Declaration, which calls for synergistic implementation of NAPs and NAPAs.





Executive Secretaries of the Rio Conventions

### **Opportunities for synergies**

Activities for enhanced synergies on adaptation, as identified by the JLG, include:

- Providing focal points of all Conventions with up-todate information on relevant assessments, research programmes and monitoring tools;
- Collaboration on the development of common messages on the linkages among climate change, biodiversity and desertification;
- Collaboration on development of educational materials:
- Establishment of joint web-based communication tools.

At the request of the CBD COP, the IPCC produced, in April 2002, Technical Paper V, Climate Change and Biodiversity, which highlights observed and expected impacts of climate change on biodiversity and explores the possible impacts of mitigation and adaptation activities on biodiversity resources.

The UNCCD COP 8, held 3-14 September 2007, adopted the objectives of the ten-year strategic plan and framework to enhance the implementation of the Convention (2008–2018). Strategic objective 1 (to improve the living conditions of affected populations) will lead to reducing the socio-economic and environmental vulnerability of affected populations to climate change, climate variability and drought. Strategic objective 3 (To generate global benefits through effective implementation of the UNCCD) will lead to achieving sustainable land management and combating desertification/land degradation, to the conservation and sustainable use of biodiversity and to the mitigation of climate change.

There is emerging evidence that carbon sequestration projects, for example in the wide expanses of dryland agro ecosystems, could have much greater co-benefits than previously expected. The sequestration of carbon has the potential to counter degradation and increase the productivity and sustainability of these ecosystems. Forest-based mitigation could also provide major social benefits by increasing food security, which in turn would help prevent unsustainable land management practices. Local populations could therefore mitigate climate change while combating desertification and protecting biological diversity.

The GEF's strategic priority, piloting an operational approach to adaptation, supports activities that increase adaptive capacity and resilience to climate change in any of the GEF focal areas, such as biodiversity, land degradation and international waters.

The National Capacity Self Assessments (NCSAs), funded by the GEF, are aimed at assisting countries to conduct joint assessment of capacity-building needs across the three Conventions. The NCSAs promote synergy among the three Conventions.

The Rio Conventions have the ability to act as catalysts for adaptation action individually and in synergy. Parties have already begun to link the implementation of the UNFCCC and the CBD around the issue of adaptation within the context of the Nairobi work programme, and it is expected that these linkages will be strengthened and expanded as additional resources flow to climate change adaptation.









