Institutional Mapping for Malawi

Final Draft Report

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# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table of Contents</td>
<td>2</td>
</tr>
<tr>
<td>List of Abbreviations</td>
<td>4</td>
</tr>
<tr>
<td><strong>EXECUTIVE SUMMARY</strong></td>
<td>5</td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>10</td>
</tr>
<tr>
<td>1.1. UNDP-UNEP Poverty-Environment Initiative</td>
<td>10</td>
</tr>
<tr>
<td>1.2. Scope of the Study</td>
<td>10</td>
</tr>
<tr>
<td>1.3. Structure of the Report</td>
<td>11</td>
</tr>
<tr>
<td>2. CENTRAL GOVERNMENT AGENCIES</td>
<td>12</td>
</tr>
<tr>
<td>2.1. The Office of President and Cabinet (OPC)</td>
<td>12</td>
</tr>
<tr>
<td>2.1.1. Cabinet Services Division</td>
<td>12</td>
</tr>
<tr>
<td>2.1.2. Policy Research, Monitoring and Evaluation Division</td>
<td>13</td>
</tr>
<tr>
<td>2.1.3. Department of Human Resource Management and Development</td>
<td>14</td>
</tr>
<tr>
<td>2.2. Ministry of Finance</td>
<td>14</td>
</tr>
<tr>
<td>2.2.1. Budget Process</td>
<td>15</td>
</tr>
<tr>
<td>2.3. Ministry of Economic Planning and Development</td>
<td>16</td>
</tr>
<tr>
<td>2.3.1. Malawi Growth and Development Strategy (MGDS)</td>
<td>16</td>
</tr>
<tr>
<td>2.3.2. Monitoring and Evaluation System</td>
<td>18</td>
</tr>
<tr>
<td>3. SECTOR MINISTRIES</td>
<td>21</td>
</tr>
<tr>
<td>3.1. Ministry of Lands and Natural Resources</td>
<td>21</td>
</tr>
<tr>
<td>3.1.1. Challenges Related to Land Issues</td>
<td>21</td>
</tr>
<tr>
<td>3.1.2. Environmental Affairs Department (EAD)</td>
<td>22</td>
</tr>
<tr>
<td>3.1.3. National Environmental Policy</td>
<td>24</td>
</tr>
<tr>
<td>3.1.4. Environmental Management Act 1996 (EMA)</td>
<td>25</td>
</tr>
<tr>
<td>3.1.5. Environmental Coordination Arrangements</td>
<td>25</td>
</tr>
<tr>
<td>3.1.6. Projects in EAD</td>
<td>27</td>
</tr>
<tr>
<td>3.1.7. Challenges for EAD</td>
<td>28</td>
</tr>
<tr>
<td>3.2. Ministry of Agriculture and Food Security</td>
<td>29</td>
</tr>
<tr>
<td>3.2.1. Synopsis of the Agricultural Sector</td>
<td>29</td>
</tr>
<tr>
<td>3.2.2. Agricultural Development Programme (ADP)</td>
<td>30</td>
</tr>
<tr>
<td>3.2.3. Institutional Set-up for the ADP Implementation</td>
<td>32</td>
</tr>
<tr>
<td>3.2.4. Department of Land Resources Conservation</td>
<td>34</td>
</tr>
<tr>
<td>3.2.5. Land Resources Conservation Policies and Legislations</td>
<td>35</td>
</tr>
<tr>
<td>3.2.6. Challenges for Land Resources Conservation</td>
<td>35</td>
</tr>
<tr>
<td>3.2.7. Synopsis of the Fisheries Sector</td>
<td>37</td>
</tr>
<tr>
<td>3.2.8. Role of the Fisheries Department</td>
<td>37</td>
</tr>
<tr>
<td>3.2.9. Challenges for the Fisheries Sector</td>
<td>39</td>
</tr>
<tr>
<td>3.3. Ministry of Irrigation and Water Development</td>
<td>40</td>
</tr>
<tr>
<td>3.3.1. Synopsis of the Water Sector</td>
<td>40</td>
</tr>
<tr>
<td>3.3.2. Role of the Ministry of Irrigation and Water Development</td>
<td>40</td>
</tr>
<tr>
<td>3.3.3. Water Resources Department</td>
<td>41</td>
</tr>
</tbody>
</table>
3.3.4. Challenges for Water Resources Management............................................................... 42
3.3.5. Department of Irrigation Services.............................................................................. 43
3.3.6. National Irrigation Policy ......................................................................................... 44
3.3.7. Challenges for the Department of Irrigation............................................................... 46

3.4. Ministry of Energy and Mining ................................................................................. 52
3.4.1. Synopsis of the Forestry Sector ............................................................................... 53
3.4.2. Role of the Forestry Department ............................................................................ 54
3.4.3. Forestry Policies and Legislation ............................................................................ 54
3.4.4. Institutional Collaboration in the Forestry Sector .................................................. 55
3.4.5. Challenges for the Forestry Sector ......................................................................... 58
3.4.6. Synopsis of the Energy Sector ................................................................................ 59
3.4.7. National Energy Policies ........................................................................................ 59
3.4.8. Role of the Energy Department .............................................................................. 60

3.5. Ministry of Tourism, Wildlife and Culture ................................................................. 63
3.5.1. Synopsis of the Wildlife Sector .............................................................................. 63
3.5.2. Role of the Department of Parks and Wildlife ....................................................... 64
3.5.3. Challenges for the Wildlife Sector ......................................................................... 66

4. DISTRICT LEVEL GOVERNMENT INSTITUTIONS ....................................................... 67

5. THE MALAWI PARLIAMENT .................................................................................. 72
5.1. The Agriculture and Natural Resources Committee of the Parliament .................... 72
5.2. Challenges for the Agriculture and Natural Resources Committee ............................. 73

6. CIVIL SOCIETY ..................................................................................................... 75
6.1. Coordination Unit for the Rehabilitation of the Environment (CURE) ....................... 75
6.2. Wildlife and Environmental Society of Malawi (WESM) ......................................... 76
6.3. Civil Society Agriculture Network (CISANET) .......................................................... 77

Case Studies
Case Study 1: Blantyre Water Board ............................................................................... 51
Case Study 2: Electricity Corporation of Malawi (ESCOM) .............................................. 61
Case Study 3: Blantyre District Assembly ....................................................................... 68

List of Annexes
Annex 1: List of People Consulted .................................................................................. 79
Annex 2: Malawi Central Government Structure .............................................................. 81
Annex 3: Malawi Facts and Figures on Environment and Natural Resources .................. 83
Annex 4: Budget Allocations for Ministries and Departments ............................................. 89

3
List of Abbreviations

ADP
EAD
EMA
M&E
MEPD
MGDS
NCE
CSO
OPC
PEI
PS
Executive Summary

The UNDP-UNEP Poverty-Environment Initiative (PEI) is a programme aimed at supporting Governments to integrate environmental sustainability as a core objective in development planning and implementation and to build capacity for mainstreaming environmental sustainability in development planning and implementation. The programme in Africa is being implemented in 7 countries: Kenya, Mali, Mauritania, Mozambique, Rwanda, Tanzania and Uganda. The programme is being introduced in Malawi, the first new country programme in the PEI scale-up.

As in the other countries the PEI will help mainstream environmentally sustainable natural resources use into Malawi’s national & sectoral development processes so as to reduce environmental degradation, improve food security, reduce vulnerability to natural disasters and to reduce poverty.

In order to understand the dynamics of environmental and development issues in Malawi, detailed consultations were undertaken with all relevant stakeholders to help to identify priority needs and guide the scope of the PEI programme in Malawi. This report provides a detailed assessment of the structures and processes encompassing key Government institutions and civil society organisations in the area of development, environment and natural resource management. It identifies their roles, mandates and policies. It also highlights their challenges and areas requiring support and action to address them. Based on this assessment, the report provides pointers to the areas for potential PEI support and is thus an important guide to the development of the PEI Malawi work plan.

In sum, potential areas for PEI support identified through the stakeholder assessment include the following:

1. **Support for improved policy implementation, coordination and harmonisation**
   Despite establishment of many policy and legal instruments, the review has shown that Malawi is still facing serious challenges in the environment and natural resources sector. The review has shown that there is weak implementation and enforcement of policies, legislation and strategies by responsible Ministries and Departments. The policies are also not harmonised and there are few formal coordination mechanism at policy and implementation levels. There is also lack of sufficient links between Malawi Growth and Development Strategy (MGDS) as the overarching policy framework and sector policies and programmes.

2. **Support to MGDS monitoring and evaluation to integrate environmental issues**
   Ministry of Economic Planning and Development (MEPD) as a central Ministry coordinating economic and development policies and programmes is responsible for conducting annual reviews of MGDS implementation. The PEI could support the process of MGDS review by assessing integration of environmental sustainability in the MGDS priorities and programmes, and reviewing and developing appropriate monitoring and evaluation indicators and tools for assessing environmental sustainability in the MGDS implementation at national and sectoral levels.

3. **Support to improve coordination of environmental issues**
   The review has also shown that there are serious coordination deficiencies among sectors both at policy level and implementation level. At policy level, there are a number of policy conflicts and disjointed strategies within natural resources sectors and with national development policies especially the MGDS. This calls for urgent policy review and harmonisation for different sectors in line with national environmental policies and legislation, international provisions and national development policies, strategies and priorities.
At policy and operational level, there are a number of formal coordination structures which are operating at suboptimal levels. A need for facilitating the functioning of these coordinating structures was expressed, as was a need to streamline them. Some of these include:

A. **Support to the Central Agencies, including MEPD, OPC and Ministry of Finance, for improved coordination of development and environment linkages**  
The Central Agencies: Office of the President and Cabinet (OPC), Ministry of Finance, Ministry of Economic Planning and Development (MEPD), and Ministry of Justice and Constitutional Affairs, have a critical role to facilitate, promote and coordinate Government policies, goals and priorities through overseeing Ministerial and sectoral processes, policies and programs. Their oversight roles span from economic, financial, and legal to policy and operational perspectives. The OPC is the overall leading agency as it operates within top political and policy spheres of Government, thereby being on top of all Government agencies. MEPD is the leading agency for all development and economic policies, strategies and programmes. With the support of the OPC and collaboration of the Environmental Affairs Department (EAD), MEPD can play a leading role of ensuring coordination, integration and harmonisation of environmental and natural resources policies, legislation and programmes in line with national development policies and priorities (MGDS).

The OPC through its Policy Division and in collaboration with the other Central Agencies is developing a guide to policy making which outlines processes to be followed by Ministries when developing policies. This calls for policies to be developed based on conceptual analysis and impact analysis. Some of the impacts to be analyzed before a policy is submitted to the Cabinet include economic and financial impacts, environmental impacts, HIV/AIDS and gender. The guidelines also promote working together of different Ministries and Departments during policy, planning and budgeting processes within government to ensure harmonisation of strategies, approaches and implementation mechanisms. PEI can support the finalization and rollout of the guidelines by ensuring that environmental sustainability indicators and considerations are put in place for analysing policy options and impacts. PEI could provide technical and financial support to OPC working in collaboration with Ministry of Finance, MEPD and EAD.

There is also a need to support improved integration of environmentally sustainable natural resource use in the budgetary processes and allocations, in order to achieve MDGS objectives relevant to sustainable natural resource management.

B. **Strengthening the Principal Secretaries Committee on Environment, Natural Resources and Climate Change and the National Council for the Environment**  
The National Council for the Environment (NCE) has a wide mandate to coordinate and advise Government on all issues of environment and natural resource management. There will be need to support the operations of the Council to ensure that they are meeting regularly (quarterly) to address emerging environmental issues both at policy and operational levels. Recently, the Government has also established a Principal Secretaries (PS) Committee on Environment, Natural Resources and Climate Change to provide policy and strategic guidance on these issues. This is a critical policy group which needs to be supported and strengthened. The linkage or interface between the PS Committee and the NCE still needs to be clarified.

C. **Facilitating review and strengthening of the role of the Environmental Affairs Department**
The Environmental Affairs Department (EAD) was established as a coordinating unit for all environmental issues at national level. It also coordinates all international conventions relating to the environment in Malawi. Its mandates and operations have been weakened over time due to frequent institutional relocation, funding and capacity constraints despite having legal frameworks through the Environmental Management Act (EMA) to support its work. In addition it has proved difficult for EAD to strategically place issues of environment as a driver of growth and poverty reduction within broader Government debates and priorities including the MGDS. Most stakeholders express the need for establishing an independent semi-autonomous body (possibly attached to a powerful, neutral Government agency) responsible for environmental issues. There is a need to review the roles and position of the EAD for it to more effectively contribute to Government priorities on growth and development.

4. **Stimulating political commitment on environmental issues**
There is also insufficient cross-government political commitment to accord environment and natural resource issues sufficiently high priority, perhaps reflecting lack of awareness of the links between environment and growth and poverty reduction. This is evidenced by incongruent policy frameworks, low funding levels for key sectors, and inadequate staff capacities.

Some of the mechanisms that could be strengthened in order to stimulate political commitment on environment are the following:

**A. Support to Cabinet Committees**
There are a number of Cabinet Committees for different sectors and issues. These Committees review and analyse issues for the whole Cabinet based on the area of mandate. Some of the relevant Committees for mainstreaming environmental issues into development include: Natural Resources, Energy and Environment; Agriculture and Food Security; Economy and Public Sector Reforms; and Local Government and Rural Transformation. PEI could explore and support the role of some of the Cabinet Committees, such as the Natural Resources, Energy and Environment Committee, to effectively handle environmental and natural resource issues in a growth and poverty context and ensure that these are given attention at the highest policy level. This could involve having regular meetings with the Committee, supporting preparation of analytical information to enhance understanding of the Committee on environmental and natural resource issues and providing guidelines and indicators for the Committee to use when reviewing sectoral policies in terms of environmental sustainability.

**B. Support to Parliamentary Committees**
The Agriculture and Natural Resources Committee is one of the Committees of the Parliament established to provide oversight functions for several Ministries such as Agriculture and Food Security; Lands and Natural Resources; Water and Irrigation; and Energy and Mining. The key responsibilities include the assessment and review of policies, legislation, programmes and budgets of relevant Ministries and Departments to ensure effectiveness and success of implementation.

There is generally limited knowledge and understanding of environment and natural resource issues and how they relate to development among the members of the Committee and the Parliament as a whole. There is a need to undertake sensitisation and training of the Parliamentary Committee on environmental sustainability so that they can push for integration of environmentally sustainable natural resource management across Government’s work. This can be done through sensitisation meetings, training workshops and study tours.
5. **Strengthening the role of Civil Society Organisations in environmental issues**

Civil Society Organisations (CSOs) can play a significant role in raising awareness on environment and natural resource issues at grassroots level and advocating for policy changes in the Government. The role of CSOs has been hampered by dwindling funding on environment programmes and activities. There are some CSO coordination bodies currently operational such as Coordination Unit for the Rehabilitation of the Environment (CURE) – dealing with environment and natural resource management – and Civil Society Agriculture Network (CISANET) – dealing with agricultural issues. There is a need for PEI to support and enhance the capacities and coordination roles of these CSO bodies so that they can take a greater role to influence and support Government in integrating environmental sustainability in development policies and programmes.

6. **Support to increased community awareness and involvement in environmental issues**

Whilst many policies emphasise the importance of community empowerment and their participation in natural resource management there is little evidence of implementation, with most communities unaware of their rights, responsibilities or opportunities with regard to natural resources. This is made worse by high levels of poverty and lack of alternative strategies which are forcing them to depend on natural resources in an unsustainable manner e.g. charcoal and poaching.

7. **Undertake a study to provide information on the economic values, benefits, costs and impacts of environment and natural resources**

There is a need for up-to-date information on the economic value of natural resources and economic costs of environmental degradation. This will help in providing hard facts on the economic benefits of the sustainable management of natural resources.

8. **Support for the preparation of the State of Environment Reports**

EAD is responsible for compiling the State of Environment Report to inform the country about the trends in environmental issues. With the rapid environmental degradation and its adverse impact on growth and development, there is a need to have regular reporting on the state of the environment so that appropriate mitigation and restorative interventions can be designed. Due to financial and capacity constraints, EAD has not been able to produce these reports regularly. This is an area requiring technical and financial support to the EAD to ensure that the state of the environment is assessed and reported on regularly as per the requirements of the law. The State of Environment Reports can also feed into the MGDS reviews to ensure that environmental issues are integrated effectively. There is a need to support the process of developing the State of Environment Report in 2008 which will also be a baseline for the MGDS review.

9. **Support to the Agricultural Development Programme (ADP)**

The process of formulating the Agricultural Development Programme (ADP) will be finalised in 2008 with the translation of the ADP framework into detailed programmes, financing modalities, policy and institutional reforms, and creating partnerships and synergies with other Ministries and sectors critical to the implementation of the ADP. The ADP is planned to be launched in June/July 2008 at the start of the new financial year. Currently the Government with support of several donors are developing specific programmes and implementation mechanisms as well as mobilising resources.

Apart from the sustainable land and water management component of the ADP, there is a clear indication that the ADP does not fully integrate environmental sustainability issues in its other components and programmes. To ensure that the national food security objectives are not undermined by unsustainable agricultural practices, there is a need to establish a technical working group to review the ADP and identify critical environmental issues and concerns that
need to be addressed or integrated in the programme. The group could include people from agriculture, forestry, water, land, fisheries, energy, marketing and trade.

The PEI could also support the process of developing the monitoring and evaluation (M&E) framework for the ADP to come up with environmental indicators and tools for assessing the ADP. This process will involve the critical review of the ADP results framework (indicators, baselines and targets) to make them more realistic, measurable and linked to the outputs and objectives. The process is being led by the Ministry of Agriculture and will involve a multi-sector task group supported by a consultant. PEI could support this process to ensure that environmental sustainability issues are assessed and included in the ADP M&E framework.
1. Introduction

1.1. UNDP-UNEP Poverty-Environment Initiative

The UNDP-UNEP Poverty-Environment Initiative (PEI) is a programme aimed at supporting Governments to include environmentally sustainable natural resource use as a core objective in development planning and implementation, and to build capacity so that decision makers know how environmental sustainability contributes to development and how to effectively include environmental sustainability in development planning and implementation.

Although environmental degradation is a serious concern in many countries in Africa, including Malawi, there is insufficient integration of sustainable management of the environment and natural resources in national and sectoral development policies, processes and programmes. Understandably central focus of the Governments has been poverty reduction and economic growth. However, environmental degradation over time reduces the social and economic benefits generated by natural resources and thus makes poverty reduction and economic growth harder to achieve.

Another challenge the PEI programme seeks to address is the cross-cutting nature of environmental issues requiring improved collaboration and coordination of many Government institutions and other stakeholders at policy, planning and implementation levels.

The PEI Africa programme is being implemented in 7 countries of Kenya, Mali, Mauritania, Mozambique, Rwanda, Tanzania and Uganda. The programme is being introduced in Malawi – the first new country in the PEI scale-up.

The PEI is being introduced in Malawi to help mainstream environment into Malawi’s national and sectoral development processes so as to reduce environmental degradation, improve food security, reduce vulnerability to natural disasters and climate change, and to reduce poverty.

1.2. Scope of the Study

In order to understand the dynamics of environmental and development issues in Malawi, there has been a need to undertake an institutional analysis which helps to identify the needs and guide the design of the PEI programme in Malawi. The institutional analysis was aimed at:

1. Providing an assessment of the local context in terms of economic and environmental issues, policy and planning frameworks, political drivers, key institutions, governance processes and actors.
2. Providing an understanding of the “Machinery of Government” (how government make decisions) relevant to PEI objectives, e.g. Government development policy and planning processes at national and sectoral levels related to natural resources and environment, including identification of links or lack of them between institutions.
3. Identifying and analysing institutional incentives, opportunities and blockages that may influence reform in the way that environment and natural resources are managed, taking into account the range of relevant institutions, legislation, polices and plans and key stakeholders.
5. Identifying possible entry points for the PEI in Malawi at national and sectoral levels.

1.3. Structure of the Report

This report provides a detailed assessment of key Government institutions, the Parliament and the civil society in the area of development, environment and natural resource management. It identifies their roles, mandates and policies. It also highlights their challenges and areas requiring support and action to address them. Based on this assessment, the report provides pointers to the areas for potential PEI support. These areas have to be further analysed and prioritised in order to develop a work plan for PEI in Malawi.

A synthesis of key issues arising from the analysis and suggested areas for PEI engagement in Malawi is presented in the Executive Summary. The report is divided into six. After the introductory section (Chapter 1), Chapter 2 presents Central Government Agencies, followed by Sector Ministries and Departments in Chapter 3 and Government structures at district level in Chapter 4. Chapter 5 provides information on the role of the Parliament in dealing with environmental issues, whereas Chapter 6 provides information on relevant Civil Society Organisations dealing with environmental issues. The report also provides more details in appendices, including a list of people consulted in this review, a list of Government Ministries and Departments, a summary of key facts and figures on environment and natural resources in Malawi and details on budgetary allocations for the reviewed Ministries and Departments for the past five years.
2. **Central Government Agencies**

The Government is structured into Ministries and Departments. Some are central Ministries while some are sectoral Ministries. Appendix 2 provides more details. There are four Central Government Agencies whose collective role is facilitate, promote and coordinate Government policies, goals and priorities through overseeing Ministerial and sectoral processes, policies and programmes. These Central Agencies consist of:

- Office of the President and Cabinet (OPC), including the Department of Human Resource Management and Development;
- Ministry of Finance;
- Ministry of Economic Planning and Development; and
- Ministry of Justice and Constitutional Affairs.

With leadership of the OPC, the Central Agencies roles centre on ensuring coordination, integration and harmonisation of policies and programmes according to national priorities.

Coordination involves ‘aligning and harmonising services and programmes of public agencies and setting out annual Government calendar for major planning, budgeting and policy/legislative activities to take place’. The integration role involves ‘ensuring that goals and activities in all the Ministries are in harmony and culminate in the achievement of the overall national development agenda of the Government’. These agencies also take the ‘role of scrutinizing and analyzing planning, budget or policy/legislation submissions by Ministries to ensure that they are appropriate, rational and consistent across Government and with national strategic goals’.

2.1. **The Office of President and Cabinet (OPC)**

The OPC is the apex of these Central Government Agencies which provide integrated advice and support to the President and the Cabinet as well as to the functioning of Ministries and inter-ministerial coordination and collaboration. The OPC is comprised of three main Departments: the Cabinet Office, Rationalisation and Civil Service Reforms and Administration.

The Cabinet Office comprises of two divisions: the Cabinet Services Division (CSD) and the Policy Research, Monitoring and Evaluation Division (PRMED).

2.1.1. **Cabinet Services Division**

The Cabinet Services Division provides support services to the Cabinet and Cabinet Committees. There are a number of Cabinet Committees for different sectors and issues. These are:

- Defence, Security and Emergencies;
- Economy and Public Sector Reforms;
- Constitutional, Legal and Parliamentary Affairs;
- Foreign Affairs and International Relations;
- Local Government and Rural Transformation;
- Research, Science and Technology;
- Social Development and HIV&AIDS;
- Agriculture and Food Security; and
- Natural Resources, Energy and Environment.
These Committees provide issues for the whole Cabinet based on the area of mandate. The key challenge is that these Committees do not meet regularly due to time constraints. As such, most sectoral issues are handled at main Cabinet level which meets at least every week (Tuesday).

