

February 2010

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NEAR EAST FORESTRY COMMISSION

NINETEENTH SESSION

NEAR EAST FORESTRY WEEK

HAMMAMET, TUNISIA
5 – 9 APRIL 2010

**Forests and range: adapting to global changes for sustainable
development**

**IN-SESSION SEMINAR: ASSESSING THE RISKS OF AND
VULNERABILITY TO CLIMATE CHANGE OF FORESTS AND
RANGE IN THE NEAR EAST**

Summary

The aim of this note is to facilitate discussion of forestry and climate change adaptation in the Near East Region. It addresses the state of knowledge on climate change risk and vulnerability assessment, impacts on the region's forests and rangelands, adaptation responses, issues regarding adaptation policies and actions, and opportunities for regional and international cooperation. A list of questions is provided to facilitate discussion.

I. INTRODUCTION

1. The most authoritative source of information on global and regional climate change trends and future scenarios is the Fourth Assessment Report (AR4) of the Intergovernmental Panel on Climate Change (IPCC). Climate trends in the Near East¹ include warming and changes in precipitation that are variable over space and time. Possible impacts in the region are water stress, altered river flows in major river systems, including the Tigris and Euphrates, coastal

¹ For IPCC's analysis of impacts, adaption and vulnerability of countries in the Near East region, refer to the chapters for the Asia and African regions in the report of Working Group II: www.ipcc.ch/publications_and_data/ar4/wg2/en/contents.html

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erosion from sea-level rise and intensifying extreme weather events, including cyclones. Climate change impacts will exacerbate the existing pressures on forests and rangelands and can be expected to result in further degradation and deforestation.

2. The 2009 report of the Arab Forum for Environment and Development on climate change impact on Arab countries², which draws on information from AR4 and other sources, points out that among the unique formations in this sub-region, the cedar forests in Lebanon and Syria, mangrove forests in Qatar, reed marshes of Iraq, high mountain ranges of Yemen and Oman and coastal mountain ranges of the Red Sea are particularly vulnerable to climate change. The sub-region is highly vulnerable to climate change because of existing conditions of water scarcity and recurrent drought. Climate change is predicted to increase the risk of wildfires, cause the shift of species habitats and increase the risk of extinctions, as is also the case elsewhere in the Near East Region.

3. More information on climate change impacts on forests and rangelands in the region are summarized in the regional analysis of forests, rangelands and climate change in the Near East, which has been made available to the members of the Commission for discussion at its current session. FAO, with the collaboration of the University of Alexandria, Egypt, undertook this analysis to facilitate discussion of the key issues in the region, countries' needs and the role of regional cooperation to address these needs.

II. COUNTRY POLICIES AND ACTIONS FOR ADAPTATION

4. A country's adaptation strategy and plan must be tailor-made to fit its unique mix of biophysical, social and economic attributes and reflect its capabilities and development priorities. The United Nations Framework Convention on Climate Change (UNFCCC), acknowledging that there is no "one-size-that-fits-all" strategy, does not attempt to give guidance on the substantive content of countries' adaptation strategies and plans, but agrees that steps countries need to take include the following: plan and implement adaptation actions; carry out impact, vulnerability and adaptation assessments; strengthen institutional capacities and promote enabling environments for adaptation planning and implementation; promote and provide incentives for adaptation; strengthen the resilience of socio-economic and ecological systems; enhance disaster risk reduction; establish risk sharing and transfer mechanisms and insurance schemes; enhance understanding and cooperation on population displacement; undertake research, technology transfer and capacity-building; and strengthen data, information and knowledge systems and education and public awareness³.

5. Risk and vulnerability assessments of forest and rangeland ecosystems and forest-dependent people are fundamental to the development of sound adaptation strategies. The ability to down-scale regional and sub-regional predictions of climate change and related impacts to national and sub-national levels is a challenge facing all countries. This limits the extent to which risk and vulnerability assessments and adaptation plans can be made with confidence. Improved techniques for risk and vulnerability coupled with flexible institutional mechanisms and governance arrangements that facilitate rapid responses are needed.

