

P.O. BOX 30251 LIMAEAWFGOVERNMENT

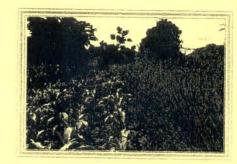
MINISTRY OF AGRICULTURE AND IRRIGATION DEVELOPMENT





# NATIONAL LAND RESOURCES MANAGEMENT POLICY AND STRATEGY





LAND RESOURCES CONSERVATION DEPARTMENT, P.O. BOX 30291

LILONGWE, MALAWI.

TELEPHONE: (265) 755352 TELEFAX: (265) 755354

JULY, 2000.

# LIST OF CONTENTS

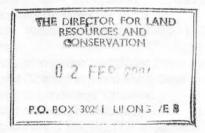
Preface ii Acronyms iii Interpretation of Terms Used iv		
1.0 2.0	Preamble Policy Goals and Guiding Principles	3 5
2.1 2.2	Policy Goal	5
3.0	Specific Policy Objectives and Strategies	8
3.1	Land Productivity	9
3.2	Land Rehabilitation	10
3.3	Public Awareness in Land Management P.O. BOX 30291, LILONG E 3	11
3.4 3.5 3.6 3.7 3.8 3.9	Technology Development in Land Management Institutional Coordination Institutional Capacity Building Environmentally Fragile Areas	12 13 14 15 16
3.10 3.11 3.12	Legislation Land Resources Information Incentives in Land Management	18 19 20
3.13 3.14 3.15	Waste Disposal Road Mitre Drains Natural Resources	21 22 23
3.16 3.17	Role of Non-Governmental Organizations and Local Communities Physical Planning and Settlements	24 25
3.18	Population	27
3.19	Women and Gender	28

#### **PREFACE**

This National Land Resources Management Policy and Strategy is a first attempt at documenting a set of policy on land use and management in the history of Malawi. It is also the, first to be developed within Malawi under the International Scheme for the Conservation and Rehabilitation of African Lands (ISCRAL) to which Malawi is a signatory. In addition, it is consistent with the recommendations made in the National Environmental Action Plan (NEAP), which was adopted by the Malawi Government in December 1994. Importantly, it has been developed by Malawians from a wide range of backgrounds including traditional chiefs, representatives of smallholder farmers and estates, non-government organizations, women and government departments.

In November 1994, the policy drafting process was initiated by a field inspection which focused on land and some management and degradation problems. This was immediately followed by a two-day National Land Resources Management Policy and Strategy Development Workshop, all present contributed what they and their respective organizations, considered to be the most important issues to be included in the policy. This resulted in the production of issues and options papers.

Individuals committed themselves and wrote basic drafts on selected issues. An executive review team, further developed the basic drafts into an initial policy document. This was tentatively approved by the Principal Secretaries for the then Ministries of Agriculture and Livestock Development and for Research and Environmental Affairs. The draft



Policy document was presented to a National Land Resources Management Policy Seminar held in Blantyre on the 15<sup>th</sup> and 16<sup>th</sup> of February 1996, where constructive criticisms were made and incorporated and development of an action plan commenced. Further development by executive review team of the Policy Document resulted in this document which was approved by Cabinet in April, 2000.

This Policy was initiated by the then Ministry of Agriculture and Irrigation Development and supported financially by UNDP and FAO under agreements with the Government of Malawi. Further, FAO provided for a policy facilitator for its development and a national consultant to assist with drafting of legislation to support the developed policy. The then Ministry of Research and Environmental Affairs coordinated the process.

#### **ACRONYMS**

MBS

MCI

ARET Agriculture Research and Extension Trust

CBO Community Based Organisation
DEMATT Development of Malawi Traders Trust
EIA Environmental Impact Assessment

FAO Food and Agriculture Organization of the United Nations

ISCRALInternational Scheme for the Conservation and

Rehabilitation of African Lands Malawi Bureau of Standards Ministry of Commerce and Industry

ME Ministry of Education

MEM Ministry of Energy and Mining

MEMP Malawi Environmental Monitoring Programme
MEPD Ministry of Economic Planning and Development

