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LAND DEGRADATION ASSESSMENT IN DRYLANDS

Note by the secretariat

1. The request for an assessment of the extent of land degradation in drylands came from the Parties to the United Nations Convention to Combat Desertification (UNCCD), out of which the Land Degradation Assessment in Drylands (LADA) project was conceived. LADA is a global initiative supported by the Global Environment Facility (GEF), the United Nations Environment Programme (UNEP), the UNCCD secretariat, the Global Mechanism, and the Food and Agriculture Organization of the United Nations (FAO) as the executing agency.
2. The objective of LADA is to assess the causes, status and impact of land degradation in drylands in order to improve decision making for sustainable development in drylands at local, national, subregional and global levels, and to meet the needs of those involved in the implementation of the action programmes of the Convention.
3. An initial project development facility was put in place to achieve the following aims:
 - (a) Review and synthesis of data and information of relevance to the development of land degradation assessment in drylands;
 - (b) Development, testing and revision of integration of land degradation assessment approaches and methods;

- (c) Capacity and network development for assessment of land degradation;
- (d) Conducting pilot studies to calibrate and test methods for assessment of land degradation in selected countries;
- (e) Development of strategies for information communication, executive partnership and co-financing; and
- (f) Development of a GEF Project Brief.

4. The LADA project has developed and tested effective assessment methodologies for land degradation in drylands through pilot projects in Argentina, China and Senegal, and also through case studies in Argentina, Kenya, Malaysia and Mexico.

5. The second project development facility developed a framework for a consensus building process, to identify global environmental benefits accruing from addressing land degradation in drylands, conservation of biodiversity, international waters and sequestration of carbon.

6. The objective of the full project approved by the GEF will be to develop tools to assess and quantify the nature, extent, severity and impacts of land degradation on dryland ecosystems, watersheds, river basins, carbon sequestration and biological diversity at a range of spatial and temporal scales. The LADA project will also engage in capacity building at various levels.

7. The FAO has prepared a progress report on the LADA project, which is herewith submitted to the Committee for consideration. Through the Conference of the Parties, the Committee may wish to provide any recommendations to the FAO that it deems appropriate.

**INTERIM REPORT PREPARED BY THE FOOD AND AGRICULTURE
ORGANIZATION OF THE UNITED NATIONS**

CONTENTS

	<u>Paragraphs</u>	<u>Page</u>
I. REPORT ON PROGRESS OF THE LAND DEGRADATION ASSESSMENT IN DRYLANDS PROJECT	1 – 45	3
A. Background	1 – 5	3
B. Project approval by the GEF Council.....	6	4
C. Achievements of the LADA project from 2002-2005.....	7 – 40	4
D. Information dissemination and promotion of international collaboration on land degradation issues	41 – 45	13
II. STRATEGY FOR LADA IMPLEMENTATION	46 – 49	13
III. BENEFITS OF LADA FOR PARTIES TO THE CONVENTION.....	50 – 52	14
IV. CONCLUSIONS AND RECOMMENDATIONS	53 – 56	15

I. REPORT ON PROGRESS OF THE LAND DEGRADATION ASSESSMENT IN DRYLANDS PROJECT

A. Background

1. Many efforts to understand, assess and monitor land degradation have been carried out in recent decades, although to date there is no mechanism in place to collect and disseminate information within countries, across regions and at international level for comparison. To respond to the need for up-to-date and comparable land degradation information, the GEF has funded the LADA project to be implemented by the UNEP and executed by the FAO. This project has benefited from the support of the UNCCD secretariat, the International Soil Reference and Information Centre (ISRIC) and several other regional and national partners.

2. The main objectives of the LADA project are: to develop tools and methods to assess the driving forces behind, and quantify the nature, extent, severity and impacts of, land degradation in ecosystems at a range of spatial and temporal scales, to carry out a global assessment of land degradation, and to build national, regional and global assessment and monitoring capacities for enabling the design and planning of interventions to mitigate land degradation, and to establish sustainable land use and management practices.