**Potential Entry Point for PEI:**

- The PEI could explore and support the role of the Cabinet Committee on Natural Resources, Energy and Environment to effectively handle environmental issues and ensure that these are given attention at the highest policy level. This could involve having regular meetings with the Committee, supporting preparation of analytical information to enhance understanding of the Committee on environmental issues and providing guidelines and indicators for the Committee to use when reviewing sectoral policies in terms of environmental sustainability.

### 2.1.2. Policy Research, Monitoring and Evaluation Division

The Policy Research, Monitoring and Evaluation Division is responsible for reviewing and coordination of policy formulation in line Ministries to ensure consistency with national policies before approval by Cabinet. Other responsibilities include:

- Policy analysis and conducting research on policy issues before Cabinet approval;
- Guiding and directing the development of policies in the public sector;
- Guiding the donor community and civil society on Government policies;
- Monitoring and evaluating the implementation of Government priority goals; and
- Assessing the efficacy of Government policies.

It also provides policy advice to Cabinet and transmits policy direction from Cabinet to Ministries as well as tracking implementation of Cabinet decisions by Ministries.

Currently, the Policy Division of OPC is spearheading institutional performance reviews whereby all Ministries are asked to submit work plans and quarterly review reports which are used to produce performance reports of the Ministries. This is being done to promote accountability and performance in the civil service.

The Policy Division is also developing a guide to executive decision making to guide policy making. Currently each Ministry or Department tends to develop policies based on their needs and available donor support. They engage in policy processes without sufficiently coordinating with other sectors for further analysis. The need for further analysis and linkages is identified when the policies are submitted to OPC for Cabinet approval. The guide being developed outlines processes to be followed by Ministries when developing policies. This calls for policies to be developed based on conceptual analysis and impact analysis. Some of the impacts to be analysed before a policy is submitted to Cabinet include economic and financial impacts, environmental impacts, HIV/AIDS and gender impacts.

The Policy Division is also looking at the issues of integration of policy, planning and budgeting processes within Government to ensure harmonisation of implementation. It is promoting coordination and collaboration of Ministries and Departments through a number of initiatives such as Ministers forums/retreats and Principal Secretaries forums. It has also formed a Committee of Central Agencies (OPC, Finance and Justice) to oversee and ensure coordination and follow-up of policies, legislation and programmes in line Ministries and Departments. It is also coordinating Government annual calendar to ensure the integration of the policy, planning, legislation and budget processes.
Potential Entry Points for PEI:

- PEI could support the development of guidelines and indicators for analysis of policy options and impacts to ensure mainstreaming environmental sustainability in development and sectoral policies.

- PEI could support relevant processes of policy harmonisation and initiatives to improve coordination and collaboration among Ministries and Departments with a view to ensuring increased harmonisation and coordination on environmental policies, laws and their implementation.

2.1.3. Department of Human Resource Management and Development

The Department of Human Resource Management and Development (DHRMD) is a Department in the Office of the President and Cabinet established under the Public Service Act (1994). It is a Central Agency responsible for ‘systematic development and implementation of equitable, sound human and institutional resource management policies, strategies, practices and systems in order to ensure efficiency and effectiveness’ in the civil service. This Department was established to ensure that the public service has adequate human resources with the effective competencies, skills and knowledge. The Department provides policy and operational advice to Government Ministries on human and institutional resources management and development, organisational structures and staff operating systems and procedures. It also coordinates training programmes for the public service.

Potential Entry Point for PEI:

- Considering the critical human resource constraints in the environmental and natural resources sector Ministries and Departments, it is important to engage this Department to explore ways of prioritizing filling of key positions in the Ministries and Departments and developing capacity across Government to manage environment issues.

2.2. Ministry of Finance

The Ministry of Finance is a Central Government Agency responsible for mobilising and allocating public resources to ensure implementation of Government policies and programmes. It coordinates budget formulation in all Ministries and Departments and enforces prudent financial management and accountability. Specifically the Ministry of Finance undertakes the following responsibilities:

- Provides advice for improving the budget framework for economic growth;
- Sources revenue both internally and externally for Government operations;
- Ensures that Government gets maximum value for money from all public enterprise investments;
- Sets priorities on Government investment programmes;
- Manages public assets and liabilities including the public debt portfolio; and
- Develops procedures, internal controls and guidelines for use of public resources.

The Ministry of Finance is composed of three Departments. These are: Treasury Department, Accountant General Department and Malawi Revenue Authority (MRA).

The Treasury Department is organised into a number of Divisions:

- Economic Affairs Division – responsible for national and sectoral policy analysis and modeling;
• Debt and Aid Management Division – responsible for liaising with external agencies for resource mobilization and debt servicing;
• Budget Division – responsible for facilitating budget framework process. The division is subdivided into several Units such as Planning, M&E and Operations;
• Revenue Division; and
• Administration and Support Services.

2.2.1. Budget Process

The Budget Division is responsible for coordinating the budget process for all Ministries and Departments. Desk officers are assigned to be responsible for specific Ministries to ensure follow-up on the budget calendar. For example there is a desk officer who has been dealing with the Ministry responsible for natural resources which had Departments of Environmental Affairs, Forestry, Fisheries, Energy and Mining. With the split of this Ministry and Departments scattered to different Ministries, this officer is handling only Ministry of Energy and Mines where Forestry is phased. These desk officers are professional economists but with little knowledge of environmental issues they are dealing with. These might require capacity building through training on environmental issues so as to ensure these are supported in the budgetary processes. Some Departments dealing with environment and natural resources issues have been inviting the desk officers in Ministry of Finance to some of their technical trainings or processes but this is not a systematised practice.

The financial year is from 1st July to 30th June. At the end of the financial year, the Ministry of Finance undertakes a public expenditure review process in consultation with other Ministries and Departments. This review is followed by preparation of a budget policy framework paper which is approved by Cabinet. Once this policy paper is approved, around February budget circulars and guidelines are issued by Ministry of Finance advising all Government agencies to start preparing budgets for the next financial year.

About two months before the budget is submitted to the Finance and the Parliament, the Ministry of Finance releases budget ceilings for each Ministry and vote. The ceilings are decided by Ministry of Finance (with the approval of Cabinet) based on forecasting of resource availability and assessment of previous budget. The ceilings are issued when Ministries have already spent a lot of time preparing their draft budgets and with the ceilings Ministries and Departments are given a difficult task of cutting down their budgets to fit the ceiling. Most of the times Ministries are not fully consulted on the ceilings and they are not given enough reasons for the given limit. There is a general feeling among Ministries and Departments that those deciding on the budget ceilings do not fully appreciate the importance of certain sectors and issues (e.g. sustainable environmental and natural resource management). As such they are given low budget allocation.

According to Ministry of Finance, allocation of funds to Ministries is based on consideration of Government priorities and previous year budget. Most of the time a Ministry gets a slight increase from the previous year’s budget e.g. 10 % increase.

Once the budgets have been reviewed based on the ceilings and further consultations with Ministry of Finance, the budgets are submitted to Ministry of Finance for consolidation and submission to Parliament which meets in June for budget approval.

Once the budget is approved by the Parliament, disbursement to Ministries and expenditure commences in July. Disbursement of funds to Ministries and Departments is done on a monthly basis based on quarterly budget plans submitted to Accountant General’s Division. Funds are disbursed in the first week of the month. Monthly allocation of funds is based on cash flows and availability of funds from revenues – as such, it is not uniform. Most Ministries and Departments get
almost all their approved budget by the end of the financial year, but mostly not at the rate they had expected according to their work plans. Expenditure control is done by Accountant General Department because payments for all Ministries are centralised.

The Ministry of Finance undertakes a mid-year budget review in November-December every year to assess level of resource availability and expenditure. Based on this review, some Ministries or Departments may be allocated more funds based on government priority programmes and some Ministries may lose some funds due to poor performance.

**Potential Entry Point for PEI:**

- The Ministry of Finance has indicated that it would welcome PEI support for the integration of sustainable natural resources management into budgetary processes.

2.3. Ministry of Economic Planning and Development

The Ministry of Economic Planning and Development is responsible for facilitating and supporting economic and social policy development for national and sectoral issues. As a Central Agency it provides leadership and guidance on national development policy processes and setting national medium and long term development agenda, including the Public Sector Investment Programme.

The Ministry is therefore responsible for coordination, formulation, implementation, monitoring and evaluation of key economic and development policies for the country. Currently it has been responsible for coordinating the development and operationalising the Malawi Growth and Development Strategy (MGDS).

The Ministry is organised into a number of Divisions each headed by a Director and comprising of a cadre of economists. Each of these Divisions has different responsibilities within the national socioeconomic development spheres and agenda. These Departments are:

- Development Division – responsible for development policies and programming with respect to national development priorities and the Public Sector Investment Programme (PSIP). This Division links up with planning units of Ministries and Departments and is also responsible for population policies linking up with development;
- Economic Planning Division – responsible for economic policies, modelling and assessing economic growth and development of MGDS;
- Monitoring and Evaluation Division;
- Social Protection Division; and
- Administration and Finance.

2.3.1. Malawi Growth and Development Strategy (MGDS)

The Malawi Growth and Development Strategy (MGDS) highlights six priority areas for Malawi to achieve economic growth and development. These include:

- Agriculture and Food Security;
- Irrigation and Water Development;
- Transport Infrastructure;
- Energy Generation and Supply;
- Integrated Rural Development; and
- Nutrition and HIV/AIDS.
All these have direct or indirect linkages with the environment and natural resources management but the key ones are Agriculture and Food Security, Irrigation and Water Development and Energy Generation and Supply. These are discussed briefly below:

**A. Agriculture and Food Security**
The main goals are to increase agricultural productivity and ensure food security for all. Some of the key strategies include agricultural productivity improvement; promotion of irrigation; and promotion of soil and water conservation techniques.

**B. Irrigation and Water Development**
The overall goal of this priority area is to ensure protection and sustainable management of water resources to meet agricultural, domestic and industrial needs of the country. This considers that water is useful for irrigation agriculture, household usage, electricity generation and industrial usage as such there is need for integrated water management. Water availability is related to environmental problems emanating from agriculture and other sectors such as deforestation and erosion.

Key strategies proposed include establishment of small and medium scale irrigation schemes; construction of multi-purpose dams (for irrigation, water supply, electricity generation and fish farming) and promotion of sustainable water supply and sanitation.

**C. Energy Generation and Supply**
The MGDS highlights that despite having a wide variety of energy resources, Malawi’s energy generation and supply is inadequate, unreliable and inaccessible to many. The key challenges associated with this situation include limited public and private investments in energy generation and supply and excessive siltation due to deforestation and poor farming practices.

The proposed strategies include improving efficiency in power generation, transmission and distribution by ensuring strong public-private partnerships; expanding rural electrification program using alternative sources (mini hydropower stations, solar energy); and ensuring that negative environmental effects and impacts are taken into consideration and minimized.

In addition to the six priority areas of focus for the short to medium term period, the MGDS identifies five thematic areas that highlight the broad priority framework for Malawi’s economic growth and development. These themes are:

- Sustainable Economic Growth;
- Social Protection;
- Social Development;
- Infrastructure Development; and
- Improved Governance.

The theme of Sustainable Economic Growth is considered as central to poverty reduction and socioeconomic development. This theme encompasses the need for protection and conservation of natural resources (fisheries, forestry, wildlife, water, land) and the environment. Under the sub-theme of Conservation of the Natural Resource Base, the MGDS calls for reduced environmental degradation to ensure sustained availability and use of natural resources such as fish, forestry and wildlife. Under the sub-theme of Land and Housing, the MGDS emphasises the need for efficient use of land and land based resources. One of the key strategies proposed is that of ‘ensuring the adoption of environmentally sustainable land use practices’.

In terms of the integration of environmental sustainability into MGDS, key issues to determine include:

- Risks to the implementation of the MGDS caused by poor environmental management;
• Mechanisms for effectively and practically integrating environmental issues into development programmes as prescribed in the MGDS; and
• Criteria for assessing how development programmes are integrating environmental sustainability.

The MGDS is a good entry point because it emphasises economic growth and development. MGDS recognises the need for integrating environmental issues in development; otherwise we may achieve growth in the short term at the expense of the environment and future growth. One of the tools for implementing MGDS is the Public Sector Investment Programme (PSIP). There is a need to assess how development projects in the PSIP are integrating environmental sustainability.

One of the challenges at national level is how to translate MGDS into sectoral policies. The other challenge is the inadequate capacity to integrate environment in national and sectoral programs. For example, MEPD does not have environmental experts thus it has to depend on different sectors to ensure integration. There is also need for community participation in creating understanding of environmental issues and their links to livelihoods and rural development in line with the MGDS and other sectoral policies and programmes.

Potential Entry Point for PEI:

- MEPD coordinates all national development policy processes and currently has variable capacity to leverage and influence sectoral policy processes as each Ministry or Department develops its own policies and strategies at their own time and convenience. MEPD in collaboration with OPC has plans to review sectoral policies in line with national development policies and to ensure harmonisation of strategies and approaches so as to ensure clear contribution to national targets. The need for policy harmonisation is more pronounced to bring together the thrust of the different policies towards achieving environmental sustainability. That is the process where PEI can provide both technical and financial support to ensure that all relevant policies and strategies are harmonised with national development policies and lead to achieving environmental sustainability.

2.3.2. Monitoring and Evaluation System

The Monitoring and Evaluation Division is responsible for coordinating M&E activities for national and sectoral policy and programme implementation. It has been responsible for coordinating monitoring of implementation and impacts of the MGDS and its predecessor, Malawi Poverty Reduction Strategy (MPRS). To this effect, the Division has developed a national monitoring and evaluation master plan to guide assessment, monitoring, evaluation and reporting of economic and social development issues at national and sectoral level in relation to MGDS. This master plan is supposed to guide different Ministries and sectors in coming up with their own M&E plans which contribute to the national plan.

The specific objectives of the national M&E master plan are:
• To assist in monitoring progress on the implementation of economic and social development policies and programmes. This would help in re-focussing implementation of programmes and determining appropriate alternatives;
• To assist in allocation and use of resources for different priority programmes as well as providing a basis for selecting projects for the PSIP; and
• To raise awareness on the extent and depth of socioeconomic well-being.

The national M&E master plan has five components:
• National development strategy i.e. MGDS implementation monitoring – this monitors mainly inputs and output indicators such as budget allocations and expenditure and achievement of outputs targets;
• Development outcomes monitoring;
• Impact assessment and policy analysis;
• Poverty monitoring information system; and
• Communication and advocacy.

The master plan does not contain specific guidelines for each sector nor for cross-cutting issues such as environment but the MEPD in collaboration with each sector is supposed to develop specific guidelines and indicators for M&E in line with the master plan.

Every year (after half a year and at the end of the financial year), the M&E Division undertakes a review of all development programmes and the MGDS in terms of implementation, including achievements and constraints. This process involves setting up an interdepartmental task force (Technical Working Committee) to review different sectors or components including the budget division of Ministry of Finance. Each sector or Department is supposed to participate in the process by being part of the teams and by preparing a submission of their activities and achievements with respect to their mandates, policies and how they contribute to the MGDS. The teams visit some selected programmes and projects for different sector in different districts to ascertain specific progress made. The report is submitted to the Cabinet through OPC.

The key challenge to the review process is that there appears to be insufficient commitment by sector Ministries. Some sectoral Departments and Ministries do not fully participate in the review and some delay in reporting or providing information. The Division does not seem to have the power to ensure that all sectors comply with the requirements. It was indicated that some cases, the non-reporting or non-complying sectors have been reported to OPC for enforcement and they end up complying upon the intervention of OPC.

The other challenge faced is the evident lack of systematic use of monitoring data for decision making, especially on strategic planning and resource allocation in annual budget and planning processes. Other key challenges identified include the following:
• Lack of standardisation and guidelines in data collection processes making it difficult to compare data across sectors and times;
• Inadequate human, material and financial resources for data collection, processing and analysis;
• Poor coordination among stakeholders such as data collection agencies, data users and districts; and
• Lack of a clear policy and legal framework on statistics to support the M&E system.

To enhance coordination of M&E at district level, the Division has placed M&E officers in all District Assemblies to set up a district level monitoring and evaluation system in line with the decentralisation process. To enhance M&E work at district level, district M&E Committees have been established to facilitate stakeholder participation and dissemination of information. The district reports are submitted to the MEPD M&E Division which prepares a national report for consideration by the TWC. The TWC reviews the reports and submits to the Principal Secretaries Monitoring Committee which forwards the reports to the Cabinet. To ensure national accountability and stakeholder participation in the review process, there is a national development stakeholder forum which also reviews the reports.

Potential Entry Point for PEI:

- MEPD annual reviews of MGDS implementation require support and collaborative effort to ensure that the results provide useful information. The annual reviews also provide avenues
for reviewing the MGDS priorities and integrating environmental sustainability. The PEI could support this process by assessing integration of environmental sustainability in the MGDS priorities and programmes and reviewing and developing appropriate indicators and tools for assessing environmental sustainability in the MGDS implementation. These indicators and tools need to be developed through a consultative process involving all key stakeholders so as to ensure understanding, ownership and implementation.
3. Sector Ministries

3.1. Ministry of Lands and Natural Resources

The Ministry of Lands and Natural Resources is the custodian of all land in Malawi. In addition, it is responsible for coordinating environmental issues across all sectors. The National Land Policy is the key instrument for dealing with all land issues. The policy deals with issues of access to land, tenure security and sustainable environmental management. The key focus for the policy is on issues of land ownership, land use, land registration, national physical development plans and establishing legal framework for land use. To support implementation of the policy, the Government has prepared a land legislation which is yet to be approved by the Government and the Parliament.

The MGDS also recognises land as a basic and important source of livelihood for most Malawians and a basic resource for social and economic development of the country. The MGDS in line with the land policy highlights the need to ensure equitable access to land and tenure security. Associated with this is the need for efficient and sustainable use of land and land based resources. One of the key strategies proposed is that of ‘ensuring the adoption of environmentally sustainable land use practices’. The MGDS also calls for community participation and public awareness of land issues at all levels.

The Ministry is composed of the following Departments:

- Policy and Planning;
- Physical Planning;
- Surveys;
- Environmental Affairs; and
- Meteorological Services.

Environmental Affairs Department (EAD) and Meteorology Department are new Departments of the Ministry of Lands following the Cabinet and Ministerial changes in 2007. Environment and natural resources responsibilities have been appended to Ministry of Lands after these changes.

The Ministry of Lands is not fully decentralised. It has three regional offices in the north, centre and south. Due to pressure from the donors (especially the World Bank), the Ministry recruited and placed district land officers in all the districts to handle land issues at district level. Their responsibilities are yet to be fully integrated at district level. Below the district headquarters level, there are no officers responsible for land administration issues. Under EAD, there is also an establishment of a District Environmental Officer in each district to coordinate environment and natural resources issues.

3.1.1. Challenges Related to Land Issues

One of the biggest challenges is lack of coordination of different sectors dealing with land issues and land based natural resources. For example, Ministry of Agriculture and Food Security has a Department of Land Resources Conservation which deals with land use planning and conservation for agricultural land but there is no formal working relationship with Ministry of Lands and Natural Resources. There is a close relationship between tenure security, land conservation and land degradation. The problems of poor land conservation and increasing land degradation are more prominent on customary land where the tenure security is lower. This means that efforts aimed at
improving land productivity and conservation should also take into consideration of land ownership and tenure security.

The Ministry is planning to implement a project on customary land reform which integrates improved tenure security, land use, environmental management and alternative viable livelihood options e.g. off-farm income generating activities. This project will be funded by African Development Bank and the Government of Malawi, but implementation will involve different sectors such as Ministry of Lands and Natural Resources and Ministry of Agriculture and Food Security. The project is still in the design phase and the implementation and coordination arrangements are still being worked out.

The other challenge is lack of a vibrant land law to support full implementation of land policies. For example, lease requirements for agricultural land stipulate that at least 10% of the land should be put to forestry but enforcement is lacking due to absence of a supporting land law. There is a draft land law which has been prepared but is yet to be approved by the Government and the Parliament.

The Ministry of Lands has also experienced capacity constraints over the years. The Ministry has almost 40% vacancy rate with about 55% for the professional grades. With these challenges, the Ministry has proposed to undertake functional review to rationalise its establishment but Government has not yet given a go ahead.

Low funding to the Ministry of Lands has also been a critical challenge to the operations of the sector.

Potential Entry Points for PEI:
- There is a need to critically review the MGDS so that land ownership, use and conservation are given due consideration in terms of focus, programmes and financing.
- There is a need to review and harmonise policies and legislation to eliminate conflicting interests e.g. land conservation vs. promotion of treadle pump irrigation in wetlands. There are a number of sectors which are dealing with land based natural resources where issues of land ownership, tenure, use and conservation are important and have a bearing on productivity, and sustainable use of those natural resources. Examples include forestry, wildlife, water resources, fisheries and agriculture. There is need for a neutral body to coordinate different institutional arrangements in the process of policy harmonisation and coordination of implementation. The identified coordinating institution is MEPD.
- There is a need for public awareness on the importance of land and environmental conservation as provided for in the national land policy and the national environmental policy. This can be facilitated by District Assembly structures (Environment and Natural Resources Committees) and civil society groups who have grassroots connections.

3.1.2. Environmental Affairs Department (EAD)

The Department of Environmental Affairs was established in the 1990s as a coordinating unit for all environmental issues at national level. It also coordinates all international conventions relating to the environment in Malawi.

The Department is responsible for the following areas:
- Coordinating Environmental Impact Assessments (EIAs) – dealing with private sector and public sector investments, using sector specific guidelines;
- Promoting biodiversity conservation;
• Pollution control and monitoring; and
• Producing State of the Environment Reports (national and district reports) – these are supposed to be produced every two years but this has not been possible due to funding constraints.

The Department has been shifted from Ministry to Ministry over the past ten years:
• In 1996 it was under Ministry of Research and Environmental Affairs;
• In 1996 it was placed under Ministry of Forestry and Environmental Affairs;
• In 2002 it was made part of Ministry of Natural Resources and Environmental Affairs;
• In 2004 it was made part of Ministry of Mines, Natural Resources and Environment; and
• Since 2007 it is under Ministry of Lands and Natural Resources.

In most of the placements the EAD has been in the same Ministry with other natural resources Departments such as Forestry, Fisheries and Wildlife thereby making coordination and collaboration easier. Other sectors under natural resources have also been shifted to other Ministries. For example, Fisheries Department has been moved to Ministry of Agriculture and Food Security while Forestry Department is now part of Ministry of Energy and Mines.

The rationale for these changes in institutional setups is not clear, and they often disturb stakeholder linkages and networks. In addition, many stakeholders felt that EAD had no institutional power to coordinate or enforce environmental legislation due to low/poor positioning in the Government setup. Although there is an Environmental Management Act to back its work, the Department as a unit in a Ministry can not effectively deal with another Department in another Ministry without going through its own hierarchy. Constant institutional relocations within different Ministries, funding constraints and limited strategic vision have diminished the capacity of EAD to play a full role in debates regarding environment and natural resources as key drivers of growth and development.

The Department is organised into the following units/sections:
• Environmental Impact Assessment (EIA);
• Pollution Control and Monitoring;
• Environmental Education and Outreach;
• Policy and Planning;
• Legal Affairs;
• Information and Documentation; and
• Administration and Finance.

