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## UNITED NATIONS CONVENTION TO COMBAT DESERTIFICATION

### CONFERENCE OF THE PARTIES

**Eighth session**

**Madrid, 3–14 September 2007**

## **Report of the United Nations Environment Programme to the Conference of the Parties to the United Nations Convention to Combat Desertification at its eighth session\***

### **I. Introduction**

1. This report describes major activities of the United Nations Environment Programme (UNEP) in support of the implementation of the United Nations Convention to Combat Desertification (UNCCD) for submission to the Conference of the Parties to the Convention at its eighth session. The report describes key UNEP activities and issues during the reporting period in areas relevant to the Convention.

2. UNEP advocates the view that decisions can and should be made not to change the desert but to live with it and preserve its resources for the future. The active participation of community groups in this task should include their taking charge of their own development, planning for risks and adapting to changing conditions while preserving their deep connections to these remarkable landscapes. The challenge remains to harness not only local but also global policy mechanisms and market incentives to develop a viable future for deserts through the achievement of both environmental conservation and economic development. The degradation of drylands is a growing problem that needs imaginative, collaborative and multi-sectoral action, since it is both a result of and a contributor to climate change, as well as a cause and consequence of poverty.

### **II. World Environment Day**

3. World Environment Day, commemorated each year on 5 June, is one of the principal vehicles through which the United Nations stimulates worldwide awareness of the environment and enhances political attention and action. Mirroring the fact that 2006 has been designated the International Year of Deserts and Desertification, UNEP selected as the World Environment Day theme for 2006 “Deserts and Desertification” with the accompanying slogan “Don't Desert Drylands!” The main international celebrations of the World Environment Day 2006 were held in Algeria. The day's agenda was aimed at giving a human face to environmental issues; empowering people to become active agents of sustainable and equitable development; and

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promoting the idea that communities are pivotal to changing attitudes towards environmental issues.

4. In 2006, UNEP produced the publication “Global Deserts Outlook”, the first thematic report in the Global Environment Outlook (GEO) series of environmental assessments by UNEP. This GEO report, prepared by experts from across the globe, traces the history and astonishing biology of deserts and assesses future changes they are likely to face. It also highlights policy options that may help Governments and relevant bodies deliver a more sustainable future for these extraordinary regions.

5. Also in 2006, the two winners of the prestigious UNEP Sasakawa Prize, Mr Rodrigo Vivas Rosas of Colombia and the Tenadi Cooperative Group of Mauritania, were honoured for their achievements in combating desertification and land degradation. The prize was awarded to these recipients in further recognition of the importance of these problems that threaten the lives and livelihoods of the two billion people inhabiting the planet’s dry and arid areas and to underline that many of the solutions to overcoming the global threat of desertification reside in the hands of local grassroots communities and indigenous peoples, including women and small-scale farmers.

### **III. Rainwater harvesting**

6. Rainwater is an easily accessible resource that can be used near its source. Technologies for its use are low cost and highly decentralized, enabling individuals and communities to manage their water resources. They have been used successfully in domestic, agricultural, environmental and industrial activities for thousands of years. Despite these advantages, however, rainwater is not considered in many water policies and strategies. UNEP is promoting the mainstreaming of rainwater management into water policies at the global, regional and national levels through the Rainwater Partnership. To this end, the African Ministers’ Council on Water at its sixth ordinary session called for the establishment of a rainwater harvesting programme within the Council.

7. UNEP is promoting the use of rainwater as a catalyst for development in the semi-arid area of Kajiado, Kenya. The following outputs from these efforts have contributed to improving the life of the community:

(a) Eighty-four rooftop rainwater-harvesting tanks have been installed to provide drinking water to over 400 families, contributing to the Millennium Development Goal 7 target of reducing by half the proportion of people without sustainable access to safe drinking water and basic sanitation by 2015;

(b) One-hundred-twenty ponds for harvesting run-off have been constructed. The water is used for kitchen gardens and for watering small livestock and trees in family woodlots. This contributes to the Millennium Development Goal 1 target of reducing by half the proportion of people living on less than a dollar a day and the proportion of people who suffer from hunger;

(c) Trenches to collect runoff and water stored in the soil have been constructed in 50 percent of the homesteads. The water is used to maintain moisture for family woodlots.

1,200 trees have been planted in family woodlots containing trees for medicinal, fruit, firewood and timber purposes;

(d) As a spin-off, energy efficient stoves have been constructed by 65 percent of the households. Use of less firewood will contribute to the reduction of deforestation and thus improve water catchment's conditions;

(e) A microfinance system to improve sustainability of the project has been established. The community has collected over half a million Kenyan shillings from its own resources, despite a drought affecting its economy. This is an indication of the community's willingness to improve its livelihood.