3. As a result of the global land degradation assessment it will be possible to identify:

- The status and trends of land degradation in drylands;
- The hot spots: in the LADA context hot spots are areas where swift rehabilitation action is required as land degradation is particularly severe or fast, with actual or expected harmful or extensive impacts on site or off site. A hot spot may also be an area where the land is vulnerable and threatened by degradation;
- The bright spots: in the context of LADA, these are areas without significant land degradation which are stable, either naturally or under the present conditions of sustainable management. A bright spot can also be a formerly degraded or vulnerable area where land protection or rehabilitation has been successful or is in progress;
- The major driving forces and pressures leading to land degradation in hot spots and improvements in bright spots;
- The status of land degradation at national and subnational scale and the driving forces and pressures leading to resources degradation, for six pilot countries affected by desertification;
- The usefulness of local participatory assessment tools.

4. The LADA project has integrated available worldwide knowledge and expertise and proposes a flexible and comprehensive framework of land degradation assessment methods. The LADA project paves the way for country-driven, worldwide land degradation assessment and monitoring of the success of actions taken to combat land degradation. With its focus on poverty alleviation and development issues, the LADA project links with food security and sustainable agricultural and rural development, in accordance with the World Food Summit, Agenda 21, the World Summit on Sustainable Development and the Millennium Development Goals.

5. This document reports on the progress of the LADA project during its initial phases (PDF-A and PDF-B) and gives a summary of the expected approach for the four years of full project implementation.

B. Project approval by the GEF Council

6. The project development phases (PDF-A and PDF-B) produced a considerable amount of information and a provisional land degradation assessment methodological framework. The report of these two phases was presented to the GEF Council in 2004 in a project brief document. In November 2004 the GEF council approved the project and the provision of funds for full project implementation through UNEP. The implementation of the GEF-funded full-scale project will take four years and is expected to start in October 2005 after completion of the project appraisal at present taking place. The project has been approved by four pilot countries, Argentina, China, Senegal and Tunisia, and the approval of more countries is expected by the seventh Conference of the Parties (COP 7) of the UNCCD in October 2005. The participating countries have committed in-kind contributions of at least the same amount that they will receive from the LADA project.

C. Achievements of the LADA project from 2002-2005

1. Development of the methodological framework

Preparatory work

7. A series of studies and stocktaking exercises were carried out during the initial stages of the project development phase (PDF-B) including studies into the possible approaches for land degradation assessment and the development of the methodological framework comprising biophysical and socio-economic aspects, a global study to assess the usefulness of remote sensing for land degradation assessment, a review of land degradation data sources, an email conference and technical report on biophysical and socio-economic indicators, and studies for linking biophysical and socio-economic data and the use of statistical techniques to link the driving forces and possible impacts of land degradation. All reports are available at: <http://lada.virtualcentre.org/pagedisplay/display.asp>.

The LADA approach

8. Based on the outcome of the preparatory studies, a LADA technical workshop, held in November 2002, produced a synthesis of existing methods and national experience and formulated a seven-step approach for undertaking the full-scale LADA, which is considered as the modular part of the LADA methodological framework. The seven steps of the LADA approach are:

1. Preparation of initial studies
2. Establishment of a national LADA task force
3. Stocktaking and preliminary analysis
4. Development of 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.

Note that at every stage a feedback loop is included.

9. This LADA approach integrates biophysical and socio-economic components of land degradation at different scales, recognizing that socio-economic issues are also driving forces for pressures that impact on land conditions.

10. The LADA approach further recognizes that land degradation assessments should: (i) capitalize on existing initiatives, (ii) focus on the goods and services of the drylands, (iii) work with local stakeholders, and (iv) develop a standardized methodology that will monitor land degradation in time. It also recognizes that humans are an integral component of most ecosystems and emphasizes understanding the consequent immediate and underlying causes of threats to biodiversity, leading to policy and management interventions at appropriate levels. The LADA approach applies the integrated approach to ecosystem management at local, agro-ecological zone, and national levels.

11. The LADA methodological framework comprises the LADA approach and a set of tools for the different scales of land degradation assessment, from the global to the subnational. It incorporates participatory rural appraisals, expert assessments, field measurements, remote sensing, geographic information systems (GIS), modelling and other modern means of data generation and dissemination for analysing and sharing information at national and international level.