The Department has establishment for District Environmental Officers for each district. These officers are supposed to coordinate environmental issues at district level in line with District Development Plans. They are also supposed to develop district State of Environment reports and District Environmental Action plans. Unfortunately, these officers have not been provided with adequate financial and technical support by the district assemblies to undertake their responsibilities. Due to the current career and incentive structure, most of the District Environmental Officers have left the districts. Currently only 8 of the 28 districts still have Environmental Officers.

Through the facilitation of EAD, there are a number of environmental policy and legislative instruments which have been developed. These include:
• National Environmental Action Plan (1994);
• National Environmental Policy (1996); and
• Environmental Management Act (1996).
3.1.3. National Environmental Policy

The National Environmental Policy was developed to guide all stakeholders in integrating environmental considerations in the national socioeconomic development policies, programmes and plans to ensure sustainable development.

Key objectives of the policy include:
- Promotion of efficient utilisation and management of natural resources;
- Facilitation of rehabilitation and management of essential ecosystems and ecological processes;
- Enhancement of public awareness on the importance of sound environmental management; and
- Promotion of cooperation between Government, local communities, CSOs and private sector in the management and sustainable utilisation of natural resources and the environment.

The policy also calls for the institution responsible for environmental affairs i.e. EAD to play a facilitating, coordinating and advisory role on all environmental issues. The Department has not been able to effectively undertake all its roles due to a number of challenges.

The mandate of the policy is derived from Section 13d of the National Constitution which calls for responsible management of the environment to prevent degradation of the environment; to provide a healthy living and working environment for the people; to protect the environment for the future generations; and to conserve and enhance biological diversity of Malawi.

The policy is also guided by several international conventions and treaties to which Malawi is a signatory. These include:
- Protection of World Cultural and National Heritage Sites 1982;
- Hostile Use of Environmental Modification 1978;
- UN Convention on the Law of the Sea 1984;
- Vienna Convention for Protection of the Ozone Layer 1985;
- Convention on Biological Diversity 1992;
- Convention to Combat Desertification 1996;
- Kyoto Protocol 1994;
- Convention on International Plant Protection;
- Convention on Wetlands of Significant Importance;
- Convention on Protection of the World Cultural and Natural Heritage;
- Convention on Conservation of Migratory Species of Wild Animals;
- African Convention on Conservation of Nature and Natural Resources;
- FAO International Undertaking on Plant and Genetic Resources;
- United Nations Framework Convention of Climate Change.
3.1.4. Environmental Management Act 1996 (EMA)

The Environmental Management Act provides a legal framework for the protection and management of the environment or the conservation and sustainable utilisation of natural resources. It identifies responsibilities for different stakeholders and calls for establishment of certain positions and bodies for coordination environmental issues. One of the bodies established in the Act is the National Council for the Environment (NCE), comprised of members from different stakeholder organisations ranging from Government, CSOs, private sector and other interest groups. The NCE is supposed to advise Government on all matters and issues affecting the protection and management of the environment and the conservation and sustainable utilisation of natural resources. The Council is also responsible for recommending to Government ‘measures necessary for the integration of environmental considerations in all aspects of economic planning and development’ as well as harmonisation of policies, plans and activities concerned with the environment and natural resources.

The Act also calls for specific measures to deal with environmental issues such as the need for Environmental Impact Assessment (EIA) for all development projects, the need for District Environmental Action Plans and the establishment of the Environmental Fund and other measures.

The Act is supposed to be the overall legislation guiding environmental protection and conservation in the country. It cuts across different sectors and is thus supposed to be higher than sectoral policies and legislation such as the Forestry Act, the Fisheries Act etc. The sectoral legislations carry specific details of that sector but they are supposed to conform to the EMA. The EMA has been reviewed to take into consideration of changing situations and provisions of other sectoral policies and legislation. The revised Act is still not approved and passed by the Parliament.

The EMA calls for each district to produce State of Environment Reports every two years. The District Environmental Officer is responsible for coordinating the preparation process drawing in inputs and participation from other sectors. These district reports are integrated into a national State of Environment Report which gives a snapshot of the environment and natural resources in the country. These reports are used to monitor changes in environmental issues throughout the country. The first national State of Environmental Report was produced in 1998 and the second one was produced in 2002. The production of these reports has not been regular due to financial and staffing constraints both at district and national levels.

3.1.5. Environmental Coordination Arrangements

The EMA calls for establishment of some coordinating committees. These are the National Council for the Environment (NCE) and the Technical Committee on the Environment (TCE). These bodies comprise of different stakeholder from the natural resources sector, academic institutions and the private sector.

The NCE is composed of the following members:

- Chairperson – appointed by the President based on the recommendation from the Minister responsible;
- Secretary to the President and Cabinet or his representative;
- All Principal Secretaries of Ministries or their representatives;
- General Manager of Malawi Bureau of standards (MBS);
- General Manager of National Herbarium and Botanic Gardens of Malawi or his representative;
- Malawi Chamber of Commerce and Industry representing the industrial sector;
• Representative of Non-Governmental Organisations dealing with protection and management of the environment and the conservation of natural resources;
• Representative of the University of Malawi; and
• Representative of the National Commission for Women in Development.

The Director for the EAD serves as a Secretary for the Council while the Department serves as the Secretariat.

The key roles of the Council include the following:
• Advising the Government on all issues affecting protection and management of the environment and the conservation and sustainable utilisation of natural resources;
• Recommending to the Government measures necessary for the integration of environmental considerations in all aspects of economic planning and development; and
• Recommending to the Government measures for harmonisation of activities, plans and policies of the lead agencies and CSOs concerned with the protection and management of the environment and the conservation and sustainable utilisation of the environment.

Although the Council has a wide mandate, there is a consensus among many stakeholders that it has not undertaken most of its responsibilities. It has mostly been involved in reviewing and approving EIA reports for projects. The Council is supposed to meet at least four times a year but this has not been possible due to inter alia, funding problems. There have also been some concerns on the attendance, as most Principal Secretaries of Ministries do not attend the Council meetings, sending lower ranking officers instead.

Recently the Government has set up a Principal Secretaries (PS) Committee on Environment, Natural Resources and Climate Change. This is a high level committee chaired by the PS for the Ministry of Lands and Natural Resources and involves all key sector Ministries such as Water, Agriculture, Energy and Mining. This Committee seems to have taken over the functions of the NCE on policy direction and coordination. As a new committee, it requires technical support to develop its Terms of Reference and work plans and to ensure functionality.

The Technical Committee on the Environment is a technical committee comprising of 10-20 technical experts who are supposed to undertake scientific studies, develop environmental guidelines and standards and provide technical advice to the council. The members of the TCE are appointed as individual experts in various fields of the environment and natural resources.

Coordination with specific Ministries is through national committees on conventions or projects and ad-hoc committees or task forces on specific initiative or projects. EAD is also a national focal point for a number of international conventions and initiatives such as the Convention on Biological Diversity (CBD), Stockholm Convention on Persistent Organic Pollutants (POPs), United Nations Framework Convention of Climate Change (UNFCCC), Montreal Protocol on Ozone Depleting Substances (ODS) and the Global Environment Facility (GEF). EAD has set up national committees for different conventions, including GEF, involving different stakeholders from different sectors. For specific projects on environment, project steering committees are established comprising of stakeholders from relevant sectors.

At times EAD has also coordinated with the Parliamentary Committee on Agriculture and Natural Resources. In those times EAD has briefed the Parliamentary Committee on relevant environmental issues requiring legislative attention and increased funding. EAD also regularly engages the media through media releases and panel discussions to broaden the spread of environmental issues.

On the other hand, other Ministries or Departments hardly involve EAD when they are developing their policies and programmes. For example the Ministry of Agriculture and Food Security has been
developing an Agricultural Development Programme (ADP) as a medium term framework to guide agricultural development in the country. EAD has not been fully involved in the ADP process to ensure integration of environmental issues as per prescriptions of the policies and laws.

As a coordinating institution for all environmental issues EAD is supposed to be involved in all policy processes which have a bearing on the environment and natural resources. In some processes, EAD is invited to participate but they are unable due to capacity constraints. EAD might also need to be proactive and strive to link up with different sectors to ensure that they are consulted in all policy processes. There is a need for the Government (OPC) to devise mechanisms to give EAD a stronger role in policy at central and sector levels in line with the EMA.

EAD has also established coordination arrangements with CSOs and private sector. EAD has considered the Coordination Unit for the Rehabilitation of the Environment (CURE) as a coordinating body for all CSOs working on the environment, and it is included in most national processes and structures. EAD has also been working with Wildlife and Environmental Society of Malawi (WESM) on a number of initiatives especially on environmental education. EAD has also been working with two associations which encompass the private sector. These are the EIA Association of Malawi and the Refrigeration Association of Malawi.

3.1.6. Projects in EAD

EAD is coordinating or participating in a number of projects which involve other sectors. These projects are:
- Institutional Strengthening on Ozone Depleting Substances – multilateral fund;
- Second National Communication for UNFCCC – GEF funded project for 2 years (US$450,000);
- Africa Environmental Information Network (AEIN) – UNEP;
- Partnership for Development of Environmental Law in Africa (PADELIA) – UNEP;
- Pollutants Project – UNIDO;
- SADC Biodiversity Project;
- Methyl Bromide Project;
- Sustainable Land Management for Shire River Basin – UNDP ($ 3 million for 3 years);
- Tree Planting for Carbon Sequestration Project – Government funded, jointly implemented with the Forestry Department;
- Promotion of Alternative Sources of Energy – GEF and other donors, jointly implemented with the Energy Department;
- Climate Change Adaptation for Rural Livelihoods and Agriculture – a new project to be funded by ADB/GEF ($ 27 million for 5 years); and
- Small Grants Programme – UNDP.

Due to limited Government funding, EAD survives mainly due to external project funding which helps it to undertake some of its responsibilities. It is possible that EAD is focusing more on discrete projects rather than strategic policy issues as a coordinating body.
3.1.7. Challenges for EAD

Whilst EAD feels that the underlying challenge is that the MGDS left out a number of environmental issues by putting environment as a cross-cutting issue, it is noted that mainstreaming is considered preferable strategically as it aims to ensure that environment is considered by all sector Ministries whose policy and programmes remit impact upon and are impacted by the environment. Most countries now do attempt to mainstream environment rather than compartmentalise it. EAD has been taking part in the MGDS review this financial year to push for more recognition of environmental issues in MGDS and to solicit more funding for environment. EAD is also planning to sensitize MEPD and Ministry of Finance on environmental issues and the need to mainstream them as priority areas of the MGDS. Financial resources and human resource constraints still pose a challenge for EAD to undertake such issues.

The Department has experienced high staff turnover over the past five years. For example, the Department has lost 9 officers in 6 months in 2007 and has lost most of the district staff. The staff are either resigning or transferring to other Government Ministries and Departments due to lack of incentives (financial and career) in EAD. This has resulted in understaffing in most of the sections and districts.

The current staff positions at the headquarter level is given as below:

<table>
<thead>
<tr>
<th>Unit</th>
<th>Number of Officers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy and Planning</td>
<td>2</td>
</tr>
<tr>
<td>Environmental Information</td>
<td>1</td>
</tr>
<tr>
<td>Environmental Education and Outreach</td>
<td>1</td>
</tr>
<tr>
<td>Legal section</td>
<td>2 (not legal experts)</td>
</tr>
<tr>
<td>EIA section</td>
<td>2</td>
</tr>
</tbody>
</table>

In addition, only 8 of the 28 districts still have Environmental Officers.

The Department has also been receiving very low funding – on average less than MK1 million per month of other recurrent expenditure (ORT). In addition, the departmental budget has been dwindling over the years. This could reflect low priority status given to environmental coordination by Government. The moving of the Department to different Ministries also affects financial allocation as the Department is affected by budget ceilings of the new Ministry. The Department has mostly been surviving on donor funded projects. Environmental Management Fund provides some little resources for some activities of the Department, especially EIA.

Another challenge perceived by EAD and other stakeholders is its inappropriate position for a coordinating body. EAD has been a Department within a number of Ministries over the years, thereby diluting its coordinating status despite having a legal mandate. With support from UNEP, a draft revised EMA has been prepared and it is still at Ministry of Justice for review before Cabinet and Parliamentary approval. The revised EMA, among other things, calls for the establishment of an Environmental Protection Agency – a semi-autonomous organisation which will have more independent convening, regulating and enforcing powers on environmental and natural management issues.

**Potential Entry Points for PEI:**

- Development of district and national State of Environment Reports. This is an area requiring technical and financial support to the EAD to ensure that the state of the environment is assessed and reported on regularly as per requirements of the law. With the rapid environmental degradation, there is a need to have regular reporting on the state of the
environment so that appropriate mitigation and restorative interventions can be designed. The State of Environment Report could also feed into the MGDS reviews to ensure that environmental issues are integrated effectively. There is a need to support the process of developing the State of Environment Report in 2008 which will also be a baseline for the MGDS. EAD is supposed to lead and coordinate the process of producing the report by drawing in members from different sectoral Ministries to contribute information for their components. Normally a multi-sectoral task force is formed to work on the gathering of information and compiling the report. These experts require resources to undertake this task within a specified time.

➢ Improving the co-ordination across the Government on environment and natural resources, including with respect to the PS Committee on Environment, Natural Resources and Climate Change and the National Council for the Environment. Currently the Government has established a committee comprising Principal Secretaries of key Ministries to oversee and coordinate at policy level issues relating to environment, natural resources management and climate change. This Committee has more authority and leverage for decision making and interface with Cabinet. This means that key issues of environmental sustainability can more easily be tackled at the highest policy level and influence changes in Government policy and programmes. There will be a need to support the Committee technically and financially to make it fully functional and effective in spearheading environmental sustainability in national development priorities. There will be a need to support the operations of the Committee and associated technical committees to ensure that they are meeting regularly (quarterly) to address emerging environment and natural resource issues both at policy and operational levels.

3.2. Ministry of Agriculture and Food Security

3.2.1. Synopsis of the Agricultural Sector

Agriculture has remained the backbone of the Malawian economy over the past 30-40 years. About 82 % of the population are involved in agriculture and these are mostly smallholder farmers on customary land. Smallholder production contributes almost 70 % of national agricultural output and about 74 % of rural incomes are derived from crop production.

Despite the dominant role of agriculture, agricultural growth has stagnated over the years from an average of 4.35 % per annum in 1970-2005 to 2.1 % per annum between 2000 and 2005. Statistics also show that smallholder agricultural growth was -1.8 % per annum during the period between 2000 and 2005.

Land holdings have also declined over the years due to rapid increase in population. The national mean land holding size fell from 1.53 hectares per household in 1970s to 0.80 hectares per household in 2000. Recent studies have shown that more than 33 % of smallholder farmers cultivate between 0.5 and 1 hectare of land per household. Malawi also has one of the lowest per capita agricultural land holding (0.36 ha) in Sub-Saharan Africa (1.45 ha on average). For the poor rural populations, the per capita land holding is 0.23 ha.

Malawi agriculture is characterized by low productivity due to, inter alia, land constraints and decreased soil fertility. Other contributing factors have been dwindling support services (extension, credit, veterinary) for smallholder farmers, and overdependence on rain-fed agriculture. Productivity of major crops (maize, rice, legumes, tobacco, and cotton) in Malawi is below the potential yields.
Maize is the main staple food for the majority of people in Malawi as such it has dominated the country’s agriculture and food security focus. Factors limiting productivity of maize in Malawi include use of low yielding local maize varieties; land degradation and soil infertility; low usage of organic and inorganic fertilizers; high incidences of pests and diseases; poor practices such as late planting and weeding; and frequent occurrence of drought.

To deal with these problems, the Government has been promoting a number of strategies. These include:

- Promoting use of improved maize varieties – currently at 25 % of the households;
- Increasing fertilizer usage by smallholder farmers – currently at 35 % of the households;
- Promoting appropriate cropping practices as well as conservation farming; and
- Promoting irrigation farming by increasing area under irrigation from the current 73,495 ha to reach the potential of 400,000 ha.

The Ministry of Agriculture and Food Security (MoAFS) recognises that environmental degradation in Malawi is reaching a crisis stage that requires urgent action. This is mainly due to massive deforestation which is resulting in siltation of rivers and lakes and loss in soil fertility due to soil erosion. Continuous cropping and cropping on fragile lands due to land constraints is also aggravating soil erosion. The siltation is also resulting in less fish stocks and low water availability for people and livestock. The loss in soil fertility is leading to reliance on inorganic fertilizers to produce crops at a high and unaffordable cost for most smallholder farmers. The Government is currently implementing a fertiliser subsidy programme to support poor smallholder farmers to access inorganic fertilisers, however the costs of this has risen significantly with fertiliser price increases.

3.2.2. Agricultural Development Programme (ADP)

The MGDS identifies agriculture and food security as the first of the six priority areas for Malawi to achieve economic growth and development. The main goals of this priority area are to increase agricultural productivity and ensure food security for all. Some of the key strategies identified for implementation include agricultural productivity improvement; promotion of irrigation; and promotion of soil and water conservation techniques. To translate these provisions into action, the Government has developed the Agricultural Development Programme (ADP) as a comprehensive framework for achieving increased agricultural productivity and food security.

Over the years it has been realised that support going to the agricultural sector has been somewhat disjointed as evidenced by many projects/programmes operating independent of each other. This has reduced the overall impact and has resulted in conflicting approaches. The conceptualisation of the ADP is a key step towards harmonisation of investments to the sector. It is envisaged that the harmonised programme will stimulate increased agricultural growth and sustained achievement of food security.

The ADP is defined as a prioritised, results-oriented, programme-based framework translating agricultural priorities articulated in the MGDS. The ADP is therefore the implementation framework for the agriculture and food security priority of the MGDS. The ADP is also aligned with regional policies and strategies as articulated in the NEPAD Comprehensive African Agriculture Development Programme (CAADP) and the SADC Regional Indicative Strategic Development Plan (RIDSP).

The ADP has three major programmes:

1. Sustainable Land and Water Management;
2. Agribusiness and Market Development; and
3. Food Security and Risk Management.
The three programme areas are supposed to be linked in their implementation framework so as to contribute to agricultural growth and sustained food security. Key to the achievement of these goals is the sustainable land and water management component. Environmental issues are embraced in the programme especially in components of land and water management. In this regard, the programme has acknowledged the existing environmental problems as they relate to agricultural development and provides responses for tackling these concerns in its components especially through its Sustainable Land and Water Management (SLWM) focal area.

The overall goal of the SLWM will be to ensure sustainable management of natural resources in order to enhance the productivity of both food and cash commodities and increase sustainability of output per unit of resource, mainly land and water, while protecting the environment. This component provides strategic linkages between the components of the ADP as they all depend on sustainable land and water management for enhanced productivity.

The focus of the SLWM component will be paid towards:

- Promoting conservation farming technologies that build soil fertility, prevent soil erosion and conserve rain water, such as contour ridging, application of manure, preparation of compost, minimum tillage, agroforestry, box ridges, and tractor ploughing to break the hard hoe pan;
- Providing specific extension advice to farmers in degraded areas in addition to general extension service promoting agricultural productivity;
- Increasing area under agroforestry and area under conservation agriculture technologies. Support will be extended towards acquisition of planting materials (mainly seeds) and other inputs for community nurseries for agroforestry and fruit tree seedlings production;
- Promoting community based dambo and water catchment area management and the prevention of river bank degradation;
- Providing research and extension services to farmers on appropriate irrigation and crop production techniques;
- Facilitating establishment of Water User Associations (WUA) and strengthening their technical and operations and management capacities for sustainable irrigation facilities;
- Establishing rainwater harvesting systems in the field and off-field including new dams constructed and dams rehabilitated as well as small-scale water harvesting systems for gardening;
- Promoting catchment area management and protection by WUAs and community afforestation;
- Soil fertility improvement e.g. through combining organic and inorganic fertilizer; and
- Improving efficiency in production e.g. promoting intercropping to cover the soil and increase productivity (maize and groundnuts).
3.2.3. Institutional Set-up for the ADP Implementation

The ADP will be coordinated and led by the MoAFS. The Irrigation Department in the Ministry of Irrigation and Water Development will directly contribute to the programme delivery through irrigation services. The Irrigation Department was fully involved in the development of the ADP. The implementation of the ADP will be through the existing structures of the MoAFS in collaboration with Irrigation Department to ensure ownership and continuity.

The MoAFS has seven technical Departments:
- Crops;
- Livestock Development and Animal Health;
- Agricultural Extension Services;
- Research and Technical Services;
- Land Resources and Conservation;
- Fisheries; and
- Agricultural Planning Services.

The MoAFS is also structured into eight geographically based Agricultural Development Divisions (ADD) and 28 District Agricultural Development Offices. The technical Departments operate through the ADDs and the District Offices. These Departments and structures will be responsible for implementation of the programme. The Department of Irrigation also uses this establishment in implementing its activities as it used to be part of the MoAFS.

Notwithstanding the existence of many Departments, which have their clear roles, responsibilities and linkages, it is clear that the ADP implementation will have to involve both state and non-state actors at central and district levels. With the decentralisation process, planning and implementation emphasis has shifted to state and non-state institutions at district level. The district level coordination will be with the District Commissioner (DC) while implementation will be steered by the District Agricultural Development Office (DADO) with support from the District Irrigation Office (DIO).

The ADP also provides for establishment of an Executive Management Committee at national level, chaired by the Principal Secretary of MoAFS, with membership from participating Ministries (Irrigation & Water Development; Trade & Industry Development; and Local Government & Rural Development) and supporting central Ministries (MEPD, Finance). This Committee will be responsible for overall policy and programme decision making and strategic coordination. Other groups to be established include:
- Working Group on Management;
- Technical Working Groups;
- Stakeholder Partnerships Forum; and
- District Subcommittee on Agriculture and Food Security.

These will ensure participation of stakeholders and improved coordination of implementation of the programme. The role of Environmental Affairs Department as a central coordinating body for all environmental issues is not explicitly recognised in the ADP coordination structures at national and district level. This could pose a risk of sideling environmental sustainability issues in the policy and strategic direction as well as in the implementation of the ADP. One of the technical working groups could be responsible for assessing environmental issues in the ADP and ensuring integration of environmental sustainability in the ADP. There is need to introduce this structure so that appropriate measures are taken into consideration to ensure inclusion of environmental issues.
Some of the risks or challenges associated with implementation of the ADP could include the following:

- Inadequate funding of the programme;
- Difficulties in operationalisation of the newly defined structures;
- Human resource capacity limitations to reach out to communities as planned;
- Limited coordinated efforts amongst the various interested stakeholders; and
- Limited commitment of different stakeholders including farmers.

**Potential Entry Points for PEI:**

- The next steps on the ADP process involve detailed design of programmes, resource mobilisation and financing modalities of the programmes, policy and institutional reforms and creating partnerships and synergies with other Ministries and sectors critical to the implementation of the ADP. The ADP implementation is supposed to start from the 2008/09 financial year upon completion of all preparatory processes such as programme designs, resource mobilisation and agreeing on financing modalities for the different components and for the different donors. The development of an M&E framework, the policy review and harmonisation processes are scheduled to be completed by the end of the 2007/08 financial year.

- To ensure adequate mainstreaming of environmental sustainability issues in the ADP, an option is to establish a Technical Working Group to review the ADP and identify critical environmental issues and concerns that need to be addressed or integrated in the programme. This group could be supported by a consultant who would speedily develop a framework for integrating key environmental sustainability issues into the programme including cost estimates. In addition, for effective implementation of the ADP, there is a need for the Working Group to undertake policy review and harmonisation to ensure consistency and coordination of implementation with other sectoral policies and programmes. These include forestry, water, land, fisheries, energy, marketing and trade. The harmonised approach will facilitate efficient achievement of results that ensures desirable impacts and environmental sustainability.

