The Federal Democratic Republic of Ethiopia
MINISTRY OF WORKS AND URBAN DEVELOPMENT

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

URBAN LOCAL GOVERNMENT DEVELOPMENT PROJECT

Draft No. 6
February 25, 2008

Ministry of Works and Urban Development
# Environmental and Social Management Framework

**Government of Ethiopia**  
**Ministry of Works and Urban Development**  
**Urban Local Government Development Project**  
**Environmental and Social Management Framework**

## CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitions</td>
<td>v</td>
</tr>
<tr>
<td><strong>1 INTRODUCTION</strong></td>
<td></td>
</tr>
<tr>
<td>1.1 Objective and Scope of the ESMF</td>
<td>1</td>
</tr>
<tr>
<td><strong>2 URBAN LOCAL GOVERNMENT DEVELOPMENT PROJECT</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>3 ORGANIZATIONAL RESPONSIBILITIES FOR ULGDP IMPLEMENTATION</strong></td>
<td>8</td>
</tr>
<tr>
<td>3.1 Federal Organizational Responsibilities</td>
<td>8</td>
</tr>
<tr>
<td>3.2 Federal &amp; Regional Environmental Protection Authorities</td>
<td>9</td>
</tr>
<tr>
<td>3.3 Bureaus of Works and Urban Development</td>
<td>10</td>
</tr>
<tr>
<td>3.4 Urban Local Governments</td>
<td>11</td>
</tr>
<tr>
<td><strong>4 POLICY &amp; LEGAL FRAMEWORK FOR ENVIRONMENTAL MANAGEMENT</strong></td>
<td>13</td>
</tr>
<tr>
<td>4.1 Overview of the National Legislative Requirements</td>
<td>13</td>
</tr>
<tr>
<td>4.2 World Bank Safeguard Requirements</td>
<td>16</td>
</tr>
<tr>
<td><strong>5 ESMF PROCESSES: PREPARATION &amp; IMPLEMENTATION</strong></td>
<td>18</td>
</tr>
<tr>
<td>5.1 Key Issues and Proposed Actions within the ESMF</td>
<td>18</td>
</tr>
<tr>
<td>5.2 Responsibilities in the ESMF Screening and Appraisal Process</td>
<td>19</td>
</tr>
<tr>
<td>5.3 Process for Screening, Review, Appraisal and Monitoring of ULGDP Investments</td>
<td>19</td>
</tr>
<tr>
<td>5.4 Step 1: Preparation and Consultation</td>
<td>22</td>
</tr>
<tr>
<td>5.5 Step 2: Screening Report</td>
<td>23</td>
</tr>
<tr>
<td>5.6 Step 3: Schedule 2 projects</td>
<td>24</td>
</tr>
<tr>
<td>5.7 Step 3: Schedule 1 Projects, Scoping &amp; EIA TOR</td>
<td>25</td>
</tr>
<tr>
<td>5.8 Step 4: Schedule 1 Projects, Environmental Impact Assessment</td>
<td>26</td>
</tr>
<tr>
<td>5.9 Step 5: Review, Appeal and Record of Decision</td>
<td>29</td>
</tr>
<tr>
<td>5.10 Step 6: Implementation &amp; Supervision</td>
<td>30</td>
</tr>
<tr>
<td><strong>6 GUIDELINES ON IMPACT MITIGATION AND MONITORING</strong></td>
<td>32</td>
</tr>
<tr>
<td>6.1 Overall Social and Environmental Benefits and Impacts</td>
<td>32</td>
</tr>
<tr>
<td>6.2 Social Benefits of ULGDP Projects</td>
<td>32</td>
</tr>
<tr>
<td>6.3 Issues Related to Involuntary Resettlement</td>
<td>33</td>
</tr>
<tr>
<td>6.4 Adverse Social Impacts</td>
<td>33</td>
</tr>
<tr>
<td>6.5 Adverse Environmental Impacts</td>
<td>34</td>
</tr>
<tr>
<td>6.6 Cumulative Impacts of the Project</td>
<td>35</td>
</tr>
<tr>
<td><strong>7 TRAINING AND CAPACITY BUILDING REQUIREMENTS</strong></td>
<td>36</td>
</tr>
<tr>
<td>7.1 ESMF &amp; RPF Training</td>
<td>36</td>
</tr>
<tr>
<td>7.2 Technical and Financial Assistance</td>
<td>38</td>
</tr>
<tr>
<td>7.3 Appointing an ULGDP Environmental and Social Specialist to MWUD</td>
<td>39</td>
</tr>
<tr>
<td><strong>8 MONITORING OF ESMF IMPLEMENTATION</strong></td>
<td>41</td>
</tr>
</tbody>
</table>
TABLES
Table 1 Participating Urban Local Governments............................................................... 4
Table 2 List of Eligible Investments under ULGDP Component 1 ................................. 5
Table 3 ULGDP Project Management Organizational Arrangements ............................... 8
Table 4 EPA Guidelines and Standards........................................................................... 15
Table 5 World Bank – Applicable Operational Policies, Bank Procedures and Good Practices................................................................. 16
Table 6 Outline of Roles and Responsibilities for the ULGDP ESMF ............................. 19
Table 7 EPA Schedules 1, 2 and 3 .................................................................................. 20
Table 8 Proposed Training Packages............................................................................... 37
Table 9 Training and Sensitization Requirements............................................................ 37
Table 10 Proposed Budget for Implementation of the ULGDP ESMF............................... 44
Table 11 Impact Identification and Classification ............................................................. 46
Table 12 Urban Roads & Drainage: Mitigation & Monitoring Checklist ....................... 59
Table 13 Water Supply and Sanitation: Mitigation & Monitoring Checklist................... 62
Table 14 Waste Management: Mitigation & Monitoring Checklist................................. 63
Table 15 Health and Sanitation: Mitigation & Monitoring Checklist............................... 64

FIGURES
Figure 1. ESMF System to be applied for ULG Investment Projects............................... 22
Figure 2. Schedule 1, Full EIA Application Process....................................................... 25

BOXES
Box 1. Objectives of the EPA ......................................................................................... 9
Box 2. Possible Agenda for a 2-day Workshop Introducing the ESMF ......................... 37
Box 3. Integration of Environmental Management into Development Planning ........... 38
### ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARAP</td>
<td>Abbreviated Resettlement Action Plan</td>
<td>O&amp;M</td>
<td>Operation and Maintenance</td>
</tr>
<tr>
<td>BP</td>
<td>Bank Procedures (World Bank)</td>
<td>OM</td>
<td>Operational Manual</td>
</tr>
<tr>
<td>BWUD</td>
<td>Bureau of Works and Urban Development (Regional)</td>
<td>OP</td>
<td>Operational Policy (World Bank)</td>
</tr>
<tr>
<td>CBDSD</td>
<td>Capacity Building for Decentralised Service Delivery</td>
<td>PAPs</td>
<td>Project Affected Persons</td>
</tr>
<tr>
<td>CRMP</td>
<td>Cultural Resources Management Plan</td>
<td>PIP</td>
<td>Project Implementation Plan</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
<td>PSCAP</td>
<td>Public Sector Capacity Building Support Program Project</td>
</tr>
<tr>
<td>EMP</td>
<td>Environmental Management Plan</td>
<td>RAP</td>
<td>Resettlement Action Plan</td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Authority</td>
<td>REPA</td>
<td>Regional Environmental Protection Authority</td>
</tr>
<tr>
<td>ERA</td>
<td>Ethiopian Roads Authority</td>
<td>RPF</td>
<td>Resettlement Policy Framework</td>
</tr>
<tr>
<td>ESMF</td>
<td>Environmental and Social Management Framework</td>
<td>RUPI</td>
<td>Regional Urban Planning Institute</td>
</tr>
<tr>
<td>ETB</td>
<td>Ethiopian Birr</td>
<td>SDPRP</td>
<td>Sustainable Development and Poverty Reduction Programme</td>
</tr>
<tr>
<td>GOE</td>
<td>Government of Ethiopia</td>
<td>TOR</td>
<td>Terms of Reference</td>
</tr>
<tr>
<td>GP</td>
<td>Good Practice (World Bank)</td>
<td>UDCBO</td>
<td>Urban Development Capacity Building Office (of MWUD)</td>
</tr>
<tr>
<td>IO</td>
<td>Infrastructure Office (for ULGDP)</td>
<td>ULGs</td>
<td>Urban Local Governments</td>
</tr>
<tr>
<td>MSE</td>
<td>Micro and Small Enterprises</td>
<td>ULGDP</td>
<td>Urban Local Government Development Project</td>
</tr>
<tr>
<td>MWUD</td>
<td>Ministry of Works and Urban Development</td>
<td>USD</td>
<td>United States Dollar</td>
</tr>
<tr>
<td>NGO</td>
<td>Non governmental organization</td>
<td>VIP</td>
<td>Ventilated improved pit latrine</td>
</tr>
</tbody>
</table>

**Exchange rates used (as at February 21, 2008)**

<table>
<thead>
<tr>
<th>Ethiopian Birr</th>
<th>US Dollar</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.31715</td>
<td>1.00</td>
</tr>
</tbody>
</table>
DEFINITIONS
As provided in the Ethiopian Environmental Protection Authority’s Environmental Impact Assessment Guideline Document (May 2000)

Activity (or Project): A development action (or project) either planned or existing, that may result in environmental impacts through pollution and/or resource use.

Affected environment: Those parts of the socio-economic and biophysical environment impacted on by the development activity/project

Alternatives: Possible courses of action, in place of another, that would meet the same purpose and need. Alternatives can refer to any of the following but are not limited to: alternative sites for development, alternative projects for a particular site, alternative site layouts, alternative designs, alternative processes and materials. In EIA the so-called “no action” alternative may also require investigation in certain circumstances.

Assessment: The process of collecting, organizing, analyzing, interpreting and communicating data that is relevant to a decision.

Auditing: The process through which an EIA is inspected which then provides an opportunity and mechanism to learn from experience and to refine project design and implementation procedures.

Competent Agency: Any federal or regional government organ entrusted by law with a responsibility related to Environmental Impact Assessment.

Compliance: To act in accordance with the rules and regulations.

Development: The act of altering or modifying resources in order to obtain potential benefits.