12. Key elements of this strategic approach are:

- Participation and inclusion of different perceptions of land degradation
- Combination of expert assessment and local knowledge
- Use of adapted assessment tools for specific environments.

13. To understand the process of land degradation at subnational, national and regional level, the LADA approach relies on the “driving force – pressure – state – impact – response (DPSIR) framework”. The DPSIR framework states that *driving forces* exert *pressures* on the environment and that these pressures can induce changes in its *state* or condition. The subsequent *impacts* on socio-economic and biophysical attributes cause society to *respond* by developing or modifying environmental and economic policies and programmes aimed at preventing, minimizing or mitigating pressures and driving forces.

Indicators toolbox and visual soil assessment tool

14. During the PDF-B phase the LADA project started developing an indicator toolbox containing a minimum set of indicators that can be measured at the local and global scale and which allow for extrapolation at these different scales. Development of the toolbox will continue during the full-scale LADA project. This toolbox is based on the compilation and analysis of indicators resulting from the email conference, technical reports and other available experience at national and international level. The LADA indicators are relatively easy to measure or obtain and are therefore of low cost. They are related to several conditions of the land, in such a way that they can describe the system in a cost-effective way.

15. The LADA project has also developed a local assessment tool, a set of simple and inexpensive assessment techniques which can be gradually learned by farmers and which are related to their needs for improving land conditions. These Visual Soil Assessment (VSA) indicators are morphological and measured soil characteristics that allow for the transfer of information between sites, soil types, land uses etc., while providing a cross-check and physical reality to structure descriptors.

16. An extract of the indicators to be used for LADA is included in table 1. Table 1 also includes a reference to the degradation/impact type and the methods for data collection that LADA will use; this is for illustration purposes only. It is also important to note that the indicator toolbox can also include local indicators for specific country circumstances.

Table 1. Extract of indicators toolbox under development (not all indicators are included for each category, and not all categories are included; for illustration purposes only)

STATE INDICATORS		
Indicators	Degradation type	Measurement
CLIMATE RESOURCES		
Aridity index	Drought/desertification	Analysis of climatic stations (LOCLIM)
Soil moisture change	Drought/desertification	Remote sensing
SOIL RESOURCES (local/national to be extrapolated globally for most at a later stage)		
Soil type	For extrapolation nationally	National soil map/Soils and Terrain (SOTER) database
Organic matter	Nutrient decline/soil biodiversity decline	Visual Soil Assessment (VSA)
TERRAIN RESOURCES (local, national and global)		
Surface aspects	Landslides, gullies and wind erosion	Remote sensing
WATER RESOURCES		
Irrigated areas	Salinization	National and FAO/Kassel database
VEGETATION RESOURCES (local, national and global)		
Changes in land cover	Loss of ecosystem structure and functioning and loss of nutrients	Remote sensing Convention on Biological Diversity (CBD)
Changes in key species	Loss of biodiversity	CBD
DIRECT PRESSURE ON THE RESOURCES (PRESSURE INDICATORS)		
Indicators	Pressure type	Measurement
BIOPHYSICAL		
Climate extreme events	Salinization (tsunami) Landslides (heavy rains) Loss of land cover and biodiversity (long drought)	Model/remote sensing Model/remote sensing Model/remote sensing
Slope/land use	Water erosion	Universal Soil Loss Equation (USLE) model
SOCIO-ECONOMIC		
Frequency of forest fires	Deforestation/nutrient loss	Database
Urbanization	Sealing (absolute loss of land)	Database/remote sensing
Livestock pressure over carrying capacity	Compaction/loss of land cover	Databases
DRIVING FORCES		
Indicators	Type of indirect cause	Measurement
SOCIO-ECONOMIC		
Incidence of poverty/headcount poverty index	Low budget for agricultural input leading to extensive farming; relates to soil fertility decline and deforestation	Population censuses
Population density	May lead to agricultural intensification as the land:labour ratio falls, or deforestation as new land must be cleared for agriculture; soil erosion.	Population censuses

2. Methodology testing at national level in three pilot countries

17. The methodological approach so far developed for the LADA is continuously being refined and is being tested at national level. Three countries — Argentina, China, and Senegal — were selected for pilot studies. All three provided a national inventory of available information on land degradation and its assessment. More detailed studies were undertaken in pilot areas, in particular in Senegal and Argentina. China focused on the development of participatory approaches rather than on technical issues and the testing of VSA indicators.

