



**UNITED  
NATIONS**



**Convention to Combat  
Desertification**

Distr.  
GENERAL

ICCD/COP(6)/CST/7  
4 July 2003

Original: ENGLISH

CONFERENCE OF THE PARTIES  
Committee on Science and Technology  
Sixth session  
Havana, 26-28 August 2003  
Item 10 of the provisional agenda

**LAND DEGRADATION ASSESSMENT IN DRYLANDS AND  
THE MILLENNIUM ECOSYSTEM ASSESSMENT**

Note by the secretariat\*

**SUMMARY**

The Land Degradation Assessment in Drylands (LADA) project aims to generate up-to-date information on ecological, economical, social and technical aspects of land degradation in drylands including a combination of traditional knowledge and modern science, to guide an integrated assessment and cross-sectoral planning and management of land resources in drylands.

The principle objective of the LADA project is to develop tools and methods to assess and quantify the nature, extent, severity and impacts of land degradation on ecosystems, watersheds and river basins, carbon storage and biological diversity in drylands at a range of spatial and temporal scales. The project will also build national, regional and global assessment capacities to enable the design and planning of interventions to mitigate land degradation and establish sustainable land use and management practices.

The Millennium Ecosystem Assessment (MA) will help provide the knowledge base for improved decisions and will build capacity for analyzing and supplying this information. This document presents the conceptual and methodological approach that the MA will use to assess options that can enhance the contribution of ecosystems to human well-being. This same approach should provide a suitable basis for governments, the private sector, and civil society to factor considerations of ecosystems and ecosystem services into their own planning and actions.

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\* The submission of this document was delayed in order to include consideration of reports submitted to the secretariat in June 2003.

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## **I. BACKGROUND INFORMATION**

1. The Conference of the Parties (COP) at its fifth session, by decision 19/COP.5, noted with appreciation the work of the Millennium Ecosystem Assessment (MA), and the Land Degradation Assessment in Drylands (LADA) projects. The COP requested the secretariat to follow closely the activities of the MA and the LADA, and to facilitate the involvement of the Parties, in order that the concerns of the Parties are taken into account in the assessments. The COP also requested the secretariat to report on the progress of these two initiatives at the next session of the Committee on Science and Technology (CST).
2. The Secretariat of the MA, and the Food and Agriculture Organization of the United Nations (FAO), which is the executing agency for the LADA project, were invited by the secretariat to prepare reports on the progress on these two initiatives. This document summarizes information contained in the reports. Full reports are available at the UNCCD Internet Web site at <http://www.unccd.int/cop/cop6/CSTsubmissions.php>.

## **II. REPORT ON PROGRESS OF THE MILLENNIUM ECOSYSTEM ASSESSMENT**

### **A. Overview and report on progress of the Millennium Ecosystem Assessment**

3. The MA, launched in June 2001, is an integrated assessment, designed to meet some of the assessment needs of the UNCCD, the Ramsar Convention on Wetlands, the Convention on Biological Diversity (CBD), the Convention on Migratory Species (CMS) and other users including the private sector, civil society, and indigenous peoples. It has been invited by those four conventions to provide assessment input to their scientific and technical bodies. The COP to CBD has further asked its Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) to report on the MA findings to the CBD COP.
4. The objective of the MA is to help meet the needs of decision-makers for peer-reviewed, policy-relevant scientific information on issues they are confronting concerning ecosystems and human well-being. The MA will also build human and institutional capacity to provide such information. If the MA proves successful, a process similar to MA would be repeated at regular intervals (of possibly five or ten years).
5. The MA is being undertaken at multiple scales. It consists of a global assessment as well as a series of linked regional, national and local assessments. The assessment is being carried out through four expert working groups, each of which will produce a final report by early 2005.
  - (a) The Sub-Global Working Group will present a methodology for conducting multi-scale assessments, and summarize the findings from each of the local, national and regional assessments associated with the MA. The sub-global components of the MA will directly meet the needs of decision-makers at those scales. In addition, the sub-global components of the MA will strengthen the global findings with on-the-ground reality and inform the local findings with global perspectives, data, and models. Approved assessments in nine countries have become components of the MA. In addition, several "candidate" assessments have been proposed. Any proposed sub-global assessments meeting basic criteria developed by the MA (available on the MA Web site) and

whose primary purpose is to meet decision-makers needs at the scale at which they are conducted, can become affiliated with the MA process and benefit from its technical resources.