Environment: The physical, biological, social, economic, cultural, historical and political factors that surround human beings. It includes both the natural and built environments. It also includes human health and welfare.

Environmental issue: A concern felt by one of more parties about some existing, potential or perceived environmental impact.

Environmental impact: The degree of change in an environment resulting from the effect of an activity on the environment, whether desirable or undesirable. Impacts may be the direct consequence of an organization’s activities or may be indirectly caused by them.

Environmental impact assessment (EIA): A process of examining the environmental consequences of development.

Environmental Impact Assessment Report: A report containing sufficient information to enable the Environmental Protection Authority to determine whether and under what conditions a proposed action should proceed.

Environmental Management Plan: An action plan that addresses the how, when, who, where and what of the environmental mitigation measure aimed at optimizing benefits and avoiding or mitigating adverse potential impacts of proposed operation or activity. It encompasses mitigation, monitoring, rehabilitation and contingency plans.

Evaluation: The process of weighing information, the act of making value judgments or ascribing values to data in order to reach a decision.

Interested and Affected Parties: Individuals or groups concerned with or affected by an activity and its consequences. These include local communities, work force, customers, or consumers, environmental interested groups and the general public.
**Impact:** The effect of an activity on the environment whether desirable or undesirable. Impacts may be the direct consequence of an organization’s activities or may be indirectly caused by them.

**Irreversible impact:** When the character, diversity or reproductive capacity of an environment is permanently lost.

**Mitigation:** Measures taken to prevent, reduce or rectify negative impacts of a particular project where the evaluation process concludes that the impacts may be significant.

**Monitoring:** The repetitive and continued observation, measurement and evaluation of environmental data to follow changes over a period of time to assess the efficiency of control measures.

**Negative impact:** A change that reduces the quality of the environment (for example, by reducing species diversity and the reproductive capacity of the ecosystem, by damaging health, property or by causing nuisance).

**Participation:** Interested and affected individuals and groups will have an opportunity to participate in decisions about ways in which environmental concerns are addressed.

**Positive impact:** A change that improves the quality of the environment (for example, by increasing species diversity and the reproductive capacity of the ecosystem, by removing nuisances or improving amenities).

**Proponent/Developer:** The party that proposes to carry out the activity that may require an environmental impact assessment. In terms of this ESMF the proponent is the urban local government (ULG).

**Rehabilitation:** Restoration of landscape to, more or less, its former appearance and characteristics.

**Screening:** The process whereby the responsible authority decides whether or not a project requires assessment, and the level of assessment that may be required.

**Significant impact:** An impact that, by its magnitude, duration or intensity alters an important aspect of the environment.
INTRODUCTION

This document provides an Environmental and Social Management Framework (ESMF) for the Urban Local Government Development Project (ULGDP). Financing for the ULGDP is provided by the International Development Association of the World Bank. Participating urban local government (ULGs) and Regional governments will also provide funds to finance ULGDP capital investment projects. The Ministry of Works and Urban Development (MWUD) is the agency responsible for overall implementation of the ULGDP including the provisions of this ESMF. The participating ULGs are the main authorities responsible for identifying and implementing ULGDP investment projects. This ESMF document is to be used by all implementing agencies of the ULGDP in order to ensure that all environmental and social safeguards are adequately addressed and that the relevant capacity and training needs are established in order for the recommended measures to be implemented effectively.

OBJECTIVE AND SCOPE OF THE ESMF

The main purpose of the ESMF is to:

⇒ Establish clear procedures and methodologies for the environmental and social assessment, review, approval and implementation of investments to be financed under the ULGDP;
⇒ Specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental and social concerns related to ULGDP investments;
⇒ Determine the training, capacity building and technical assistance needed to successfully implement the provisions of the ESMF; and
⇒ Provide practical information resources for implementing the ESMF.

A Resettlement Policy Framework (RPF) has been developed and is presented in a separate document. Short simpler descriptions of the ESMF and RPF guidelines and checklists for use by ULGs in identifying and implementing ULGDP investment projects will be prepared separately.

Ethiopian Environmental Regulations

The ESMF will ensure compliance with the relevant requirements of the Environmental Policy of Ethiopia, legislation and guidelines, including

a) Proclamation No. 295/2002 Environmental Protection Organs Establishment
b) Proclamation No. 299/2002 Environmental Impact Assessment
c) Proclamation No. 300/2002 Environmental Pollution Control
d) Proclamation No. 513/2007 Solid Waste Management Proclamation
f) EPA Environmental Impact Assessment Procedural Guidelines, Series 1, November 2003
g) EPA Environmental Management Plan for the Identified Sectoral Developments in the Ethiopian SDPRP, May 2004

Public Disclosure

For projects such as the ULGDP, the World Bank procedures require that the ESMF and RPF are prepared and publicly disclosed prior to project appraisal. This allows the public
and other stakeholders to comment on the possible environmental and social impacts of the project, and for the World Bank’s Appraisal Team to strengthen the frameworks, particularly measures and plans to prevent or mitigate any adverse environmental and social impacts. To this end, this document will, when agreed between the GOE and the World Bank, be publicly released through the World Bank’s InfoShop, and in public locations in Ethiopia prior to project appraisal.
Urban Local Government Development Project

Background, Justification & Components

The Urban Local Government Development Project is a continuation of a program of reform by the GOE which started with the government’s creation of a new institutional and organizational framework for urban local governments in the early 2000s. The World Bank contributed to the early stages of establishing these urban local governments through the Capacity Building for Decentralized Service Delivery Project (CBDSD) which aimed to support the decentralization, reform and capacity building initiative. The CBDSD was followed by support from the Urban Management Sub-program of the Public Sector Capacity Building Program Support Project (PSCAP) that substantially scaled up the capacity building component of the CBDSD. The CBDSD and PSCAP are focused on capacity building to enable regions and cities to establish the necessary institutional and organizational frameworks, and provide a range of training and other technical assistance activities to establish cities as viable entities that are able to fulfil their legal mandates. The ULGDP builds on the CBDSD and PSCAP initiatives by establishing an on-budget, performance-related specific purpose grant as an additional component to the government’s fiscal architecture of predictable resource transfers to the urban sector. The specific purpose grant is incentive-driven and is designed to support improvements in infrastructure and service delivery as a result of enhanced performance by the urban local governments (ULGs) in implementing the government’s urban reform agenda. The specific purpose grant complements the other fiscal instruments that the government has already created as part of its decentralization strategy, which include:

⇒ The Regional Block Grant (providing support for recurrent expenditures from the federal treasury);
⇒ The regional PSCAP Specific Purpose Grant (providing support for capacity building); and
⇒ The pilot Local Investment Grant (providing support for small capital investments in rural woredas and urban local governments).

ULGDP Scope

The ULGDP developmental objective is: to support improved performance in the planning, delivery and sustained provision of priority municipal services and infrastructure by urban local governments as well as contribute to the implementation of the government’s Urban Development and Urban Good Governance Programmes. IDA support for the ULGDP will, initially, be contained within a 5 year period, with the Project Effective Date expected in August/September 2008.

The ULGDP has two components:-

Component 1: Performance Grants which constitute the vast majority of the project funds and would be disbursed as per the access and performance criteria stated in the ULGDP Operational Manual.

Component 2: Implementation Support which reserves a very small (less than 1%) amount of the project funds to finance planning and implementation of the ULGDP.

As a result of enhanced performance, the ULGDP Performance Grants will enable cities, to:

a) More effectively address urban infrastructure backlogs;

b) Facilitate local economic development and to generate employment; and
c) Provide incentives for urban local governments and regions to implement the government’s proposed reforms under the Urban Development and Urban Good Governance Programs; which are needed for sustainable urban services and growth.

The key trigger for ULG access to ULGDP funds will be preparation and submission of 3-year capital investment plans. The 3-year capital investment plans should be: (a) realistic; (b) technically sound; (c) responsive to real community priorities; and (d) sustainable for operations and maintenance. These investment plans will form the core of the ULGs’ initial 3-year capital investment and annual applications for ULGDP funding and must, therefore, be prepared and submitted in a timely fashion and in formats that will enable Regional Bureaus of Works and Urban Development (BWUDs) and the MWUD to adequately review and approve the requests.

The planning and budgeting for ULGDP at federal, regional and ULG levels will be integrated into and aligned with the existing GOE Public Investment Program financial calendar and systems.

**Participating Urban Local Governments**

For the start of the ULGDP 19 cities will be invited to prepare and submit applications for ULGDP Performance Grants. These are indicated in Table 1 below.

<table>
<thead>
<tr>
<th>City</th>
<th>Federal Chartered City or Regional State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addis Ababa City Government</td>
<td>Federal Chartered City</td>
</tr>
<tr>
<td>Dire Dawa City Administration</td>
<td>Federal Chartered City</td>
</tr>
<tr>
<td>Bahir Dar, Dessie, Gondar and Kombolcha</td>
<td>Amhara Regional State</td>
</tr>
<tr>
<td>Harar</td>
<td>Harari Regional State</td>
</tr>
<tr>
<td>Adama, Bishoftu, Jimma and Shashemene</td>
<td>Oromia Regional State</td>
</tr>
<tr>
<td>Awassa, Arba Minch, Dila and Sodo</td>
<td>Southern Nations Nationalities &amp; Peoples’ Regional State</td>
</tr>
<tr>
<td>Mekele, Adigrat, Axum and Shire</td>
<td>Tigray Regional State</td>
</tr>
</tbody>
</table>

The 19 cities contain a population of approximately 5.5 million comprising about 43% of Ethiopia’s total urban population. These 19 cities have been selected for two main reasons: a) it is important to focus on large sized investments so that substantial impact can be achieved – so as to avoid a large number of small investments that have little real impact; and b) to focus the ULGDP investment in those 18 cities that have already received substantial capacity building support through the CBDDS project, including development of 5 year capital investment plans, plus the capital city, Addis Ababa. In this document these cities are referred to as “urban local governments” (ULGs).

