



NEAR EAST FORESTRY AND RANGE COMMISSION

TWENTY-SECOND SESSION

Tlemcen, Algeria, 13 - 17 December 2015

CRITERIA AND INDICATORS FOR SUSTAINABLE MANAGEMENT OF FORESTS AND RANGELANDS IN THE NEAR EAST

I. Background and Rationale

1. Forests and rangelands in the Region are under several types of pressure ranging from drought and climate change to changes in land use and increasing refugees. While the instability in the region increases the stress on the ecosystems, the conflicts affecting land use will increase with the increasing stress caused by population growth and the need for food security.
2. Although forests in the NENA region cover a small part of the land, rangelands have quite extensive coverage, reaching up to 65 percent of the land area in some countries. These resources play important social, cultural, environmental and economic roles, particularly when including categorizing them as 'other wooded lands and trees outside the forests' (including urban forests and trees, mangroves, oases...). However, in most countries, forest and rangelands resources are not given the priority they deserve.
3. While some countries in the Region have a long and rich experience in forest management, and Criteria and Indicators (C&Is) are used in one way or another as a management tool, several governments do not recognize the importance of the C&Is, because of their limited forest cover.
4. It is often difficult to distinguish between forests, bare-lands and rangelands in the region because of the multiple land-use practices and the complexity of the land cover. Rangelands are frequently perceived as sources of animal feed, overlooking their other supportive and provisional ecosystem roles. In many cases, rangelands, mangroves, oases, urban forests and trees are frequently managed by other institutions than the institutions in charge of the forestry sector. The use of the C&Is should be extended to include these diversified ecosystems and the supportive and provisional services they render.
5. Criteria and indicators) have been used, within and across countries, to develop a common understanding of what is meant by sustainable forest management (SFM), a common approach to

This document is printed in limited numbers to minimize the environmental impact of FAO's processes and contribute to climate neutrality. Delegates and observers are kindly requested to bring their copies to meetings and to avoid asking for additional copies. Most FAO meeting documents are available on the Internet at

promoting SFM and assessing forest trends and progress toward it. They provide a common framework for exchanging knowledge, experience and lessons learned between different stakeholders at global, regional/sub-regional, national, subnational and operational/Forest Management Unit (FMU) levels. C&Is have fostered regional engagement on forest/SFM issues, including in the course of bringing countries together in regional/sub-regional processes to elaborate C&I sets.

6. An expert meeting on Criteria and Indicators for Sustainable Forest Management for countries in the region was jointly organized by FAO and UNEP in September 1996. Representatives from 30 member countries identified 7 criteria and 65 indicators for sustainable forest management at the regional and national levels (The Near East Process).

7. Since 1996, several meetings were held at the regional level by FAO and different partners in order to promote the use of the C&Is at the national levels. National adoption processes were held in different countries, but they were rarely translated into action plans and the C&Is were almost never used, with the exception of a few countries. Despite their importance at different levels, no indicators of sustainability were ever explicitly developed for the rangelands in the NENA region.

8. Almost two decades after the development of C&I for SFM in the “Near East Process”, an “Expert Consultation Meeting on the Development of Criteria and Indicators for Sustainable Management of Forests and Rangelands and Proposal of a Work Plan for their Adoption and Uses in the Near East and North Africa Region” was held in Cairo on June 7-9, 2015. The meeting was organized by FAO, through its Regional Office for the Near East and its Forestry Department in Rome, in collaboration with IUCN Regional Office for West Asia. The overall goal of the meeting was to propose and elaborate a set of sustainability indicators for forests, rangelands and other-wooded lands for the NENA Region.