MH Ministry of Housing

MIBPT Ministry of Information, Broadcasting, Posts and

Telecommunications

MIRTDC Malawi Industrial Research and Technology Development

Centre

MIWD Ministry of Irrigation and Water Development MLGRDMinistry of Local Government and Rural Development

MLV Ministry of Lands and Valuation MNR Ministry of Natural Resources

MOALD Ministry of Agriculture & Irrigation Development

MOF Ministry of Finance MOH Ministry of Health MOJ Ministry of Justice

3

MOREA Ministry of Research and Environmental Affairs

MOT Ministry of Tourism

MOWS Ministry of Works and Supplies

MPPS Ministry of Physical Planning and Services
MORRA Ministry of Relief and Rehabilitation Affairs

MWCACS Ministry of Women. Children Affairs and Community Services

MYSC Ministry of Youth, Sports and Culture
NEAP National Environmental Action Plan
NGO Non Governmental Organisation

NHBG National Herbarium and Botanic Gardens
NLUMB National Land Use Management Board
NLUMT National Land Use and Management Tribunal

OPC Office of the President and Cabinet

UM University of Malawi

UNDP United Nations Development Programme

#### INTERPRETATION OF TERMS USED

#### LAND

Land is a finite natural resource, comprising the inter-related environmental components of geology or rock type, soil and its organisms, topography and aspect, climate (including micro-climate), water (rivers, lakes and underground) and vegetation.

#### LAND CAPABILITY

The ability of a particular type of land to accept a specific use and associated management practices without permanent degradation occurring. It is an expression of the combination of inherent characteristics of the land and associated climate to sustain the nominated use and management for both present and future generations.

#### LAND DEGRADATION

The decline in the quality of the land and its resources, caused by inappropriate human usage. It includes decline in soil fertility and structure and the deterioration of natural vegetation, landscapes and water resources and encompasses the adverse effects of overgrazing,

excessive tillage, erosion, sediment deposition, urbanization, road construction, pollution, toxic wastes, the introduction of noxious plants and feral animals and the decline of native plant communities.

#### LAND SUITABLITY

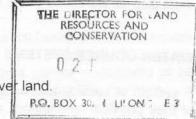
Land capable of sustaining a particular use and set of management practices within a location or social setting which make it economic for the particular production.

#### LAND TENURE

The manner in which land is held by the user, whether customary, public or private land (leasehold or freehold).

#### **PROPERTY RIGHTS**

The mandate which the landholder has over land



#### LAND CONSERVATION

The prevention and control of soil erosion and degradation through the application to land use and management practices-vegetative, structural, chemical and mechanical, -which when combined are within the limits of economic practicability and enable a level of production to be obtained which is within the capability of the land to maintain this perpetually.

#### SOIL EROSION

The wearing away of the land by running water, rainfall, wind and landslides. Soil erosion is the detachment and movement of soil particles from one place to another by any of the above mentioned agents. There are various complex forms of erosion. Some such as raindrop splash erosion, sheet erosion and rill erosion are insidious. Gully erosion is a spectacular form, indicating that the previously mentioned forms are active and that all water erosion processes are developed to a serious stage of land degradation.

#### SUSTAINABLE LAND USE

The use of land in such a way that its present and future productive capacity is not reduced.

Sustainability is more about output over an infinitely long period of time than on total output in the short term. Maximum yield may therefore be sacrificed to a lesser but more stable level.

Most importantly, sustainability is a relative concept. That is, the possibility of achievement of sustainability depends on the relationship between the level of output required and the level of input provided. Where the level of output required is low, only a low level of input is needed. If an increase in the level of input is required, the level of input must also be increased or the system will decline.

#### WATER COURSE SYSTEMS

A system of surface and underground waters that constitute, by virtue of their physical relationship, a unitary whole and flow into a common terminus.

#### 1.0 PREAMBLE

The Government of Malawi is placing the highest priority on poverty alleviation among its policy objectives. The successful implementation of the National Land Resources Management Policy and Strategy will positively contribute to poverty alleviation through influencing and encouraging coordinated sustainable land útilization and management. This policy is in line with the umbrella National Environmental Management Policy and has taken into consideration the recent reviews of a number of other sectoral policies.

Since independence in 1964, the development process in Malawi has been accompanied by unprecedented investment in various development and infrastructure projects. These investments, however, have largely been a product of independent decisions and plans by ministries, parastatals, the private sector, non-governmental organizations (NGOs), foreign aid donors and the community.