(b) The Condition and Trends Working Group will describe each major ecosystem service. The condition and geographical distribution and trends of the supply and demand for each service will be considered and the capacity of ecosystems to supply these services, and the impacts of the changes in ecosystems on their provision will be described. A description of the current extent, condition and trends of ecosystems, presented in commonly referenced units (e.g., forests, freshwater, coastal, mountain, etc.), and trade-offs between the provision of the various services will be laid out. Chapters will also address issues such as species use of multiple ecosystem types, areas with multiple examples of rapid change, land conversions, and protected areas. The final section of the product will aim to assess the impacts of ecosystem change on human well-being, covering indicators of health, environmental security, cultural security, economic security and equity;

(c) The Scenarios Working Group will assess the findings of previous global scenario analyses concerning goods and services and develop a set of scenarios providing quantitative estimates of the consequences of various plausible changes in primary driving forces on proximate forces, ecosystem goods and services and the human well-being. It will illustrate the connection of global changes in ecosystem services at different scales (global to local) and the connection of ecosystem services to human well-being;

(d) The Response Options Working Group will begin with an introduction to the conceptual framework and the typology of response options within categories of disciplinary tradition, social control, drivers and scale. Then there will be an assessment of past and current response options, which will provide the basis for practical recommendations, tools and guidelines for the various users through an evaluation of existing literature and the MA sub-global assessments. Finally, there will be a synthesis of the “ingredients for successful responses”, based on an evaluation of available policies and scenarios.

6. A more detailed outline of the working groups assessment reports can be obtained from the MA Secretariat (Internet Web site: <http://www.millenniumassessment.org>, E-mail address: [info@millenniumassessment.org](mailto:info@millenniumassessment.org)). In addition to the full assessment reports, a summary for policy makers will be prepared for each assessment report and a synthesis report will be prepared to address high priority needs as identified by the UNCCD.

7. The MA will use a wide range of data and information, relying on peer reviewed findings in the published literature and global datasets. The process will also incorporate indigenous and traditional knowledge, national data available from a wide range of ministries, private sector information, etc. In particular, the MA will seek to incorporate information from national strategies and action programmes and will seek to develop products and build capacity that may be directly helpful in updating national strategies and action programmes.

8. World Environment Day, 5 June 2003, marked the second anniversary of the MA. The assessment is now half way into the process, within schedule and budget, and the first product will be released in 2003. The four MA working groups are preparing the draft assessment reports and carrying out the sub-global assessments. First drafts of the global assessment reports will be ready

for review in late 2003 and early 2004. In parallel, the MA is implementing an engagement strategy to facilitate the participation of stakeholders in the process at national and regional levels, developing a capacity-building strategy that will allow it to systematize and share the expertise gained through the assessment and a communications strategy that will ensure broad dissemination of its findings. In September 2003, a publication will be issued, entitled *Ecosystems and Human Well-being: A Framework for Assessment*. This book will describe the conceptual approach of the MA and provide important guidance to governments and other users on how to conduct an integrated ecosystem assessment. The year 2004 will be devoted to the review process of the drafts of various MA reports. The review process will include two rounds and will seek input from national governments, experts and users in the private sector and civil society. During 2004, the MA will further deepen its engagement and capacity-building activities at various levels to continue to ensure stakeholder access to the process and its benefits. The final reports, to be published by Island Press, will be released during the first half of 2005.

9. The MA interacts with other environmental and sectoral assessment processes including the Intergovernmental Panel on Climate Change (IPCC), the Land Degradation Assessment in Drylands (LADA), the Global International Waters Assessment (GIWA), the Global Environment Outlook (GEO) and the Forest Resources Assessment (FRA), to ensure that it adds value to activities already underway.

10. The MA Board is multisectoral and representative of different communities of ecosystem users. The Executive Secretary of UNCCD and the Chairperson of CST are represented on the MA Board. Representatives of other conventions (Ramsar Convention on Wetlands, UNFCCC, CBD and CMS) and other key international institutions are also included in the Board.