---

1 Regional BWUDs will work in close consultation with Regional Urban Planning Institutes.

2 This data is based on the 1995 census estimates for July 2007. These will be updated with the May 2007 census data once this is released in 2008.
**Anticipated ULG investment project types**

**COMPONENT 1**

The list of eligible investments will include all sectors for which ULGs have legal responsibility for investment, comprising, but not limited to those described in Table 2. ULGs are encouraged to focus on projects that will contribute directly to creating jobs and increasing incomes, including labour intensive projects. Table 2 sets out a list of the types of ULG investment projects that are likely to be undertaken as part of the ULGDP.

<table>
<thead>
<tr>
<th>Infrastructure/Service</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Roads</strong></td>
<td>Cobblestone, gravel and red ash roads, rehabilitation of roads, bridges, fords and culverts, pedestrian ways and street lighting, etc.</td>
</tr>
<tr>
<td><strong>Integrated infrastructure and land services (for housing, SME, industrial zones)</strong></td>
<td>Land development, servicing land with utilities (water supply, electricity, telecommunications and survey), roads and drains solid &amp; liquid waste collection &amp; disposal, etc.</td>
</tr>
<tr>
<td><strong>Sanitation (Liquid Waste)</strong></td>
<td>Sewer reticulation systems, wastewater treatment ponds, sludge ponds, community soak away pit and septic tanks, community latrines: dry pit, ventilated improved pit latrine, composting, drainage canals, vacuum trucks and vacuum handcarts, etc.</td>
</tr>
<tr>
<td><strong>Sanitation (Solid Waste Management)</strong></td>
<td>Transfer stations, collection points, collection bins, landfills, biogas and composting plants, collection trucks, other collection equipment and landfill site equipment including compaction vehicles, etc.</td>
</tr>
<tr>
<td><strong>Water Supply</strong></td>
<td>Spring catchments and gravity distribution system, river intake (run of river/dam), treatment works and pressure distribution, wells with submersible pumps, treatment works and pressure distribution, rehabilitation or expansion of existing system, communal standpipes, etc.</td>
</tr>
<tr>
<td><strong>Urban drainage</strong></td>
<td>Drainage and flood control systems, etc</td>
</tr>
<tr>
<td><strong>Built Facilities</strong></td>
<td>Urban markets with associated services (water supply, drainage, access roads, etc), development of production and market centres for small businesses, slaughter houses with by-products processing facilities, etc</td>
</tr>
<tr>
<td><strong>Consultancy services</strong></td>
<td>For studies relating to, preliminary and detailed design, contract documentation and supervision relating to the above infrastructure and services, etc.</td>
</tr>
</tbody>
</table>

**COMPONENT 2**

It is expected that only a very small (less than 1%) amount of IDA ULGDP funds will be required for implementation support. The funds necessary, in addition to the sources outlined below, will finance further training and capacity building initiatives as required to support implementation. This will include supervision and other support activities such as regional visits, workshops, seminars, evaluations and meetings; consultancy services to support cities in the implementation of the Environmental and Social Management Framework (ESMF) and Resettlement Policy Framework (RPF) activities as required - including screening, preparation of environmental impact assessments, environmental management plans, cultural resource management plans, and resettlement action plans, and monitoring compliance with safeguards frameworks; a MOFED based expert responsible
for financial disbursements and reporting (if required); support for preparation of mid-term and final evaluation reports (including the Implementation Completion Report), etc.

**Note:** ULGDP support activities that are required prior to the ULGDP fund availability (the Project Effective Date), including training for implementing agencies on the ULGDP Operational Manual, Urban Infrastructure and Asset Management Manual, ESMF and RPF, as well as any other necessary activities, will be funded from CBDSD or PSCAP.

**Access Criteria**

Eligible urban local governments will need to meet certain criteria to access funds under the project. The criteria, at a minimum, provides assurances that: (a) funds will be managed adequately, and (b) proposed investments by the cities adequately represent the priorities of citizens, will generate jobs and promote the local economy, can be implemented to acceptable standards and can be operated and maintained adequately. As such, the following criteria have been proposed:

a) Submission of a signed Participation and Performance Agreement by each ULG;

b) Submission of a rolling 3-year capital investment plan based on a consultative process with a detailed annual action plan, approved by City Council;

c) Demonstration of own budgetary resources adequate to meet (a) counterpart funding requirements; and (b) existing and future O&M requirements over the 3-year capital investment plan period;

d) Improved financial management systems in place, with evidence of an adequate internal audit system; and

e) Adequate human resource capacity to consult, plan, implement and sustainably manage priority services and infrastructure.

**Performance Criteria**

While cities will be allocated funding envelopes once they meet the access criteria, their performance in the use of the funds and in the implementation of the reforms being promoted through the Urban Development and Urban Good Governance Programs, will be assessed. To encourage good performers, and to ensure that funds are not “locked” by poor performers, reallocations will be carried out periodically. Reallocations will be based on annual performance reviews. MWUD is creating a system of annual performance reviews to follow the implementation, at regional and city levels, of the MWUD’s Urban Development and Urban Good Governance Programs. The review of regional and city performance related to the implementation of this project will be incorporated as part of the regular annual review process of MWUD. The criteria for assessing performance will be based on measures related to:

a. Works implementation progress (60% in the first year of ULGDP, 75% in the second year and 100% in the 3rd year);

b. Fund utilization (65% in the first year, 80% in the second year and 100% in the 3rd Year);

c. Financial performance (revenue targets should be met 100% in the 2nd year of ULGDP; annual reports should be submitted on time as per the financial regulation; completion of audits as per the financial regulation);

d. Procurement and safeguards compliance (100%); and

---

3 O&M requirements to be calculated based on the MWUD’s proposed asset management framework.
e. Timely submission of project physical and financial performance reports as per the PIP and OM.
Organizational Responsibilities for ULGDP Implementation

The following section describes the organizational responsibilities for ULGDP implementation. The two main project management systems required for ULGDP implementation are:

a) For overall project management – led by MWUD. Only those responsibilities relating to the implementation of the ESMF and RPF are included. Full details of overall project management responsibilities are contained in the ULGDP PIP and Operational Manual;

b) For transfer of funds, financial management and reporting – led by MOFED. Organizational responsibilities relating to transfer of funds, financial management and reporting are excluded from this ESMF document as they are described in the ULGDP PIP and Operational Manual.

Table 3 ULGDP Project Management Organizational Arrangements

FEDERAL ORGANIZATIONAL RESPONSIBILITIES

The implementation of ULGDP will use existing government structures with MWUD having overall implementation responsibility in accordance with its federal mandate. No new organizational structures will be established at the Federal or Regional levels.

Ministry of Works and Urban Development

As the federal agency with overall implementation responsibility for ULGDP, the Ministry of Works and Urban Development will be responsible for the tasks indicated below. The MWUD will assign specific responsibility for day to day management of the Ministry’s responsibilities to the Urban Development Capacity Building Office (UDCBO).

---

4 Participating Urban Local Governments will establish “Infrastructure Offices” not specifically for ULGDP implementation but as part of a wider, parallel and ongoing initiative to strengthen ULG organizational focus and capacity for integrated infrastructure planning and management. ULGs may, where necessary, offer higher and more attractive salaries to attract suitably qualified staff for ULGDP implementation. Addis Ababa and Dire Dawa may not need to establish infrastructure offices as they already have established organizational entities such as the Addis Ababa City Road Authority and Addis Ababa Water and Sewerage Authority.
UDCBO will serve as the coordinating body across federal, regional and local agencies. If needed, additional staff may be recruited to complement or strengthen existing capacity. UDCBO will hire an Environmental and Social Specialist whose responsibility will include supervising the overall implementation of the ESMF and RPF, providing support to agencies with a role in the ESMF such as the Environmental Council, the Environmental Protection Authority, BWUDs/RUPIs and ULGs.

The duties and responsibilities of UDCBO as the ULGDP coordinating unit relevant to the ESMF and RPF (a full list is included in the Project Implementation Plan) include the following:

a. Ensuring smooth implementation and forward planning – including identification and mitigation of constraints/problems and exploitation of opportunities arising.

b. Following up the day-to-day preparation and implementation of the project and providing effective and efficient management of the ULGDP;

c. Ensuring timely reports are produced by participating ULGs/Regions, consolidated and presented to the Minister/World Bank as required and when endorsed disseminate them to the right users;

d. Coordinating ULGDP implementation, facilitating flow of information and keeping consolidated documentation on a national basis;

e. Providing assistance to regional and local governments as needed, other stakeholders, subcommittees, technical groups, monitoring, review and evaluation teams;

f. Determining overall capacity building and specific training needs, provision of training to meet ULGDP needs (OM, PIP, ESMF, RPF), establishing and administering the budget (ULGDP component 2) to meet capacity building and training needs;

g. Monitoring and reporting on overall ULGDP implementation progress;
  ⇒ Coordinate and consolidate ESMF audit reports, monitor and evaluate ESMF and RPF implementation;
  ⇒ Monitor key performance indicators and facilitate regional preparation of reports;

h. Recruiting key staff for ULGDP implementation;

i. Facilitate cities meeting access/performance criteria; and

j. Verifying compliance with Ethiopia’s and the World Bank’s environmental, cultural, resettlement and other relevant safeguards.

**Federal & Regional Environmental Protection Authorities**

The Environmental Protection Authority (EPA), the main agency responsible for environmental management, was established in 1995 under Proclamation 9/1995, as an independent agency reporting to the Council of Ministers.

The EPA is required to provide regional authorities with guidance, technical support, and capacity building; support the development of various guidelines, including procedures appropriate to local projects; undertake awareness creation in other federal agencies; and provide technical support to those agencies. Its key objectives are outlined in Box 1.

**Box 1. Objectives of the EPA**
Role in the Implementation of the ESMF: The EPA will be responsible for ensuring that all ULG investment projects under the ULGDP comply with national EIA regulations and the requirements of the ESMF. Following screening by the ULG responsible, where relevant, the Regional Environmental Protection Authorities (REPAs) will review and approve project EIAs and will issue an environmental permit/license where applicable. The federal EPA will undertake environmental audits where required to ensure that ULGs are complying with their Environmental Management Plans (EMPs) and their commitments to environmental management, mitigation and monitoring.