A considerable proportion of these development projects have been carried out without spatial co-ordination within the context of a National Land Resources Management Policy and Strategy. Consequently, sectoral development projects have been sited to satisfy only the sectors' locational requirement for land, labor, transport and other infrastructure requirements. This situation has, at times, resulted in land use conflicts and unsuitable land management practices.

Agriculture is the biggest land use in Malawi and this affects and is affected by the other land uses. It is important for Government to provide policy guidelines that indicate the national aspirations on the way land should be used and managed.

Malawi is a relatively small country, with a total area of 118,484 square kilometers, of which 20% is covered by water. Of the 94,000 square kilometers of land area, only about a third can be considered to be suitable for cultivation under the prevailing traditional management level practiced by smallholder farmers.

The population growth rate is one of the highest in the region being more than 3%, with a potential for doubling from the present 12 million to 20 million by the year 2020, This leads to inter-generational subdivision of land holdings, where the smallholder agriculture subsector of over 1.8m farm families cultivate about 82% of land under customary tenure, and where about 390 000 families farm less than 1.0 ha and 340 000 families farm less than 0.5 ha.

The traditional inter-gerational sub-division of land holdings is continuously declining per capita arable land holding, posing a threat to food security. Furthermore, under traditional farming it is not difficult to undertake sustainable food production on land holding sizes of less than 0.5 ha. The increasing demand for land for commerce, industry, human settlement and other services further reduce available land.

Therefore, this National Land Resources Management Policy and Strategy will assist to:

- (i) balance land requirements for different land uses according to land suitability and capability and regulate competing land demand for different sectors;
- (ii) designate, through consultation with land users, the best use of land for optimal socio-economic development;
- (iii) provide guidelines and strategies for the sustainable utilization of the land resource base;
- (iv) define the roles of different players in land resources management issues, guide the formulation and / or the review of sectoral policies and legislation related to land use and its management for sustainability; and
- (v) enable Malawi to determine the priority application of both internal and externally provided resources.

This National Land Resources Management Policy and Strategy will be an instrument for the conservation of land for agriculture and other uses. The Policy, also indicates land use and management measures that will balance and regulate competing land use for various activities such as human settlements and forest reserves.

# 2.0 POLICY GOAL AND GUIDING PRINCIPLES

# 2.1 Policy Goal

The overall policy goal is to promote the efficient, diversified and sustainable use of land based resources both for agriculture and other uses in order to avoid sectoral land use conflicts and ensure sustainable socio-economic development.

# 2.2 Guiding Principles

Malawi's economy is highly dependent on natural resources. If these are depleted or degraded, long term food security and sustainable socio-economic growth will be seriously compromised, Therefore the need for policy guidelines on the conservation and management of land

resources can not be over emphasized. The policy goal as indicated above will be guided by the following key principles:

- a) full involvement of the private sector, NGOs, community based organizations (CBOs) and local communities, is critical to improved protection, conservation, management and sustainable utilisation of Malawi's natural resources, especially land,
- b) while there will be a requirement for legislation to support some land use and management policies, regulatory measures alone do not provide incentives for individuals or organizations to invest in sustainable environmental management. Legislation will be complemented by social and economic incentives to influence involvement of land users in adopting sustainable land use and management practices.
- equitable and secure tenure over land and resources for users is a fundamental requirement for encouraging the adoption of sustainable natural resource management,
- this policy will purposely include mention of women and youth; they will be involved in policy, programme and project design and implementation,
- e) Malawi's environment has been significantly affected by the activities of various sectors. This calls for concerted efforts by all sectors when formulating policies and plans to ensure these include those related to the utilisation, management and conservation of land. Only when such policies and plans are implemented can there be sustainable national development,
- f) trade-offs between economic development and environmental protection will be minimized through use of land suitability assessment, environmental impact assessment and land resource monitoring,
- g) the implementation of sustainable land use and management policies will require substantial financial resources, which may be beyond the capacity of the government and donor agencies;