- There are also plans to develop a comprehensive M&E system for the ADP which allows for assessing implementation and achievement of intended objectives. This ADP M&E system should be synchronised with the MGDS M&E framework so as to assess how the ADP is contributing to the achievement of MGDS objectives and targets. This system should also be linked to other existing M&E systems such as the Food Security Policy implementation monitoring and evaluation system as well as other sectoral M&E systems. This system should also help to assess how the ADP is integrating sustainable environmental and natural resources management issues by highlighting clear indicators for assessing environmental sustainability for the ADP. The PEI could support the process by supporting technically and financially the team which will develop the M&E framework and tools for the ADP. The process is to be led by the MoAFS and will involve a multi-sector task group supported by a consultant. This group should include Government sectors and civil society groups. There will be need to ensure that relevant environment and natural resources sector are involved. The PEI might provide support in this area by mobilising and supporting relevant Government sectors and civil society groups to contribute effectively to the process.
3.2.4. Department of Land Resources Conservation

Ministry of Agriculture and Food Security has a Department of Land Resources Conservation. The mandate of the Department is on managing land-based resources in a sustainable manner for socioeconomic development. This includes agricultural land (for smallholder farmers), forestry and water. The Department has mainly been addressing the problem of soil degradation caused by soil erosion through land use planning and conservation.

To ensure national coverage of its activities, the Department has staff positions in all agricultural establishments from headquarters level to ADD, district to local level. These officers work with the extension staff to promote sustainable land and water conservation among the smallholder farmers. The key constraints have been high vacancy rates both for the land resources conservation technicians and the agricultural extension staff.

The Department has three operational units namely:
- Environmental Conservation and Education;
- Land Resources Surveys and Evaluation; and
- Land Management Training.

The Department used to run a Land Husbandry Training Centre in Zomba which offered technical training to both Government staff and farmers on land resources issues. This centre also served as a regional training centre for the SADC region. Due to budgetary and staffing problems the centre was closed in 2000 and there have been no concrete plans of reviving its operations in the present financial environment.

The Department’s linkages with other Departments within the MoAFS have been well maintained, reflecting the understanding that its work is directly complementary to that of other Departments. Just like for other technical Departments in the Ministry, technologies developed by it are channelled to the end users (communities) through the Department of Agricultural Extension Services (DAES). Its relationship with other Departments also pertains to providing technical guidance on matters related to land-based resources.

In order to enhance the implementation of the Departments’ mandate there have been some initiatives to put in place a National Land Use and Management Board, a National Agroforestry Steering Committee and a Soil and Water Conservation Research Coordination Committee. These structures have not been yet established.

Outside the MoAFS, the Department has actively worked with the Department of Forestry on issues of agroforestry and afforestation in general. The Forestry Research Institute of Malawi (FRIM), part of Forestry Department, has been a close working partner on the agroforestry programme. Similar working relationships have been maintained with the World Agroforestry Centre (ICRAF), Agricultural Research and Extension Trust (ARET) and the various CSOs dealing with land resources conservation issues.

Linkages with other Departments e.g. Forestry and Water have mainly been through projects and through international convention processes (e.g. UNFCCC and CBD processes) coordinated by the Environmental Affairs Department. Currently the Department is coordinating the sustainable land and water management pillar of the ADP and it has been working with other stakeholders to formulate this ADP component.

The Department used to undertake quarterly stakeholders meetings but these were supported through donor funded project funds and they were discontinued after the projects phased out.
Currently the Department conducts annual review meetings and some stakeholders are invited to participate.

### 3.2.5. Land Resources Conservation Policies and Legislations

The problem of soil erosion has been increasing over the years. In 1992, it was estimated at 20 tons/ha per annum increasing to 35 tons/ha per annum in 1995. Current estimates show soil loss of up to 43 tonnes/ha per year, resulting in about 4-11% loss in crop yield.

The Department has put in place National Land Resources Management Policy and Strategy. This policy, initiated first in November 1994, was the first of its kind in the country’s history. The formulation process was in tandem with the International Scheme for the Conservation and Rehabilitation of African Lands (ISCRAL) to which Malawi is a signatory; and was also consistent with the National Environmental Action Plan (NEAP) adopted by the country in December 1994. The policy formulation process was undertaken using a participatory process through involvement of all key stakeholders including chiefs and farmer representatives from the smallholder and estate sub-sectors. The policy got Cabinet approval in April 2000.

The overall goal of the policy is to promote efficient, diversified and sustainable use of land based resources both for agriculture and for other uses in order to avoid sectoral land use conflicts and ensure sustainable socioeconomic development. The issues of environment are well enshrined in the policy’s focal areas as is evident in the details of each of the multiple specific objectives. Thus, the policy seeks to:

- Improve and sustain the productivity of land for agricultural and other uses through use of sound technologies to conserve soil and water resources, soil fertility improvements and respecting livestock stocking capacities of land;
- Promote rehabilitation of degraded lands for both agriculture and other uses with the aim of sustaining the usability of these lands;
- Control the dangers of surface run-off water such as soil erosion and all its associated causative factors;
- Promote community awareness, understanding and initiatives in land resources management to ensure sustainable utilisation of land resources;
- Support development of land management technologies deemed economically and ecologically sound and socially acceptable;
- Protect and preserve areas deemed environmentally fragile such as steep slopes, stream banks, water shed areas, swamps and dambos;
- Put in place waste disposal measures deemed appropriate to minimize land degradation and land pollution; and
- Promote natural resources management, conservation and utilisation ensuring sustainable productivity of land and ecosystems.

The policy also pays particular attention to the issue of bringing on board all the key stakeholders at both policy formulation and implementation stages to ensure its successes. Based on the provisions of the policy, the Department has set a number of priorities. These include:

- Soil conservation – using both physical and biological means;
- Soil fertility – using organic means;
- Conservation agriculture; and
- Rainwater harvesting.

### 3.2.6. Challenges for Land Resources Conservation
The efficiency and effectiveness of the Land Resources Conservation Department in fulfilling its environmental and other mandates is hampered by a numerous constraints as summarized below:

- Inadequate human capacity due to deaths, retirements and resignations. The Department has a vacancy level currently standing at 48%. The Department has thus relied on already constrained extension staff in most districts which further dilutes its work and influence to deliver effective land resources conservation services. Further, some quality is compromised since some staff members lack the requisite training and this is exacerbated by the closure of the Land Husbandry Training Centre;
- Inadequate funding levels both from the Government and donor sources make the Department incapable of fully exploiting its potential. For example, the Land Resources Department receives least Government funding in the MoAFS. Over the years, the Department seems to have been losing influence and recognition with more emphasis being put on food security programmes involving inorganic fertiliser and irrigation;
- Inadequate and obsolete equipment hampers the Department’s technical capacities in areas of surveying, soil assessment and mapping. Due to lack of funding the Department cannot afford the requisite equipment for its work;
- Escalating land degradation as land users hardly adopt the measures for arresting the problem. As people strive for quick livelihood actions, they neglect adoption of land resources management technologies, most of which have long-term effects;
- Limited coordination and collaboration in land resources management initiatives with other Departments in the Ministry and other sectors. Within the Ministry of Agriculture, the Department is considered more as a technical support Department - as such it has limited policy influence compared to other Departments such as Planning and Crops. In addition, there are no formal coordination mechanisms with other sectors to facilitate its collaboration with other these sectors such as lands, forestry, and water;
- No supporting legislative framework – there is no legal instrument on land resources. This means there are no incentive and disincentive systems for compliance and non-compliance respectively. The Department relies on the available legislation such as the EMA, Land, Forestry and Water Acts which are coordinated by other Ministries.

To address the challenges and constraints, there are a number of areas that need to given more attention and support. Some of these could be potential entry points for the PEI in the land resources sub-sector:

- With the escalating land degradation and loss in soil fertility, there is a need to enhance and rekindle political commitment on the need for land conservation and sustainable land management. This could start with awareness-raising of the Members of Parliament on the threats of land degradation and the benefits of embracing sustainable environmental and land management. This could involve training workshops, study tours and visits to different hot spots;
- There is a need for establishing stakeholder forums that will regularly bring together CSOs, private sector and the Government at national and district levels to discuss environmental issues and planning, and to address problems of land degradation and its impacts in a coordinated manner;
- There is a need for a study to quantify the scale and trend of land degradation parameters and the impacts on agricultural productivity, national development and the overall environment. Currently there are no regular up to date data to support land use planning and land conservation work.
- There is a need to support capacity building and institutional development of the Department through staff recruitment for essential positions and staff training mainly through local universities (Bunda College and others) as well as updating the stocks of equipment within the Department.

Potential Entry Points for PEI:
3.2.7. Synopsis of the Fisheries Sector

The fisheries sector is one of the important sectors to the population and economy of Malawi. Fish provides about 60-70% of total animal protein and 40% of the total protein intake for the majority of the rural poor in Malawi. In addition, fish contributes about 4% of GDP. It is also estimated that the fisheries sector provides employment opportunities to over 200,000 people and supports about 14% of Malawi population which resides along the lakeshores of Lake Malawi through fishing, processing, marketing, fishing gear construction, boat building and other ancillary activities.

The fisheries sector has been affected by environmental degradation. The key problem has been depletion of fish stocks which has been caused by unsustainable fishing, including the use of destructive fishing methods and equipment, and by the destruction of fish habitats due to siltation and other human activities. The total fish landings have declined from 76,500 Mt per year in 1990 to about 45,602 Mt per year in 2006.

As a result, per capita fish consumption has decreased from 10-18 kg per year in the 1970s to 4.8 kg in 2003.

The MGDS recognises the significant role of fish to the population of Malawi. It therefore calls for actions that will ensure sustained fish availability for food and as well as for income generation. To achieve this goal, the key strategies put forward include the following:

- Increasing and sustaining the productivity of small and large scale fisheries for both domestic and export markets;
- Enforcing legislation to ensure sustainable production of fish;
- Promoting the use of modern techniques of fishing;
- Capacity building through community training; and
- Development of small-scale fish farming and deep water fishing.

3.2.8. Role of the Fisheries Department

The Department of Fisheries is part of the Ministry of Agriculture and Food Security since 2007. Before that the Department was part of the Ministry of Natural Resources and Environment. The mandate of the Department is to ensure sustainable management of aquatic resources especially fish. This is done through ‘the protection of the existing fish resources by means of appropriate research, the collection and analysis of the relevant data and the application of appropriate control mechanisms’.

The Department is guided by a number of instruments:

- Fisheries and Aquaculture Policy 2001;
- Fisheries Act 1997;
• Fisheries Regulations; and
• Strategic Plan.

Fisheries Policy and Act empower the Department to undertake the following functions:

• To monitor and where appropriate, control the exploitation of fish, directing and regulating production within sustainable limits for each fishery, and using the law to safeguard the resources from any other threat;
• To promote fish production from smallholder and large fish farming operations;
• To identify and quantify under-utilised fish resources, particularly those in the offshore waters of Lake Malawi;
• To undertake research and disseminate results which will lead to improved fisheries management, fishing, fish handling and processing;
• To foster greater community involvement in resource management to improve the effectiveness and appropriateness of management initiatives;
• To develop the institutional capacity of the fisheries sector; and
• To prohibit the introduction of live exotic fish species without rigorous scientific assessments.

The Department is organised at headquarters level into a number of units:

• Extension and Development;
• Planning and Monitoring;
• Training (running a training college in Mangochi);
• Research (running a research centre in Mangochi);
• Aquaculture; and
• Administration.

The Department has some district offices in a number of districts where fishing is an important economic activity, especially those along the lakeshore. It is also working with the other Departments of the MoAFS (e.g. extension) and the Irrigation Department of the Ministry of Irrigation and Water Development in other districts promoting aquaculture.

Over the years the Department has been working with other Departments (Forestry, Irrigation, Water and Agriculture) through projects and other national initiatives. One of the key avenues for collaboration with other stakeholders was the development of the Fisheries Policy. This process took on board other environmental stakeholders and policies.

The Department has been collaborating with a number of CSOs in the country, especially those promoting aquaculture with smallholder farmers. These include World Vision, Concern Universal and Action Aid. The Department has also been working with the World Fish Centre to promote aquaculture in the country.
3.2.9. Challenges for the Fisheries Sector

The Department feels that there is not much coordination and harmonisation of policies among different sectors of the Government. These sectors include fisheries, water, irrigation, agriculture, tourism and wildlife. There are some conflicting activities between fisheries and other sectors e.g. cultivation in the river banks causing erosion and siltation results in destruction of fish breeding places and habitats – yet agricultural policies are promoting irrigation through treadle pumps. Similarly, tourist development on the lakeshores sometimes leads to disturbing breeding habitats for fish. There is a need for policy and legislative harmonisation. There is also a need to review the EMA in line with national development and sector policies.

The Fisheries Department also feels that there is weak Government capacity and coordination to implement or enforce policies and legislation concerning the environment and natural resources management. There is a need for a stronger oversight body on all environmental issues. This will require review of the core functions of the currently weak EAD and establishment of a semi-autonomous environmental authority.

Other challenges include:

- Low and declining funding (yearly average not more than MK 40 million for the Department). This would suggest that natural resources issues are given low priority in the Government funding;
- Low staffing (vacancy rate at 40%) and insufficient training due to funding constraints; and
- Lack of up-to-date data on fish resources and production. There is a need to strengthen information systems in the fisheries sector.

To address these challenges and constraints, there are a number of areas that need to given more attention and support:

- There is a need to sensitize policy-makers, the Parliament and local communities on the status of fisheries resources and the impact of environmental degradation on fisheries. It would be useful to enhance the role of the Parliament in taking up environmental issues in the Parliament and also in their constituencies;
- There is a need for a comprehensive study to quantify economic values and impacts of fisheries resources and the economic impacts of environmental degradation on fisheries;
- There is a need to strengthen information systems for fisheries and other natural resources. There is a need for regular monitoring and information collection on the status of fisheries resources to guide policy decisions and planning;
- As with other natural resources, there is a need to enhance collaboration with the media on fisheries and other natural resources to ensure that there is extended sensitization of communities on the policies and the need for sustainable resource use. This requires providing training and other technical support to the media to ensure a technically well informed media to report and analyse environment and natural resources issues; and
- There is a need for policy and legislative harmonisation between fisheries sector and other sectors such as water, forestry and agriculture.

**Potential PEI Entry Points:**

- The PEI could explore the above mentioned issues and provide technical support on some of them in line with the support to other sectors. One area which is relevant for all sectors is the policy and legislative harmonisation. The other area is the sensitisation of policy-makers and Parliamentarians. The third area could be the economic study.
3.3. Ministry of Irrigation and Water Development

3.3.1. Synopsis of the Water Sector

Malawi is endowed with good water resources (surface and ground water) requiring good management. Water resources degradation is a serious problem for Malawi since 1990s. Water catchments have been degraded over time due to human activities (settlements and agriculture) resulting in reduction in water availability. The demand for water has grown higher due to the increased population and increased economic activity. There is also increased pollution of water resources due to increased human activities on land (agriculture and industry) and careless disposal of industrial and household waste.

The MGDS identifies irrigation and water development as one of the priority areas for Malawi. The overall goal of this priority area is to ensure protection and sustainable management of water resources to meet agricultural, domestic and industrial needs of the country. It is recognised that water is important for irrigation agriculture, households, electricity generation and industries which calls for integrated water management. In addition, water availability is related to environmental problems emanating from agriculture and other sectors such as deforestation and erosion. Key strategies proposed in the MGDS include:

- Multi-purpose dam construction – for irrigation, water supply, electricity generation and fish farming;
- Promoting sustainable water supply and sanitation; and
- Establishment of small and medium scale irrigation schemes.

3.3.2. Role of the Ministry of Irrigation and Water Development

The Ministry of Irrigation and Water Development is responsible for coordinating sustainable management of water resources to ensure adequate supply of water for household use, irrigation services, electricity generation and other uses. The Ministry has four Departments:

- Water Resources – comprised of several units: Surface Water, Ground Water, Water Quality and Water Resources Board Secretariat;
- Water Supply and Sanitation;
- Planning; and
- Irrigation Services.

The Irrigation Department was part of the Ministry of Agriculture in the past five years but it was transferred to the Ministry of Water in 2007.

The Ministry developed a new policy on water in 2005. In addition, a draft Water Resources Bill has been prepared in 2007 and has been submitted to the Cabinet for approval.

The National Water Policy aims to incorporate issues of water resource management, water quality and water utilisation. The provisions of the policy aim at:

- Promoting sustainable and integrated water resources management and development to make water readily available and equitably accessible by all Malawians;
- Ensuring water of acceptable quality for all the needs;
- Achieving sustainable provision of water supply and sanitation services to all individuals and entrepreneurs at affordable cost;
• Promoting efficient and effective utilisation, conservation and protection of water resources for sustainable agriculture and irrigation, fisheries, navigation, eco-tourism, forestry, hydropower and disaster management and environmental protection;
• Promoting international cooperation in the management of trans-boundary and cross-boundary waters without compromising the country’s sovereignty, security and territorial integrity;
• Facilitating conformity with current regional and international agreements and protocols on shared water resources, catchment protection and management, and water resources monitoring;
• Promoting the participation of the private sector in water resources development, management and service delivery; and
• Promoting coordination between the Ministry responsible for water issues and other stakeholders in the water sector and the natural resources sector.

3.3.3. Water Resources Department

The role of the Water Resources Department is to monitor water resources: where we have water, what quantity and what quality. This role has been negatively affected by lack of resources. The Department is receiving lower funding to undertake its responsibilities. The water monitoring network, which was established a long time ago, has not been well maintained due to lack of resources. As a consequence, there is inadequate monitoring to assess the changes and impacts on water resources. According to the Ministry officials, policy-makers seem not to fully appreciate the role of the Water Resources Department. The demand for monitoring water resources is considered secondary although there is a lot of demand for providing adequate water to the population.

The Department is comprised of several units dealing with Surface Water, Ground Water, Water Quality and the Water Resources Board. The Department also has three regional offices and district offices in all districts. The key challenge is the technical adequacy of Water Services Officers at district level because most districts are run by lower grade technical staff and consequently the issues of water are not fully articulated in district policy and planning processes.

The Department hosts the Water Resources Board which is mandated to coordinate all water resources in Malawi. The Board is composed of different key stakeholders. For example, Electricity Supply Commission of Malawi (ESCOM) is a member of the Board because ESCOM is a major water user for electricity generation. ESCOM also deals closely with the Department. The Department regulates the flow of the Shire River in collaboration with ESCOM to ensure smooth flow of water for electricity generation and flood control. ESCOM also pays non-consumptive water charges of about MK 2 million/year per power station to the Department/Water Resources Board for using the water for hydroelectricity generation. The Board also has technical committees which bring in other stakeholders dealing with water and environment.

A number of stakeholders feel that the Water Resources Board is a weak body with inadequate capacity and funding to undertake its functions. For example, ESCOM had asked the Board to commission a comprehensive study to determine the sources, biology and dynamics of the weeds which have infested the Shire River leading to reduced flow of water and blockage of the water barrage at Liwonde. The Board has not carried out this task, yet collects charges from ESCOM. Currently ESCOM is spending about MK 8 million per month to dredge the weeds at Liwonde barrage to ensure adequate flow of water for electricity generation.

The Ministry through the Department of Water Resources collaborates with other stakeholders in a number of ways:
• The Ministry is member of the National Council for the Environment (NCE) and the Technical Committee on Environment (TCE);
• The Ministry recently established Water, Environment and Sanitation (WES) aid coordination group involving Government, donors, UN and CSOs. This group is chaired by the PS and it meets every month;
• The Ministry has also been working with CSOs in the water sector and natural resources management. These include Malawi Water Partnership, Water Aid, Concern Universal, CURE and WESM;
• The Department also collaborates with other stakeholders through projects. The main development project for the Ministry is the National Water Development Programme. This a project of about US$ 300 million funded by the World Bank. It has several components: urban water supply and sanitation; rural water supply and sanitation; small towns water supply and sanitation; and water resources management.
• The Ministry is tasked to work with the Parliamentary Committee on Agriculture and Natural Resources through the Subcommittee on Water, but the Committee has not been very active on water issues.

There are however no formal coordination arrangements with other stakeholders in the agriculture, forestry, fisheries and tourism sectors. There are no interdepartmental policies and programmes on areas of common interest. For example, during the preparation of the ADP some considered that the Water Resources Department was not fully involved in the process except for the Irrigation Services Department.

3.3.4. Challenges for Water Resources Management

Among the key challenges requiring attention are the capacity constraints in the sector to implement policies and enforce laws and standards – otherwise the policies and laws will remain ineffective. The Government needs to seriously address capacity constraints by filling all vacant positions in the Department especially at district level.

Other challenges and areas requiring support are:
• Public awareness-raising on the need for sustainable water management and utilisation. This could start in schools so as to raise awareness of children. Other targets could be local leaders and the Members of Parliament;
• Reviewing and harmonising policies with other sectors (such as agriculture, irrigation, tourism, industrial development and forestry) to improve policy coherence e.g. in order to promote water catchment conservation and irrigation farming in areas where people are farming very close to the river using treadle pumps;
• Influencing the Government and the Parliament to provide adequate resources for the water sector to reflect its priority position in MGDS. Policy needs to be translated into national budget and action;
• There is also a need to strengthen the Water Resources Board to undertake its regulatory and coordination functions effectively, linking up with other related sectoral coordination arrangements and influencing the Government policy.
Potential PEI Entry Points:
- PEI could support the awareness-raising on the need for sustainable water management. PEI could also provide support to the policy harmonisation process in collaboration with OPC, MEPD and EAD.

3.3.5. Department of Irrigation Services

The Department of Irrigation Services is also a Department in the Ministry of Irrigation and Water Development. During the past five years, the Department was part of the Ministry of Agriculture and Food Security, but it was moved to the Water Ministry in 2007. The responsibility of the Department of Irrigation Services is ‘to manage and develop water and land resources for diversified, economically sound and sustainable irrigation and drainage systems under organised smallholder and estate management institutions and to maintain an effective advisory service’.

Based on this broad responsibility, the priorities for the Department are the following:
- Development of irrigation infrastructure – especially gravity systems because they are cheaper for farmers than other systems such as pumps;
- Water resources development – making sure adequate water is available for irrigation. This mainly involves dam construction; and
- Capacity building through extension services to support irrigation farming and formation of water users associations.

The Department acts as a facilitator in the implementation of these priority areas by creating ‘an environment that encourages the private sector, smallholder farmers, estates and commercial farms to invest in irrigation development and manage their own operations’.

The Department is coordinated at headquarters level but it has staff at Agricultural Development Division level and at district level. Below the district level, the Department uses agricultural extension staff to facilitate implementation of irrigation activities.

The Department has strong linkages with MoAFS, as they work together in almost all aspects of irrigation farming (agronomy, extension, etc.), and also because the Department was part the Ministry in the past years. The Department has been fully involved in the formulation of the ADP, since the ADP considers irrigation as a priority area. However, the Water Resources Department has not fully been part of the ADP formulation.