11. Because the MA is a 'needs-driven' assessment process, a number of steps were taken to involve intended users in the MA design through both formal and informal dialogues:

(a) Information needs from the MA were discussed at the meeting of CST Bureau (August 2001), and at the fifth session of CST (October 2001), as well as at the tenth Ramsar STRP meeting (June 2001) and the sixth (March 2001) and seventh (November 2001) and eighth (March 2003) sessions of CBD SBSTTA and the sixth session of the CBD COP;

(b) The MA sub-global assessment activities now underway include extensive involvement of the users in their planning phase;

(c) Workshops and briefings have been conducted for the private sector, including sessions jointly organized with the World Business Council on Sustainable Development (WBCSD), to explore how the MA could contribute to sustainable development planning within business;

(d) A series of meetings and consultations to explore user needs within civil society and indigenous peoples' organizations have been organized throughout the world;

(e) The first draft of the "users needs" outline was made available through the MA Web site in August 2001. This document is being updated on an ongoing basis and the working groups are charged with responding to the defined user needs to the greatest extent possible in their work.

12. In addition, the MA has developed a series of mechanisms to facilitate the participation of stakeholders in the assessment process. More information on these can be found on the MA Web site (<http://www.millenniumassessment.org>):

(a) User forums. The MA is establishing opportunities for dialogue at the regional, national and local levels with the multiple stakeholders identified as beneficiaries of the assessment;

(b) Affiliated scientific organizations and academies of sciences. The MA has developed a mechanism to interact more broadly with the scientific community, in particular with organizations responsible for fostering scientific, technical or technological research, monitoring, or assessment or linking scientific research or assessment to the needs of decision-makers;

(c) Sub-global assessments. Applications to become affiliated assessments will be reviewed on a continuing basis;

(d) Access to information. The MA is an open, transparent process. As it develops, the MA will provide broad access to the information which it generates. A data and information support system to organize and facilitate access to this information is now online for the use of the assessment authors and will soon be available to the public;

(e) Newsletter. In order to subscribe to the quarterly electronic newsletter, users can visit the MA Web site (<http://www.millenniumassessment.org>) and follow the link on newsletter.

#### B. Meeting UNCCD needs in the Millennium Ecosystem Assessment

13. All four MA reports will contain assessment information relevant to UNCCD needs. In particular, the Condition and Trends report and the Sub-Global Assessments report will include detailed information on dryland systems. In addition to these, the MA will produce a synthesis report specifically tailored for UNCCD.

14. *Condition and Trends.* As mentioned above, this MA report will focus on the current state and the historical trends observed in the relation between ecosystem services and human well-being. This will be done by type of service and by type of system.

15. The section on dryland systems will be of specific relevance to UNCCD. As with the other systems, the main objective of the assessment here will be to assess the conditions of these ecosystems, the causes of changes to the ecosystems and the consequences of these changes for people and other life on earth. This will be assessed by providing the baseline information on the state of ecosystems and their capacity to supply ecosystem services. The following issues will be specifically addressed:

- The baseline condition of the system, processes modifying the system and whether the resultant changes are reversible, the state of knowledge regarding the system and existing uncertainties;
- The consequences (including economic and other welfare measures) of modifications on the ecosystem for goods and services it provides;

- How historical changes in the ecosystem have affected its underlying biological capacity to provide ecosystem services in the future.

16. *Sub-global assessments.* As noted above, several of the MA sub-global assessments feature dryland regions and regions experiencing land degradation, including those in Southern Africa, Western China, India, Chile, and Egypt. Results from these and the general lessons derived from them will be especially significant to UNCCD.

17. *Dryland cross-cut team.* In addition, in collaboration with the United Nations University, the MA has formed a cross-cutting group team to ensure consistency and a focus on user needs on issues pertinent to dryland systems across all four of the MA working groups. This dryland cross-cut team will meet in Tashkent, Uzbekistan, from 18 to 22 August 2003.

18. The outline of the synthesis report for UNCCD as it currently stands is the following:

- What is the current status of areas experiencing or at risk of desertification and the associated human well-being?
  - How many people live in these regions and how are they affected?
  - What have been the historical patterns of desertification and how has desertification changed the capacity of these ecosystems to contribute to human well-being?
- What were the most critical factors affecting the observed changes?
  - What has been the relative contribution of human-induced and non-human-induced changes to desertification?
- What are the costs, benefits and risks of the observed desertification and how have these affected different sectors of society and different regions?
- What are the plausible future changes in rates and extent of desertification and in the supply of, and demand for, goods and services in these regions and the consequent changes in health, employment, security and other constituents of well-being?
  - What are the most critical drivers and factors affecting future changes?
  - What are the costs, benefits, and risks of plausible future human-induced desertification and how will these affect different sectors of society and different regions?
- What can we do about it? What response options and processes can be considered to realize or avoid specific futures?
  - What are the trade-off implications of the response options?
  - How does inertia in the social and natural systems impact management decisions?
- What are the most robust findings and key uncertainties that affect the design of strategies to address desertification (including the consequent changes in health, employment, security) and other management decisions and policy formulation?
- What tools and methodologies developed and used in the MA can strengthen capacity to assess desertification, its impacts on human well-being, and the implications of response options?

