

SAI of Morocco

Research project on Land use/Land management practices in environmental perspective

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Acronyms and abbreviations

Foreword

Executive Summary

Chapter I : Background

1. Introduction

- The importance of this Topic resides in :
 - The impact of human activities on the land has grown enormously, altering entire landscapes, and ultimately impacting the earth's nutrient and hydrological cycles as well as climate.
 - The degradation of land and its resources becomes a global problem and takes several forms.
 - The current and future human activities depend, to some degree, on the land, minerals, water and other renewable and non- renewable resources

- The strong interest in land use results from their direct relationship to many of the planet's fundamental characteristics and processes, including the productivity of the land, the diversity of plant and animal species, and the biochemical and hydrological cycles...

2. Objectives

- To provide comprehensive data and information to the user of the project output regarding the land use/land management practice specifically in environment perspective;

- To spread, into SAIs, the interest to consider the environmental dimension in the audit of the programs and the projects connected to land use and land management;

- To provide, to SAIs, information regarding Land Use/Land Management Issue(s) that can be audited and introduce examples and case studies of best practices in this field;

3. Concepts and definitions

Land and Land Resources:

Land and Land Resources refer to a delineable area of the earth's terrestrial surface, encompassing all attributes of the biosphere immediately above or below this surface,

including those of the near-surface, climate, the soil and terrain forms, the surface hydrology (including shallow lakes, rivers, marshes and swamps), the near-surface sedimentary layers and associated groundwater and geohydrological reserve, the plant and animal populations, the human settlement pattern and physical results of past and present human activity (terracing, water storage or drainage structures, roads, buildings, etc.) (FAO/UNEP, 1997).

Land use:

Land use is characterised by the arrangements, activities and inputs people undertake in a certain land cover type to produce, change or maintain it" (FAO/UNEP, 1999) (Adopted during the course of development of the Land Cover Classification System, LCCS). A more inclusive definition of land-use is often used in practice. 'Land use' actually includes near-surface water (see the definition of land). Any given area of land is usually used to satisfy multiple objectives or purposes.

Land resources management:

Land resources management is the actual practice of the use(s) of the land by the local human population, which should be sustainable (FAO/Netherlands, 1991). In a broader sense it includes land-use planning, as agreed between stakeholders; legal, administrative and institutional execution; demarcation on the ground; inspection and control of adherence to the decisions; solving of land tenure issues; settling of water rights; issuing of concessions for plant and animal extraction (timber, fuelwood, charcoal and peat, non-wood products, hunting); promotion of the role of women and [other] disadvantaged groups in agriculture and rural development in the area; and the safeguarding of traditional rights of indigenous peoples (FAO, 1995).

Land use planning:

Land-use planning has been defined as "the systematic assessment of land and water potential, alternative patterns of land use and other physical, social and economic conditions, for the purpose of selecting and adopting land-use options which are most beneficial to land users without degrading the resources or the environment, together with the selection of measures most likely to encourage such land uses" (FAO, 1999-b).

Sustainable Land Management (SLM):

SLM is defined as a knowledge-based procedure that helps integrate land, water, biodiversity, and environmental management (including input and output externalities) to meet rising food and fiber demands while sustaining ecosystem services and livelihoods. SLM is necessary to meet the requirements of a growing population. Improper land management can lead to land degradation and a significant reduction in the productive and service functions.¹ In layman's terms, SLM involves:

- Preserving and enhancing the productive capabilities of land in cropped and grazed areas—that is, upland areas, downslope areas, and flat and bottom lands; sustaining productive forest areas and potentially commercial and noncommercial forest reserves; and maintaining the integrity of watershed for water supply and hydropower generation needs and water conservation zones and the capability of aquifers to serve the needs of farm and other productive activities.
- Actions to stop and reverse degradation—or at least to mitigate the adverse effects of earlier misuse—which is increasingly important in uplands and watersheds, especially those where pressure from the resident populations are severe and where the destructive consequences of upland degradation are being felt in far more densely populated areas “downstream.” (World Bank, 2006).

The functions of the land: The land has many functions that must be considered in the planning of the development to ensure an efficient allocation of land resources:

- Productive Function;
- Biotic and environmental Function;
- Regulating Function of the climate;
- Hydrological function;
- Function of storage;
- Function of control of the waste and the pollution;
- Function of Vital space;
- Function of filing or conservation of the heritage
- Function of spatial connection.

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4.Land use : statistics

- Certain information regarding Land and Land Use (Statistical Data-FAO or others).
- Current situation and trends of land use management and challenges in regional level (Africa, Europe, Asia, America...).

Chapter II: Environmental issues in Land use

2.1 Environmental issues in Land use

- 2.1.1 Deforestation
- 2.1.2 Degradation of biodiversity
- 2.1.3 Desertification and soil erosion
- 2.1.4 Environmental risks related to the management of local public services
- 2.1.5 Degradation of water quality
- 2.1.6 Contamination from waste
- 2.1.7 Degradation of air and atmospheric
- 2.1.8 Others

2.2 International agreements related to Land use and sustainable land use

- The issues related to this aspect are more global. Many international agreements at the global or regional level have been signed by different countries of the* World.
- These legal instruments of policy planning and management of land use provide solutions to various problems related to land use, particularly in the field of fight against deforestation, pesticide use in agriculture, urban planning and air quality ...

Chapter III : Land use and sustainable land use management

3.1 Regulatory, institutional and economic aspects

- 3.1.1 Regulatory aspects (Zoning, Urban planning, Environmental controls)

3.1.2 Institutional aspects

3.1.3 Economic aspects

3.2 Factors having adverse effect on land use management

3.2.1 Lack of information and appropriate regulation

3.2.2 Inappropriate economic and institutional policies

3.2.3 Lack of coordination of stakeholders

3.2.4 Inappropriate urban planning and lack of environmental impact assessment

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3.3 Policies, methods and other tools to preserve land resources

3.3.1 Conservation instruments

These instruments aim to minimize the impact of development or to mitigate and reduce pollution and risks. The process of environmental impact assessment is the primary planning tool in this area.

3.3.2 Restoration or rehabilitation

These instruments aim to limit and control access to areas and resources in order to allow natural processes (ecological) to restore a balance that has been lost. These practices can also be proactive to accelerate the process of restoring the natural balance.

3.3.3 Protection instruments

These instruments aim to minimize the impact of development or to mitigate and reduce pollution and risks. The process of environmental impact assessment is the primary planning tool in this area.

3.3.4 Mitigation instruments

These instruments aim at innovative and experimental, heavy interventions on the territory so as to transform the ambient environment according to concerns and priorities regarding the environment. It is case for instance, of green belts, green plans agglomeration, urban forests, equipment for pollution control, pollution dispersion.

3.3.5 Prevention instruments

These instruments are proactive. They aim, through direct intervention, management of resources and sensitive areas to avoid adverse cumulative effects in the short, medium and long term.

Chapter IV: Auditing Land Use/Land Management Issue(s)

As part of the exchange of experience in auditing and in order to help SAIs to learn from best practices enshrined in this area, this section is reserved to the presentation of different experiences in auditing land use and land management by collecting examples and case studies from SAIs experiences.

Until today, seven countries (Finland, Czech, Bulgaria, Mexico, Poland, Ukraine and Morocco) have declared that they have case studies on their experiences in this field.

The presentation of case studies can include information bellow: title of audit, audit objectives, type of audit, audit scope, audit criteria, audit conclusions (or recommendations), possible limitations/risks/barriers/difficulties found out during auditing

Appendices

Glossary

List of references/Bibliography