**Bureaus of Works and Urban Development**

In each of Ethiopia’s five participating regions the Bureaus of Works and Urban Development (BWUDs) will be the coordinating body to oversee, coordinate and facilitate the implementation process of the ULGDP for local governments under their jurisdiction. The Regional Bureaus of Works and Urban Development will work in close consultation with and delegate specific functions to Regional Urban Planning Institutes (RUPIs). BWUDs will be responsible for the following functions:

a) Ensuring that participatory planning processes are undertaken by the ULGs;

b) Collaborating with local governments in enforcing ULGDP operating guidelines, ESMF, RPF and other ULGDP or government procedures. Providing technical assistance to cities for implementation and compliance with safeguards and prevailing technical standards.

---

The City Manager’s Office will play this role in AACG and DDCA.
URBAN LOCAL GOVERNMENTS

The operational framework for planning and implementing ULGDP investment projects will be through a consultative process with the appropriate stakeholders at the local government level. Within each ULG, Infrastructure Offices (IOs) will be responsible for implementation of the ULGDP.

Urban Local Governments will be the highest body that will oversee, coordinate and implement ULGDP activities through their Council. ULGs will determine the allocation of the tasks for which they are responsible, as listed below, to ULG Bureaus, departments or units, including Infrastructure Offices:

a) Include in ULG CIPs, Annual Plans and budgets 20% ULG contribution to ULGDP Performance Grants received and provide contribution;

b) Manage the implementation of the ULGDP investment projects and planning in advance for the sustainable operation and maintenance of ULGDP investment after project completion;

c) Undertake OM, ESMF, RPF and overall ULGDP training. Identify capacity building needs and inform BWUDs/MWUD of these needs.

d) Implement and follow OM, ESMF and RPF procedures, including ESMF and RPF reporting requirements;

e) Assist communities in undertaking planning and implementation exercises, and mobilize needed local resources and monitor their use;

f) Organize joint reviews and evaluate the ULGDP activities and results;

g) Consult and report regularly to the ULG City council regarding the progress of ULGDP implementation;

h) Implementing actions to satisfy reforms/performance requirements;

i) Ensuring adequate staffing;

The development and implementation of the ESMF and RPF may involve a number of processes which include:

a. An environmental screening to identify the potential severity of environmental impacts including land acquisition, resettlement and cultural resources;

b. Where required as a result of the environmental screening, development of:

⇒ Full or partial Environmental Impact Assessments;
⇒ Environmental Management Plans;
⇒ Full or abbreviated Resettlement Action Plans;
⇒ A Physical Cultural Resources Management Plans; and
⇒ And implementation of environmental mitigation measures.

The main responsibility for initiating and carrying out these activities will be the responsibility of the ULG IO6. The regional BWUDs will provide a review role, and provide political and administrative support for the implementation of the EIAs and RAPs, while the MWUD/UDCBO will ensure that there is compliance with the ESMF and RPF and national legislation, and that information is gathered in one place for overall ULGDP project monitoring and progress reporting.

---

6 If necessary with support from local consultants contracted by MWUD/UDCBO
Addis Ababa City Government and Dire Dawa City Administration

Addis Ababa City Government and Dire Dawa City Administration are federal chartered cities who combine the authority, functions and responsibilities of regional BWUDs and BOFEDs as well as of Urban Local Governments. Hence, regarding the ULGDP:

1. The Bureau of Finance and Economic Development will have the authority to carry out the tasks and assume the responsibilities assigned to BOFEDS; and

2. The City Manager and City Manager’s Office will have the overall authority (including the authority to delegate tasks), carry out the tasks and assume the responsibilities assigned to BWUDs and ULGs.

3. The City Manager will determine the infrastructure body/office responsible for the implementation of the infrastructure project.
Policy & Legal Framework for Environmental Management

OVERVIEW OF THE NATIONAL LEGISLATIVE REQUIREMENTS

The Constitution adopted by Ethiopia in 1995 provides the guiding principles for environmental protection and management in Ethiopia. The concept of sustainable development and environmental rights are enshrined in article 43, 44 and 92 of the Constitution of GOE.

Article 43: The Right to Development identifies peoples’ right to:

⇒ Improved living standards and to sustainable development; and
⇒ Participate in national development and, in particular, to be consulted with respect to policies and projects affecting their community.

Similarly, in Article 44: Environmental Rights, all persons:

⇒ Have the right to a clean and healthy environment; and
⇒ Who have been displaced or whose livelihoods have been adversely affected as a result of State programs have the right to commensurate monetary or alternative means of compensation, including relocation with adequate State assistance.

Moreover, in Article 92: Environmental objectives are identified as:

⇒ Government shall endeavour to ensure that all Ethiopians live in a clean and healthy environment.
⇒ The design and implementation of programs shall not damage or destroy the environment.
⇒ People have the right to full consultation and to the expression of views in the planning and implementation of environmental policies and projects that affect them directly.
⇒ Government and citizens shall have the duty to protect the environment.

The Environmental Policy of Ethiopia was approved by the Council of Ministers in April 1997. It has 10 sectoral and 10 cross-sectoral components one of which addresses “Human Settlements, Urban Environment and Environmental Health”, and was based on the findings and recommendations of the National Conservation Strategy of Ethiopia. The policy document contains elements that emphasize the importance of mainstreaming socio-ecological dimensions in development programs and projects.

The National Conservation Strategy was developed through a consultative process over the period 1989 to 1995. It takes a holistic view of natural, human made and cultural resources, and their use and abuse and seeks to present a coherent framework of plans, policies and investment related to environmental sustainability. The document consists of five volumes i.e., the Natural Resource Base, Policy and Strategy, Institutional Framework, the Action Plan and Compilation of Investment Programme.

A number of proclamations and supporting regulations contain provisions for the protection and management of the environment and put into effect the principles of the Constitution and the Environmental Policy. Environmental Impact Assessment Proclamation No. 299/2000 contains provisions designed to ensure sustainable development. Proclamation 299/2000 makes an environmental impact assessment mandatory not only for development projects but also for policies, plans and programs (see Section 0).
**Environmental Policy of Ethiopia**

The goal of the Environmental Policy of Ethiopia is to improve and enhance the health and quality of life of all Ethiopians and to promote sustainable social and economic development through the sound management and use of resources and the environment as a whole so as to meet the needs of the present generation without compromising the ability of future generations to meet their own needs. For the effective implementation of the Environmental Policy of Ethiopia the policy encourages creation of an organizational and institutional framework from federal to community levels. The Environmental Policy of Ethiopia provides a number of guiding principles that require adherence to principles of sustainable development; in particular the need to ensure that Environmental Impact Assessment:

a) Considers impacts on human and natural environments;
b) Provides for early consideration of environmental impacts in projects and programs design;
c) Recognizes public consultation;
d) Includes mitigation and contingency plans;
e) Provides for auditing and monitoring; and
f) Is a legally binding requirement.

**Proclamation 295/2002, Establishment of Environmental Protection Organs**

Proclamation 295/2002 establishes the organizational requirements and identifies the need to establish a system that enables coordinated but different responsibilities of environmental protection agencies at federal and regional levels. The Proclamation indicates the duties of different administrative levels responsible for applying federal law. Depending on the decisions made, resources available and specific organizational situation in each Region, Regional States have allocated responsibilities and duties to woredas, ULGs and kebeles. See Section 0, Annex A: List of Regional EPA Contacts.

**Proclamation 299/2002, Environmental Impact Assessment**

The Environmental Impact Assessment (EIA) Proclamation makes EIA a mandatory requirement for the implementation of major development projects, programs and plans. The Proclamation is a tool for harmonizing and integrating environmental, economic, cultural, and social considerations into decision making processes in a manner that promotes sustainable development. The why and how to prepare, methodologies, and to whom the report is submitted are described in this law. The law clearly defines:

a) Why there is a need to prepare EIAs;
b) What procedure is to be followed by the ULG in order to implement EIA of the project;
c) The depth of environmental impact studies;
d) Which projects require full EIA reports;
e) Which projects need partial or no EIA report; and
f) To whom the report has to be submitted.

**Proclamation 300/2002, Environmental Pollution Control**

Proclamation 300/2002 aims to mitigate pollution as an undesirable consequence of social and economic development activities. The proclamation needs to be observed for effective EIA administration.
**Proclamation 513/2007, Solid Waste Management**
Proclamation 513/2007 aims to promote community participation in order to prevent adverse effects and enhance benefits resulting from solid waste. It provides for preparation of solid waste management action plans by urban local governments.

**Sectoral environmental policies**
Sectoral policies have been prepared by various agencies. The Federal Water Resource Policy formulated by the Ministry of Water Resources advocates comprehensive and integrated water resource management. The overall goal of the policy is to enhance and promote all national efforts towards the efficient and optimum utilization of the available water resources for socio-economic development on a sustainable basis.

**Environmental guidelines and standards**
National environmental standards have not yet been established for Ethiopia. Currently, the EPA is implementing international best practice standards for pollution control, emissions and waste as outlined in the Proclamation for Environmental Pollution Control. The Environmental Protection Authority have produced a number of documents to guide any person or organization who is undertaking activities that may have positive or negative impacts on social, physical or cultural environments. These are described in Table 4 below.