### C. Future collaboration with UNCCD

19. Cooperation with UNCCD, and in particular the CST, is of great importance to the MA. Regular reports on the MA will be presented, as requested, at future meetings of CST and the MA welcomes the opportunity to provide such reports to the COP. Side events or working group discussions will be arranged in order to provide opportunities for detailed input from Parties.

20. More specifically, there are four areas that the COP may wish to consider in order further to promote cooperation and linkages between the MA process and UNCCD.

(a) All Parties to UNCCD and the UNCCD secretariat were invited to nominate experts to participate as authors and reviewers in the MA working groups. The MA will select experts and reviewers based on these nominations during 2003. The authors will prepare the drafts during 2003, and the reviewers will provide peer review comments on the drafts in 2004. The composition of the group of reviewers will reflect the need to aim for a range of views and expertise and a balanced gender and geographical representation, ensuring also appropriate representation of experts from developing and developed countries and countries with economies in transition. Draft reports of the MA will undergo two rounds of review by governments and experts. Additional nominations of experts, or indications of willingness to support the costs of travel and participations of experts in the MA process, by Parties to the UNCCD, would be very helpful.

(b) Considerable interest exists among institutions and countries to undertake “sub-global” assessments at national or subnational scales, or to link existing processes with the MA. Such initiatives, especially in developing countries, will need financial support for their involvement.

## **III. REPORT ON PROGRESS OF THE LAND DEGRADATION ASSESSMENT IN DRYLANDS PROJECT**

### A. Background

21. The Land Degradation Assessment in Drylands project (LADA) is funded by the Global Environment Facility (GEF), with co-funding from UNCCD country Parties, FAO, Global Mechanism, UNEP and other international organizations. It is executed by the FAO and responds to the needs of country Parties expressed at the fourth session of the COP to support the activities under the Convention.

22. During the first phase of the project (2002-2004), LADA aims to generate up-to-date information on ecological, economical, social and technical aspects of land degradation in drylands including a combination of traditional knowledge and modern science, to guide an integrated assessment and cross-sectoral planning and management of land resources in drylands.

23. The principal objective of the LADA project is to develop tools and methods to assess and quantify the nature, extent, severity and impacts of land degradation on ecosystems, watersheds and river basins, carbon storage and biological diversity in drylands at a range of spatial and temporal scales. The project will also build national, regional and global assessment capacities to enable the



design and planning of interventions to mitigate land degradation and establish sustainable land use and management practices.

24. The LADA project is putting together the pieces of a global challenge, by mobilizing worldwide the extensive knowledge and expertise available, by creating a new, more interactive and comprehensive framework of assessment methods, and by capacity building and testing this framework in real-world situations. Once the tools and the data are in place to understand the root causes, driving forces and functioning of the land degradation problem, it will be possible to assess it at global, national and subnational levels and to identify the following:

- The status and trends of land degradation in drylands in all its components including biodiversity,
- The hotspots that are the areas with greatest land constraints, the actual degradation of such areas and areas under risks of degradation, drought or floods,
- The bright spots that are the areas where the degradation has been slowed down or reversed through conducive policies and actions and the priority areas where the conservation and rehabilitation of fragile lands could be the most cost effective. Such information will assist communities and governments in the design of effective remedy measures and supportive policies.

25. An international technical workshop has been organized in Rome, Italy, on the margins of the first session of the Committee for the Review of the Implementation of the Convention (CRIC) where operational details, pilot country selection and general strategy of the LADA project were discussed. Documentation and details of LADA meetings are available on the Internet at: <http://www.fao.org/ag/agl/agll/lada/home.stm>.