6. Little information is available on Near East countries' efforts to carry out risk and vulnerability assessments, develop strategies and plans and implement adaptation measures. National reports to UNFCCC give only an incomplete picture. Of the 27 members of the Near East Forestry Commission, only 17 countries have submitted to UNFCCC their first National Communication and six have submitted their second.⁴ There is scant mention of forestry in most

² AFED. 2009 Arab environment: climate change. Impact of climate change on Arab countries. AFED, Beirut. www.sciencedev.net/Docs/arab_climate_report.pdf

³ See draft decision text on enhanced action on adaptation of the Ad-hoc Working Group on Long-Term Cooperative Action at <http://unfccc.int/resource/docs/2009/awglca8/eng/107a01.pdf>

⁴ See http://unfccc.int/national_reports/non-annex_i_natcom/items/2979.php

of the National Communications (and what is reported refers mainly to mitigation rather than adaptation). The four National Adaptation Plans of Action (NAPA) for the region have more information on proposed forest adaptation measures.

7. Although providing only a partial picture of needs and possible responses, the National Communications and NAPAs do indicate some key areas for forestry adaptation in the region. These include: restoration and rehabilitation of degraded shrublands and woodlands, establishment of green belts to combat desertification, afforestation, agroforestry, sand dune stabilization, biodiversity conservation and restoration, including establishment of nature reserves, improved water use efficiency for tree and plant production, vulnerability assessments on forest and rangeland flora and fauna; substitution of wood fuels; participatory reforestation for energy, programmes on research, education and awareness raising.

8. Apart from instigating adaptation measures in the field, countries will have to undertake action related to the following: 1) integrating climate change into national forest programmes, including stakeholder involvement; 2) strengthening capacity for adaptation policy formulation, planning and field implementation; and 3) monitoring and assessment of progress and impacts of adaptation measures.

III. IMPLICATIONS OF INTERNATIONAL CLIMATE CHANGE DELIBERATIONS

9. Over the past few years, the UNFCCC has put increasing emphasis on climate change adaptation, agreeing that it must proceed at the same time as accelerated mitigation action. The inability of the UNFCCC at its Fifteenth Session of the Conference of the Parties (COP15) (Copenhagen, December 2009) to reach consensus on international commitments for climate change mitigation makes it all the more crucial that countries initiate strong action in adaptation.

10. While COP15 did not achieve the desired outcomes, the results do represent progress towards agreement on stronger mitigation commitments and on increased support for adaptation. The Copenhagen Accord, although not adopted by COP15, represents a vision for a political consensus on the long-term, global response to climate change. Progress was made towards agreement on the long-term cooperative action under the Convention and further commitments under the Kyoto Protocol under the two respective ad-hoc working groups: the Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA) and the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP).

11. The Copenhagen Accord stresses the need to establish a comprehensive adaptation programme, including international support. Enhanced action and international cooperation on adaptation is urgently required. The Accord calls for the establishment of the Copenhagen Green Climate Fund under UNFCCC to support mitigation, adaptation, capacity building, and technology development and transfer in developing countries. Adaptation would be targeted particularly to the most vulnerable, especially least developed countries, small island developing states and Africa.

12. The current draft text of the AWG-LCA regarding climate change adaptation recognizes the value of cooperative action at regional level and calls for the establishment or strengthening of regional centres or platforms to support enhanced action on adaptation by developing countries.

13. UNFCCC deliberations on forest mitigation, in particular related to “reducing emissions from deforestation and forest degradation in developing countries (REDD+)”⁵, have raised political visibility and commitment for forestry to an all-time high. There appears to be consensus on the scope for REDD+, covering essentially all possible forestry mitigation options - reduced emissions from deforestation and forest degradation, conservation, sustainable management of

⁵ See SBSTA text on REDD+ adopted by COP15 at: <http://unfccc.int/resource/docs/2009/sbsta/eng/l19a01.pdf> and the most recent version of the REDD+ text of the Ad-hoc Working Group on Long Term Cooperative Action at <http://unfccc.int/resource/docs/2009/awglca8/eng/l07a06.pdf>

forests and enhancement of forest stocks. As most mitigation and adaptation measures in forestry are mutually supportive, support for REDD+ in a country could be expected to bring adaptation benefits.

IV. OPPORTUNITIES FOR REGIONAL COOPERATION AND RELEVANT SUPPORT BY FAO

14. The Arab Forum for Environment and Development (AFED) held its second annual conference in Beirut on 19-20 November 2009. The 500 delegates from 22 countries deliberated the findings of the report issued by AFED on the Impact of Climate Change on Arab Countries.⁶ Among the findings were that, although the challenges are immense, virtually no concerted mitigation or adaptation efforts are being carried out to make Arab countries better prepared to address the climate change vulnerabilities discussed in the report. Governments were urged to devote more efforts and resources to monitor and assess climate change in all sectors affected by climate change, and establish a regional centre for coordination of research and scientific knowledge. Technical training and the establishment of a regularly updated database inventory of climate change research and national, regional and international studies were also recommended.