<table>
<thead>
<tr>
<th>GUIDELINE / STANDARD</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIA Guideline, July 2000</td>
<td>The EIA Guideline Document provides essential information covering:</td>
</tr>
<tr>
<td></td>
<td>⇒ Environmental Assessment and Management in Ethiopia</td>
</tr>
<tr>
<td></td>
<td>⇒ The Environmental Impact Assessment Process</td>
</tr>
<tr>
<td></td>
<td>⇒ Standards and Guidelines</td>
</tr>
<tr>
<td></td>
<td>⇒ Issues for sectoral environmental impact assessment in Ethiopia covering:</td>
</tr>
<tr>
<td></td>
<td>agriculture, industry, transport, mining, dams and reservoirs, tanneries,</td>
</tr>
<tr>
<td></td>
<td>textiles, hydropower generation, irrigation projects and resettlement</td>
</tr>
<tr>
<td></td>
<td>projects.</td>
</tr>
<tr>
<td></td>
<td>⇒ Annex 1 identifies the activities for which a full EIA, partial measure</td>
</tr>
<tr>
<td></td>
<td>or no action is required. Annex 2 provides an example of an application</td>
</tr>
<tr>
<td></td>
<td>form. Annex 3 provides standards and guidelines for water and air.</td>
</tr>
<tr>
<td>EIA Procedural Guideline, November 2003</td>
<td>The guideline outlines the screening, review and approval process for development projects in Ethiopia and defines the criteria for undertaking an EIA.</td>
</tr>
<tr>
<td>Draft Guideline for Environmental Management Plan (draft), May 2004</td>
<td>The guideline outlines the necessary measures for preparation of an Environmental Management Plan (EMP) for proposed developments in Ethiopia and the institutional arrangements for implementation of EMPs.</td>
</tr>
<tr>
<td>Waste Handling and Disposal Guideline, 1997</td>
<td>The Government has developed Waste Handling and Disposal Guideline which is being used by health facilities since 1997. The Guidelines are meant to help industry and local authority to deal with the waste situation at a local level.</td>
</tr>
<tr>
<td>National Sanitation Protocol</td>
<td>The Ministry of Health has developed a National Sanitation Protocol which is designed to follow the national strategy for hygiene and sanitation improvement with its focus on universal access (100% hygienic and sanitized households) in rural or peri-urban environments.</td>
</tr>
<tr>
<td>Injection Safety Guideline</td>
<td>The Government is finalizing an “Injection Safety Guideline” to reduce infections through contaminated needles. The Government has agreed to</td>
</tr>
</tbody>
</table>
install a regular monitoring system to ensure the implementation of the safeguards and regular checking of facilities to ascertain that health facility generated wastes do not contaminate the environment.

Labour Proclamation (42/93)  
The Labour proclamation requires an employer to take the necessary measures to adequately safeguard the health and safety of the workers.

Ethiopian Roads Authority (ERA) Environmental Procedures Manual, 2001  
ERA prepared this manual for the use and technical guidance for design personnel of the Ethiopian Roads Authority and consultants doing an Environmental Assessment Study during road design. The manual was developed in order to standardize Environmental Procedures for design of new roads and rehabilitation of existing roads.

Public Health Proclamation (200/2000)  
This proclamation:
- Prohibits discharge of untreated liquid waste generated from septic tanks, seepage pits and industries into water bodies, or water convergences
- Prohibits the disposal of solid or liquid or any other waste in a way which contaminates the environment or affects public health.

**WORLD BANK SAFEGUARD REQUIREMENTS**

World Bank safeguard policies are described in the following documents:

**Table 5  World Bank – Applicable Operational Policies, Bank Procedures and Good Practices**

<table>
<thead>
<tr>
<th>Yes</th>
<th>If applicable, how might it apply?</th>
</tr>
</thead>
</table>
| Yes | Environmental Assessment (Operational Policy (OP), Bank Procedures (BP) and Good Practices (GP) No. 4.01)  
The ULGDP will finance urban local government capital investment plans which will include those sectors for which ULGs have legal responsibility for provision of infrastructure and services, including, but not limited to: water resource and water supply; sanitation; primary health; primary and secondary education; roads; urban drainage and flood control works; land and infrastructure development to support construction of housing, micro and small enterprise development; industrial zones; markets and premises for MSE; solid waste management, including collection vehicles & systems, landfill sites; and liquid waste management, including vacuum trucks for emptying septic tanks and liquid waste disposal ponds.  
The environmental and social risks associated with these kinds of infrastructure or services can be, but will in most cases, not be significant. It is therefore possible that ULGDP investment projects may fall into OP 4.01 Category A, B or C.  
**Note:** Generally the World Bank OP 4.01 categories A, B and C correspond to the categories described in the Ethiopian EPA’s EIA Guidelines Document in Appendix 1 as Schedule 1, 2 and 3 activities (See Table 7, EPA Schedules 1, 2 and 3).  
The screening process that will determine whether investment projects identified in ULGDP 3-Year Capital Investment Plans will require an EIA will only be carried out after project approval. For this reason the ESMF assumes that ULGDP projects may be assigned to environmental categories 1, 2 or 3 as per EPA guidelines.  
EIAs and Environmental Management Plans (EMP) will be prepared as necessary, in line with the ESMF, once the exact nature and locations of ULGDP investment projects have been identified. ULGDP multi-sectoral safeguard guideline and checklists are included in this ESMF to be used by ULG staff and staff of other involved implementing agencies in addressing these issues. The ESMF will be submitted for Bank review and publicly disclosed in-country and in the InfoShop prior to appraisal. |
<p>| No | Natural Habitats (OP/BP 4.04) |</p>
<table>
<thead>
<tr>
<th>Yes</th>
<th>Cultural Property (OP 4.11)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Physical cultural resources are defined as movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. They may include cemeteries, churches, mosques, buried archaeological remains or sites of great historical significance.</td>
</tr>
<tr>
<td></td>
<td>ULGDP projects will be classified during the environmental screening process as Category A or B, and are then subject to the provisions of OP 4.11. Category A is any project involving significant excavations, demolition, movement of earth, flooding, or other environmental changes. Category B is any project located in, or in the vicinity of, a physical cultural resources site recognized by the borrower. In this respect it is noted that Ethiopia has 7 sites that are classified as UNESCO World Cultural Heritage sites. These include the remains of the ancient city of Axum that lie within the modern city of Axum; the fortified historic town of Harar Jegol; and the Fassiledas Ghebbi in Gondar. These three sites lie within the area of the 3 of the 19 participating ULGDP cities.</td>
</tr>
<tr>
<td></td>
<td>When a ULGDP project is identified as being likely to have adverse impacts on physical cultural resources, the ULG will:</td>
</tr>
<tr>
<td></td>
<td>⇒ Identify appropriate measures for avoiding or mitigating these impacts as part of the EIA process;</td>
</tr>
<tr>
<td></td>
<td>⇒ Develop a cultural resources management plan that includes measures for avoiding or mitigating any adverse impacts on physical cultural resources, provisions for managing chance finds any necessary measures for strengthening institutional capacity, and a monitoring system to track the progress of these activities</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Yes</th>
<th>Involuntary Resettlement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A Resettlement Policy Framework (RPF) has been prepared for the ULGDP. Resettlement Action Plans (RAPs) will be prepared as necessary, in line with the RPF, once the exact nature and locations of ULGDP investment projects have been identified. The RPF will be submitted for Bank review and publicly disclosed in country and in the InfoShop prior to appraisal.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No</th>
<th>Indigenous Peoples (OP 4.10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Forests (OP/BP 4.36)</td>
</tr>
<tr>
<td>No</td>
<td>Safety of Dams (OP/BP 4.37)</td>
</tr>
<tr>
<td>No</td>
<td>Projects in Disputed Areas (OP/BP/GP 7.60)</td>
</tr>
<tr>
<td>No</td>
<td>Projects on International Waterways (OP/BP/GP 7.50)</td>
</tr>
</tbody>
</table>

The ESMF will address the requirements of the OP 4.01. It contains a screening procedure for determining if an environmental impact assessment, physical cultural resources management plan, or resettlement action plan is required for any particular ULGDP investment. The resettlement action plan is explained in more detail in the Resettlement Policy Framework. The ESMF provides recommendations for ensuring that issues related to cultural property are adequately addressed as required by OP 4.11.
ESMF Processes: Preparation & Implementation

This chapter sets out the processes and identifies the responsibilities for implementing the Environmental and Social Management Framework. It details issues that will be addressed; the next steps to be taken and describes the various elements of this ESMF including:

⇒ Steps to be taken for a full EIA if required, including an application for environmental authorization;
⇒ Terms of reference for an annual environmental and social audit of the ULGDP;
⇒ Guidelines on the environmental and social impact of ULG project investments; and
⇒ Compliance mechanisms.

Key Issues and Proposed Actions within the ESMF

The ULGDP has the potential to provide significant social benefits, and to deliver environmental benefits, depending on the investment projects that are put forward by ULGs for ULGDP performance grant financing. However there are risks of adverse environmental and social impacts, owing to:

⇒ Inherent environmental risks involved in infrastructure projects, including soil erosion, depletion, pollution or contamination of waterways and groundwater sources, impacts on people, buildings (houses, shops, kiosks, etc) economic and social activities in the vicinity of the project, and secondary impacts owing to the sourcing of construction materials;
⇒ Social risks during construction of projects such as road safety and accidents, dust and noise, an influx of people to certain areas due to better facilities provision and improved access, risks of disruption to livelihoods and potential for economic resettlement and displacement of people associated with land take, and indirect social impacts from the downstream effects of project such as water diversions;
⇒ Weak capacity at a ULG level to integrate measures to prevent or mitigate environmental impacts into the design of projects, and during construction, and operation of the projects.

These risks are taken seriously by the GOE and MWUD owing to the importance of the environmental impacts involved and the need to ensure improvements in people’s well-being. People’s livelihoods are often dependent on a sustainable environment, and adverse environmental or social impacts of infrastructure projects will be carefully avoided. The GOE has developed its institutions and legal framework for environmental management over the past fourteen years. The activities set out in this ESMF therefore build on the GOE’s laws, policies and procedures in environmental management.

The ULGDP also offers some opportunities to enhance environmental management:

(a) To include environmental and social performance within broader performance incentives to be applied through ULGDP implementation; and
(b) To link the screening and assessment of ULG investment projects to spatial planning (for example: land use, development or strategic planning) to a greater extent than at present.

In addition, ESMF implementation will be supported by a number of measures:
At the national level, a staff member will be appointed within the MWUD/UDCBO with specific responsibilities for addressing ULGDP environmental and social issues (refer to Section 0);

An annual environmental and social performance audit will be carried out by and be reviewed by the World Bank.