there is thus a requirement for the involvement of the private sector and NGOs,

- h) land-based resources and activities, such as minerals, agriculture and forestry are key components of the modern economy, since they form the basis of most industrial products and processes. Sustainable use and management of these resources is thus crucial in all industrial production and commercial transactions,
- the future availability of land is crucial for the continued supply of habitat and natural resources to satisfy demands that are on the increase as a result of economic growth, technological progress, urbanization and increased population;
- the challenge for land use planning results from the contradiction between the rapid technological changes which influence urban growth and the slow process of planning which allocates land for specific uses;
- where any development operation disturb land, rehabilitation must be completed to standards;
- the current population growth rate of the country is imposing a serious threat to the carrying capacity of the environment, natural resources, and the economy; its management to sustainable levels through family planning is urgently required;
- m) the implementation of land management policies and strategies will require multi-sectoral solutions and the participation of all, including local communities; and
- n) classification and zoning of land use activities for different sectors is important in order to reduce conflicts between sectors. Therefore, the existing land use plans in the Ministry of Physical Planning and Surveys and land resources and evaluation data in the Ministry of Agriculture and Irrigation should be used by the various sectors in their development planning.

#### 3.0 SPECIFIC POLICY OBJECTIVES AND STRATEGIES

#### 3.1 LAND PRODUCTIVITY

#### Policy Objective:

To improve and sustain productivity of land for agriculture and other alternative uses.

#### **Strategies**

- 3.1.1 Produce, maintain, update and disseminate appropriate soil organic matter building technologies.
- 3.1.2 Promote appropriate soil and water conservation practices
- 3.1.3 Support development of methodologies for participatory approach to conservation farming.
- 3.1.4 Provide land resources information for proper land use planning and management.
- 3.1.5 Encourage land users to practice productive forms of sustainable land use.
- 3.1.6 Produce and regularly evaluate area specific recommendations on soil erosion control and soil fertility improvement.
- 3.1.7 Provide guidelines on stocking rates and carrying capacities for different areas in collaboration with Department of Animal Health and Industry.

#### 3.2. LAND REHABILITATION

#### **Policy Objective**

To rehabilitate degraded land for agricultural production and other alternative uses.

- 3.2.1 Promote regeneration of vegetation in degraded areas.
- 3.2.2 Map extent of degraded areas and prioritize areas for rehabilitation
- 2.2.3 Provide and regularly update guidelines for rehabilitation of degraded areas.
- 3.2.4 Encourage local communities to form conservation committees to rehabilitate their degraded areas through self help efforts. Government will provide technical assistance to support programmes such as physical soil conservation, grazing management, agroforestry practices and vetiver grass planting once communities have organised themselves.
- 3.2.5 Collaborate with other stakeholders in the rehabilitation of all categories of land other than arable land such as waste disposal sites.
- 3.2.6 Encourage voluntary resettlement of people currently farming on fragile and non-arable areas on to land of sustainable productive land.
- 3.2.7 Provide incentives for construction and establishment of successful conservation and rehabilitation measures.
- 3.3. PUBLIC AWARENESS IN LAND MANAGEMENT

#### **Policy Objective**

To instill a sense of responsibility and commitment among the public towards management of land resources

#### **Strategies**

3.3.1 Publicize the land resources management policy and its implications on the community.

- 3.3.2 Strengthen and enhance land conservation modules and curricula in schools, colleges and relevant institutions.
- 3.3.3 Regularly conduct awareness campaigns on sound land resources management practices
- 3.3.4 Involve all stakeholders such as traditional leaders, policy makers, the private sector, NGOs and CBOs in public awareness campaign meetings.
- 3.3.5 Promote use of competitions as a means of increasing awareness of improved land resources management practices.
- 3.3.6 Review training approaches in schools, colleges and relevant institutions.
- 3.3.7 Encourage firms involved in activities that directly affect land quality, such as agriculture, mining and forestry, to view land based environmental problems as the top environmental concerns.
- 3.3.8 Enhance programmes that emphasize increased awareness of population problems on land and the benefits of smaller family sizes.

#### 3. 4 SURFACE WATER RUNOFF

**Policy Objective** 

To control surface runoff water for agriculture and other uses

#### **Strategies**

- 3.4.1 Promote technologies that will minimise volume and velocity of surface run-off from agricultural land
- 3.4.2 Promote simple water harvesting technologies
- 3.4.3 Promote catchment conservation and land use planning through popular participation.