Argentina

18. The LADA task force in Argentina is led by the *Dirección de Conservación del Suelo y Lucha contra la Desertificación* in the *Secretaría del Medio Ambiente y Desarrollo*. The lead agency has convened a Technical Advisory Committee with representatives from different authorities and institutions at subnational level and a Monitoring Group with experts on data collection, analysis and dissemination to handle the information at national level.

19. A national report on information and available experience on national land resources and on the land degradation status of the country is already available on CD-ROM and on the Internet. This report contains the preliminary stratification rules and identification of the hot spots and bright spots, and initial perceptions of the state, cause and impact of land degradation in the country.

20. In addition, the LADA task force in Argentina has carried out local studies in four pilot sites to determine the state of the sites and to develop techniques for measuring degradation. The results of these studies clearly indicate that the experience of LADA-Argentina in assessing land degradation at local level is replicable in other participating countries. A number of developed practical and efficient “methodological approaches” (e.g. productivity changes) and tools (remote sensing and modelling) demonstrate that LADA is not only useful for detecting and evaluating problems of land degradation, but that it can also be used as a decision support tool for designing management practices for dryland areas.

21. At country level the LADA methodology was adopted by a recently approved GEF OP 15 Project for the Patagonia region. Furthermore, the LADA working group is considering the possibility of including the LADA methodology for a pipeline GEF OP 15 Project for the Chaco Region involving Argentina, Bolivia and Paraguay.

China

22. The LADA task force in China, led by the National Bureau to Combat Desertification at the State Forestry Administration, prepared a report on information and experience available on land degradation assessment at national level (available at the LADA virtual centre (<http://lada.virtualcentre.org/pagedisplay/display.asp>)). The document reports on the initiatives China has undertaken to assess land degradation and in particular desertification; it includes details on the national institutional arrangements, the different programmes involved in combating land degradation and an analysis of information user needs. During the PDF-B phase China has focused on strengthening participatory approaches. The first Chinese LADA Local

Level Stakeholder Consultation/Training Workshop brought together actors from different levels and the provinces more affected by desertification. The workshop was held in Yan Chi county Ningxia-hui Autonomous Region.

23. China has been progressively working through the LADA steps, and so far has identified and characterized seven pilot sites for carrying out local studies. The findings from a special case study on salinity in the Heilongjiang province highlighted the importance of including this site in the local assessments, as well as the possibility of scaling up the rehabilitation work carried out during the study to other areas affected by salinity.

24. China has also contributed to improving the methodological framework by testing the VSA indicators for local assessment. The findings of the study allowed the VSA tool to be refined and also confirmed the usefulness of the methods used.

25. The LADA task force has also started to work informally with the China-GEF-Asian Development Bank project on Capacity Building to Combat Land Degradation. Between the two projects 27 pilot sites will be surveyed, using mainly the LADA assessment tools.

Senegal

26. The institutional focal point is the Centre de Suivi Ecologique. This institute has established an interactive network with other institutions and stakeholders in the country and has carried out a study that includes:

- A survey on stakeholders' needs regarding information products and decision support tools for combating land degradation in drylands. This survey was carried out by selecting a representative sample of public sector actors (technicians, decision makers at every level), international organizations and funding agencies, private sector representatives and NGOs directly involved with rural development and agriculture (unions, professional associations etc.). Based on this survey, the national LADA products will be defined during the full LADA project.
- A country-wide study of the normalized vegetation index (NDVI) changes and a provisional identification of hot spots and bright spots.
- The participating institutions have established a base for the harmonized collection of data relating to indicators of pressure state, impact and response at the different levels, particularly by using remote sensing techniques and GIS. A preliminary analysis within the DPSIR framework has been undertaken with the identification of the location, type and major causes of land degradation, their impact and trends, and the possibility of following their evolution by remote sensing.
- More general strategic considerations on how to implement LADA in the country and in West Africa in general at the institutional level (distribution of responsibilities, activities, operations, coordination and quality control).