For other Departments, the linkages are mainly through projects and not at policy and planning level. Some of the linkages include the following:
- Working with EAD on undertaking EIAs for irrigation schemes as per the requirement of the National Irrigation Policy;
- Working with Forestry Department through the IFAD project which has been promoting afforestation in irrigation schemes;
- Working with Fisheries Department through the IFAD project integrating fish farming in irrigation schemes;
- Working with Ministry of Health through IFAD project – promoting consideration of health issues (malaria and bilharzia control) in irrigation schemes;
- Working with Ministry of Trade and Industry – promoting the marketing of irrigation crops.

The Department has been working with the private sector – through engaging them as consultants and construction companies in designing and construction of irrigation schemes.
The Department is also working with many CSOs who are promoting small-scale irrigation throughout the country. The Department has set up a consultative forum with CSOs which meets regularly. This year, the forum has met twice.

3.3.6. National Irrigation Policy

The irrigation services are guided by the National Irrigation Policy of 2000. Key policy objectives include:

- Promoting irrigation to increase agricultural production and enhance food security;
- Promoting irrigation activities for income generation and commercialisation both at smallholder and estate levels; and
- Creating an enabling environment for irrigated agriculture by facilitating and encouraging the private sector to invest in irrigation development, and encourage rural communities to manage irrigation projects in order to fully utilise irrigable land in Malawi.

Some of the provisions of the Policy include:

- The establishment of the National Irrigation Board to coordinate irrigation activities;
- The need to undertake an Environmental Impact Assessment (EIA) for all medium and large scale irrigation development to ensure that any detrimental environmental impacts associated with irrigated agriculture are avoided or minimized. Once the EIA is done, mitigation and restorative mechanisms are meant to be built in the projects to deal with the identified environmental impacts. This might require identifying alternative irrigation options. These measures do not necessarily ensure environmental sustainability of the irrigation intervention options;
- The need to address health aspects thoroughly in the planning, design, financing, construction and operation of all irrigation schemes.

Key considerations in implementing the policy objectives have been:

- Availability of irrigable land and adequate water;
- Organisation of farmers into groups and associations;
- Achieving food security for the smallholder farmers; and
- Availability of markets for irrigation crops.

Apart from the provision on the EIA, the Irrigation Policy does not fully highlight key environmental sustainability issues and measures which should be considered in the planning of irrigation development.

It has also been noted by most stakeholders that in most smallholder irrigation systems, the irrigation systems have been promoted without rigorous economic and financial assessment. This has been manifested in the type of irrigation systems promoted (some of them inappropriate and costly to maintain for the smallholder farmers) and the type of crops promoted (low value crops such as maize). The Government has been promoting a number of irrigation technologies such as treadle pumps, gravity fed furrow irrigation and motorised pumps. There have been some studies to assess the effectiveness of the irrigation technologies in terms of costs and impacts on the beneficiaries. The results show a mixed story on the effectiveness of these technologies for smallholder farmers, considering acquisition costs, operating costs and returns.
3.3.7. Challenges for the Department of Irrigation

There are conflicting messages and priorities. Political masters and Irrigation Department emphasise increasing the area under irrigation using all available moisture/water source to ensure food security, while other stakeholders such as the Land Resources Conservation Department, emphasise sustainable land and water management. For example, over the years, the Department of Irrigation has been linked to environmental degradation due to promotion and increased usage of treadle pumps which lead to people cultivating close to water bodies thereby destroying river banks.

On the other hand, the Department has tried to comply with the environmental law which stipulates that any irrigation scheme greater than 10 ha should be subjected to EIA to be approved by the NCE. The EIA is done but compliance after the EIA is not ascertained as it remains in the hands of those responsible for the irrigation schemes to implement mitigation measures. In addition, there are number of small-scale irrigation schemes which have been implemented without any environmental assessments. These are mostly those implemented by CSOs.

The Department does not have adequate capacity (technical and financial) to enforce environmental considerations during the establishment of irrigation schemes and the implementation of irrigation activities. It uses consultants to design and construct irrigation schemes and they may not be very aware of environmental sustainability issues. There is a need to build capacity for environmental monitoring within the irrigation sector so as not to rely on consultants.

There has been low funding from Government for irrigation services except in 2002 when there were HIPC funds. ORT funding has been low for the Department. This year’s ORT funding for irrigation headquarters is about MK 32 million to cater for the headquarters, ADD and district activities. Last year headquarters had received MK 24 million which was not enough to supervise irrigation activities for the whole country, and this year it has been allocated only MK 18 million.

The Department has partly benefited from project funding for a number of projects being implemented:

- 3 projects funded by African Development Bank (US$ 9 mio, US$ 12 mio & US$ 24 mio). These contain all aspects of irrigation including marketing and value adding;
- Project funded by Arab Bank for Economic Development for Africa (BADEA) worth US$ 10 mio; and
- Bwanje irrigation project – funded by the Japanese Government.

**Potential PEI Entry Points:**

- *Enhancing capacity of the Department to integrate environmental sustainability issues when planning and implementing irrigation activities and support services. This can be done through training of staff at national and district level and providing necessary guidelines and indicators for analysing different irrigation options to ensure they are environmentally sustainable.*

- *Over the past ten years there has been extensive promotion of irrigation in Malawi resulting in increased area under irrigation and increased usage of water resources and fragile wetlands. Most of these irrigation schemes/projects have been established without adequate consideration of the environmental impacts (short term and long term). There is a need for assessing what has been done (well or wrongly) in terms of promoting irrigation and the impact on the environment so as to develop guidelines of how to integrate environmental sustainability in irrigation activities and programmes as well as policies. This could also include an economic study on benefits and costs of irrigation with respect to environmental degradation.*
There is need for policy harmonisation between irrigation and other sectors such as water, fisheries, land use and conservation, fisheries and agriculture. This will ensure that possible and potential conflicts are minimised.

Much of the small scale irrigation activities are undertaken in wetlands areas close to water bodies. Some of these are fragile areas requiring conservation agriculture. Some of the areas are cleared up for irrigation farming making them prone to erosion, siltation and drying up. There is thus need to promote conservation farming among smallholder farmers in these areas to ensure that the degradation and damage to these areas is minimised and benefits are optimised. The MoAFS extension service staff, land resource conservation technicians and irrigation technicians need to work together to promote conservation farming. For them to undertake this task, training is required. This training should integrate all aspects of conservation agriculture and environmental sustainability in irrigation farming and other fragile areas.
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Case Study 1: Blantyre Water Board
Contact: J. Chimeta, Water Quality Controller

Blantyre is the largest commercial city of Malawi and the Blantyre Water Board manages water supply to meet its requirements for industrial and household use. The board manages water supply from two sources: the Shire River and the Mudi Dam. These water resources have been severely affected by environmental degradation.

For the Shire River, the biggest problem faced by the Board is heavy siltation due to soil erosion. This has forced the board to hire a dredger from the Sugar Corporation of Malawi (SUCOMA) at high cost. The board has to dredge the silt 3-4 times a year at a cost of MK 1.3 million per time. In addition, the Board is exploring ways of assisting the people in the catchment of the Shire River with alternative strategies e.g. bee-keeping to reduce deforestation which is causing the siltation problem.

For the Mudi Dam, the main problem has also been siltation due to deforestation of the catchment causing erosion. The catchment area for the dam (890ha) was encroached in the 1990s when people started farming, building and quarry mining. As a result of the siltation, the dam has lost almost one third of its 1.4 million cubic meters capacity. Sometimes the Board stops pumping water from the dam due to excessive siltation. The Board has plans to dredge the dam. The estimated cost is MK 34 million and the Board cannot currently afford the cost.

There is also increased nitrification of the dam due to agricultural activities (use of fertilizers) in the
catchment area. This has resulted in the emergence and spreading of an aquatic weed which has infested the dam thereby further reducing its capacity. The Board is trying to physically remove the weeds from the dam but the success rate is low. The Board is considering biological control of the weed through exploring importing insects from Zambia. The nutrient load has also led to increase in the algae population which discouls the water and create odours. This is resulting in increased cost for water treatment.

The Board is working hand in hand with a number of stakeholders on the rehabilitation of the catchment area for the Mudi Dam. These include: Forestry Department – providing technical expertise; Blantyre District Assembly – identification of and compensation for the communities to be relocated from the catchment; WESM – provision of tree seedlings; and CURE – a member of the Catchment Committee. There is the Ndirande-Mudi Catchment Committee which has been formed to deal with the problems of the Mudi Dam. The Committee comprises of the Blantyre Water Board, Forestry Department, Ministry of Lands, Ministry of Water, Blantyre City Assembly and CURE. There is also the Ndirande Reforestation Committee comprising of communities in the catchment area. This Committee is helping to reduce illegal tree cutting in the catchment area. The Committees meet quarterly. Blantyre Water Board has also employed a security company to guard the Mudi catchment area.

What needs to be done:
- Intensify civic education and public awareness-raising for the people living in the catchments to stop them from destroying the environment;
- Stop river bank cultivation; and
- Reforestation.

3.4. Ministry of Energy and Mining

3.4.1. Synopsis of the Forestry Sector

The Department of Forestry is a Government Department established to facilitate and coordinate sustainable management and utilisation of forestry resources to support national development. It coordinates all stakeholder efforts in the forestry sector as per established policy and legislative frameworks. The Department is under the Ministry of Energy and Mining since 2007.

The key problem in the forestry sector has been the high rate of deforestation. Over the past twenty to thirty years there has been a speedy reduction in the forest cover in Malawi due to human activities such as cultivation, unsustainable harvesting of forest resources and urban development. The proportion of land under forest cover has reduced from 47% in 1975 to about 27% in 2005.

The rate of deforestation has remained high over the past years reaching a peak around the year 2000. The estimated deforestation rate is higher than the population growth rate (around 2%) which is an indication of excessive exploitation of the forest resources. Table below provides more details on the deforestation rate:

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<td>Deforestation rate (%)</td>
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In the past (from colonial times to the independence), the focus in the forestry sector was on the protection of forests to protect watershed catchments and exploit prime timber for development and for export. It is estimated that there are about 69 forest reserves (7,905 square km) – making up about 30% of forest cover in Malawi.
Considering the increasing demand for forestry products, the Government decided to establish forest plantations to support development in terms of timber, poles, fuel wood, pulp and other wood based industry. These plantations can produce an annual sustainable wood volume of about 1.2 million cubic meters (14% of potential sustainable wood supply for Malawi with the remainder being sourced from sustainable harvesting from forest reserves and private plantations). The utilisation of the forest plantations has been low (about 0.25 million cubic meters) due to poor Government funding and low investment levels by the private sector to exploit these state owned forestry plantations. The Government would like to see more private sector partnership in the exploitation and management of these plantations.

Despite establishment of these forest plantations and reserves, the problem was that these plantations were only owned and managed by the Government and people were still exploiting natural forests on customary land in unsustainable ways. As a result, there was a lot of deforestation on customary land. The Government thus changed focus to promoting tree planting by the people for fast growing trees such as eucalyptus and acacia. But the challenge is to understand what has been the impact of such efforts on the forest cover and socioeconomic development. The Department has not been able to undertake such assessment due to financial and capacity problems. The Department feels that there is a need to quantify the social, economic and environmental impacts of these tree planting activities.

The country has not been able to quantify the contribution of forestry to national development nor the socioeconomic impact of forests on poverty. In addition to timber, the use of non-timber forest resources (mushroom, medicines, etc.) has been increasing and significant. But there have not been many studies to quantify the socioeconomic impacts of these resources. Some small studies might have been done in some parts of the country.

There is also a wide recognition that forestry resources have been greatly undervalued in Malawi due to the lack of information and quantification of the market value of such resources. This is evidenced by the low fines or compensations paid for illegally exploiting forest resources. There is a need to quantify the real values. Some forest resources are being taken out of the country to neighbouring countries and beyond because they are undervalued. In sum, the demand for forest resources is high, but there is no capacity to sustain the production of these resources.

In addition to assessing the values and impacts of forest resources to enhance efficient and sustainable utilisation, sustainable management of forests has benefits on water resources and reducing flooding – problems frequently facing the country. The current focus of the Government is on development as highlighted in the MGDS but there is insufficient emphasis on sustainable management of natural resources especially forestry resources.

### 3.4.2. Role of the Forestry Department

Changes in the Government administration from colonial times to the present have come up with different development priorities and this has influenced the activities and institutional set-up of the Forestry Department. In the 1970s, the Department was part of the Ministry of Agriculture. Later they were split into two different Ministries.

In the past Forestry Department has been in the same Ministry with the Environmental Affairs, Wildlife and Fisheries Departments, thereby allowing for some level of coordination and linkages. In the current setup, Forestry has been placed in the Ministry of Energy and Mines, while the EAD is under the Ministry of Lands and Natural Resources and the Wildlife Department is under the Ministry of Tourism and Wildlife. The separation of the various natural resources related Departments has reduced the avenues for coordination and linkages.
In the past years, the Department has been organised into four functional units:

- Development Services – dealing with forestry plantations and protected reserves;
- Extension Services – dealing with promotion of conservation and management as well as training;
- Planning – dealing with policy issues and monitoring and evaluation as well as research; and
- Administration – dealing with general administration, personnel issues and financial management.

The Department is running a Forestry Research Institute (FRIM) based in Zomba and a training institution called Malawi College of Forestry and Wildlife based in Dedza district. The College is run jointly with the Department of Wildlife.

Following a functional review of the Department, the functions of the Department are centred on the current establishments. The Department is headed by the Director of Forestry. The Director is supported by three Deputy Directors – for Administration, Research and Plantations. The planning, training and extension services fall under the Deputy Director for Administration. The research activities including the FRIM are coordinated by the Deputy Director for Research.

The Department has three regional offices (north, centre and south) and district offices in all 28 districts which undertake various functions and responsibilities for the districts and communities. The District Forestry Offices work under the coordination of the District Assembly and are guided by District Development Plans. The key constraints at district level have been limited staff capacity and funding for these establishments.

### 3.4.3. Forestry Policies and Legislation

The forestry sector is guided by the Forestry Policy and Act. These have been translated into a National Forestry Programme to guide implementation of forestry programmes, projects and activities. In addition to these, the MGDS also provides recognition and direction on the importance of the forestry sector to national development.

The overall goal of the National Forestry Policy (1996) is to facilitate conservation of forest resources to sustain the contribution of national forest resources to the population of the country. This involves a number of issues such as facilitating regulated and monitored access to forest resources by the people of Malawi and promoting community-based conservation and sustainable utilisation of forest resources for income generation and poverty reduction.

National Forestry Act was put in place in 1997 to assist in the following issues:

- Protection and management of forest resources in protected forest reserves and on customary land to maintain environmental stability, prevent resource degradation and increase social and economic benefits;
- Promotion of community involvement in conservation and management of forest resources in community forest resources and protected forest areas; and
- Protection of fragile areas such as steep slopes, river banks, water catchments and the conservation and enhancement of biodiversity.

The National Forestry Programme (NFP, 2001) was developed to translate the provisions of the Forestry Policy and Act into strategies, priorities and viable actions for implementation. The NFP aims to achieve sustainable management of forest goods and services for improved and equitable livelihoods.
The MGDS as an overall development strategy for Malawi also highlights the importance of the sustainable use of natural resources to achieve economic growth and development. One of the key natural resource identified is forestry. The MGDS calls for sustainable use and management of forestry resources through a number of strategies such as increasing reforestation efforts of key areas; initiation of reforestation and environmental rehabilitation programmes in priority areas, improving enforcement of regulations for forestry management; introducing incentives for private sector participation; and improving productivity and value added by the industrial forestry sector.

3.4.4. Institutional Collaboration in the Forestry Sector

The Forestry Act 1997 calls for the establishment of a Forestry Management Board to deal with all matters relating to tree and forest management in Malawi. The composition of the board is multi-sectoral involving several key stakeholders as follows:

- PS for Natural Resources;
- PS for Agriculture and Livestock Development;
- PS for Lands;
- PS for Local Government and Rural Development;
- PS responsible for District Administration in the Office of President and Cabinet;
- PS for Energy and Mining;
- PS for Works and Supplies;
- PS for Research and Environmental Affairs;
- General Manager of National Herbarium and Botanic Gardens;
- General Manager of Electricity Supply Commission of Malawi (ESCOM);
- Director of National Parks and Wildlife;
- Director of Fisheries;
- Director of Forestry – provides Secretariat to the Board;
- Representative of the University of Malawi;
- Representative of the Timber Association of Malawi; and
- 3-5 members representing the general public.

The Board is supposed to meet at least twice a year. Currently the Board is functional and is chaired by a representative of the University of Malawi. Further assessment of the board will need to be done to find out the specific composition, activities and responsibilities considering changes in the Government Ministries and Departments over the years. As with other similar structures in other sectors such as water, the Board is not fully functional to undertake its coordinating and advisory role due to financial constraints. In addition, there seems to be very little coordination of these structures apart from the fact that a number of same people may be in different bodies. In the absence of formal coordination arrangements among different sectors, the efficacy of these boards may be challenged.

The Department of Forestry has been working with a number of Government Departments to promote forestry issues. This collaboration has mainly been based on joint programmes or projects. For these joint steering committees and implementation arrangements have been established.

Currently the following projects are being implemented by the Department:

- EU project on improved Forest Management for Sustainable Livelihoods – this is the main project in the Department covering 12 districts. The total cost of the project is 9.8 million Euros. The project is for an initial period of 5 years with the potential for extending into a second phase;
- Two Government funded development projects: Forestry Replanting and Seed Nursery Project (FOREP, MK 50 million) and Tree Planting for Carbon Sequestration Project (MK 80
million). These have been funded by the Government of Malawi with support from the Energy Fund and other sources;

- The Department is also working on the Lake Malawi Artisanal Project with the Fisheries Department (ADB funded); and
- Some small research projects at FRIM.

In the past, Forestry has been working closely with the Ministry of Agriculture especially on areas of agroforestry and afforestation. This has also helped forestry to link up with other international organisations such as World Agroforestry Centre (ICRAF).

The Department has also been working with Department of Wildlife and National Parks especially when they were in the same Ministry. Now the two Departments have been put in different Ministries with different mandates, and there are problems in working together. For example, the Forestry Department has to hire armed wildlife guards for the protection of forests. The Department is trying to establish working relationships with Ministry of Defence on the protection of forests. There is still scope to work together with Wildlife and Parks on ecotourism in the forest reserves.

Forestry has also been working closely with EAD on a number of programmes and projects. EAD is considered as a coordination body for environmental issues and not an implementer. EAD has helped to link Forestry Department to donor funded projects and programmes. This was also working well when the two Departments belonged to the same Ministry. Separation of EAD and Forestry to different Ministries has negatively affected coordination and implementation of joint projects and programmes. Forestry and EAD are also not coordinating well at district level. Forestry and EAD staff members are mostly engaged in different activities.

The Department has also been working with National Herbarium and Botanical Gardens (a parastatal organisation) – which was an offshoot of the Forestry Research Institute. This work has been on the areas of research and monitoring. Currently their working arrangements have problems because they belong to different lines of authority since the National Herbarium is now a parastatal organisation. The Forestry Department has been working with the National Research Council on a number of projects supported by the Council through a small grants programme.

The Forestry Department has been working with national universities especially the University of Malawi – Bunda College of Agriculture – and the Mzuzu University – on training and capacity building. This relationship has been growing over the years.

At the national policy level, the Department has not had much linkage with MEPD on policy issues. The Department is not fully involved in key policy processes and budgeting processes – it is only required to supply information for MEPD.

There are a number of CSOs the Department has worked with – mostly based on projects. The Department is trying to increase its collaboration with CSOs as partners. The CSOs the Department has been working with include: Coordination for the Rehabilitation of the Environment (CURE); Wildlife and Environmental society of Malawi (WESM); Concern Universal; CARE International Malawi; and Mulanje Mountain Conservation Trust.

The Department has also been working well with the media – radio, newspaper and TV. For example, TV Malawi has placed a technician at the Forestry Department to assist in programmes on forestry issues.
3.4.5. Challenges for the Forestry Sector

One of the main challenges is low funding reflecting low Government priority on natural resources and forestry. The low priority assigned to the forestry sector is also evidenced by low and declining budgets over the years. In the 2007/08 budget, Energy and Mining have specific/separate budget votes but Forestry as a separate Department has no specific budget vote as it is embedded in the Ministry’s administrative operational budget. Forestry budget is equivalent to 0.3 % of agriculture budget.

The Forestry Act also calls for the establishment of a fund to assist in the conservation and management of forest resources and forest lands in Malawi. This fund was supposed to be administered within the sector (by the Department) to take care of proceeds from the utilisation of forest reserves. These funds would compliment the Government funding to the sector. Currently the fund is not functioning and all proceeds from forest resources (concessions from forest lodges, sale of timber from forest plantations) are pooled into central Treasury. There is need to further assess the problems with the fund and operationalise the management and utilisation of the fund for the benefit of the forestry sector.

There has not been much debate and interest shown by the Members of Parliament as individuals or committees on forestry issues and problems. The forestry issues are supposed to be handled by the Parliamentary Committee on Agriculture and Natural Resources but they have not taken centre stage as compared to food security issues such as the fertilizer subsidy issue. The key challenge is how to influence political commitment to forestry and environmental issues. This will require assembling up-to-date information on the state of environmental degradation and economic impacts of such degradation and use such information to raise awareness and stimulate action for key decision makers.

Poor data and information management has led to lack of updated data sets for forestry. The sector has been relying on the Forestry Research Institute as an information centre but the Department has also been trying to have capacity at headquarters and districts levels. In general there has been poor information management at forestry headquarters and districts mainly due to poor resource allocation. The Department is hoping to get support from the EU project to improve information management at headquarters as part of extension services.

Dissemination of forestry information is also considered weak due to capacity problems. Data for most forestry issues is not available. For example, much data on forest cover is based on a World Bank study carried out in 1992. There is a need for urgent support in this area to update key data sets and develop credible information management.

There has been high staff turnover and there are many positions not filled - the vacancy rate is about 37%. In addition more staff training is required.

Lack of coordination and integrated resource management between sectors is also a major challenge, as explained above.

Potential PEI Entry Points:

- Stimulating and influencing political commitment to forestry and broader environment and natural resources issues through the Parliament and Cabinet. There is a need to engage these bodies into evidence-based consultative and awareness meetings and workshops to bring forward the issues relating to the importance of the forestry sector and its link to national development. The first step will be to assemble relevant facts and figures on the
state of the forest resources and other natural resources and their economic as well as social cost and benefits to the country.

- The donors have played a major role in supporting and influencing the Government policy on development. There is need to also raise awareness of the donors and the aid coordination group on the state of forest resources and other natural resources and their economic, as well as social, cost and benefits to the country. This should influence donors to harmonise their policies and approaches on natural resources/forestry/environmental issues so as to influence the Government national agenda/policy and provide effective and coherent support to the Government and the communities.

- There is a need for support to the collection of data on forestry resources and updating national information for effective programming. Specific studies or surveys will have to be done to collect basic environmental/forestry information to support national planning. One area could be updating of land cover and use maps/profiles. There is also a need to quantify the real value of forest resources as well as the contribution of forestry to the national development, including the socioeconomic impact of forests and non-forest resources on poverty.

### 3.4.6. Synopsis of the Energy Sector

About 84% of the available energy is consumed by households, while 8% is used in the agricultural and natural resources sector. The remainder is used in transport (4%), industry and mining (2%) and in other social services (2%).