13

- 3.4.4 Campaign against bush fires and wanton cutting down of trees.
- 3.4.5 Promote good soil management technologies such as mulching, tilling, crop residue management.

# 3.5 COMMUNITY INITIATIVES IN LAND RESOURCES MANAGEMENT

#### **Policy Objective**

To provide an enabling environment for community initiatives in managing their land resources

#### Strategies

- 3.5.1 Develop and follow appropriate methods of extension based on the principles of participation, two-way communication, empowerment of farmers to solve their own problems and farmer to farmer extension.
- 3.5.2 Facilitate through the extension agents, the formation and organisation of autonomous community farming groups to improve land use and management practices.
- 3.5.3 Develop land use and management training manuals using the most successful participatory approaches.
- 3.5.4 Formulate contractual agreements between communities and the Department on conservation activities in their areas to ensure Commitment from both sides
- 3.6 TECHNOLOGY DEVELOPMENT IN LAND MANAGEMENT

# **Policy Objective**

To develop technologies that are economically viable ecologically sound and socio-culturally acceptable

- 3.6.1 Identify and promote demand driven research needs in land management and help to initiate research.
- 3.6.2 Encourage participatory technology development
- 3.6.3 Conduct on farm testing of research proven technologies in different agro-ecological zones.
- 3.6.4 Carry out demonstrations and interprete research results into simple messages for farmer training and appreciation.
- 3.6.5 Strengthen a holistic research which assesses causes and effects of soil erosion and degradation in interaction with agriculture activities (tillage, cropping, soil fertility improvement, pest control, groforestry, livestock production, farm machinery etc) currently studied independently.
- 3.6.6 Strengthen collaboration with research institutions both local and international in order to exchange information, harmonise/standardize research methods and tools.

# 3.7. INSTITUTIONAL COORDINATION

**Policy Objective** 

To enhance coordination among institutions involved in land resources management.

P.O. BOX 3025 I. LILONG E 3

#### **Strategies**

- 3.7.1 Develop strong institutional linkages between the Department and other government institutions, private sector, NGOs, local and international organizations involved in land resources management in order to share information and experiences.
- 3.7.2 Provide technical support to other institutions involved in land resources conservation such as ARET, Bunda, NGOs etc.

RESOURCES AND

CONSERVATION

- 3.7.3 Ensure that sectoral policies and supporting legislation to land resources management are consistent with provisions of this policy.
- 3.7.4 Decentralize land use planning, its management and administration in order to improve public participation and reduce delays in decision making.
- 3.7.5 Create a statutory National Land Use and Management Board to advise government on land use, land conflict resolution, land use changes and management.
- 3.7.6 Contract out and provide contractural services of some land resources conservation activities at the discretion of the Director of Land Resources Conservation.
- 3.7.7 Strengthen the functions of relevant national, technical committee such as National Agroforestry Steering Committee, Soil and Water Conservation Research Coordination Committee.

# 3.8. INSTITUTIONAL CAPACITY BUILDING

#### **Policy Objective**

To strengthen capacities of the Department and other institutions to better plan implement and monitor and evaluate land resources management

- 3.8.1 Improve the capacity of LHTC to provide national and regional training
- 3.8.2 Provide training to all staff involved in land management
- 3.8.3 Ensure provision of materials and equipment for effective/efficient functioning of the department

- 3.8.4 Develop the human resources required for the implementation of the policy and optimum utilization of managerial, technical and scientific talent.
- 3.8.5 Provide a conducive working environmental in which every employee is able to reach optimum capability.
- 3.8.6 Empower rural communities to effectively manage their land resources.

#### 3.9. ENVIRONMENTALLY FRAGILE AREAS

#### **Policy Objective**

To protect and preserve environmentally fragile areas such as steep slopes, stream bands, watershed areas, swamps and dambos.

#### Strategies

- 3.9.1 Identify and map all environmentally fragile areas
- 3.9.2 Provide appropriate guidelines on use and management of different kinds of environmentally fragile areas.
- 3.9.3 Publicise the different ecological functions of the environmentally fragile areas.
- 3.9.4 Propose areas for gazetting as protected areas.