3. Methodology testing - special country case studies

27. In addition to the studies in the three pilot countries, several special case studies were conducted during the PDF-B phase to test different parts of the methodological framework and to understand further the causes of land degradation and their links to socio-economic issues. Brief reviews are given below for case studies conducted in Argentina, Egypt, Malaysia, Mexico, South Africa, Uzbekistan and Kenya.

Argentina

28. A study led by the World Resources Institute on the ecosystem approach to assessing degradation of Argentina's drylands examined not just the biophysical components of the environment but trends in a wide array of ecosystem services. Based on information analysed for this pilot study, potential degradation in Argentina's dryland ecosystem services should be examined more closely in the Dry Pampas and Patagonia. The two remaining regions, the Chaco and Puna, are scored with mixed trends in ecosystem services. The Chaco has received the only other upward trend score, represented primarily by an increase in its area of soybean production.

29. Trade-offs have been made in the case of the increased extent of soybean monoculture cultivation, influencing such factors as the cultivation of other crops, the use of water resources, the amount of land available for grazing, and the ability to support tourism. As the area planted with soybean expands, there is less land for grazing livestock and less land for other traditional crops such as maize, wheat, cotton, potatoes and lentils. For example, the increase in the soybean production area has led to trade-offs in supporting services of the Chaco. Cultivated fields, especially when clean ploughing is used over the more traditional no-till practices, eliminate suitable habitats for many wildlife species.

Egypt

30. The country carried out a study on causes of land degradation. The majority of the country area is desert and contains little or none of the land classified as arid, semi-arid, or dry sub-humid that makes up drylands. However, irrigated land in desert areas does come under the umbrella of LADA. Land degradation does occur in Egypt but it is not widespread. The major land degradation problems in Egypt are related to hydrological constraints which cause waterlogging, salinity and alkalinity, physical constraints such as deterioration of the soil structure and compaction, and biological constraints caused by a decline in soil organic matter leading to declining soil fertility.

Malaysia

31. The Malaysia report focused on salt-affected soils. The report gives an interesting and factual description of agriculture in Malaysia and then describes some of the salinity problems. Soil erosion, fertility depletion, salinization, waterlogging and the lowering of the groundwater table have also been recognized as important land degradation problems in Malaysia.

Mexico

32. This was an extensive study of two sites – Salinas, San Luis Potosi, consisting of 4,445 hectares and Las Casitas, Pueblo, consisting of 3,100 hectares. The study was an attempt to use the DPSIR framework. The study was implemented in six well-defined and logical steps.

33. The study took into account the physical processes as well as the social, cultural, political and economic factors relating to land degradation. So many indicators were considered, however, that it was difficult, if not impossible, to analyse and interpret the results. This became particularly complex when trying to combine many of these indicators into a map. Although this study was well conducted and well summarized, it clearly illustrates that a very exhaustive assessment which incorporates many different variables is not practical and manageable for making assessments on a more generalized country or global basis.

South Africa

34. This study focused primarily on salinity problems. The report provides a good snapshot of some of the major soil degradation problems. The paper also highlighted the importance of soil organic matter and how the decline of soil organic matter is accelerating salinity problems as well as fertility problems. An estimated 20 per cent of the country's total surface area has the potential for erosion. The authors estimate that more than half of South Africa's surface area is under threat of desertification and that although the process can be reversed, this will be a slow process requiring considerable input. Although this study was limited, it does indicate a good understanding of the problem and lays out a basic framework that can be used to assess soil degradation; little or no attention was given to the social and political drivers associated with land degradation.

Uzbekistan

35. The Uzbekistan study focuses on salinity and how to map salinity. The approach adopted can be the basis for producing other degradation maps. The authors identified the important land degradation processes in Uzbekistan as: (1) secondary salinization of irrigated lands, (2) flooding and waterlogging of irrigated lands, (3) loss of organic matter and fertility decline in soils, (4) widespread occurrence of erosion in irrigated soils, (5) soil pollution, and (6) aerosol transport of salt and dust from the dry bed of the Aral sea. They concluded that land degradation trends pose a serious hazard to the food security, health and safety of the people located in the country's drylands.