26. A number of documents on technical and methodological issues at national and international levels have been produced on key areas of dryland degradation. Methodological guidelines were prepared, discussed and are being implemented in pilot countries – Argentina, China and Senegal. At the same time, expanding the project to Ethiopia, Mexico, Namibia, South Africa and Thailand is under consideration. Additional resources and co-funding from FAO's Technical Cooperation Programme (TCP) are sought to prepare a number of technical assistance and capacity-building projects to train national institutions and UNCCD focal points in the area of land degradation assessment and desertification control.

27. A briefing for the GEF is being prepared for the full phase of the project (2004 – 2008) to cover as many countries as possible and apply the land degradation assessment methodology globally. LADA is seen by UNEP, GEF and the UNCCD as being in charge of the development of a standard methodology to assess land degradation in drylands and as such has a number of partners in its International Steering Committee. These include, in addition to those already mentioned, NGOs (LANDCARE Australia), technical agencies such as the International Soil Reference and Information Centre (ISRIC) and international bodies such as the European Commission and UNDP.

*The LADA project and its approach*

28. The two-year methodology development phase of the LADA project was launched in 2002. It has focused on methodology assessment, development and pilot testing, building a cooperative network of institutions, identifying and assessing sources of data with global and regional coverage and preparation of the full-scale project. New and integrated assessment methods are tested in three pilot countries: Argentina, China and Senegal, through a participatory and country-driven approach.

29. During the subsequent four-year full implementation phase, the project will develop a comprehensive knowledge base, a network of information systems and a series of assessments tools and products (maps, databases, analysis, etc.) at national, regional and global scales. It will help the countries to build their national capacities of assessment and information management as well as monitoring and evaluation capacities for land degradation assessment based on modern technology, such as geographic information systems (GIS), remote sensing, process modelling and use of Internet resources, applied to geo-referenced data for monitoring of changes and continuous updating of knowledge and understanding of land degradation and remedial actions. It will also provide an evaluation of best practices, and related management and decision-making processes, for the control and prevention of land degradation in drylands together with the identification of effective remedial measures.

30. LADA follows a participatory, decentralized, country-driven and integrated approach and has been making ample use of remote sensing, modelling and other modern means of data generation and gathering, processing, networking and communication technologies for sharing information at national and international levels. As land degradation is a dynamic, interactive process that evolves and differs over time and space, the analysis of the responses to its impacts will be an important aspect of LADA. Some degraded lands are relatively stable; others continue to deteriorate while some may actually be on the way to recovery – often as a result of specific methods of land management. It is of utmost importance for the control of land degradation to identify such trends and find out how and why they developed, naturally or as a result of human interventions, and to understand the specific driving forces.

31. In view of the importance of driving forces and of changes below the soil surface, the assessment of land degradation cannot limit itself to a one-time survey of its most conspicuous impacts. It should also detect the less visible impacts and anticipate the less predictable ones, those that are below ground, effects on ecosystem functions and off-site implications. This requires scientifically sound and reliable indicators, monitoring and early warning systems (based on remote sensing and GIS technology, particularly at small scales) which capture resource quality and ecological processes, as well as related human interventions – the decision-making processes that underlie land use and management systems.

32. Recent advances in participatory assessment, planning and management of resources provide an opportunity for developing a more reliable and innovative assessment methodology for land degradation, including its biophysical and socio-economic components and allowing the combination of local knowledge and modern science. Assessment of the socio-economic driving forces and the cultural attributes and indicators linked to land degradation is crucial if there is to be success in reversing land degradation and generating win-win scenarios for mitigating threats of desertification, biodiversity loss and climate change through promotion of sustainable land use.

B. Major outputs of the Land Degradation Assessment  
in Drylands project

33. Specific major outputs of the project should include:

- A standardized methodological framework for the assessment of land degradation status, risks, and causes, used and applied effectively by national institutions.
- A baseline map of dryland degradation at sub-regional scale, based on the collection and collation of existing maps and databases and the incorporation of new data and information where possible.
- A global assessment of actual dryland degradation and degradation hazards.
- A detailed assessment of land degradation at national level, focusing on areas at greatest risk ('hot spots') and areas where degradation has been successfully reversed ('bright spots'), covering not only the state of degradation but its causes and impacts, together with identification of remedial measures.
- Analysis of land degradation areas at risk and the impacts on the environment (ecosystems, carbon emissions, international waters, etc.) and on human livelihoods (food security, poverty, migrations, etc.).
- Best practices for the control and prevention of land degradation in drylands, considering indigenous and traditional knowledge and information on indigenous practices.
- Communication and exchange of information on dryland degradation, and promotion of its use in decision making through policy guidance, GEF interventions, priority actions, lessons learned and best practices, monitoring tools, etc.