9. At the end of this meeting, based on the seven “Thematic Elements” (criteria) contained in the UN Forest Instrument, and building on the “Near East Process” list of C&Is, experts have developed a set of “Criteria and Indicators for Sustainable Forest and Range Management in the Near East and North Africa Region” by integrating rangelands, other-wooded lands and sustainable land management (SLM) aspects in indicators. In addition, the number of proposed indicators was reduced from 65 to 33 to increase feasibility and cost-efficiency of their practical use by decision makers at national as well as at the field level. The new proposed set of criteria and indicators for sustainable forest and range management is presented in Annex 1.

II. The current and potential uses of the C&Is; the challenges and opportunities

10. Understanding the importance of the C&Is as a planning and monitoring tool and not just as another reporting obligation and considering their contribution to the sustainable forest, land, and rangeland management will further enhance their use at the different levels. Such a monitoring tool could and should be used by the institutions in charge of the different ecosystems and their land-uses. The adoption and implementation of the C&Is by the different countries could enhance coordination among the concerned institutions leading to a better recognition of the importance of such ecosystems. This will facilitate the adoption of C&Is and their integration into the work of the different institutions in the countries. Better data on forest and range management indicators will also allow for better mainstreaming of sustainable forest and rangeland management into national policy and budget allocation processes.

11. The current developments in information technology and mapping tools have allowed for an easy and cheap access to maps for a better assessment of the resources. Combined with the C&Is, such tools should be utilized at the national level in order to assess and evaluate the resources and analyse the trends in land degradation. This will help the implementation of sustainable forest and range management system and practices.

12. Using C&Is will help provide the necessary information to establish priority policies for ranges, forests and woodlands, plan their implementation and monitor and assess effectiveness of management and policy. They will also provide a standard approach for reporting nationally and to international conventions and processes. To allow cost-efficient monitoring, forest and range management indicators could be integrated within existing related monitoring and reporting processes.

13. The adoption and use of the C&Is as a planning and monitoring tool for decision-makers will require the development of a baseline information system against which land-use/land-cover changes will be compared. To do this effectively, all stakeholders would need to consistently contribute to the formation, uptake and strengthening of the C&I process. This will foster better planning of forest and range-related activities. It will allow for the identification of gaps and needs for capacity strengthening and for submitting relevant projects for international funding.

14. The use of the C&Is will support making progress on achieving sustainability targets and adoption of sustainable practices. For instance, C&Is could be used in the different aspects related to land degradation neutrality and sustainable land management, in particular, aspects related to Sustainable Development Goal 15: *Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss*. Coordinating data collection with other processes will contribute to promoting information sharing among the different institutions.

15. At the regional level, the uses of the C&Is could be strengthened through a better reflection and integration of the C&Is when updating processes of policies/strategies, in projects and programs developed and implemented at both the regional and national levels. This would allow for a better follow-up on the use of the C&Is in sustainable forest and range management.

III. Points for the Commission's considerations

16. The Commission may wish to recommend to countries to:

- Take basic steps in establishing/strengthening their national forest assessment and monitoring systems to enable them to undertake a baseline and subsequent regular assessments of forest and range management indicators to allow them to monitor changes and trends in their land use/land cover and seek the support of FAO in this regards. This would take into consideration information on forests, other wooded lands (OWL), rangelands, changes in land-use/land-cover.
- Integrate the C&Is within the National Forests and Range Programs and similar processes, when defining the different uses of C&Is at the National and Management Unit levels.
- Raise awareness of policy makers and all concerned stakeholders on the importance of C&Is as management and monitoring tools and as providers of information for reporting processes; this will contribute to a better understanding of the economic value of forests and rangelands and the high cost of adopting unsustainable management practices
- Assess the challenges that led to the limited use of C&Is as monitoring and reporting tools at both policy and practice levels and take needed actions to address these challenges at the country level and if required with support from FAO and other related organizations on an as needed basis.