Kenya

36. The study focused on saline and sodic lands but other degradation processes of great importance in Kenya include fertility decline, soil acidification and aluminium toxicity, organic matter decline, wind and water erosion, and soil compaction. The case study was not very detailed and indicated that there is a need for a more complete assessment of land degradation.

4. Methodology testing- summary of findings

37. The findings of the pilot studies and special case studies are fundamental for the refinement of the methodological approach and the assessment tools. The analysis of the studies carried out in Argentina and Mexico showed that exhaustive studies are difficult to carry out and not cost-efficient; it also highlighted the need to streamline the methodological framework and the indicators originally proposed for the assessment. This is resulting in a further revision of the methodological framework to produce a minimum set of tools which can be comprehensive while cost-effective and which cover the maximum possible aspects of land degradation without using complicated methods for data collection, processing and analysis.

5. Development of the global land degradation assessment (GLADA)

38. In order to establish priorities for investment and to design, apply and monitor policies to combat land degradation, at regional and global levels, including rehabilitation of degraded lands, it is important to have a global overview of the current state of the land. So far most of the studies on degradation have focused mainly on soil degradation and have not included socio-economic aspects.

39. The only available global assessment of soil degradation is the UNEP and ISRIC Global Assessment of Soil Degradation (GLASOD) study carried out during the 1980s at a scale of 1:5 million. The study has been extremely useful in pinpointing areas where specific types and intensities of effects of soil degradation occur, but has also been criticized because of its subjective nature and its reliance on expert opinion only. Since then, more specific and objective studies have been undertaken, notably the Mapping of Soil and Terrain Vulnerability in Central and Eastern Europe (SOVEUR) study for Central and Eastern Europe by FAO and ISRIC, and the Soil Degradation in South and Southeast Asia (ASSOD) study for South-East Asia by UNEP, ISRIC and FAO. Using more recent material, readily available, the GLASOD study has been improved by LADA. The results have been compiled in Arc/Info format and a revised GLASOD map could now be produced by FAO. Summarized country results including potentially affected population are now available on the Internet at: <http://www.fao.org/landandwater/agll/glasod/glasodmaps.jsp>.

40. The LADA project will produce a GLADA. A study to develop a methodology for land degradation assessment at global level was carried out by ISRIC in the Shaanxi Province, North China, using the remote sensing NDVI and other biophysical parameters. This study showed that the index can be used together with other parameters to assess land degradation. The approach developed by ISRIC will be used in conjunction with other remote sensing data, in particular those applications developed by the Global Land Cover Network (GLCN) that will identify agricultural expansion and land cover changes. Data from GLASOD and the SOTER and the World Overview of Conservation Approaches and Technologies (WOCAT) programmes will be used to produce a first updated global assessment. Global results will be linked with the provisional results of the pilot studies within each pilot country (global to local and local to global). This biophysical evaluation will be strongly underpinned by a study of socio-economic driving forces and a stratification that focuses on actual land use and input/management systems, access to land and population affected.

D. Information dissemination and promotion of international collaboration on land degradation issues

41. The LADA project has generated about fifty documents from field and desk studies, which are now available in the LADA virtual centre at <http://lada.virtualcentre.org/pagedisplay/display.asp>. In addition, this virtual centre provides access to about 1,700 documents and links to other initiatives regarding land degradation. This will be the basis of the LADA information network which will be further developed during the implementation of the full project and to which national LADA websites will be linked.

42. A LADA brochure highlighting the background, objectives and expected results of the LADA project was discussed and distributed at various international meetings. An updated version will be produced in 2006.

43. To further regional cooperation in land degradation assessment, three regional LADA workshops were organized (in Dakar for the Africa region, in Bangkok for the Asia region and in Port of Spain for the Caribbean). These resulted in additional information on the status of land degradation in these regions and enhanced regional streamlining of methodologies to tackle the problem.

44. A final PDF-B technical LADA workshop and Steering Committee meeting preparing the full project document took place in June 2004.