**Next Steps**

The specific next steps that will be taken are, in chronological order:

1. January 2008 MWUD to consult with EPA and World Bank on this ESMF
2. January/February 2008 Implementation arrangements for the ULGDP will to be confirmed during project preparation
3. January/February 2008 Inclusion of the operational manual sections that accompany this ESMF in the operational manual
4. March 2008 ULGDP World Bank Appraisal Mission to confirm the proposed operation of the ESMF with the GOE
5. February/March 2008 MWUD/UDCBO to confirm and develop the proposals for training and capacity building
6. January to July 2008 Discussions with ULGs on use and application of the ULG and Environmental and Social Guidelines
7. April to May 2008 ESMF safeguard workshop & training program

**Responsibilities in the ESMF Screening and Appraisal Process**

The following table outlines the proposed roles and responsibilities for the different steps in screening and appraisal.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Lead Role</th>
<th>Others Involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion of screening using the form in Annex B: Screening Form.</td>
<td>Urban local government, Infrastructure Office</td>
<td>-</td>
</tr>
<tr>
<td>Full EIA, RAP and CRMP</td>
<td>Urban local government, Infrastructure Office in consultation with Regional EPA</td>
<td>With support from BWUDs and RUPIs to prepare EIA and RAP</td>
</tr>
<tr>
<td>Implementation of EMP and RAP</td>
<td>Urban local government, Infrastructure Office</td>
<td>-</td>
</tr>
<tr>
<td>Monitoring of EMP and RAP implementation</td>
<td>Regional EPA Bureau</td>
<td>ULG Infrastructure Office provide local support + BWUD / RUPI support</td>
</tr>
<tr>
<td>Annual Audit</td>
<td>Independent consultants</td>
<td>MWUD/UDCBO; BWUD, Regional Bureaus of EPA</td>
</tr>
</tbody>
</table>

**Process for Screening, Review, Appraisal and Monitoring of ULGDP Investments**

The ESMF has been designed to support the application of Ethiopian law on environmental impact assessment to ULGDP. These legal requirements are summarized in the:
a) EIA Guideline, July 2000  
b) EIA Procedural Guideline, November 2003  
c) Draft Guideline for Environmental Management Plan, May 2004  
The EIA Guideline, July 2000 describes Schedule 1, 2 and 3 activities or projects. A summary of key urban related activities is presented in Table 7 below.

<table>
<thead>
<tr>
<th>Schedule 1: Projects which may have adverse and significant environmental and social impacts, and may, therefore, require full EIA:</th>
</tr>
</thead>
</table>
| 1. **URBAN WATER SUPPLY AND SANITATION**  
⇒ Construction of dams, impounding reservoirs with a surface area of 100 hectares  
⇒ Ground water development for industrial or urban water supply of greater than 4000 m3/day  
⇒ Canalization and flood-relief works (large scale)  
⇒ Drainage Plans in towns close to water bodies  
| 2. **WASTE DISPOSAL**  
⇒ Waste disposal installations for the incineration, chemical treatment or land fill of toxic, hazardous and dangerous wastes  
⇒ Installation for the disposal of industrial waste  
⇒ Land fill site for waste disposal in major urban centre  
| 3. **URBAN DEVELOPMENT**  
⇒ Hospital and educational facilities (large scale)  
⇒ Housing development covering an area of 50 hectares or more  
⇒ Designation of new towns and residential area  
⇒ Establishment of industrial estates  
⇒ Shopping centres, complexes and establishment of open air market area in major urban centres  
⇒ Establishment of bus and rail terminal  
| 4. **TRANSPORT**  
⇒ Major urban roads  
⇒ Rail infrastructure and railways  
| 5. **ENERGY**  
⇒ High power transmission line  
⇒ Large bio-mass energy using plants  
⇒ Thermal power stations and other combustion installations with a heat output of 100 Mega Watts or more  
⇒ Construction of combined cycle power station  
<table>
<thead>
<tr>
<th>Schedule 2: Projects of the type or scale or with other relevant characteristics that have potential to cause environmental and social impacts but which do not warrant a full EIA:</th>
</tr>
</thead>
</table>
| 1. **URBAN WATER SUPPLY AND SANITATION**  
⇒ Urban water supply and sanitation  
⇒ Land drainage (small scale)  
⇒ Sewerage system  
| 2. **WASTE DISPOSAL**  
⇒ Recycling plant (small scale)  
| 3. **URBAN DEVELOPMENT**  
⇒ Housing and commercial projects  
⇒ Cemetery site and establishment of religious institutions  

Table 7  EPA Schedules 1, 2 and 3
4. **TRANSPORT**
   - Upgrading or rehabilitation of major urban roads
   - Airports with basic runway length less than 2,100m

5. **ENERGY**
   - Thermal power stations and other combustion installations with a heat output of less than 300 mega watts
   - Electricity transmission lines

**Schedule 3:** Projects which would have no impact and do not require EIA.

**SOCIAL INFRASTRUCTURE AND SERVICES:** Educational facilities (small scale), Audio visual production, Teaching facilities and equipment, Training, Medical centre (small scale), Medical supplies and equipment, Nutrition, Family planning

**ECONOMIC INFRASTRUCTURE AND SERVICES:** Telecommunication, Research

Under the ULGDP, it is anticipated that the majority of ULG investment projects will be Schedule 1 or 2 and require full or partial EIAs. The proposed ULGDP process for identifying and managing environmental and social issues is presented in Figure 1.
Figure 1. ESMF System to be applied for ULG Investment Projects

<table>
<thead>
<tr>
<th>PREPARATION &amp; CONSULTATION</th>
<th>SCREENING REPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective:</strong></td>
<td>Ensure that environmental and social issues are introduced to communities</td>
</tr>
<tr>
<td><strong>Actions:</strong></td>
<td>Educate communities on environmental and social issues and requirements of the ULGDP</td>
</tr>
<tr>
<td></td>
<td>Promote environmentally beneficial ULG investment projects</td>
</tr>
<tr>
<td></td>
<td>Ensure conformity with national construction standards and norms</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REVIEW AND APPROVAL</th>
<th>FULL/PARTIAL ENVIRONMENTAL IMPACT ASSESSMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective:</strong></td>
<td>Review the EIAs and ensure that measures have been incorporated</td>
</tr>
<tr>
<td><strong>Actions:</strong></td>
<td>Once an ULG investment project has been screened and any necessary environmental review or assessment has been completed, ULG investment project can be approved if it meets environmental viability criteria</td>
</tr>
<tr>
<td></td>
<td>Approval may be denied if the environmental assessment recommendations are not satisfactorily incorporated into project design</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IMPLEMENTATION AND SUPERVISION</th>
<th>MONITORING AND EVALUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>- Prepare contracts with environmental clauses for companies and organizations to execute an ULG investment</strong></td>
<td></td>
</tr>
<tr>
<td><strong>- Undertake site visits to ensure that environmental criteria and mitigation measures, as required by contracts, have been incorporated into ULG investment projects.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>- Require changes to ULG investment project design and/or implementation if unforeseen impacts occur.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>- Approval is required to issue final payment for ULG investment project construction.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>- Site visits during ULG investment project execution and operation to assess how environmental screening and mitigation measures are succeeding or have succeeded in minimizing impacts.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>- Determine if changes are needed to improve environmental assessment process</strong></td>
<td></td>
</tr>
<tr>
<td><strong>- Meet with contractors and community representatives to gather feedback</strong></td>
<td></td>
</tr>
<tr>
<td><strong>- Annual audit carried out by MWUD/WB</strong></td>
<td></td>
</tr>
</tbody>
</table>

**STEP 1: PREPARATION AND CONSULTATION**

At the start of, and before completing, the exercise to prepare the 3-Year Capital Investment Plan and prioritize the projects to be funded by ULGDP Performance Grants, the ULG Infrastructure Office will:

a) Review ESMF and RPF requirement. Obtain copies of all relevant federal and regional laws, guidelines and procedures relating to environmental protection, cultural heritage and resettlement issues. Complete training requirements for
implementation of ULGDP ESMF and RPF. Ensure there is good knowledge of 
ULGDP, ESMF and RPF requirements at different levels in the ULG – council,
Mayor, Mayor’s Committee, City Manager, professional and technical staff.

b) Contact the Regional Environmental Protection Authority:

⇒ Provide them with a copy of this ESMF and the RPF document;
⇒ Provide them with details of the contact at the ULG; and
⇒ Inform the Regional EPA that activities are being planned that may be
categorized as being Schedule 1, 2 or 3 activities in terms of federal and 
regional environmental legislation.

c) Identify and review all projects proposed for prioritization and funding by the 
ULGDP; and

d) Identify potential environmental, physical and cultural impacts in general and 
potential mitigation measures.

e) Identify interested and affected communities7, NGOs, businesses, etc., and inform 
them of the proposed activities and its potential impacts.

**STEP 2: SCREENING REPORT**

Screening is the processes of determining whether or not a project requires EIA and the 
level at which the assessment should occur. The ULG IO initiates the process by 
submitting the form contained in Section 0, Annex B: Screening Form to the Regional 
EPA. In the case of Addis Ababa City Government and Dire Dawa City Administration submission will be made to their own EPAs8.

This ULGDP Screening Report will describe,

a) The proposed activities and their potential impacts,
b) Characteristics of the location (sensitivity of the area),
c) Size (small, medium and large scale),
d) Degree of public interest,
e) Institutional requirement, environmental enhancement and monitoring 
considerations,

The outcome of screening will be that each ULGDP project is categorized as being a 
Schedule 1, 2 or 3 project:

a) Schedule 1 projects are fed into the standard EIA process determined by EPA;
b) Schedule 2 projects will not require an EIA, but will necessitate the inclusion of 
environmental and social mitigation and enhancement measures in the design and 
implementation of projects through the use of standard construction contract 
clauses and an environmental management plan; and

c) Schedule 3 projects are not subject to environmental assessment as no potential 
impacts are anticipated.

---

7 Individuals or groups concerned with or affected by an activity and its consequences. These include 
local communities, work force, customers, or consumers, environmental interested groups and the 
general public.

8 Where a project is federal or trans-regional (i.e., has impacts outside the region originating the 
project), the Screening Report and Environmental Impact Assessment will be submitted to the Federal 
EPA.
The Screening Report will be submitted to the Regional Environmental Protection Authority – with copies to the BWUD and MWUD/UDCBO– with a request for approval. The Regional Environmental Protection Authority will review the Screening Report and will:

(a) Accept the document - with conditions relating to implementation;
(b) Accept the documents with required and/or recommended amendments; or
(c) Reject the document with comments as to what is required to submit an acceptable Screening Report.