8. The most visible impact of the Kajiado project is the availability of safe drinking water near people's homes and the reduction of the time required to fetch firewood and water. The time saved and money borrowed from the microfinance component of the project is being used for income-generating activities such as bead making and small-scale trading. Availability of water has enabled women to establish kitchen gardens that have resulted in monthly savings of up to 1,000 Kenyan shillings per family. The use of energy-saving stoves has reduced the amount of woodcut from nearby forests by 50 percent and has contributed to the reduction of deforestation in the area.

#### **IV. Land Degradation Assessment in Drylands (LADA) Project**

9. UNEP is making significant in-kind contributions to the work of the Land Degradation Assessment in Drylands (LADA) Project. LADA is a global initiative supported by the Global Environment Facility (GEF), UNEP, the UNCCD secretariat, the Global Mechanism (GM) and the Food and Agriculture Organization of the United Nations (FAO) as the executing agency. UNEP partners with FAO in sponsoring the Global Land Cover Network (GLCN). The analysis of land cover change carried out under the global component of LADA draws on methods developed by GLCN. Additional UNEP contributions being considered include a possible atlas publication presenting global LADA findings together with satellite imagery and local case studies. Active engagement has also been established with the UNEP project "An Ecosystem Approach to Restoring West African Drylands and Improving Rural Livelihoods through Agroforestry-based Land Management Interventions". The results of this project will further strengthen the results from the LADA project.

10. The project, which started in May 2006, has resulted in the development and testing of effective assessment methodologies for land degradation in drylands through pilot projects in Argentina, China and Senegal and case studies in Argentina, Kenya, Malaysia and Mexico. A detailed substantive report on the progress of LADA has been prepared by FAO (ICCD/COP(8)/CST/9). In this regard, LADA is included as item 5 on the provisional agenda for the Committee on Science and Technology in Madrid.

#### **V. A spatial analysis approach to the global delineation of drylands**

11. The joint programme of work between the UNCCD and the Convention on Biological Diversity (CBD) foresees (in programme element A) a number of activities regarding assessments of drylands, such as compiling information on the status of and trends in dryland

biodiversity, developing criteria for the identification of lands of particular value or under threat and developing dryland biodiversity indicators. Carrying out these activities requires a common understanding of what and where the drylands of the world are. The definitions of drylands, however, differ between the two conventions.

12. In 2007 UNEP, through the World Conservation Monitoring Centre, undertook a study and produced a report in order to clarify the definitions of drylands used by the two conventions. The report “A spatial analysis approach to the global delineation of dryland areas of relevance to the CBD Programme of Work on Dry and Subhumid Lands” is available online at [http://www.unep-wcmc.org/habitats/drylands/dryland\\_report\\_final\\_HR.pdf](http://www.unep-wcmc.org/habitats/drylands/dryland_report_final_HR.pdf). The study and the report were supported by the Carlo Schmid Programme of the German Academic Exchange.

13. The study found that, while the UNCCD has a spatially explicit definition of dryland boundaries, the CBD definition is both broader and less precise. The former definition covers 34.9 percent of the world’s terrestrial area. Depending on the precise dryland criteria used, the latter definition could cover 41 to 52 per cent of the world’s terrestrial area, that is, between 6 and 17 per cent more than the definition in the UNCCD.

14. The delineation of dryland areas, and hence their extent, has major implications for the scope of the joint work programme between the two conventions. The report has been made available to both conventions and it is recommended that a joint definition be sought in order to allow for improved implementation of the joint work programme.

## **VI. Indicators for dryland biodiversity**

15. In decision VII/30, the Conference of the Parties to the CBD adopted a framework for assessing and communicating progress toward the 2010 biodiversity target on a global scale. The framework includes seven focal areas, each of which encompasses a number of indicators for assessing progress toward, and communicating, the 2010 target at the global level. The 2010 Biodiversity Indicators Partnership, coordinated by UNEP through the World Conservation Monitoring Centre and with support from the GEF, will produce global-scale biodiversity indicators for all biomes, including drylands, on behalf of the CBD.

16. This work will assist the implementation of the joint programme of work between the UNCCD and the CBD, in particular programme element A2.1b on the development of indicators of the status of and trends in the biological diversity of dry and sub-humid lands.