*LADA PDF-B activities*

34. The first Steering Committee meeting of the LADA project was organized by and held in Rome, Italy, from 23 to 25 January 2002. This meeting was combined with an expert consultation on assessing and combating land degradation. The meeting was attended by more than 40 experts, including representatives from key international organizations. In addition, a number of NGOs attended the meeting together with research institutes and programmes. National representatives from Brazil, China, India, Senegal and Tunisia presented specific programmes on land degradation assessment and combating desertification in their respective countries. The proceedings are contained in FAO World Soil Resources Report No. 97 (September 2002).

*Preparatory stocktaking reports*

35. Two reports have been prepared, on data sources for land degradation assessment, and on methodologies for land degradation assessment. One report was drafted on the approach and development of a methodological framework for land degradation assessment. The University of Essex is preparing a report for LADA on the field-testing indicators for biodiversity in drylands, which is to complement the report on the same subject prepared in draft form. The three pilot countries (Argentina, China and Senegal) have prepared their stocktaking reports on the land degradation situation in their respective countries. In addition, South Africa prepared a similar report with its own resources.

36. A global study was undertaken to assess the potential of remote sensing methodologies in land degradation assessment studies. This report was peer reviewed and is available on LADA Web site. Consultations and an e-mail conference were organized to develop background information for a technical meeting that would bring together the pilot countries and a number of international experts to agree on the principles of a LADA approach to be tested in each country.

37. Technical reports focused on the overview of data sources and methodologies of land degradation assessments and establishment of a practical framework, illustrating the complexity, linkages and interrelationships among socio-economic, political and biophysical factors in the land degradation process. The e-mail conference and a preparatory report focused on the socio-economic and biophysical indicators of land degradation. Moreover, the University of Amsterdam prepared background documents on linking socio-economic and biophysical data and the use of statistical techniques to link driving forces and possible impacts of land degradation. The findings of the e-mail conference and the background paper were published as FAO World Soil Resources Report No. 100 and are available on the FAO Web site.

38. In order to evaluate the preparatory studies which were carried out and to arrive at an overall strategy to tackle land degradation assessments, particularly in the pilot countries, a technical workshop was organized in Rome, Italy. More than 40 participants attended the workshop, among which representatives from eight country Parties as well as research institutions and centres of excellence; international organizations; consortia such as the World Overview of Conservation Approaches and Technologies (WOCAT) and the MA. The agenda, list of participants and conclusions and recommendations of the two working groups are available from <ftp://ftp.fao.org/agl/agll/lada/reporttechnmeet.doc>. A seven-step LADA methodological guideline was suggested, which is discussed in the section below. In a follow-up of the technical meeting, the FAO-LADA task force defined tasks for each pilot study to be undertaken and established specific task forces for each country.

#### *LADA guidelines development*

39. Based on the outcome of thematic studies, the e-mail conference and the LADA technical workshops, guidelines were developed to carry out the national pilot studies. These guidelines maintain that land degradation should be assessed and dealt with holistically and in a multidisciplinary way in order to establish links between the driving forces, the causes/pressures, the state of land degradation and its impact on the people and the environment.

40. Various methods and tools to assess land degradation are available, with their individual strong points and disadvantages, but with clear complementarities. A combination of these tools should therefore be linked with a quantitative modelling approach for economists and decision makers. The links established should integrate biophysical and socio-economic factors into models that can effectively serve in support to decision making.

41. The LADA approach comprises seven sequential steps:

1. preparation of initial studies;
2. establishment of a national LADA task force;
3. stocktaking and preliminary analysis;

4. developing a stratification and sampling strategy;
5. field survey and local assessments;
6. development of a LADA decision-support tool;
7. development of a LADA monitoring tool.

Each of these steps is dealt with in detail in the draft guidelines and uses the DPSIR framework, the five capitals defined in livelihood approach (natural capital, social capital, human capital, financial capital, and infrastructure capital) and the ecosystem approach to goods and services.