#### 3.10. LEGISLATION

#### **Policy Objective**

To provide, where necessary, the legal framework to support land resources conservation and management policies for rational and informed land resources management.

- Formulate a legal framework for the implementation of a comprehensive land resources conservation policy 3.10.1 without compromising the principles of sustainable development. Encourage maximum community participation 3.10.2 formulating, reviewing and updating sectoral laws relating to land use, planning and management. Ensure that cross-sectoral laws are consistent with the 3.10.3 provisions of land use and management legislation. Make legal provision for punitive and incentive measures relating to prevention and control of soil erosion and 3.10.4 improvement and maintenance of soil fertility. Empower traditional leaders to authorize the use and occupation of customary land in their areas and ensure 3.10.5 its sound use and management. Prepare a report on land use patterns and soil conservation status in Malawi for the Minister(s) 3.10.6 responsible for land use and management matters, to annually table in parliament
  - 3.10.7 Establish land use and management appeals tribunal

# 3.11. LAND RESOURCES INFORMATION

# **Policy Objective**

To improve the acquisition and utilisation of land resources information for proper planning and management of land resources for agriculture and other uses

#### Strategies

3.11.1 Ensure adherence to standards in land resources data collection, analysis and management.

Provide high quality data that is compatible with national 3.11.2 and international set standards. Ensure periodic acquisition of aerial photographs and 3.11.3 and maps for purposes of satellite imagery updating land resources information. Publish and disseminate land resources information to 3.11.4 land users to enable them make informed decision on the use of land resources. Establish and maintain land resources information 3.11.5 centres that will contain data to be used for planning from farm to national level. Strengthen linkages for information sharing and 3.11.6 expertise exchange with national and international centres involved in land resource information generation and analysis.

#### 3.12. INCENTIVES IN LAND MANAGEMENT

#### **Policy Objectives**

To promote the use of incentives which encourage communities to undertake soil conservation measures

- 3.12.1 To develop guidelines on type and use of reward schemes in land resources management
- 3.12.2 Encourage use of incentives as a way of rewarding land users who have successfully implemented good land management practices.
- 3.12.3 Provide loan guarantees for compliance with leasehold covenants

3.12.4	Provide tax rebates for establishment and maintenance		
5.12.4	of soil conservation measures.		
3.12.5	Monitor and evaluate the impact of these incentives on the adoption of soil conservation measures.		
3.12.6	Establish a mechanism for linking agricultural credit worthiness of land users to good land management practices.  THE LECTOR FOR LAND ATION		
3.13. WAS	TE DISPOSAL 0 2 2004		
Policy Objectives			
To institute measures for the satisfactory disposal of all types of waste so that land degradation and land-based pollution are prevented.			
<b>3</b> .13.1	Encourage the recycling of re-usable materials and compost putrescible waste from farms, related agrobased industries and households. Use the products as organic fertilizer and for other purposes.		
3.13.2	Designate land suitable for use as waste disposal sites, properly manage these and where possible, reclaim the sites for other uses.		
3.13.3	Introduce social and economic incentive schemes that encourage individuals and institutions to carry out proper disposal and management of wastes to prevent land degradation.		
3.13.4	Devise guidelines to effectively manage existing waste disposal sites that are improperly located and managed.		
3.13.5	Ensure implementation of existing international treaties and bilateral agreements preventing the transport through and disposal of waste within Malawi.		
8. · · · · · · · · · · · · · · · · · · ·	MITTE DEAINS		

14. ROAD MITRE DRAINS

#### **Policy Objective**

To minimize the volume and velocity of erosive runoff from road mitre drains in order to prevent and control erosion on road reserves and surrounding land.

#### **Strategies**

3.14.1	Provide improved guidelines and standards for discharge of runoff and its disposal from road works.
3.14.2	In the improved guidelines and standards, as in 14.1, encourage the harvesting and utilisation of runoff.
3.14.3	Require road contractors to have all roads served with mitre drains which discharge to waterways without causing erosion.
3.14.4	Amend and enforce appropriate legislation pertaining to road standards, designs and construction to ensure safe disposal of runoff.
3.14.5	Introduce a monitoring mechanism in road construction and maintenance so that contractors and the Ministry responsible for public works effectively prevent erosion.
3.14.6	Introduce civic education to members of the public so that they know their rights concerning runoff from the road mitre drains

# 3.15. NATURAL RESOURCES

# **Policy Objective**

To promote the management, conservation and utilization of natural resources in order to ensure sustainable land and ecosystem productivity.