Overall, there is heavy reliance on biomass energy. About 93% of energy demand is supplied by biomass (firewood, charcoal, crop and industrial residues). Biomass (especially firewood and charcoal) supply almost 99% of household energy demand for rural households.

<table>
<thead>
<tr>
<th>Source of energy for cooking (proportion of households - %)</th>
<th>Malawi</th>
<th>Rural Malawi</th>
<th>HS2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>firewood</td>
<td>89.9</td>
<td>97.0</td>
<td></td>
</tr>
<tr>
<td>charcoal</td>
<td>6.8</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>electricity</td>
<td>1.7</td>
<td>0.4</td>
<td></td>
</tr>
</tbody>
</table>

Rural households account for 58% of the fuel wood consumption while urban households account for 42%. On the other hand, urban households use more fuel wood per capita (about 1.56 cubic meter) than rural households (0.85 cubic meter), because of using mainly charcoal produced through traditional inefficient methods (7 tons of firewood to produce 1 ton of charcoal). Industries (mainly tea and tobacco estates) account for 20% of fuel wood consumption while brick making, fish smoking and other small scale industries use about 10% of fuel wood.

Recent trends show that demand for forest products is greater than the supply. Annual consumption of forest products is estimated at 15 million cubic meters while potential sustainable supply from current sources is estimated at about 7-8 million cubic meters. This is escalating deforestation.

### 3.4.7. National Energy Policies

To improve coordination and efficiency of the energy sector, the Government has developed an integrated energy policy. The objectives of the National Energy Policy (2003) are to:

- Improve efficiency and effectiveness of the commercial energy supply industries;
• Improve the security and reliability of energy supply systems;
• Increase access to affordable and modern energy services;
• Stimulate economic development and rural transformation for poverty reduction;
• Improve energy sector governance; and
• Mitigate environmental, safety and health impacts of energy production and utilisation.

One of the policy goals is to reduce dependence on biomass energy from 93% in 2000 to 50% in 2020 with the other 50% of energy coming from modern energy sources. The other energy sources include electricity (to increase from 2.3% to 30%), coal (to increase from 1% to 6%), liquid fuels (to increase from 3.5% to 7%) and renewable sources (to increase from 0.2% to 7%).

The policy also calls for measures to ensure that energy programmes do not compromise the environment, safety and health. These include undertaking EIAs for energy projects, promoting environmental friendly technologies and promoting energy conservation.

The MGDS highlights that despite having a wide variety of energy resources, Malawi’s energy generation and supply is inadequate, unreliable and inaccessible to many. The key challenges associated with this situation include limited public and private investments in energy generation and supply, and reduction in electricity generation as a result of siltation due to deforestation and poor farming practices.

The MGDS proposed strategies for the energy sector include improving efficiency in power generation, transmission and distribution by ensuring strong public-private partnerships; expanding rural electrification programme using alternative sources (mini hydropower stations, solar energy); and ensuring that negative environmental effects and impacts are taken into consideration and minimized.

Although energy generation and supply is a MGDS priority, many stakeholders feel that this has not been matched with resource allocation.

3.4.8. Role of the Energy Department

The role of the Department of Energy within the Ministry of Energy and Mines is to advise Government on energy policy and to design energy programmes and coordinate implementation. It also operates as a technical line Ministry supporting the Electricity Supply Commission of Malawi (ESCOM).

The Department undertakes its activities in collaboration with other stakeholders within the Government, CSOs and the private sector. One of the means of collaboration was the development of Energy Policy through a consultative process.

The Department has also been working with EAD to ensure that any energy project must undergo an EIA as per environmental laws. The Department has been collaborating with MEPD on formulation and review of the MGDS on the energy issues and on the infrastructure services project funded by the World Bank. The Department has also been working well with the Ministry of Health and the Christian Health Association of Malawi (CHAM) to provide electricity to rural health centres through the rural electrification programme.

To improve capacity in the energy sector, the Department has been working with the Mzuzu University where they have established a training unit on renewable energy sources, especially solar power.
The Department has also been working with CURE on energy and environmental issues involving CSOs. Currently there are no CSOs working directly with the Department on energy programmes.

To enhance collaboration with the private sector, there is a consultative forum through the Nation Action Group (NAG) on the private sector which also discusses energy issues, such as electricity shortages and blackouts, and the Department has participated in such forums. The Department is also working with the recently formed association of solar companies.

There is need to establish more collaboration between the energy sector and the Water Resources Board on electricity issues. There is insufficient action to deal with the Shire River problems affecting electricity generation such as exotic weeds and siltation. ESCOM is currently a member of the Water Resources Board but they feel the Board is not doing much to address the water problems affecting the Shire River (see page 40).

Energy issues are also not well appreciated and addressed at Parliamentary level. The Agriculture and Natural Resources Committee of Parliament has not been very active on energy issues.

The Department of Energy is involved in compilation of information for the energy sector such as the energy balance which is transmitted to SADC. The Department also collects data from energy companies (ESCOM, oil and coal companies) on a monthly basis. This information is used to assess energy availability and constraints for the country.

Currently the Department is implementing two major projects:
• Rural electrification programme – funded by the Government through the fuel levy and donor funding. This is implemented through ESCOM; and
• Renewable energy project – funded through UNDP. This is promoting solar power energy.

The Department faces a number of challenges. These include:
• Low Government funding to undertake all its mandates;
• Personnel challenges – high staff turnover. The Department does not have an elaborate structure or career path to retain professional staff; and
• The Department is only based at headquarters level. It does not have regional and district representation and it is difficult for it to contribute adequately to decentralised planning and programming.

Potential PEI Entry Points:
➢ The Department feels that any support to their efforts should be directed at supporting the rural electrification programme (grid electricity, mini hydropower systems, solar power). This will increase access to electricity for the rural areas and peri-urban areas thereby reducing demand on biomass energy and deforestation. The Department also needs support to facilitate its coordination roles and activities.

Case Study 2: Electricity Corporation of Malawi (ESCOM)

ESCOM is the Government owned only supplier of electricity in Malawi. ESCOM produces economic benefits for the country from water resources by generating hydroelectric power.

Physical degradation of the environment is causing serious problems for ESCOM. This is manifested in the following ways:
• Siltation of the Shire River due to massive soil erosion causing reduced volumes of water; and
• Increase in aquatic weeds due to increased nutrient load from agricultural activities which block water flow.
The negative effects of these have been significant to the company and the economy as whole. Some of the direct effects include the following:

- There is a 10-12% reduction in power generation due to siltation and reduced water flows. The capacity of ESCOM is about 300 megawatts per day. This reduction in power generation means a big loss if valued in real economic terms.
- ESCOM is spending more money on maintenance and repair of turbines due to effects of siltation. There is a loss of revenue of MK 3 million per day when ESCOM shuts one turbine for maintenance.
- The loss to industry due to the reduced power and blackouts has been estimated to be 10 times that of ESCOM, translating into approximately MK 30 million per day.
- The replacement cost of one turbine is about MK 200 million and turbines are wearing out faster due to the silt.
- ESCOM is spending MK 8 million per month for removing aquatic weeds blocking water flow in the Shire River at Liwonde barrage. In addition, this year ESCOM is spending MK 80 million to buy equipment (harvester and trucks) for removing the weeds.

The demand for electricity is growing at 4-7% per annum. Currently ESCOM is not able to meet the demand of 250 megawatts. Although ESCOM has a capacity of 300 megawatts, one machine at Tedzani (40 megawatts) is not working and there is also reduced power generation due to the environmental problems.

To deal with the problems, ESCOM regularly brings together stakeholders such as the industry and the media to discuss electricity problems. ESCOM is also working with the Government on policy issues. ESCOM is a member of the Water Resources Board which is responsible for all water issues in the country. ESCOM has also taken part in rehabilitation of the environment by distributing tree seedlings to communities for afforestation. It would be most useful if the Government could do more to enforce policies and legislation to ensure environmentally sustainable resource use. In addition, it would be most useful if the Government could put more emphasis on harmonising policies and legislation of different sectors to ensure sustainable environmental management.

ESCOM is working with the Government with financial support from World Bank on an interconnection project with Mozambique to be able to import power when there is a deficiency and to export power when there is a surplus.

Government is also implementing a rural electrification programme to increase access to electricity in the rural areas. ESCOM is used as a contractor to install electricity grids and provide electricity. The installation costs are paid fully by the Government because some of the sites are not economically viable for ESCOM. According to ESCOM, the electricity tariffs charged in Malawi are below costs and are the cheapest in the region to help poor people access electricity. Electricity industry was liberalized to allow private sector participation in distribution or even generation of electricity but so far no players have joined.

The ESCOM case shows that there is a close interrelationship between forestry resources, water resources, energy supply and agricultural activities:

- Water resources provide the source for hydroelectric power generation.
- Forestry resources provide energy sources for the majority of the population.
- Increasing access to electricity has the potential to reduce overdependence on biomass energy from forest resources.
- Deforestation results in increased erosion which leads to siltation of rivers and water bodies, thereby reducing water volumes and flow rates. This results in reduced hydroelectric power generation and increased maintenance and repair costs for equipment. There are also increased costs due to dredging the silt from the generation plants.
- Agricultural activities also cause erosion and siltation. Increased use of inorganic fertiliser and chemicals in agriculture coupled with erosion lead to increased nutrient loads in the water bodies causing flourishing of aquatic weeds. These aquatic weeds are reducing and blocking water flows in the Shire River. ESCOM is incurring high costs to physically remove the weeds from the river flow system.
- Increased cost of electricity generation results in increased cost of electricity supply to
households and industries, making electricity unaffordable for many and increasing production costs in industries.
- Reduced electricity supply and blackouts cause high losses to the industry and the economy as a whole.

Following from the above, there is a need for close collaboration and coordination of efforts among different sectors to deal with the electricity problems. The coordination needs to start from policy level and extend to programme implementation. The PEI may explore ways of facilitating this complex coordination and collaboration by providing evidence of the benefits and economic costs of the inter-linkages and collaboration, i.e. identifying the weakest and strongest links.

To reduce energy problems and improve access to electricity, there are a number of measures which need to be undertaken:
- Private companies to explore and utilise untapped hydropower in the country by installing mini hydroelectricity generation. The Government could support these efforts by sourcing the initial equipment and providing them loans or guaranteeing credit facilities with commercial banks.
- Reduce costs/taxes on electrical installation equipment and appliances to encourage people to use electricity. This can be done by reducing duty and VAT on such equipment to make them more affordable especially for the rural populations which are targets for the rural electrification programme.
- Assess alternative sources of energy so as not to rely only on electricity. The use of gel fuel, thermal power stations using coal etc. need to be explored.
- Government and the CSO partners to intensify on afforestation programmes to increase forest cover so as reduce soil erosion and siltation of water bodies.

3.5. Ministry of Tourism, Wildlife and Culture

3.5.1. Synopsis of the Wildlife Sector

Malawi’s wildlife resources as part of the natural resource base are subjected to various forms of degradation. Major problems in the wildlife sector are poaching and encroachment leading to destruction of natural habitats and deforestation. For example, recent statistics show that elephants were wiped out completely in Majete game reserve while in Kasungu National Park; they declined from 2853 in 1979 to 391 in 1995. Nationally they declined by 50 % from 4500 in 1979 to 2250 in 1995.

The problem is more serious in the unprotected areas. The protected areas, accounting for 21.6 % of land area, include the national parks, wildlife reserves and forest reserves. These areas contain more wildlife resources. There is a multiplicity of factors leading to this degradation, namely, increasing human population pressures; general poverty levels; over-exploitation; and limited appreciation of the value of wildlife by the general public. The tendency to over-exploit the wildlife has brought about serious conflicts between law enforcers and the public in the vicinity of the protected areas.

In the past the Government was responsible for all wildlife conservation and was seen as hostile to communities surrounding the protected reserves. The Government changed its policy in 2000 to involving other stakeholders, especially communities, private sector and CSOs. The Government is working with CSOs to help communities to understand the need for conservation so as to get tangible benefits from wildlife and the protected areas. The Government has developed access and benefits sharing guidelines to be used in all protected areas.

The goal of the National Wildlife Policy (2000) is to ensure proper conservation and management of wildlife resources in order to provide for sustainable utilisation and equitable access to the
resources and fair sharing of the benefits from the resources for both present and future generations of Malawians.

The policy embraces the following objectives:

- To ensure adequate protection of representative ecosystems and their biological diversity by promoting and adopting appropriate land management practices that are in line with sustainable utilisation considerations;
- To create public awareness and understanding on the need for wildlife conservation and management and also their relationship to other land use issues;
- To create a conducive environment for wildlife-based enterprises;
- To facilitate development of necessary legislation and enforcement mechanisms in order to eliminate illegal wildlife use; and
- To develop a cost-effective legal, administrative and institutional framework for managing wildlife resources without compromising the resources' ecological attributes.

The Wildlife Policy is part of the Government’s land-use plans and is aligned to the National Environmental Policy and also to related sectoral policies such as Lands, Agriculture, Forestry, Fisheries, Water and Tourism.

3.5.2. Role of the Department of Parks and Wildlife

The Department of Parks and Wildlife is mandated to oversee wildlife conservation in Malawi. The general objective is to protect examples of natural habitats of wildlife and conserve wildlife in Malawi. The Department has been moving from Ministry to Ministry over the years. It was under the Ministry of Natural Resources and Environment and then it was moved to the Ministry of Information and Tourism. Currently it is a Department under the Ministry of Tourism, Wildlife and Culture. Tourism is an important benefit from wildlife conservation.

 Principally, the Department remains the main player for overseeing the conservation and management of wildlife resources in the protected areas such as gazetted national parks and wildlife reserves. The Department manages eleven protected wildlife areas in Malawi – 3 in the north, 3 in the centre and 5 in the south. The mandate of the Department goes beyond protected areas – it is responsible for managing wildlife outside protected areas as well.

The Department is organised into 3 sections:

- Wildlife Management – responsible for management of protected areas. This involves law enforcement, wildlife control and infrastructure development;
- Education and Extension – responsible for information dissemination on conservation and outreach to communities; and
- Research and Planning – responsible for monitoring and research to generate information to enhance good management of wildlife.

The Department has its headquarters in Lilongwe and it also has regional offices in the three regions of Malawi. It also has offices in all the protected wildlife reserves and national parks.

There is a general acknowledgement that work in the area of wildlife conservation needs to be done in close collaboration with multiple other key stakeholders namely Government Departments (forestry, water, agriculture, tourism, security), local communities, CSOs and the private sector. In order to minimize conflicts between the state and the communities as well as conflicts between wildlife and communities, the Department is moving towards more community-based management of wildlife with an increased share of the benefits accruing to the communities than has been the
case in the past. The importance of other organisations to the sector has also been viewed with respect to budgetary needs and community awareness raising and mobilisation.

The Department is also guided by several international conventions on Trading of Endangered Species, Wetlands Management, Heritage Sites and the SADC Wildlife Protocol. The Department is a national focal point for the above conventions and protocols. The Department also participates in the activities related to other international conventions, such as CBD and UNFCCC.

In the implementation of wildlife policies and programmes, the Government has become increasingly conscious of the need to pursue more participative approaches to managing natural resources, including wildlife. Thus, partnerships formation with all key stakeholders, including communities has taken the centre stage. Areas of responsibility between the state and non-state actors are being closely looked at to promote this partnership in wildlife management. This notwithstanding, the Department remains the authority over all policy and legislative matters. It also coordinates all works of all stakeholders in this sector in tandem with existing policy and legislative frameworks.

Considering that tourism is the major source of economic gains from protected areas, the Department is currently working with private sector operators to manage tourist lodges in protected wildlife areas through concessions.

The Department also collaborates closely with other Government Departments through certain projects and initiatives. The Department participates in a number of EAD coordinated structures such as NCE and TCE. The Department has also been interacting with the Ministry of Irrigation and Water Development on wetland management issues although limitedly. The Department has been working with Forestry Department by assisting in wildlife monitoring in forest reserves, providing some training and firearms to forestry guards, and jointly running the Malawi Forestry and Wildlife College in Dedza.

In a bid to promote transparency and accountability in policy implementation, there is a requirement for a Wildlife Research and Management Board. The Board’s main function is advising on important wildlife conservation and management issues. Currently the Board is not established. The question, however, remains on how effective the Board will be without adequate operational funding.

The Department has also been working closely with CSOs over the years on a number of wildlife conservation issues. The main CSOs working with the Department are: WESM, CURE, Danish Hunters Association, Total Land Care and Kuti Private Game Ranch.

The Department is also working with some universities and organisations on a number of wildlife research activities:

- University of Malawi – Biology Department doing some research work in Lake Malawi National Park;
- Museum of Malawi is working with University of Chicago studying small birds in Nkhotakota Game Reserve;
- There is an annual scientific expedition to Nyika National Park involving UK university students and officials. Every year they write a report on the expedition with useful recommendations for wildlife management and conservation.

The Department feels that there is a need to come up with more avenues for collaborative research work with universities.
3.5.3. Challenges for the Wildlife Sector

The Department faces a number of challenges which limit its activities on wildlife and biodiversity conservation.

One of the challenges is staff shortages. The Department has a lot of vacancies – e.g. the optimum staffing levels for wildlife camps is 5 but for most camps there are 2-3 staff members. In addition there is high staff turnover mainly due to lack of incentives for staff, especially staff working in the bush.

There is also shortage of funding for operations, especially for research and monitoring. The Department is relatively big in terms of staff to manage the protected areas. Funding provided is mainly for salaries and very little for operations (funding is shared between Tourism and Wildlife Departments). This year funding has improved – almost doubled.

Donor funded projects have helped in other activities of the Department, especially on infrastructure development. For example, in Nyika National Park there was a GTZ/KWF project dealing with the core zone and border zone issues. Currently there are no donor funded projects – the Department is still in the process of developing proposals.

At policy level, wildlife conservation seems not to be a priority area despite the heightened attention on promoting tourism. Top level Government management seems not to fully appreciate the importance of wildlife and natural resources conservation.

There is little support from the Parliament on the need to increase the budget for Wildlife Department to ensure effective wildlife conservation. A number of MPs complain of wildlife destroying crops and the Department not doing much to stop the problem. There is a Parliamentary Committee on Commerce, Industry and Tourism which is the link between the Department and the Parliament. There has been some little interaction with the Committee. On the natural resource aspects, there has not been much interaction with the Agriculture and Natural Resources Committee despite the current chairperson of the committee being a former senior staff member of the Department of Wildlife and National Parks.

High poverty leading to people depending on wildlife resources for livelihoods has resulted in increased poaching. There is need to work more with the communities on activities such as wildlife farming, e.g. rearing game and selling game meat and getting people involved in managing crocodiles in the Lower Shire River for economic benefits.

Information on wildlife resources has not been regular and up-to-date. The Department is trying to compile information on wildlife resources and create a database. There is some information being collected every year in Nyika, Liwonde, Kasungu and Lengwe but for the other areas there is insufficient information being collected.

There has also not been much quantification of the costs and benefits associated with wildlife resources. This is due to a lack of information and funding to undertake such exercises. People do not fully see and understand the benefits of conservation.
4. District Level Government Institutions

The decentralisation system allows for districts to operate fully in terms of planning, programme implementation and monitoring. The District Assembly is the hub of all district activities and development. The District Assembly is headed by the District Commissioner who is assisted by the Director of Planning and Development as well as technical people from the different Departments related to different sectoral Ministries and Departments. Some Ministries have decentralised and have offices and officers at district level, while others have not yet decentralised. Those who have presence at district level include Agriculture, Forestry, Water, Community Services and Social Welfare, Environmental Affairs, Education and Health.

The assembly governance system includes the Assembly which is comprised of local leaders (chiefs, elected councillors and MPs). This is the supreme decision maker at district level and is headed by a chairperson. The District Commissioner is the executive head of the District Assembly and operates as a secretariat for the Assembly. Technically the District Commissioner is guided by the District Executive Committee (DEC) comprised of technical people from the District Assembly, sectoral Departments and CSOs. This Committee provides the policy and programming guidance for the District Commissioner and the District Assembly. The DEC also has subcommittees for different sectoral issues such as environment and natural resources, forestry, HIV/AIDS and others.

Below the district level there is an Area Development Committee (ADC) comprised of local chiefs, councillors and other local leaders) at traditional authority level. The ADC is supported by an Area Executive Committee (AEC) comprised of technical people from Government Departments and CSOs operating in those areas. The ADC and the AEC provide linkages with Village Development Committees (at group village level) and local communities. At village level there are also committees involving communities for different issues such as natural resources committees, and village AIDS committees. (See Diagram 1 on page 62.)

The District Assembly through DEC produces a district socioeconomic profile every five years and this is translated into the District Development Plan. The District Environmental Officer supported by the Environment and Natural Resources Subcommittee of DEC are responsible for developing the district State of the Environment Report every two years and assessing all development programmes for compliance with environmental policies and laws.

Potential PEI Entry Points:

- To ensure integration of environmental sustainability in the District Development Plans, there is a need for capacity building of the DEC and its subcommittees through training and development of guidelines and indicators for mainstreaming environmental sustainability. This is an area which PEI can support on a pilot basis. Although PEI does not have funding for a broad district level programme, pilot activities could act as catalyst for securing funding from other donors for a comprehensive district level mainstreaming programme.

- There is also a need to support the district to undertake mass sensitisation through local level structures on the scale of environmental degradation and the importance of conservation and ensuring environmental sustainability in development activities. Some resource materials and other information and financial support will be needed to support the district to undertake this mass sensitisation campaign. The civil society organisations will also need to support the districts in this challenging initiative to ensure that the local masses appreciate the need for environmental conservation and management for sustainable development.
Case Study 3: Blantyre District Assembly

Blantyre district is one of the densely populated districts in the southern region of Malawi. The district contains Malawi’s largest commercial and industrial city. This has caused strains on the environment in...
the city and the surrounding rural areas. Environmental degradation is therefore a key and increasing problem in the district.