15. At its Twenty-ninth Session (Cairo, March 2008), the FAO Regional Conference for the Near East called on countries to develop policies and legislation conducive to climate change mitigation and adaptation and improve adaptation capacities. It also requested FAO to prepare studies specific to the region on the possible impact of climate change on agriculture, food security and natural resources and to promote the integration of climate change into natural resources management programmes and activities in the region.⁷ Similar recommendations and requests were made at the Eighteen Session of the Near East Forestry Commission, as reported in document NEFC FO:NEFC/2010/5 for the Commission's current session.

16. *Silva Mediterranea* has been instrumental in launching recent initiatives related to forests and climate change in the Mediterranean region. In November 2009, *Silva Mediterranea* and the International Centre for Advanced Agronomic Studies (CIHEAM), together with other partners, organized the Regional Workshop on Mediterranean Forest Genetic Resources and Climate Change, held in Chania, Greece. In collaboration with *Gesellschaft für Technische Zusammenarbeit* (GTZ), FAO/*Silva Mediterranea* is supporting the development and implementation of a project on "Adapting policy framework conditions for sustainable forest management in the Mediterranean Middle East and North Africa (Algeria, Lebanon, Morocco, Syria, Tunisia and Turkey) within the context of climate change" (For more details, see the Secretariat note FO:NEFC/2010/Inf.5 on "*Silva Mediterranea*: progress report on activities). Moreover FAO/*Silva Mediterranea*, in collaboration with the European Forest Institute (EFIMED), is organizing the first "Mediterranean Forest Week", to be held in Antalya, Turkey, on 13-16 April 2010. A scientific seminar on "Knowledge-based management of Mediterranean Forests under climate driven risks: the ways ahead" will be organized on 15 April.

17. Adaptation (and mitigation) should be integrated into national climate change strategies and be compatible with national development priorities. Countries of the Near East Region may be interested to know that FAO is developing tools (or guidelines) to help countries integrate climate change into their forestry sector. One is aimed at national policy level to help countries identify needed policy, institutional and legislative changes. The second is targeted at the forest management unit level. When they are completed in 2010, FAO will offer to assist countries wishing to use them.

⁶ See: WWW.SCIENCEDEV.NET/DOCS/ARAB_CLIMATE_REPORT.PDF

⁷ The report of the session, document NERC/08/REP, is available at <ftp://ftp.fao.org/docrep/fao/meeting/014/k2369e2.pdf>

18. The positive news is that there are regional initiatives and other supportive actions under way which would assist countries to address the challenges and opportunities for climate change adaptation in the forest sector. Nonetheless, there are many outstanding needs and potential for enhanced regional cooperation to help address these needs.

CONCLUSIONS

- The need for countries to initiate or accelerate efforts in adaptation is increasingly apparent and urgent.
- Climate change adaptation in the forest sector will require risk and vulnerability assessments of forests and forest dependent people, adjustments to forest policies and management practices, new research, additional training and capacity strengthening. This will require additional financial investments in the sector.
- No comprehensive picture exists of the status of countries' risk and vulnerability assessments and adaptation plans in the region.
- Annex 1 Parties to UNFCCC have committed themselves to assist developing countries meet the challenges of climate change. New and additional resources for climate change adaptation, particularly for the most vulnerable countries, are likely to materialize. Action now by forestry agencies to undertake risk and vulnerability assessments and to develop sound adaptation plans would put the forestry sector in an advantageous position to receive adaptation support.
- Regional mechanisms and cooperation can be instrumental in enhancing national action in forestry for climate change adaptation and should be strengthened.

POINTS FOR DISCUSSION BY THE COMMISSION

- What are the needs of the forest sector related to climate change adaptation, including regarding forest and rangeland monitoring; research on climate change impacts, vulnerability and effectiveness of response measures; strengthening of institutional capacity; and adjusting policies and practices. What measures must countries take and what is the role of regional cooperation in addressing these needs?
- How might regional cooperation contribute to compiling and sharing of information, knowledge and experiences in climate change adaptation and in facilitating technology transfer and financial support? How might regional cooperation be further strengthened, and what roles can regional mechanisms play?
- What role could the Commission play in responding to the call of UNFCCC to establish regional centers or platforms that could enhance adaptation efforts?