## **VII. Remote sensing of drylands**

17. In cooperation with the Secretariat of the CBD and the NASA-NGO Biodiversity Working Group, the World Conservation Monitoring Centre prepared the “Sourcebook on Remote Sensing and Biodiversity Indicators”, published in 2007 as No. 32 of the Convention on Biological Diversity’s Technical Series (available at <http://www.cbd.int/doc/publications/cbd-ts-32.pdf>). One chapter focuses on the use of remote sensing in national biodiversity indicator development for dry and sub-humid lands.

18. It is hoped that the Sourcebook will assist in the planning and implementation of biodiversity-relevant indicators within the UNCCD as well as other conventions. It supports in

particular the implementation of programme element A2b of the joint programme of work between the UNCCD and CBD (indicators of the status of and trends in the biological diversity of dry and sub-humid lands).

### **VIII. Assessment of the biodiversity of drylands**

19. The joint programme of work between the UNCCD and CBD foresees, under programme element A (assessments), the compilation of information on the status of and trends in biodiversity in dry and sub-humid lands; on the effectiveness of existing conservation measures; on areas considered to be of particular value or under threat; on the benefits derived from biodiversity in dry and sub-humid lands and the socioeconomic consequences of its loss; on best management practices including innovation, knowledge and practices of indigenous and local communities; and on refining identified areas of value (programme element A1.2). It also envisages the development of criteria to facilitate the identification of lands of particular value or under threat and of indicators of the status of and trends in the biological diversity of dry and sub-humid lands, as well as indicators of effectiveness of practices for the activities under programme element A 1.2 (programme element A2.1).

20. In collaboration with the CBD Secretariat, the UNEP World Conservation Monitoring Centre is currently developing a means of assisting in the collation of this information. This assistance would build on the World Conservation Monitoring Centre's experience in assessing the status of and trends in components of biodiversity for other ecosystem types such as mountains, mangroves, coral reefs and sea grasses.

### **IX. Joint reporting on drylands for the Desertification Convention and the Convention on Biological Diversity**

21. The joint programme of work between the Desertification Convention and the Convention on Biological Diversity addresses, in programme element C1, national reporting to the two conventions. It states:

“The two Secretariats will seek to identify harmonized formats of reporting in compliance with their respective obligations. Joint reporting will be in line with the provisions in the programme of work under the Convention on Biological Diversity on the biodiversity of dry and sub-humid lands, as well as the ongoing work to harmonize reporting under the Convention with that of the other biodiversity-related conventions.”

22. In support of this programme element and as part of a wider UNEP knowledge management project between biodiversity-related conventions, the World Conservation Monitoring Centre, in collaboration with the UNEP Division of Environmental Law and Conventions, the secretariats of CBD and UNCCD, is currently drafting a potential joint reporting framework on drylands for the two conventions. This work builds on the current reporting formats of the two conventions as well as on the programme of work on dry and sub-humid lands of the CBD and the other elements of the joint programme of work between the two conventions.

## **X. Coordination and implementation of the Desertification Convention's Subregional Action Programme for West Asia**

23. West Asia is characterized by dry, harsh climatic conditions and limited water, soil and vegetation resources. Levels of water scarcity in the region are among the highest in the world. Rainfall is limited and erratic and the region experiences frequent droughts.

24. About 85 per cent of the area of West Asia lies within arid and semi-arid zones and is largely rangeland. The annual average rainfall in these areas ranges between 100 and 250 mm and is highly variable both within and across seasons. Frequent droughts coupled with mismanagement of resources, such as overgrazing, contribute to rapid land degradation in these fragile ecosystems. This leads to loss of biodiversity of rangeland species and declining productivity, which reduces the already low incomes of local communities and encouraging migration to urban areas.

25. Rangelands in the region, especially in Jordan, Saudi Arabia and the Syrian Arab Republic, suffer severe degradation from excessive grazing pressure. Over-exploitation of the vegetation resources in these areas has resulted in a decline in perennial and indigenous species, while annual species are unsustainable particularly in the drought-prone areas of much of the West Asian rangelands. The result is a loss of vegetation cover, depleted soil nutrients and increased water and wind erosion. Appropriate interventions and resource management, particularly water harvesting and grazing management, will conserve water, soil and vegetation cover and mitigate the effects of drought.

26. The degradation of mountains and rangelands poses a serious threat to rural community livelihoods and adversely affects national economic development in many West Asian countries. Monitoring of vegetation cover and the development of cost effective vegetation cover, soil and water conservation practices and productivity enhancing technologies, as well as policy and institutional options that enable the adoption of such technologies and practices, are needed. Mountainous areas in Lebanon and Yemen have a special importance within the agricultural production systems in those countries. Although rainfall in those areas is often higher, due to their inaccessibility these areas tend to be relatively isolated and marginalized and are home to some of the poorest communities in the region.