According to the district socioeconomic profile the major environmental problems for the district are highlighted in the following summary:

<table>
<thead>
<tr>
<th>Rank</th>
<th>Problem</th>
<th>Causes</th>
<th>Affected traditional Authority Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Deforestation</td>
<td>Firewood &amp; charcoal; Timber/poles for construction; Brick burning; Agricultural expansion; Infrastructure development.</td>
<td>All traditional authorities</td>
</tr>
<tr>
<td>2</td>
<td>Over excessive population density</td>
<td>Migration from rural to urban areas; Insufficient emphasis on family planning.</td>
<td>Kapeni Machinjiri Makata Somba</td>
</tr>
<tr>
<td>3</td>
<td>Water pollution</td>
<td>Water hyacinth; Poor disposal of wastes; Effluent from industries; Spillage of sewerage streams; Chemicals run-off from farming; Farming and settlements alongside rivers; Washing and bathing in rivers; Use of poisonous herbs in fishing.</td>
<td>All traditional authorities</td>
</tr>
<tr>
<td>No.</td>
<td>Issue</td>
<td>Problem</td>
<td>Authority</td>
</tr>
<tr>
<td>-----</td>
<td>--------------------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>4</td>
<td>Unplanned settlement</td>
<td>Delay in allocation of plots; Lack of enforcement of planning regulations (all trading centres); Lack of relevant legal instruments to enforce development planning; Lack of understanding of the consequences of unplanned settlements; Insufficient attention from authorities; Encroachment.</td>
<td>Kapeni Somba Machinjiri</td>
</tr>
<tr>
<td>5</td>
<td>Waste mismanagement</td>
<td>Improper waste disposal; Lack of refuse collection; Lack of refuse pits/bins.</td>
<td>Kapeni Somba Makata Kuntaja Machinjiri</td>
</tr>
<tr>
<td>6</td>
<td>Land degradation</td>
<td>Deforestation; Bush fires; Overgrazing by animals livestock; Monocropping; Ridging along the slopes.</td>
<td>All traditional authorities</td>
</tr>
<tr>
<td>7</td>
<td>Disease outbreak</td>
<td>Careless disposal of refuse; Unhygienic practices; Utilisation of unsafe drinking water.</td>
<td>All traditional authorities</td>
</tr>
<tr>
<td>8</td>
<td>Drought</td>
<td>Deforestation; Rain shadow; Climatic changes.</td>
<td>All traditional authorities</td>
</tr>
<tr>
<td>9</td>
<td>Water hyacinth</td>
<td>Importation of weed</td>
<td>All traditional authorities</td>
</tr>
<tr>
<td>10</td>
<td>Air pollution</td>
<td>Fumes from factories and engines; Use of CFC fridges and freezers.</td>
<td>Kapeni Kuntaja Machinjiri</td>
</tr>
<tr>
<td>11</td>
<td>Siltation</td>
<td>Cutting down of trees in river catchments.</td>
<td>Kapeni Kuntaja Machinjiri</td>
</tr>
</tbody>
</table>

Source: Blantyre District Assembly

There is high energy demand from Blantyre city which is within the district. This is mainly supplied for in form of charcoal and firewood, and this leads to increased deforestation problems in the district. In addition, there are limited alternative livelihood strategies for the rural people in the district; therefore they engage in destructive charcoal business and other natural resource based activities to support their livelihoods and feed the increasing city demand.

There is also a problem of water pollution for rivers passing through the city into the rural areas because of dumping of wastes in the city. Issues of environmental health have been a problem in the district due to poor sanitation. Every year there are cases of cholera in the district. There is a committee looking at water and sanitation at district level which is undertaking activities promoting hygiene and the use of improved toilets. There is also an emergency response facility every year supported by UNICEF and Ministry of Health, mostly in the rainy season to deal with environmental health problems.

Water scarcity has not been a problem of the district in the past except when there is a drought this problem is being aggravated by deforestation.

The district has established a number of initiatives/activities to deal with the various problems. Some of these include:

- Establishment of a District Environment Sub-Committee (DESC) as a subcommittee of the District Executive Committee to advise the Assembly Members, DEC, ADCs and VDCs on the issues of environment;
- Establishment of the office of the District Environmental Officer within the District Assembly to coordinate environmental activities in the district;
- Development of the District State of the Environment Report (DSOER) and the District Environmental Action Plan (DEAP) to guide programme implementation;
Facilitating formation of community level environmental management committees e.g. Village Natural Resources Management Committee; and
Implementing a number of environmental projects such as MASAF afforestation projects.

Coordination at district level
Coordination at district level is facilitated through committees. The main committee is the District Executive Committee (DEC). This a technical arm of the District Assembly comprising of all sector Departments and CSOs in the district. The DEC has several subcommittees responsible for different sectoral responsibilities:

- Technical Working Group on Social Welfare, Orphans and Vulnerable Children;
- District Training Team;
- District AIDS Coordinating Committee;
- District Youth Committee;
- Finance Committee;
- Planning and Development Committee;
- Works Committee;
- Education Committee; and
- Agriculture and Environment Subcommittee.

The District Environmental Officer is responsible for coordinating environmental issues at district level. Currently, the district does not have an officer as the incumbent left for further education. Due to the departure, there is limited coordination of environmental issues. Environmental issues are partly being handled by the Director of Planning and Development with support from the District Forestry Officer. The Environmental Officer was also responsible for producing the State of Environment Report for the District.

The District has an Environment Subcommittee composed of all sectors that deal with environmental issues i.e. Forestry, Water, Meteorology, Health, Agriculture, Fisheries, Labour, and some CSOs. The Environmental Officer serves as secretariat to the Committee. The Committee is supposed to meet regularly (monthly) or depending on issues. Currently, the Committee has been dormant.

Below the district level, there are natural resources management committees at community level.

District Assembly funding
Blantyre district relies on Government funding as they have a low internal revenue base. The funding is based on sectors. Most sectors receive very little funding except for health. The district is not receiving much funding through the District Development Fund (DDF) because the regular DDF funding which was coming from donors such as NORAD stopped. Currently donor funding is sector specific. There has also been Malawi Social Action Fund (MASAF) funding for specific projects. MASAF funding is being transformed into local development funding.
5. The Malawi Parliament

The National Assembly or the Parliament comprises of elected Members of Parliament (MPs) mandated to review and pass laws for the country. It is organised into the Committee of the Whole Assembly and Constitutionally Established Committees and Standing Committees established through Parliamentary standing orders. The Constitutionally Established Committees are:

- Budget and Finance Committee;
- Defence and Security Committee;
- Legal Affairs Committee; and
- Public Appointments Committee.

The Standing Committees are:

- Business Committee;
- Public Accounts Committee;
- Parliamentary Development and Coordination Committee; and
- Departmentally Related Committees.

The Departmentally Related Committees include:

- Commerce, Industry and Tourism;
- Health and Population;
- International Relations;
- Media and Communications;
- Agriculture and Natural Resources;
- Education, Science and Human Resources;
- Social and Community Affairs; and
- Transport and Public Works.

The Committee directly responsible for environmental issues is the Agriculture and Natural Resources Committee but other Committees have direct relevance to environmental issues as well, e.g. Health and Population; Commerce, Industry and Tourism.

5.1. The Agriculture and Natural Resources Committee

The Agriculture and Natural Resources Committee is one of the Departmentally Related Committees of the Parliament provided for in the standing orders of the National Assembly. It comprises of MPs from different political parties to provide oversight functions to Ministries and Departments dealing with agriculture and natural resources. The key responsibilities of these Departmentally Related Committees include the following:

- To study and review policies, legislation and programmes of the assigned Ministries, statutory corporations and other bodies funded by Treasury, and assess the effectiveness and success of implementation of such policies, legislation and programmes;
- To examine budgets and expenditure of their assigned Ministries, statutory corporation and other bodies.

The Agriculture and Natural Resources Committee is responsible for several Ministries such as Agriculture and Food Security; Lands and Natural Resources; Irrigation and Water Development and Energy and Mining. The role of the Committee is to carry out oversight functions on policies and programmes and to review laws relating to those Ministries.
Currently the Committee meets only on quarterly basis due to financial constraints. The meetings take about a week or two. During these meetings, the Committee considers several issues under its mandate within the time allocated. Once the Committee has considered an issue, a report is produced for the Parliament to discuss and adopt. Once the report is adopted by the Parliament, the Government has the responsibility of implementing recommendations. The Committee then has the role of following up and monitoring implementation. Sometimes the Government does not implement the recommendations of the Parliament. It would be useful to identify reasons for this and, if appropriate, recommend remedial action.

The Committee acknowledges that in the national budget process in the Parliament, there has not been sufficient attention paid to environmental issues. Issues of environment do not come out strongly in Parliamentary debates. Much attention has been paid to agriculture and food security issues, but agriculture and environment are closely linked and need to be considered together.

During budget preparation and Parliamentary session, different Ministries engage the Committees to lobby them to push for increased budgetary allocation to their Ministries and Departments. Committees have powers to summon the Minister of Finance to lobby for increased budgetary allocation for priority areas. However, Ministries tend to engage the Committees late when budgets are already in the Parliament for approval.

The Committee has had good working relationships with CSOs such as CURE, WESM, Landnet and CEPA. The key challenge for the CSOs is that they do not have adequate funds to engage the Committee regularly. They always complain that the Committee is too expensive to engage in terms of allowances and transport refunds.

5.2. Challenges for the Agriculture and Natural Resources Committee

The MPs generally have a limited knowledge of environmental issues and in particular of how environmentally sustainable natural resource use contributes to key national development priorities. Most of them concentrate on requesting development projects for their constituencies without considering the environmental impacts and problems affecting their areas. There is need for more sensitisation of the Committee on the need for environmental protection and sustainability so as to push for more funding for these issues. Once the MPs are sensitised, it would be most useful for them to individually and collectively undertake awareness raising campaigns on environmental natural resources issues in their constituencies.

Parliamentary Committees lack resources to fully carry out their responsibilities. The level of funding for the Committee is low in relation to all their planned activities. As previously noted, currently the Committee on Agriculture and Natural Resources meets only on quarterly basis which means that only few things are considered in a year. There is a need for more resources for the Parliament to carry out its oversight functions effectively through Committees. With adequate financial resources, the Committee could meet more regularly e.g. monthly.

In addition to financial resources, there is a need to strengthen Parliament’s capacity to handle environmental and natural resource issues more effectively. This can be done through sensitisation meetings, training workshops and study tours for all MPs. This will increase the knowledge, understanding and skills related to environmental issues among MPs in general and the Agriculture and Natural Resources Committee in particular.

The Committee feels that there are a number of laws that have been developed but that there is lack of enforcement due to low staffing and funding in Ministries. There is an urgent need for
appropriate enforcement of environmental laws to ensure environmental protection and sustainable management of natural resources to achieve MGDS priorities. This will entail providing more resources in order for the natural resources sectors to help Malawi achieve key national development goals. There is also a need to review some of the current laws to harmonise them. Some of the laws in the sector are very old. This process should start with a review and integration of policies for different Ministries e.g. Water, Forestry and Agriculture. The reviewed policies will then assist to update the laws.

The Committee feels that there is poor coordination of natural resources issues because Departments dealing with them are scattered across different Ministries. For example, because of lack of effective coordination between Forestry and Water Departments, forest reserves are being destroyed thereby destroying water catchment areas. There is a need for OPC to ensure that there is better co-ordination across the sectors. One way of achieving this is to have one institutional home for all Departments dealing with environment and natural resources. Another way of achieving adequate co-ordination across sectors would be an overarching cross-sectoral resource management act, based on sustainable management principles. This could be combined with a cross-sectoral funding mechanism that focuses on addressing environmental and natural resource issues with significant cross sectoral impacts.

**Potential PEI Entry Points:**

- Sensitising the members of the Agriculture and Natural Resources Committee and the MPs in general on the contribution of sustainable natural resources management to national development goals.
- Support for a review and harmonisation of policies and laws related to natural resources.
6. Civil Society

6.1. Coordination Unit for the Rehabilitation of the Environment (CURE)

CURE was formed in 1994 to coordinate Civil Society Organisations (CSOs) working on environmental issues mainly in areas degraded due to hosting Mozambican refuges for several years. It has grown to be a strong national coordinating body for all CSOs, including both professional non-governmental organisations (NGOs) and smaller community based organisations (CBOs) working on environmental issues. Its mission is ‘to enhance the ability of CSOs to improve the management of Malawi’s environment and natural resources in a participatory and gender sensitive manner for the benefit of the community’. It is headquartered in Blantyre in the southern region of the country.

Key activities being undertaken by CURE include the following:
- Capacity building at all levels;
- Communication of environmental policies and issues through a newsletter and resource centre;
- Coordination of activities and networking among CSOs mainly through environmental coordination meetings which involve all stakeholders such as civil society, chiefs, media and sometimes Government; and
- Advocacy through participating in policy processes e.g. land and environment, preparation of policy briefs for CSOs and participating in international fora on environment.

There are a number of challenges related to coordination among CSOs working on environmental and natural resources issues. Different organisations have different approaches – some of them based on different donor approaches. However, there is little coordination and harmonisation of approaches e.g. on providing incentives to community volunteers and communities.

There is also little commitment of some CSOs to the need for coordination as spearheaded by CURE. Many CSOs seem not to have been valuing coordination. To improve coordination and its mandate, CURE is transforming itself into a full membership organisation with a constitution and code of conduct. To ensure effective participation and coordination, CURE has been rotating venues for meetings to allow CSOs in different parts of the country to participate. Most CSOs dealing with environment are based in the southern region.

CURE and its members have experienced inadequate funding on environment programmes and activities. Most CSOs have been shifting focus from environment to livelihoods and HIV/AIDS issues due to lack of funding for environment issues. Recently the Malawi Environmental Endowment Trust (MEET) was established with support from the Government and donors to provide funding to CSOs for some environmental activities. This facility is also assisting in bringing CSOs together to work on environmental projects.

Few member CSOs of CURE are taking part in policy issues. There is a need for members to take an active role in policy issues through small task forces which would come up with issues to bring forward to Government. This would help ensure that environmental sustainability issues are better integrated in Government policies and programmes drawing on grassroots experiences.

There is a generally slow response from the Government on key issues raised by CSOs and sometimes the Government takes a defensive position. For example, last year CSOs throug
petitioned the Government to take drastic action on charcoal business as it was resulting to serious deforestation, but the Government has not acted on the petition. The CSOs wanted Government to declare a state of environmental disaster but this did not occur. CSOs also interpret the absence of key influential people from the Government during environmental coordination meetings as an indication of a low priority being attached to environment.

Environmental degradation is increasing because communities do not fully appreciate the importance of environmental sustainability. Most communities are not aware of environmental policies and regulations. There is a need for more public awareness.

The participation and influence of the Parliament on environmental issues is limited. CURE has tried to work with the Parliament to influence changes especially on land issues and deforestation. Although the Parliament can be influential in changing the Government policy and laws, most members do not understand environmental issues. In addition, the challenge of working with the Parliament is that the Parliamentary Committees are expensive to engage with as allowances have to be paid for each meeting they participate in.

6.2. Wildlife and Environmental Society of Malawi (WESM)

The Wildlife and Environmental Society of Malawi is a CSO which has been actively engaged in environmental activities for a long time. WESM was established in 1947 as a membership organisation called the Wildlife Society of Malawi. The priority then was on conservation of wildlife but now it is also dealing with other environmental issues such as ecosystem management and pollution. The key interests for WESM are to ensure conservation of areas of high significance on biodiversity and to promote sustainable use of natural resources by communities.

Specifically, WESM is focusing on the following areas:

- Advocacy, environmental education and communication – mainly done through youth clubs and magazines;
- Integrated natural resources management both on customary and public land – facilitating community management projects for natural resources and enhancing sustainable livelihoods from natural resources; and
- Facilitating conservation through research on biodiversity and generating recommendations on policy and programmes.

WESM has its head office in Blantyre in the southern region of the country but it also has offices in Lilongwe in the central region and Mzuzu in the northern region. WESM is a founding member of CURE – the coordinating agency for all CSOs working on environment. WESM thus supports CURE in a number of issues such as harmonisation of standards and practices; creating awareness on policy, advocacy and legal issues; and capacity building. Currently CURE is strengthening its legal mandates and instruments to become a full membership organisation with powers to coordinate and represent member organisations more effectively.

According to WESM, there are a number of challenges which need to be addressed in the environmental sector:

- Limited policy implementation and weak enforcement of laws and regulations. Malawi has a lot of good policies but implementation is weak in most sectors dealing with environment and natural resources management. There is also not much enforcement of regulations and legislations due to capacity and financial constraints.
- Increasing unsustainable use of natural resources. Malawi has a lot of natural resources but they are mismanaged. Some are underutilised while many are overexploited e.g. through charcoal production and fishing. A recent study on charcoal business shows that it is a big
business worth more than MK 7 billion annually reflecting the increasing drive for over exploitation.

- Poor coordination of the environmental sector. The environment and natural resources sector is split across different Ministries thereby creating coordination problems and resulting in loss of focus on the policy and programme interrelationships. There is a need for stronger leadership, e.g. through establishment of an independent environmental protection authority for enforcement of regulations as well as coordination and harmonisation of policies.

- Low Government funding on priority environmental areas resulting in poor planning and uncoordinated responses to environmental problems. The CSOs have been engaging the Parliamentary Committee on Agriculture and Natural Resources to lobby for increased funding and action on environmental issues. The key bottleneck has been the high costs of engaging the MPs as they are due allowances and transport reimbursements which is not sustainable for CSOs.

6.3. Civil Society Agriculture Network (CISANET)

CISANET is a grouping of CSOs working in the agricultural sector. Considering that agriculture is the backbone of Malawi’s economy, CISANET was formed to influence policies and practices of Government, donors and civil society through advocacy and networking. CISANET was registered in 2005 and its membership is country wide with a secretariat based in Lilongwe.

CISANET has two core objectives:

- Advocacy – facilitating civil society to dialogue with Government, Parliament, donors etc. on issues affecting agriculture, sustainable rural livelihoods and development; and

- Networking – facilitating information sharing amongst civil society through meetings, e-communication channels, media and other channels.

The areas of focus for CISANET include:

- Advocacy on matters of agriculture and food security to promote best practices and increase accountability of CISANET members, donors and the Government to poor communities and other stakeholders;

- Monitoring and evaluating impacts of policies, programmes and projects with respect to national budgetary provisions;

- Increasing coordination and sharing of information and experience of member organisations; and

- Identifying needs shared by multiple members for activities or research that require external funding, secure funding and share the results both within the network and the public.

Among the wide range of issues affecting agriculture and rural livelihoods, CISANET has prioritized the following issues:

- Food security policy development and implementation;

- Budget formulation and monitoring/tracking;

- Agricultural marketing;

- Livestock development; and

- Small-scale irrigation development.

These issues are handled through thematic groups of member organisations with the facilitation of the secretariat. This promotes participation of members in dealing with the priority issues. The priority areas of CISANET however do not explicitly include any issues relating to environment and
natural resource management although agricultural activities are heavily dependent on and have extensive impacts on environment and natural resources. CISANET is recommended to seriously consider and integrate the issue of environmental sustainability and management of natural resources in agriculture as a key pathway for ensuring sustainable agricultural growth development. They need to advocate for better integrating environmental sustainability in all agricultural policies and programmes such as the ADP.

Other influential civil society groups which are also members of CISANET include National Association of Smallholder Farmers in Malawi (NASFAM) and Farmers Union of Malawi (FUM). These are also membership based organisation promoting agricultural issues and facilitating coordination among their members. These groups also command a lot of influence and support among their members, from the Government and donors. Therefore they stand to be good advocates for integration of environmental sustainability in agricultural policies, programmes and activities at national, district and community level.

**Potential PEI Entry Points:**

- **There is a need for capacity-building and increased funding to CSOs to undertake advocacy work as well as implement innovative community based programmes which improve livelihoods and sustain the environment at local levels.**
Annex 1: List of People Consulted

<table>
<thead>
<tr>
<th>Name</th>
<th>Organisation</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mrs. Patricia Zimpita</td>
<td>Office of President and Cabinet</td>
<td>Director of Policy, Monitoring and Evaluation</td>
</tr>
<tr>
<td>Mr. Moses Chirwa</td>
<td>Ministry of Finance</td>
<td>Principal Debt and Aid Management Officer, Desk Officer for UN System,</td>
</tr>
<tr>
<td>Mr. Levison Chirwa</td>
<td>Ministry of Finance</td>
<td>Principal Budget Officer, Desk Officer for Natural Resources</td>
</tr>
<tr>
<td>Mr. Cliff Chiunda</td>
<td>Ministry of Economic Planning and Development</td>
<td>Director for Development</td>
</tr>
<tr>
<td>Yona Kamphale</td>
<td>Ministry of Economic Planning and Development</td>
<td>Director for Economic Planning</td>
</tr>
<tr>
<td>Mr. Ben Botolo</td>
<td>Ministry of Economic Planning and Development</td>
<td>Director for Monitoring and Evaluation</td>
</tr>
<tr>
<td>Mr. Collins Moyo</td>
<td>Ministry of Lands and Natural Resources</td>
<td>Director, Policy and Planning</td>
</tr>
<tr>
<td>Dr. A. Kampelewerera</td>
<td>Environmental Affairs Department, Ministry of Lands and Natural Resources</td>
<td>Deputy Director</td>
</tr>
<tr>
<td>Mr. Evance Njewa</td>
<td>Environmental Affairs Department, Ministry of Lands and Natural Resources</td>
<td>Environmental Officer, Planning</td>
</tr>
<tr>
<td>Dr. J. Luhanga</td>
<td>Ministry of Agriculture and Food Security</td>
<td>Controller of Agricultural Extension and Technical Services</td>
</tr>
<tr>
<td>Mr. Ian Kumwenda</td>
<td>Ministry of Agriculture and Food Security</td>
<td>Malawi Agricultural Sector Investment Programme Coordinator</td>
</tr>
<tr>
<td>Dr. S. Donda</td>
<td>Fisheries Department, MoAFS</td>
<td>Fisheries Socio-Economist, Ag. Deputy Director, Planning</td>
</tr>
<tr>
<td>Mr. Mathews Manda</td>
<td>Department of Land Resources Conservation, MoAFS</td>
<td>Deputy Director</td>
</tr>
<tr>
<td>Mr. Kachinjika</td>
<td>Fisheries Department, MoAFS</td>
<td>Deputy Director, Extension</td>
</tr>
<tr>
<td>Mr. Maurice Makuwila</td>
<td>Department of Fisheries, MoAFS</td>
<td>Principal Fisheries Officer, Planning</td>
</tr>
<tr>
<td>Mr. Abel Chirwa</td>
<td>Ministry of Irrigation and Water Development</td>
<td>Deputy Director of Water Resources, Surface Water</td>
</tr>
<tr>
<td>Mr. Sandram Maweru</td>
<td>Ministry of Irrigation and Water Development</td>
<td>Director of Irrigation Services</td>
</tr>
<tr>
<td>J. Chimeta</td>
<td>Blantyre Water Board</td>
<td>Water Quality Controller</td>
</tr>
<tr>
<td>Dr. D. Kayambazinthu</td>
<td>Forestry Department, Ministry of Energy and Mines</td>
<td>Director of Forestry</td>
</tr>
<tr>
<td>Peter McCarter</td>
<td>Improved Forest Management for Sustainable Livelihoods Project</td>
<td>Team Leader</td>
</tr>
<tr>
<td>Mr. Lewis Mhango</td>
<td>Department of Energy, Ministry of Energy and Mines</td>
<td>Chief Energy Officer</td>
</tr>
<tr>
<td>Dr. Roy Bhima</td>
<td>Department of National Parks and Wildlife, Ministry of Tourism, Wildlife and Culture</td>
<td>Deputy Director, Research and Planning</td>
</tr>
<tr>
<td>Mr. D. Chapalapata</td>
<td>Electricity Supply Commission of Malawi</td>
<td>Director of Generation</td>
</tr>
<tr>
<td>Precious Kamtsitsi</td>
<td>Blantyre District Assembly</td>
<td>Director of Planning and Development</td>
</tr>
<tr>
<td>Name</td>
<td>Organisation</td>
<td>Position</td>
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</tr>
<tr>
<td>Hon. Dzoole Mwale</td>
<td>Malawi Parliament</td>
<td>Chairperson for The Agriculture and Natural Resources Committee</td>
</tr>
<tr>
<td>Ulemu Munthali</td>
<td>Coordination Unit for the Rehabilitation of the Environment</td>
<td>Programme Officer</td>
</tr>
<tr>
<td>Mr. Daulos Mauambeta</td>
<td>Wildlife and Environmental Society of Malawi</td>
<td>Executive Director</td>
</tr>
<tr>
<td>Felix Mtonda</td>
<td>OXFAM</td>
<td>Programme Manager</td>
</tr>
</tbody>
</table>
Annex 2: Malawi Central Government Structure