# Strategies

3.15.1	Ensure that environmental impact assessment is carried out where land use and associated practices are likely to have significant adverse impacts on natural resources.
3.15.2	Promote monitored and controlled access of local communities into surrounding forests, wildlife reserves, national parks, fragile areas and inland water systems for their own socio-economic benefits.
3.15.3	Incorporate clauses into sectoral land use and management policies and legislation which will promote the conservation of natural resources, especially in water catchments, dams, rivers and areas rich in biodiversity.
3.15.4	Protect fishery resources through controlling pollution of rivers and lakes and institute land use and management measures which will prevent and control siltation of breeding grounds for fish and other aquatic life.
3.15.5	Develop and implement forestry management measures that will reduce deforestation.
3.15.6	Use educational curricula and the media to promote awareness on the importance and wise utilisation of natural resources.

# 3.16. ROLE OF NON-GOVERNMENTAL ORGANIZATIONS AND LOCAL COMMUNITIES

Policy Objective

To compliment government efforts in promoting sustainable land use and management practices.

- Identify, analyze and incorporate positive traditional 3.16.1 knowledge in land use and management systems. Train local communities in sustainable land use and 3.16.2 practices such as crop production, management livestock raising and other resource management activities. Disseminate information to local communities and help 3.16.3 source funds for local community initiatives on sustainable methods of land utilisation. Promote off-farm employment activities amongst local 3.16.4 communities in order to reduce pressure on land and increase employment, income levels and food security. Identify mechanisms to enable local communities to 3.16.5 prepare and submit self-help programmes
  - 3.17. PHYSICAL PLANNING AND SETTLEMENTS

# **Policy Objective**

To provide a framework to guide the spatial evolution of settlements and investments to optimize the utilization of land.

improvement of land use and management.

- 3.17.1 Formulate and enforce standards, guidelines and development regulations to ensure socio-economic benefits of land use and management.
- 3.17.2 Review existing and prepare new national, district, local, physical and spatial development plans in order to ensure the efficient and most economic use of land.

Request developers to observe and follow building 3.17.3 regulations in order to promote the quality of the project, property and physical development and to conserve the aesthetic values in the landscape. Revise and formulate land use planning standards to 3.17.4 ensure the sustainability of land is safeguarded and disseminate the standards in simplified version. Promote use of the existing national physical 3.17.5 development plan and the land resource evaluation data, in order to minimize sectoral conflicts. Ensure that future urban development and expansion 3.17.6 are confined to land of low agricultural value. utilisation natural Encourage the sustainable 3.17.7 resources used for the development of human settlement. Encourage local communities to develop permanent 3.17.8 settlements in their areas in order to optimize land use. Promote research into building materials and methods 3.17.9 which will reduce dependence on the use of natural resources and minimize cost. Promote settlement and voluntary resettlement away 3.17.10 from marginal land

# 3.18. POPULATION

#### **Policy Objective**

To encourage reduced growth in the nation's population in order to achieve sustainable land resources management and the associated goals of food security, improved health, employment and poverty reduction.

Strategies

24

- 3.18.1 Enhance programmes that emphasize increased awareness of population problems on land and the benefits of smaller family sizes.
- 3.18.2 Undertake research with respect to demographic, cultural and socio-economic factors as they relate to land use and management.
- 3.18.3 Provide integrated population and land use management education in the formal school system and other institutions of learning.
- 3.18.4 Promote the role of women in the design, management and implementation of population and health programmes in order to integrate population, land use and management of land.

#### 3.19. WOMEN AND GENDER

#### **Policy Objective**

To integrate gender issues in all phases of policy and decision making on land so that men and women as equal partners have a shared responsibility over sustainable use and management of land resources.

- 3.19.1 Promote the perspectives of women, especially rural women and children in all programmes addressing land use and management issues.
- 3.19.2 Utilize the positive indigenous knowledge of women, in all programmes regarding sustainable land use and management.
- 3.19.3 Develop and implement policies that recognise and enshrine the legal rights of women to land on an equitable basis.