**STEP 3: SCHEDULE 2 PROJECTS**

Schedule 2 projects will be subject to a limited Environmental and Social Review carried out by the ULG’s IO. They will be able to engage an independent consultant to carry out the review, if necessary. The review will require:

⇒ A field visit to the project area to identify likely environmental and social impacts;
⇒ Brief consultation with beneficiaries and affected communities;
⇒ Use of the ESMF environmental contract clauses and impact mitigation checklists - attached in Annex D: Example of Environmental Contract Clauses and Annex F: Environmental and Social Impact Mitigation and Monitoring Checklists;
⇒ Preparation of an abbreviated EMP or, if necessary, a full or abbreviated RAP, with the ULG investment project application.

The Environmental and Social Review will be submitted to the Regional Environmental Protection Authority – with copies to the BWUD and MWUD/UDCBO– with a request for approval. The Regional Environmental Protection Authority will review the Environmental and Social Review and accept the document (with conditions relating to implementation), accept the documents with required and/or recommended amendments or reject the document with comments as to what is required to submit an acceptable Environmental and Social Review.
**STEP 3: SCHEDULE 1 PROJECTS, SCOPING & EIA TOR**

The objective of the scoping activity is to identify the requirements for and prepare a Terms of Reference that can be used to secure and guide a consultant who has the required
expertise and who will carry out the Environmental Impact Assessment for the ULGDP projects(s). An example is provided in Annex C.

The scoping stage will be carried out by the ULG IO. It aims to identify:

a) The objectives, scope, tasks to be undertaken, outputs and estimated costs of the environmental impact assessment,

b) The issues or concerns to be assessed, and

c) The significant effects and factors to be considered.

The purposes of scoping are to:

a) Involve potentially affected groups,

b) Consider reasonable alternatives,

c) Evaluate concerns expressed,

d) Understand local values,

e) Determine appropriate methodologies, and

f) Establish the terms of reference,

The outcome of scoping is a Terms of Reference for undertaking full scale EIA. The EIA TOR requires to be reviewed by the Regional EPA.

EIA Terms of Reference should include:

(a) Executive summary

(b) Policy, legal, and administrative framework.

(c) Project description.

(d) Baseline data.

(e) Environmental and social impacts.

(f) Analysis of alternatives.

(g) Environmental management plan (EMP).

(h) Appendixes:

- List of EIA report preparers.
- References.
- Record of interagency and consultation meetings.
- Tables presenting the relevant data.
- List of associated reports.

An outline for the Terms of Reference for a ULGDP EIA is contained in Annex C: Terms of Reference for EIA.

The TOR for the Environmental Impact Assessment will be submitted to the Regional Environmental Protection Authority – with copies to the BWUD and MWUD/UDCBO – with a request for approval. The Regional Environmental Protection Authority will review EIA TOR and accept the document (with conditions relating to implementation), accept the documents with required and/or recommended amendments or reject the document with comments as to what is required to submit an acceptable EIA TOR.

**STEP 4: SCHEDULE 1 PROJECTS, ENVIRONMENTAL IMPACT ASSESSMENT**

For ULGDP investment projects that are expected to result in significant environmental and social impacts, an EIA report in the form set by national law and guidelines is required as described in Annex C. The ULG IO may consult with the relevant Regional EPAs for technical advice and will in most cases procure the services of an environmental consulting firm to prepare the EIAs. The format for the EIAs will follow the requirements under the
EPA guidelines document. In addition, Schedule 1 projects may also require the preparation of Resettlement Action Plans (RAPs). The RPF provides clear guidelines on how this will be implemented under the ULGDP. An important aspect of the study is to also assess the location and design of the ULG investment project to ensure that there are no alternatives which may minimize or avoid these potential environmental and social impacts. If an alternative is not feasible, then the ULG IO must prepare an EIA and/or RAP. The process required for Schedule 1 projects is described in Figure 2 on the following page.

The purpose of EIA is to generate sufficient information on significant impacts that enable the preparation of an Environmental Impact Assessment report, which will be used to determine whether or under what conditions a project should proceed.

Environmental Impact Study Involves:

- a) Impact prediction,
- b) Impact analysis,
- c) Consideration of alternatives,
- d) Preparation of management plan (mitigation, monitoring activities), and
- e) Preparation of contingency plan.

Assessing impacts characteristics should:

- a) Be carried out with well defined values of significance,
- b) Compare all feasible alternatives,
- c) Document the values and beliefs on which judgments are based, and
- d) Be based on acceptable methodology, research and experimental findings.

Design of mitigation measures seeks to:

- a) Find better ways of doing things,
- b) Minimize or eliminate negative impacts,
- c) Enhance benefits, and
- d) Protect public and individual rights to compensation.

Mitigation options include:

- a) Alternative ways of meeting the needs,
- b) Changes in planning and design,
- c) Improving monitoring and management,
- d) Clauses in construction contracts that mitigate construction impacts,
- e) Monetary and in kind compensation,
- f) Performance bonds,
- g) Replacing, relocating, rehabilitating, etc.

As part of the EIA process, Environmental Management Plans (EMPs) will be prepared and implemented for Schedule 1 projects. Effective implementation of the EMP will ensure that the appropriate mitigation measures have been employed to avoid and/or minimize any potential impacts resulting from the proposed activity.

The contents of an EMP should include:

⇒ A description of the possible adverse effects that the EMP is intended to address;
⇒ Identification of project design alternatives that would meet similar objectives, and a description of why these design alternatives are not viable, especially if they have a lesser environmental or social impact;
⇒ A description of planned mitigation measures, and how and when they will be implemented;
⇒ A program for monitoring the environmental and social impacts of the project, both positive and negative;
⇒ A description of who will be responsible for implementing the EMP; and
⇒ A cost estimate and source of funds.

Environmental contract clauses should be included in construction contracts. Annex D: Example of Environmental Contract Clauses provides a set of recommended contract clauses to include in contractor agreements.

The EIA and EMP will be submitted to the Regional Environmental Protection Authority – with copies to the BWUD and MWUD/UDCBO– with a request for approval. The Regional Environmental Protection Authority will review the EIA and EMP and will:

(a) Accept the document - with conditions relating to implementation;
(b) Accept the documents with required and/or recommended amendments; or
(c) Reject the document with comments as to what is required to submit an acceptable EIA and EMP.

**Supervision of EMPs**

MWUD will agree with the BWUDs and ULGs participating in ULGDP on the supervision of the EMP for Schedule 1 projects within the overall plan for the project. Accordingly, the supervision arrangements for the EMP should summarize key areas on which supervision will focus - critical risks to implementation of the EMP, how such risks will be monitored during implementation and agreements reached with the Proponent.

Supervision of the EMP, along with other aspects of the project, covers monitoring, evaluative review and reporting and is designed to:

⇒ Determine whether the project is being carried out in conformity with environmental safeguards and legal agreements;
⇒ Identify problems as they arise during implementation and recommend means to resolve them;
⇒ Recommend changes in project concept/design, as appropriate, as the project evolves or circumstances change; and
⇒ Identify the key risks to project sustainability and recommend appropriate risk management strategies to the Proponent.

It is vital that an appropriate environmental supervision plan is developed with clear objectives to ensure the successful implementation of an EMP.

**Budget**

The EMP for each Schedule 1 investment project will outline the appropriate budget required to implement measures for mitigation and monitoring. It will also indicate the costs of training and capacity building required. Costs should be calculated based on estimates provided by contractors for any mitigation measures required during the civil works. For example:

⇒ Costs of ensuring the appropriate dust suppression mechanisms are in place during excavation works must be calculated and included in the tender documents;
⇒ Costs of installing erosion control measures should be estimated as part of the engineering costs; and
⇒ Costs of monitoring noise during construction should be calculated based on the frequency of monitoring and cost of equipment.

**Resettlement, Pest Management and Cultural Resources Management**

If identified as a requirement of the ULG investment project through the screening process, a Resettlement Action Plan, an Abbreviated Resettlement Action Plan, a Physical Cultural Resources Management Plan, Solid Waste Management Action Plans or a combination of these, is prepared alongside or as an integrated part of the EMP.

**A. Resettlement Action Plan**

A full RAP will be prepared for Schedule 1 projects where the number of Project Affected Persons is 200 or more individuals. An Abbreviated Resettlement Action Plan will be prepared where the number of Project Affected Persons is 25 or greater but less than 200 individuals. An Abbreviated Resettlement Action Plan is not required where there are less than 25 Project Affected Persons. The RPF outlines the relevant steps required in order to ensure that appropriate measures are put in place to safeguard the rights of affected communities.

**B. Physical Cultural Resources Management**

It is important that the EIA also identify the process for addressing impacts on cultural property. Measures will need to be integrated into the EMP to address the following areas:
⇒ Avoidance or mitigation of identified adverse impacts;
⇒ Provisions for chance finds;
⇒ Measures for strengthening institutional capacity; and
⇒ Monitoring systems to track progress of these activities.

The plan should be consistent with the Ethiopia’s overall policy framework and national legislation, the World Bank OP 4.11 for Cultural Property, and should take into account institutional capabilities relating to the management and preservation of physical cultural resources.

**C. Solid Waste Management Action Plans**

Solid Waste Management Proclamation No. 513/2007 states (Article 5.1) that Urban Administrations shall ensure the participation of the lowest administrative levels and their respective local communities in designing and implementing their respective solid waste management plans. In Article 5.1 each Region or urban administration shall set its own schedule and, based on that, prepare its solid waste management plan and report of implementation. Further information on preparation and implementation of solid waste management plans may be obtained from the Regional Environmental Protection Authorities and EPA.

**STEP 5: REVIEW, APPEAL AND RECORD OF DECISION**

**Review**

The purpose of review is to examine and determine whether the Environmental Impact Assessment and Environment Management Plan is an adequate assessment of the environmental effects and of sufficient relevance and quality for decision-making. The Screening Report, Environmental Impact Assessment and Environmental Management Plan will be presented by ULG IO to the ULG Council for approval. Once approved, the documents will be compiled and submitted by ULG to the Regional EPA, BWUD and MWUD/UDCBO. The Regional EPA will review the proposals.
Five hard copies and one electronic copy will be submitted by the ULG IO to the Regional Environmental Protection Authority of:

a) The Screening Report

One hard copy and one electronic copy should be submitted to the BWUD. One hard copy and one electronic copy should be submitted to the UDCBO/MWUD.