#### *Socio-economic issues in land degradation assessment*

42. Terms of reference have been prepared for a study on socio-economic issues (cause and effects) of land degradation; World Resources Institute (WRI) will carry out the study using an approach which evaluates goods and services by ecosystem affected by land degradation. At the same time this study will form part of the Argentina case study. Other socio-economic aspects, in particular the linkages between biophysical and socio-economic factors and their impact, were explored with the University of Amsterdam.

#### *LADA special studies*

43. A study is underway to exploit global databases with information on land degradation stress, cause and effect which will be analysed together with information derived from other similar products such as soil, climate, land cover and farming system information. Other special studies have been launched in several countries to investigate cause and effect of salinity problems as a particular cause of land degradation.

#### *LADA Web site and information platform*

44. A methodological framework and a cost estimate were made for the construction of a LADA Web site and information platform and required inputs identified. A list of keywords and categories for the Web site was prepared. More than 700 documents were collected and indexed to be included in the Web site. The information platform architecture was implemented allowing update and search of documents. E-mail conferences and national platforms can be constructed and function within the central site. The provisional LADA Web site was expanded with extensive material and background papers, the results of the e-mail conference, and the outcome of the technical LADA workshop, which will be moved to the official LADA information platform.

#### *LADA awareness raising*

45. A LADA brochure highlighting the background, objectives and expected results of the LADA project was discussed and distributed at various international meetings.

46. The LADA project was presented and discussed with participants of a number of UNCCD and GEF conferences and other international meetings on land degradation. LADA also participated actively in the meeting of the Organisation for Economic Co-operation and Development (OECD) on soil erosion and soil biodiversity indicators.

C. Participation of countries in the Land Degradation Assessment  
in Drylands project

*National pilot studies*

47. Participating pilot countries (Argentina, China and Senegal) have prepared national background papers on degradation assessment in the drylands. This allows the identification of priority areas for pilot studies and of specific potential and constraints for degradation assessment and rehabilitation in each country. The seven-steps approach agreed upon at the LADA technical workshop is being partially or wholly tested in each country. Responsibilities and cooperating institutes and ministries have been identified.

*Invitation to countries to participate in the LADA project*

48. Countries wishing to participate in the LADA process in an early stage, can register their participation with the LADA Secretariat (E-mail address: LADA-Secretariat@fao.org), designate a national focal point and establish a national cooperative network. The participating countries will be invited to join in regional workshops and international electronic consultations on the development of common methods and to undertake their national assessment accordingly.

49. During the preparatory phase, countries and organizations wishing to launch pilot studies will test the methodology in one or more selected areas and report on their findings at international workshops. Other countries will prepare their participation for the full implementation phase of the project by taking stock of their experience, compiling the information available in the ministries and other institutions concerned and building their national capacities to this effect.

50. FAO will supply the national focal points with background material and data, linkages with its international geographic information systems and other databases, guidelines and advisory services for capacity building, as well as specialized training, equipment and material.

51. Other interested institutions can seek participation in the LADA networks through its Web site <http://www.fao.org/ag/agl/agll/lada/default.stm> or by contacting the LADA Secretariat.

## **IV. CONCLUSIONS AND RECOMMENDATIONS**

52. Decisions taken by the COP at its sixth session could strengthen the contribution of the MA by supporting and welcoming progress in the MA as reported; requesting the CST to continue to identify opportunities for collaboration with the MA in contributing to the assessment needs of the Convention; requesting status reports on progress of the assessment at sessions of CST or the COP, as appropriate; and urging developed country Parties to provide assistance to affected developing country Parties to facilitate their experts' participation in the work of the MA.

53. The two assessments are geared to providing the tools needed for informed decision making in the management of ecosystems for human well-being. Capacity building is an important ingredient as put forward by the two initiatives. It is essential for country Parties to be involved as much as possible in these projects. The COP may wish to reinforce the necessity for Parties to be

more closely engaged in these initiatives, to render support as appropriate, and, where applicable, to seek to make use of and benefit from the new methodological tools to be developed, and to test their efficiency at the individual country level.

54. Country Parties have been invited to take an active part in these projects individually and through subregional and transboundary initiatives, as appropriate. The COP may wish to encourage Parties to take up this offer, and to request Parties to support these initiatives as much as possible in order to enable them to achieve their goals.

55. The two initiatives have already made headway in pilot areas, where work has been undertaken. The data and information generated would help countries in starting the process of building their national capacities of assessment and information management, making use of the new tools being developed. The COP may wish to encourage the projects to enhance exchange of available pertinent information in this regard.

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