17. The Commission may wish to recommend that FAO supports countries in:

- Undertaking an assessment process for the status of Sustainable Forest and Rangelands Management (SFRM) in the NENA region. The assessment could cover, but not be limited to, the resources availability and requirements for monitoring SFRM, and the capacity building and resources needs on sustainable forest and range management.
- Based on the assessment, developing a regional project for establishing/strengthening SFRM systems and facilitating the exchange of experience between countries in the Region in the use

of C&Is as planning, monitoring and reporting tools for SFRM and building countries' capacities in their adoption and use at both policy and practice levels.

- Assessing progress made at the next session of the NEFRC.

ANNEX I

Proposed Common Set of Sustainability Indicators

Criteria and Indicators of Sustainable Forest and Rangelands Management

in the NENA Region:

Criterion 1: Extent of forest and range resources

Indicators:

1. Area and percentage of forests, rangelands and “other wooded lands”
2. Area and percentage of forests, rangelands and other wooded lands for which management plans are made
3. Area and type of forests, rangelands and bare-lands affected by land degradation
 - a) Erosion (permanent loss of top soil due to water run off or wind)
 - b) Loss of biomass and related soil carbon content depletion (deforestation, short or no fallow, overgrazing)
 - c) Pollution of soil & water (excess of nitrates, phosphates and biocides in soils and water, industrial leakages, radioactivity)
4. Area and type of interventions to address or reduce land degradation per hectare per year (afforestation/reforestation, range improvement, soil retention...)

Criterion 2: Conservation of biological diversity in forest and rangeland areas

Indicators:

5. Areas and percentage of forest reserves and rangeland ranches and protected areas
6. Number/area of forests, rangelands and woodlands (including plots smaller than 0.5ha) under traditional management/protection systems (Hima, Marabout, Maqam, etc.)
7. Area of distribution and number of species at risk in forest and rangeland areas (IUCN Red List)
8. Existence of documented seed provenances
9. Number of species/provenances conserved ex situ

Criterion 3: Health, vitality and integrity

Indicators:

10. Areas and percentage of forests and rangelands affected by:
 - a) storms
 - b) insects and diseases
 - c) drought
 - d) wild animals (game)
 - e) invasive species
 - f) fires
 - g) mining (including oil)

11. Area of encroachment or fragmentation caused by farming, urban expansion and unplanned tourism
12. Area affected by instability and social conflicts

Criterion 4: Productive capacity and functions

Indicators:

13. Biomass/Standing Volume, Growing Stock, Carbon Stock in forests, woodlands and rangelands.
14. Annual wood removal including fuel wood and charcoal
15. Annual rangeland fodder production
16. Annual non-wood forest and rangeland products outputs (including among others aromatic and medicinal plants)
17. Number of livestock grazing in forests, woodlands and rangelands

Criterion 5: Protective and environmental functions

Indicators:

18. Size and percentage of forests/rangelands managed mainly for soil and water conservation
19. Size and percentage of forests/rangelands managed to reduce natural hazards (landslides, rockfalls, floods, etc.)
20. Areas managed for scenic and amenity purposes (including urban and peri-urban forests and tree plantations, windbreaks, green belts)

Criterion 6: Maintenance and development of socio-economic functions and conditions

Indicators:

21. Value of wood and non-wood forest products (including recreation, hunting, grazing...)
22. Share of forests and rangelands (livestock products) sector in GNP/GDP
23. Value from secondary forest industries
24. Number of individuals working in the forest and rangelands sector
25. Number of forest and rangelands related offenses (illegal harvesting, voluntary fires, illegal grazing...)
26. Number of traditional management practices or local technologies documented

Criterion 7: The legal, institutional and governance frameworks

Indicators:

27. Existence of updated national forest and range policy/strategy/legislation and regulations
28. Existence of policy supporting community forest and range tenure
29. Existence of institutional instruments and tools

30. Share of contribution from national budget to forest and rangelands related activities
31. Existence and type of forest and rangelands related education (university, technical, informal) and research institutions
32. Number and gender of individual enrolled in forest and rangelands related education (by type of education)
33. Percentage of public/private lands (forests, woodlands, rangelands, bare-lands...)