27. In 2003, an inventory/regional database for each of the thematic networks of the subregional action programme was completed. Accordingly, a database on water resources (TN1) was developed by the International Centre for Agricultural Research in the Dry Areas (ICARDA) and another on vegetation cover (TN2) was developed by the Arab Centre for the Study of Arid Zones and Dry Lands (ACSAD). Both databases were established in close cooperation with the Diversity Convention national focal points in West Asia. The establishment of these databases projects was instrumental in the facilitation of linkages, information exchange and knowledge sharing among concerned stakeholders at the national and regional levels. The outputs of the above project have also led to the identification of three priority areas for intervention, of concern at both the regional and national levels, aimed at combating land degradation. These priority areas agreed upon and endorsed by the focal points of the West Asia member countries include mountainous areas in the Islamic Republic of Iran, Lebanon, Oman and Yemen; rangelands in Jordan, Saudi Arabia and the Syrian Arab Republic; and coping with salinity problems: Bahrain, Kuwait, Qatar and the United Arab Emirates.

28. To enhance the implementation of the subregional action programme further, the Global Mechanism mobilized \$350,000 committed by the Organization of Petroleum Exporting Countries' Fund for International Development to support the implementation of start-up demonstrative pilot projects, under the rubric "Integrated Natural Resources Management to Combat Desertification In West Asia", aimed at the rehabilitation of mountainous areas and rangeland in four West Asian countries. These projects aimed at enhancing the integrated natural resource management programme for combating desertification in pilot sites (in Jordan and Syria for rangelands and in Lebanon, and Yemen for mountainous areas). The projects were implemented and coordinated by UNEP and were executed by ACSAD for Syria and Yemen and by ICARDA for Jordan and Lebanon.

29. The impact of UNEP projects on the community include successful measures and technologies for prevention of land degradation and rehabilitation of degraded lands based on local knowledge and modern science applied and implemented by local communities and institutions in the pilot area. These projects have also improved the livelihoods of local communities in the region.

30. Guidelines, recommendations and approaches were developed for optimal management of natural resources (water, soil and vegetation), for reducing land degradation and rehabilitating degraded lands in the target environments. In addition, options for policies, property rights and regulatory frameworks were adopted by national systems in West Asia for the transfer of proven technologies and approaches for combating desertification in these areas.

31. Two thousand hectares of rangeland and mountainous areas were rehabilitated. Furthermore, UNEP is enhancing the awareness and understanding of the public and decision makers on the causes and effects of land degradation and the efforts needed to combat it and to rehabilitate degraded lands.

32. A comprehensive proposal towards a Global Environment Facility medium-sized project entitled "Integrated Natural Resources Management to Combat Desertification in West Asia" has been reviewed and approved by the UNEP Division of Global Environment Facility Facilitation and will be submitted shortly to the GEF for approval.

## **XI. Capacity-building and awareness**

33. UNEP has established a long-standing strategic partnership with the Arab Team on Biodiversity and Desertification of the Council of Arab Ministers Responsible for the Environment; it is quite active in providing to this regional intergovernmental forum capacity-building support and policy advice geared to the needs of the region. The team meets twice a year and establishes work plans for addressing desertification, biodiversity and water related issues in the region.

34. To enhance awareness on the part of the public and decision makers, UNEP has produced, in cooperation with ACSAD and the Cairo office of the United Nations Educational, Social and Cultural Organization, a 30-minute documentary film and a book on the Arabian deserts in both Arabic and English (completed 2007). It has also carried out many other similar activities.

35. Since December 2004, UNEP has participated in co-organizing and co-sponsoring, and delivering technical support for, over 50 activities in support of the Desertification Convention and related activities (workshops, expert group meetings, conferences, etc). These activities aimed at building national and regional capacities including with respect policy, institutional and technical aspects of combating land degradation with due consideration to crosscutting issues of biodiversity and water management (with a focus on integrated water resources management).

36. UNEP is working within the West Asia region on a biodiversity workplan and strategy in partnership with ACSAD and ICARDA to provide overall direction in terms of the protection of the region's biodiversity in accordance with the Convention on Biological Diversity. In addition, UNEP participated in the following four meetings and provided policy advice to the Arab Team on Biodiversity and Desertification:

- (a) First meeting (Abu Dhabi, 8–10 January 2005);
- (b) Second meeting (Cairo, Egypt, 21 and 22 June 2005);
- (c) Third meeting (Cairo, Egypt, 22–24 January 2006);
- (d) Fourth meeting (Cairo, Egypt, 20–22 September 2006);
- (e) Fifth meeting (Cairo, Egypt, 10–12 April 2007).

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