Central Government Agencies

The Office of the President and Cabinet
- Cabinet Office
- Department of Human Resources Development
- Public Service Commission
- Department of Disaster Management
- Department of Nutrition and HIV/AIDS
- Department of Statutory Corporations

Office of the Vice President

Ministry of Finance
- Treasury Department
- Accountant General’s Department
- National Audit Office

Ministry of Economic Planning and Development
- Economic Planning Services
- Development Planning Division
- Economic and Development Monitoring and Evaluation
- National Statistical Office
- Department of Population
- Department of Poverty Reduction and Social Protection

Ministry of Justice

Ministry of Foreign Affairs

Sector Ministries

Ministry of Agriculture and Food Security
- Department of Agriculture Extension Services
- Department of Agricultural Research
- Department of Livestock Development
- Department of Crops
- Department of Land Resources and Conservation
- Fisheries Department
- National Food Reserve Agency
- ADMARC

Ministry of Energy and Mines
- Department of Forestry
- Department of Energy
- Department of Mines
- Department of Geological Services

Ministry of Irrigation and Water Development
- Department of Irrigation
- Department of Water Resources Management
- Department Water Supply and Sanitation

**Ministry of Lands and Natural Resources**
- Department of Lands and Natural Resources
- Department of Environmental Affairs
- Department of Meteorological Services
- Department of Land Surveys
- Department of Physical Planning

**Ministry of Tourism, Wildlife and Culture**
- Department of Tourism
- Department of Parks and Wildlife
- Department of Arts and Culture
- Department of National Archives and Antiquities
- Department of Museums
- Department of National Heritage
- Censorship Board

**Ministry of Education, Science and Technology**

**Ministry of Health**

**Ministry of Industry and Trade**

**Ministry of Local Government and Rural Development**

**Ministry of Transport, Public Works and Housing**

**Ministry of National Defence**

**Ministry of Information and Civic Education**

**Ministry of Home Affairs and Internal Security**

**Ministry of Labour**

**Ministry of Women and Child Development**

**Ministry of Youth Development and Sports**

**Ministry of Persons with Disabilities and the Elderly**
Annex 3: Malawi Facts and Figures on Environment and Natural Resources

Population
- Current population estimated at about 12.3 million
- High population growth rate – 3.2 % per annum (population expected to double in 20-25 years)
- High population density at 112/km²
- High proportion of the population in rural areas – 85 %

Urbanisation
- Malawi is the least urbanized country in southern Africa – only 24 % of the population live in urban areas as compared to 36 % for southern Africa
- Though least urbanized, Malawi has high urban growth rate of over 6 % as compared to 3.5 % for southern Africa
- South Africa with 50 % urbanization has the least urbanization growth of 1.2 %
- A lot of environmental problems related to waste management, sanitation, water scarcity and pollution, depletion of natural resources in surrounding areas
- Environment increasingly becoming hazardous to human health – rapid spread of water-borne (diarrhoea and cholera) and respiratory diseases (TB)

Poverty
- Poverty levels have remained high for the past ten years

Poverty levels (% of the population)

<table>
<thead>
<tr>
<th>Category</th>
<th>1998</th>
<th>2005</th>
<th>Poverty line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>54%</td>
<td>52%</td>
<td>$182.5/person/yr or MK24637.5</td>
</tr>
<tr>
<td>Ultra-poor</td>
<td>23.6%</td>
<td>22%</td>
<td>$113/person/yr or MK15255</td>
</tr>
</tbody>
</table>

- Income levels are low for most people, especially in rural areas

Average annual per capita incomes by source (MK)

<table>
<thead>
<tr>
<th>Source</th>
<th>Total</th>
<th>Agriculture</th>
<th>Wages</th>
<th>Enterprises</th>
<th>Other sources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MK</td>
<td>%</td>
<td>MK</td>
<td>%</td>
<td>MK</td>
</tr>
<tr>
<td>National</td>
<td>11,312.00</td>
<td>38.66</td>
<td>4,073.60</td>
<td>36.01</td>
<td>6,615.53</td>
</tr>
<tr>
<td>Rural</td>
<td>8,934.40</td>
<td>49.67</td>
<td>2,415.07</td>
<td>27.03</td>
<td>5,316.44</td>
</tr>
</tbody>
</table>

Source: NSO Integrated Household Survey 2004-05 (% = % of total); 1US$=MK135

- High malnutrition and mortality rates associated with high poverty levels

Nutrition and health indicators for Malawi

<table>
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<tr>
<th></th>
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<tbody>
<tr>
<td>Nutrition-related indicators</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stunting (%)</td>
<td>49.0</td>
<td>49.0</td>
<td>48.0</td>
<td>45.9</td>
</tr>
<tr>
<td>Wasting (%)</td>
<td>5.0</td>
<td>6.0</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Underweight (%)</td>
<td>27</td>
<td>25.0</td>
<td>19.4</td>
<td>19.4</td>
</tr>
<tr>
<td>Infant mortality (per 1,000 live births)</td>
<td>122.7</td>
<td>103.8</td>
<td>76.0</td>
<td>69</td>
</tr>
<tr>
<td>Under-five mortality (per 1,000)</td>
<td>219.7</td>
<td>188.6</td>
<td>133.0</td>
<td>118</td>
</tr>
<tr>
<td>Maternal mortality (per 100,000)</td>
<td>620.0</td>
<td>1120.0</td>
<td>984.0</td>
<td></td>
</tr>
</tbody>
</table>

Agriculture and food security

- 82% of the population involved in agriculture
- Smallholder production contributes almost 70% of agricultural output
- 74% of rural incomes from crop production
- Agricultural growth was on average 4.35% per annum 1970-2005
- Between 2000-2005 it fell to 2.1% per annum
- MGDS annual agricultural growth target – 6%
- Small holder agricultural growth was -1.8% per annum between 2000-2005
- Agriculture is characterized by low productivity and land constraints
- National mean land holding size fell from 1.53 hectares per household in 1968 to 0.80 hectares per household in 2000
- One of the lowest per capita agricultural land holding 0.36ha in Sub-Saharan Africa (1.45ha); Mozambique (2.53ha)
- For the poor the per capita land holding is 0.23ha
- More than 33% of smallholder farmers cultivate between 0.5 and 1 hectare of land per household

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<tr>
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</thead>
<tbody>
<tr>
<td>Agricultural growth per annum</td>
<td>4.35%</td>
<td>2.1%</td>
<td>6%</td>
</tr>
<tr>
<td>Small holder agricultural growth per annum</td>
<td></td>
<td>-1.8%</td>
<td></td>
</tr>
<tr>
<td>Mean land holding size per household</td>
<td>1.53 ha</td>
<td>0.80 ha</td>
<td></td>
</tr>
<tr>
<td>Per capita land holdings</td>
<td></td>
<td>0.36 ha (Sub-Saharan Africa average: 1.45)</td>
<td></td>
</tr>
</tbody>
</table>

- Productivity of major crops in Malawi is below the potential yields due to reduced fertility levels

Yield Gap Analysis of Selected Crops

<table>
<thead>
<tr>
<th>Crop/Technology</th>
<th>Average Farmers Yields (kg/ha)</th>
<th>Potential attainable Yields (kg/ha)</th>
<th>% Yield Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize (hybrid)</td>
<td>2,450-3,000</td>
<td>5,600-6,400</td>
<td>56-53</td>
</tr>
<tr>
<td>(composite)</td>
<td>2,000-2,500</td>
<td>4,000-4,800</td>
<td>50-48</td>
</tr>
<tr>
<td>(total)</td>
<td>1,150-1,600</td>
<td>5,600-6,400</td>
<td>79-75</td>
</tr>
<tr>
<td>Rice (improved)</td>
<td>1,000-1,200</td>
<td>1,600-2,000</td>
<td>38-40</td>
</tr>
<tr>
<td>Pulses (beans)</td>
<td>450-509</td>
<td>1,600-2,000</td>
<td>72-75</td>
</tr>
<tr>
<td>rainy season (summer)</td>
<td>1,200-1,500</td>
<td>1,600-2,000</td>
<td>40-25</td>
</tr>
<tr>
<td>Pigeon pea</td>
<td>600-800</td>
<td>1,600-2,000</td>
<td>63-60</td>
</tr>
<tr>
<td>Groundnuts (Spanish)</td>
<td>560-800</td>
<td>1,600-2,000</td>
<td>65-60</td>
</tr>
<tr>
<td>(Virginia)</td>
<td>500-750</td>
<td>1,200-1,600</td>
<td>38-53</td>
</tr>
<tr>
<td>Tobacco</td>
<td>874-1,000</td>
<td>2,000-2,800</td>
<td>56-64</td>
</tr>
<tr>
<td>Cotton</td>
<td>700-1,200</td>
<td>2,000-2,400</td>
<td>65-50</td>
</tr>
</tbody>
</table>

Source: ADP

- Area under maize – 1.34 million hectares (61% of cropped land)
- Average yield for maize – 1,150 kg/ha
- Area under hybrid maize – 290,000 ha
• Average yield for hybrid maize – 2,303kg/ha
• Area under composite maize – 104,000 ha
• Average yield for composites – 1,328 kg/ha
• Area under local maize – 950,000 ha
• Average yield for local maize – 836 kg/ha
• Land under improved maize varieties – 25 %
• Fertilizer usage – 35% of the households
• Land under appropriate cropping practices as well as conservation farming – 50%
• Area under irrigation increasing – currently 73,495 ha, target 96,748ha, potential 400,000ha
• Food production levels have been unstable and erratic over the past 10 years (1997–2006)
• National food deficits in 4 of the past 6 production years

**Malawi’s national food availability (2002–2006)**

<table>
<thead>
<tr>
<th>Years</th>
<th>Domestic maize balance (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001/02</td>
<td>-195,229</td>
</tr>
<tr>
<td>2002/03</td>
<td>-684,094</td>
</tr>
<tr>
<td>2003/04</td>
<td>-50,028</td>
</tr>
<tr>
<td>2004/05</td>
<td>-537,032</td>
</tr>
<tr>
<td>2005/06</td>
<td>487,007 (surplus)</td>
</tr>
<tr>
<td>2006/07</td>
<td>600,000 (surplus)</td>
</tr>
</tbody>
</table>

(Source: Ministry of Agriculture & MVAC)

Factors limiting productivity of maize in Malawi:
• Use of low yielding local maize varieties;
• Land degradation and soil infertility;
• Low usage of organic and inorganic fertilizers;
• High costs of inorganic fertilizers;
• High incidences of pests and diseases; and
• Poor cultural practices such as late planting and weeding.

**Livestock**

• Low livestock numbers and proportion of households owning livestock
• Slow increase in livestock numbers
• Proportion of households owning livestock:
  o Cattle – 8 %
  o Goats – 35 %
  o Pigs – 10 %
  o Chicken – 89 %

**Livestock Census Figures for the Past 10 Years**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cattle Population</th>
<th>Goat Population</th>
<th>Pig Population</th>
<th>Sheep Population</th>
<th>Chicken Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>589,175</td>
<td>1,566,514</td>
<td>420,772</td>
<td>97,916</td>
<td>10,005,000</td>
</tr>
<tr>
<td>1998</td>
<td>715,391</td>
<td>1,597,536</td>
<td>427,314</td>
<td>102,671</td>
<td>10,366,000</td>
</tr>
<tr>
<td>1999</td>
<td>711,675</td>
<td>1,427,134</td>
<td>444,381</td>
<td>103,095</td>
<td>12,088,630</td>
</tr>
<tr>
<td>2000</td>
<td>763,724</td>
<td>1,689,485</td>
<td>468,140</td>
<td>111,539</td>
<td>7,065,082</td>
</tr>
<tr>
<td>2001</td>
<td>749,029</td>
<td>1,669,669</td>
<td>456,291</td>
<td>115,249</td>
<td>7,348,450</td>
</tr>
<tr>
<td>2002</td>
<td>781,747</td>
<td>1,716,822</td>
<td>435,257</td>
<td>104,450</td>
<td>8,871,612</td>
</tr>
<tr>
<td>2003</td>
<td>764,061</td>
<td>1,922,264</td>
<td>477,863</td>
<td>227,363</td>
<td>9,947,612</td>
</tr>
<tr>
<td>2004</td>
<td>777,846</td>
<td>1,961,080</td>
<td>584,709</td>
<td>156,809</td>
<td>13,528,815</td>
</tr>
<tr>
<td>2005</td>
<td>791,017</td>
<td>2,223,668</td>
<td>608,814</td>
<td>166,231</td>
<td>13,026,662</td>
</tr>
<tr>
<td>Year</td>
<td>Cattle Population</td>
<td>Goat Population</td>
<td>Pig Population</td>
<td>Sheep Population</td>
<td>Chicken Population</td>
</tr>
<tr>
<td>------</td>
<td>------------------</td>
<td>-----------------</td>
<td>---------------</td>
<td>-----------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>2006</td>
<td>799,017</td>
<td>2,301,349</td>
<td>636,991</td>
<td>175,394</td>
<td>25,891,568</td>
</tr>
</tbody>
</table>


**Major ecological zones**

1. **Lower Shire Valley**
   - Districts: Chikwawa and Nsanje
   - 201,261 farming households
   - Altitude: between 30 and 500 meters above sea level
   - High temperatures
   - Low rainfall (less than 600 mm of rain per year)

2. **Lakeshore and low lying rain shadow areas**
   - Districts: Mangochi, Salima, Nkhotakota, Nkhatabay and Karonga, Phalombe Balaka, Mwanza and Rumphi
   - 789,590 farming households
   - Altitude: between 400 to 1000 meters
   - Rainfall: ranging between 600 and 800 mm per annum except for Nkhatabay
   - Very high average temperatures

3. **Medium attitude areas**
   - Kasungu/Lilongwe Plain: Kasungu, Ntchisi, Dowa, Mchinji, Lilongwe and parts of Dedza districts
   - Shire Highlands: Machinga Zomba, Chiradzulu and Blantyre districts
   - Northern areas: Mzimba, Rumphi and parts of Chitipa districts
   - 1,503,141 farming household
   - Altitude: between 1000 to 1500 meters above sea level
   - High average rainfalls ranging from 800 to 1200 mm per annum

4. **High attitude plateaus and hilly areas**
   - Kirk Range: Ntcheu, parts of Mwanza and Neno districts
   - Misuku hills in Chitipa district
   - Nyika Plateau in the north
   - Mountainous areas: parts of Dedza, Mulanje and Thyolo districts
   - 779,662 farming households
   - Altitude: above 1500 meters above sea level
   - Rainfall: average above 1200 mm per annum
   - Low average temperatures

**Climate change**

- Variable climate and weather patterns being experienced.
- Rain-fed agriculture is increasingly getting vulnerable to climate-related natural shocks and disasters.
- Frequent droughts and floods with devastating effects on food production, fresh water availability, biodiversity.
- Floods and drought are the most frequent natural disasters. Drought is a greater threat in terms of geographical range and economic effect.
- Malawi has also been experiencing changing rainfall patterns in recent years, including changes in on-set of rains, irregular and uneven rainfall distribution, dry spells, and torrential rains.
• Malawi experienced severe food shortages in 2002/2003 – estimated cereal production in 2004/2005 lowest in ten years (1.34 Mt).
• The 2005/2006 seemed much worse in terms of the number of people affected – about 4.9 million people were affected in 2005/2006, compared to 3.2 million in 2002/2003.

**Major forms of environmental degradation:**
• Soil erosion;
• Deforestation;
• Water resource degradation;
• Fisheries depletion; and
• Loss of biodiversity.

Estimated soil loss due to erosion
• Soil erosion has been increasing:
  • 20 tonnes/ha per annum in 1992
  • 35 tonnes/ha per annum in 1995
  • Current estimates up to 43 tonnes/ha/year
  • Estimated to result in 4-11 % yield loss

**Forestry resources**

**Forest resources changes**

<table>
<thead>
<tr>
<th>Year</th>
<th>Proportion of total land area (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>47</td>
</tr>
<tr>
<td>2000</td>
<td>28</td>
</tr>
<tr>
<td>2005</td>
<td>27 (Southern Africa = 32.7)</td>
</tr>
</tbody>
</table>

**Deforestation rate**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Deforestation rate (%)</td>
<td>3.6</td>
<td>3.1</td>
<td>4.4</td>
<td>2.8</td>
</tr>
</tbody>
</table>

**Energy**

• 84 % of energy is consumed by households
• 8 % is used in agricultural and natural resources sector
• 4 % is used in transport
• 2 % is used in industry and mining
• 2 % is used in other social services

**Heavy reliance on biomass energy:**

• 93 % of energy demand is supplied by biomass (firewood, charcoal, crop and industrial residues)
• Biomass (firewood and charcoal) supply 99 % of household energy demand
• Rural households account for 58 % of fuel wood consumption
• Urban households account for 12 % of fuel wood consumption
• Urban households use more fuel wood per capita (1.56 m3) than rural households (0.85 m3) because of using mainly charcoal produced through traditional inefficient methods (7 tons of firewood to produce 1 ton of charcoal)
• Industries (mainly tea and tobacco estates) account for 20 % of wood fuel consumption
• Brick making, fish smoking and other small scale industries use about 10 % of fuel wood
• Demand for forest products greater than supply:
  • Potential sustainable supply from current sources = 7-8 million cubic meters
  • 47% of wood fuel is from unsustainable sources (natural woodlands)
• 48% of wood fuel is from sustainable yield
• 5% comes from other biomass sources (crop and industrial residues)
• Annual consumption of forest products = 15 million cubic meters

Source of energy for cooking (proportion of households – %)

<table>
<thead>
<tr>
<th>Source</th>
<th>wood</th>
<th>charcoal</th>
<th>electricity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malawi</td>
<td>89.9</td>
<td>6.8</td>
<td>1.7</td>
</tr>
<tr>
<td>Rural Malawi</td>
<td>97.0</td>
<td>1.2</td>
<td>0.4</td>
</tr>
<tr>
<td>IHS2005</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source of energy for lighting (proportion of households – %)

<table>
<thead>
<tr>
<th>Source</th>
<th>wood</th>
<th>paraffin</th>
<th>electricity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malawi</td>
<td>3.9</td>
<td>84.4</td>
<td>5.6</td>
</tr>
<tr>
<td>Rural Malawi</td>
<td>4.2</td>
<td>88.3</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Other sources of energy
• Liquid fuels 3.5 %
• Electricity 2.3 %
• Coal 1%
• Other renewable sources 0.2%

Water availability
• Water demand higher than supply
• Pollution of water resources due to increased human activities on land (agriculture and industry)


<table>
<thead>
<tr>
<th>Year</th>
<th>1990</th>
<th>2000</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total supply</td>
<td>35,300</td>
<td>31,800</td>
<td>28,600</td>
</tr>
<tr>
<td>Total demand</td>
<td>192</td>
<td>429</td>
<td>887</td>
</tr>
<tr>
<td>Demand/supply ratio (%)</td>
<td>0.5</td>
<td>1.3</td>
<td>3.1</td>
</tr>
</tbody>
</table>

Fisheries
• Key problem: Depletion of fish stocks through unsustainable fishing
• Total fish landings in 1990 – 76,500 Mt per year
• Total fish landings in 1999 – 43,000 Mt per year
• Total fish production in 2006 – 45,602 Mt per year
• Quantity of fish (capture fisheries) – 44,769 Mt
• Aquaculture production – 800 Mt; Average fish yield in aquaculture – 0.7 ton/ha
• Per capita fish consumption decreased from 10-18kg per year in the 1970s to 4.8kg in 2003
• Fish provides about 60-70% of total animal protein in Malawi
• Fish contributes about 4% of GDP

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total fish landings (Mt per year)</td>
<td>76,500</td>
<td>43,000</td>
<td>45,602</td>
<td></td>
</tr>
<tr>
<td>Chambo fish landings in lakes Malawi and Malombe (Mt per year)</td>
<td>8500</td>
<td>6000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per capita fish consumption (kg/yr)</td>
<td>10.2</td>
<td>7.0</td>
<td>4.8</td>
<td></td>
</tr>
</tbody>
</table>

Environmental health

Access to water (% of households)
Sanitation
- High number of households with no toilet facility especially in rural areas
- Toilet construction heavily dependent on tree logs – lack of tree logs a growing constraint
- Use of the bush as a toilet – leading to water contamination
- Low number of people with the improved types of toilet such as VIP (Ventilation Improved Pit)

Comparisons on toilet types (% of households)

<table>
<thead>
<tr>
<th>Type of toilet</th>
<th>Malawi</th>
<th>Rural Malawi</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>16.9</td>
<td>18.8</td>
</tr>
<tr>
<td>Traditional pit latrine</td>
<td>57.4</td>
<td>56.9</td>
</tr>
<tr>
<td>VIP (IHS2 2005)</td>
<td>1.8</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Household waste disposal
- Disposal of household wastes an important element of household sanitation
- 18% have no any proper method for disposing of their household waste
- Only 22.6% of the households had a rubbish pit within their homestead
- Careless disposal of household wastes posing a big health hazard

Waste disposal (% of households)

<table>
<thead>
<tr>
<th>Method of waste disposal</th>
<th>Malawi</th>
<th>Rural Malawi</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>18.1</td>
<td>19.8</td>
</tr>
<tr>
<td>Rubbish pit</td>
<td>49.3</td>
<td>49.9</td>
</tr>
<tr>
<td>Dust bin</td>
<td>1.0</td>
<td>4.5</td>
</tr>
</tbody>
</table>

IHS2 2005

Annex 4: Budget Allocations for Ministries and Departments

Background:

In the past years, there was Ministry of Natural Resources and Environment which comprised of the following Departments:
- Environmental Affairs;
- Forestry;
- Energy;
- Mines;
- Geological Survey; and
- Fisheries.

Currently there is a new Ministry of Energy and Mines which comprises of the Departments of Energy, Mines and Forestry.

The Department of Environmental Affairs has been moved to the new Ministry of Lands and Natural Resources. This Ministry also hosts the Meteorology Department which was formerly part of Ministry of Transport.
The Fisheries Department has now been moved to Ministry of Agriculture and Food Security.

In addition there is a Ministry of Irrigation and Water Development which is dealing with water resources and irrigation development. In the past five years Irrigation Department was under Ministry of Agriculture and Food Security.

The following table provides a summary of some of the recurrent budget allocations for different sectors over the past five years.

**Summary of National Budget Allocations to Selected Programmes:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (MK’000)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2003/04</td>
</tr>
<tr>
<td>Irrigation Development and Management</td>
<td>1,134,722</td>
</tr>
<tr>
<td>Environmental Management</td>
<td>55,604</td>
</tr>
<tr>
<td>Environmental Conservation and Education</td>
<td>-</td>
</tr>
<tr>
<td>Wildlife Conservation and Management Services</td>
<td>30,672</td>
</tr>
<tr>
<td>Aquaculture and Fisheries Development</td>
<td>4,047</td>
</tr>
<tr>
<td>Land Resource Management, Evaluation and Education</td>
<td>28,812</td>
</tr>
<tr>
<td>Water Resources Management and Development</td>
<td>38,336</td>
</tr>
<tr>
<td>Energy and Mining</td>
<td>68,059</td>
</tr>
<tr>
<td>Meteorological Services</td>
<td>-</td>
</tr>
<tr>
<td>Lands Administration</td>
<td>12,909</td>
</tr>
<tr>
<td>Infrastructure Development and Rehabilitation</td>
<td>0</td>
</tr>
<tr>
<td>Manpower and Institutional Development</td>
<td>11,226</td>
</tr>
</tbody>
</table>