45. At the same time, the LADA project established links with other initiatives regarding land degradation, including the Priority Actions Programme/Regional Activity Centre (PAP/RAC), a key component of the Mediterranean Action Plan (MAP). A collaboration with this Centre has produced a CD with a photo-library on soil erosion processes which complements the Guidelines for mapping and measurement of rainfall-induced erosion processes in the Mediterranean coastal areas. Cooperation has been initiated with the DeSurvey project, an European Community initiative that will map and study in the European region and in selected pilot countries. LADA also cooperates with UNEP in the Global Environment Outlook (GEO-4) assessment and with Desertlink and MEDCOASTLAND.

II. STRATEGY FOR LADA IMPLEMENTATION

46. The PDF-A and PDF-B phases have resulted in the development and refinement of a land degradation assessment methodological framework with a set of tools for assessment at different scales. The results of the pilot country studies and special case studies have been analysed and taken into consideration in further improving the methodological framework. This improvement will also consider the experience of other initiatives relating to land degradation assessment such as the UNCCD Thematic Programme Network 1 in Asia, Desertlink and Priority Actions Programme Regional Activity Centre (PAP/RAC).

47. During full project implementation, the methodological framework will be used to carry out land degradation assessment at different scales. In summary, the phases for implementation of the full-scale project will include:

1. Establishment of the LADA network and information system (including a survey on user information needs);
2. Stratification, acquisition and analysis of remote sensing and socio-economic data;
3. Identification of hot spots and bright spots at global level;
4. Higher resolution studies by pilot countries (including stratification, acquisition and analysis of remote sensing and socio-economic data);
5. Collection of information and capacity building at local level in pilot countries;
6. Identification of pilot countries' national hot spots and bright spots including driving forces and pressures;
7. Integration of information acquired at different scales (global, regional, national and subnational);
8. Publication of results and recommendations.

48. The global land degradation assessment and the work of the six pilot countries will allow identification of ways in which the assessment can be done at different scales using harmonized methodologies. In addition, pilot countries will be fundamental in the dissemination of harmonized assessment tools in their regions and are expected to assist other countries that are interested in carrying out detailed national land degradation assessments in the future; they will also be fundamental in refining the findings of the global study.

49. In this context, and subject to extra funding's being secured, the LADA project/FAO could work with additional countries which may be interested in using the LADA methodological framework and refining the results of the global study.

III. BENEFITS OF LADA FOR PARTIES TO THE CONVENTION

50. The results from the global assessment will allow Parties to the Convention to have an overview of the status of land degradation and to identify the areas where targeted investment may be needed to stop and/or reverse land degradation. At the same time, the identification of bright spots will allow countries to exchange methods for ecosystem management that have proved to be effective.

51. The results from the global LADA assessment will also allow Parties to identify potential actions at regional level. The results from the national and local studies will guarantee that methodologies are useful in different country scenarios and that capacity is also built at local levels.

52. The use of harmonized methodologies will also allow monitoring of the success of activities undertaken to implement the multilateral environmental agreements (MEAs), most notably the UNCCD, the United Nations Framework Convention on Climate Change (UNFCCC) and the CBD. At the same time, the LADA tools and methods can be made available to all parties and could be used for carrying out assessments and proposing actions linked to other international initiatives, for example TerrAfrica in the case of African countries.

IV. CONCLUSIONS AND RECOMMENDATIONS

53. The LADA project will bring benefits to Parties to the Convention as it will allow a better allocation of resources and the formulation of projects that can be submitted to different potential donors for national and regional action.

54. It is recommended that in order to facilitate and validate the assessment, the COP should encourage Parties to exchange information with the LADA project on current national or regional activities relating to the assessment of land degradation in drylands. Parties may also make available data on land degradation and drylands, including the results of surveys, desertification maps, land degradation perceptions, hot spots and bright spots identified by previous assessments or through other methodologies and statistics, and related biophysical and socio-economic data.

55. The LADA project will organize an e-conference to establish user information needs and invites Parties to participate in this through their national focal points. Parties are encouraged to participate in order to ensure that the LADA products are useful within their national context.

56. Parties embarking in more detailed national land degradation assessments may wish to adopt the LADA methodological framework and to share their findings in order to refine the global LADA assessment. At the same time, Parties interested in refining the findings from the global LADA assessment in their own country are welcomed to request LADA assistance to develop project proposals and to identify potential funds. Parties which are in a position to assist financially in this endeavour are invited to do so.

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