The review will be conducted by the Regional Environmental Protection Authority, in consultation with the Regional BWUD, will include review of:

a) Screening Report including the EIA/EMP Terms of Reference;
b) Environmental Impact Assessment report and Environmental Management Plan; and
c) Performance monitoring or audit reports at different stages in the project cycle.

Reviewing by the Regional EPA may include considerations of the adequacy of:

a) Compliance with the "approved TOR";
b) Required information;
c) The examination of alternatives, assessment of impacts, appropriateness of mitigation measures and monitoring schemes as well as implementation arrangements;
d) The use of scientific and analytical techniques;
e) The extent of public involvement and reflection of PAPs concerns; and
f) Presentation of the information to decision makers at Regional, Sectoral, and Local levels.

CRITERIA FOR SAFEGUARD APPROVAL

⇒ For those EIAs which meet the country’s EIA requirements and World Bank OP 4.01, an environmental permit can be granted.
⇒ For those EIAs which do not meet the country’s EIA requirements and World Bank OP 4.01, an environmental permit is rejected and the EPA may want to carry out an audit. The ULG will be asked to re-submit the EIA based on recommendations of the audit.

DISCLOSURE OF SUBPROJECT INFORMATION

In compliance with World Bank guidelines and in the EIA proclamation, before a ULG investment project is approved, the applicable documents (EIA, EMP, CRMP and/or RAP) must be made available for public review at a place accessible to local people (e.g. at a local government office (i.e. kebele council, ULG and regional bureaus, at the EPA), and in a form, manner, and language they can understand.

STEP 6: IMPLEMENTATION & SUPERVISION

When approval has been given to the EIA/EMP, CRMP, ARAP or RAP systemic follow-up is needed:

a) To ensure that the anticipated impacts are maintained within the levels predicted,
b) To see that the unanticipated impacts are managed and or mitigated before they become problems,
c) To realize and optimize the benefits expected, and
d) To provide information for a periodic review and alteration of the environmental management plan and enhance environmental protection through good practice at all stages of the project.

It is therefore necessary that:

a) Environmental Management Plan, Cultural Resources Management Plan or Resettlement Action Plan is implemented, is monitored and reported on; and

b) External audits are conducted by UDCBO/MWUD.

As part of the ULG investment project implementation, arrangements are made for contracts to be prepared and signed by appropriate parties and financing agreements signed with implementing agencies or beneficiary representatives. Most of the arrangements regarding construction, implementation, and supervision are contained in a legal contract signed between the executing agency and the contractors. It is critical that the results of the EIA process (special mitigation measures, design specifications, supervision plans, and monitoring arrangements) be duly incorporated into the legal contract. In addition to special measures that may need to be included in the contract, ULGDP ULG investment projects will find it very advantageous to prepare a standard set of environmental clauses to be included in each contract. If necessary, these could be prepared individually for different categories of ULG investment projects. Examples of contract clauses are provided in Annex D: Example of Environmental Contract Clauses.

**MONITORING AND EVALUATION**

Monitoring of the compliance of ULG investment project implementation with the mitigation measures set out in its EMP, CRMP and/or RAP will be carried out by the ULG IO that are responsible for environmental management. ULG IOs will have responsibility for carrying out this monitoring by regularly visiting the projects, and pursuing the following corrective measures as required. Compliance monitoring comprises on site-inspection of construction activities to verify that measures identified in the EMP, CRMP and/or RAP and included in the clauses for contractors are being implemented.

**ANNUAL ENVIRONMENTAL REPORTS**

Once implementation of the ULG investment project has started, regular supervision missions should be carried out by ULG IO (this could be contracted to a local qualified consultant if the ULG does not have the required capacity). An annual environmental report must be submitted to BWUDs by each ULG and consolidated by BWUDs as regional reports for submission to the Regional EPA, UDCBO/MWUD and World Bank for review.

The purpose of these reports is to provide:

⇒ A record of ULGDP project activities, experience and issues running from year-to-year throughout the ULGDP that can be used for identifying difficulties and improving performance; and

⇒ Practical information for undertaking an annual review.

Annex E: Format of an Annual Environmental Report provides a recommended format.
Guidelines on Impact Mitigation and Monitoring

This chapter describes the potential environmental and social benefits and impacts of the ULGDP and outlines the measures that will be implemented as part of the ULGDP Operational Manual to address potential impacts.

OVERALL SOCIAL AND ENVIRONMENTAL BENEFITS AND IMPACTS

The infrastructure projects implemented by urban local governments are likely to deliver significant social benefits, provided that they are planned in an inclusive manner, and they are designed to ensure a distribution of benefits to vulnerable groups including the old, youth, women, and the poorest. Social benefits cannot be guaranteed, and there is a requirement to ensure that projects are planned, constructed and operated in a manner which maximizes benefits. In particular, this should take cognizance of the vulnerable groups as mentioned above, and ensure their participation in ongoing consultation throughout the design and implementation of ULG investment projects. In some cases, there may be risks of the permanent or economic displacement of people, requiring a carefully planned and implemented RAP.

The potential environmental benefits of urban infrastructural projects depend on the nature and location of the project, though they are likely to be limited in scale.

SOCIAL BENEFITS OF ULGDP PROJECTS

A. Employment

Road rehabilitation and construction will have short term positive impacts on the socio-economic environment as they provide employment for labourers and increased income. In the long term, improved road conditions provide increased access to social services, markets and can improve the overall employment situation.

Specific socio-economic benefits include:

⇒ Demand for skilled and unskilled labour;
⇒ Increase in income for local communities; and
⇒ Indirect employment opportunities from provision of services to construction workers, such as sale of food and beverages.

NOTE: The ULGDP investment projects will include a substantial component, in each implementing ULG, of labour intensive construction works such as cobblestone roads, open drains, etc.

B. Improved transportation, resulting in improved access to markets and social support networks

Socio-economic benefits provided by road rehabilitation and construction include all-weather road reliability, reduced transportation costs, increased access to markets for local produce and products, increased investment in real estate development, industry and commerce, better access to health care and other social services. In the long term, this will have a positive benefit to local economic development.

C. Improved availability of clean water, resulting in improved health

Water supply projects can significantly improve peoples’ lives by giving access to clean water. This decreases child mortality and general health levels in the community by decreasing waterborne diseases, and increasing hygiene and sanitation. This in turn increases productivity and opportunities for social development and overall community improvement.
D. Avoidance of damaging floods in urban areas
Floods can have devastating social and economic consequences, limiting communities in terms of access, sustainable production and income streams. Addressing the problem of floods through infrastructure improvements can have a significant impact on livelihoods, sustainability and productivity.

E. Health impacts of investments in sanitation and solid waste
A wide range of diseases can be caused by poor collection and disposal of solid and liquid wastes within an urban setting. Infants and children can in particular suffer from serious health problems and mortality as a result of diseases caused by poor sanitary practices.

F. Multiplier economic investment effects of providing integrated infrastructure and services to land for residential, MSE and industrial development
Provision of integrated urban infrastructure services make available serviced land for construction of residential, commercial and industrial – including MSE – facilities by governmental authorities as well as communities, NGOs, real estate developers, private individuals, cooperatives, etc. The potential multiplier economic effects are considerable in a broad range of examples from employment generation, productive investment in MSEs, industry and services, to the generation of increased ULG revenues.

ISSUES RELATED TO INVOLUNTARY RESETTLEMENT
The construction of urban roads in particular may displace people from their work places, i.e., result in economic displacement. It is unlikely, but nonetheless possible, that smaller-scale construction projects (labour intensive cobble streets, for instance) will result in any displacement.

With regard to expropriation of land and resettlement, all ULGs have processes for calculating compensation required for expropriation of land and resettlement, most of which are based on recent national legislation. However, these are generally only applied to regional and federal level projects where funds are available. In areas where land availability is not too much of an issue, urban inhabitants are provided with land of equal size as compensation. The RPF provides the framework by which potential resettlement issues will be addressed.

Any persons adversely affected by ULGDP will be supported by enabling them to get jobs and other assistance similar to the support provided through the UDP for MSEs.

ADVERSE SOCIA L IMPACTS
In addition to displacement, the following are the potential adverse social impacts that can be envisaged of ULGDP-financed projects. Further details are provided in the checklist in Annex F: Environmental and Social Impact Mitigation and Monitoring Checklists.

A. Safety of road travel
During ULGDP construction works, increased activity and vehicular movement can be dangerous and cause accidents. In addition, roads that are not designed or constructed to strict engineering standards can be very treacherous, particularly when there are heavy rains and in dense settlements.

B. Disposal of medical waste from clinics
If medical wastes from clinics are not disposed of properly, this can cause health problems for the surrounding communities in terms of contamination of soil and groundwater which may then be used for drinking or in crop production. In addition, if not properly fenced, there is a risk of children accessing the area and having access to the waste.

C. Increased prevalence of water-borne diseases
Some water supply projects may result in standing water, which, if not accompanied by improved sanitation and education in hygiene, may result in waterborne diseases and associated health impacts.

D. Increased prevalence of communicable diseases
Communicable diseases may be associated with some projects if, for example, schools and clinics are not provided with adequate sanitation facilities, and/or hygiene and sanitation education.

E. Increased prevalence of vector-borne diseases
Some activities associated with ULGDP projects will create borrow pits during construction e.g. roads. If these borrow pits are left without rehabilitation, they may become filled with water, providing a habitat for disease vectors. They may also provide dangers for children and livestock.

ADVERSE ENVIRONMENTAL IMPACTS
The following are the potential adverse environmental impacts that can be envisaged of ULGDP-financed projects. Further details are provided in the guidelines in Annex F: Environmental and Social Impact Mitigation and Monitoring Checklists.

A. Land take for the sites of infrastructure, and by gathering of construction materials
Infrastructural projects necessarily require land. In addition, the sourcing of construction materials (gravel, sand etc) from borrow pits and gravel pits can also result in the complete removal of vegetation. Therefore, in addition to the displacement of people, urban infrastructure projects may result in the loss of important ecological resources for local people, vegetation that provides watershed protection, and the depletion of biodiversity of national or international importance. The exact location of the project and the management of the sourcing of construction materials are the key issues here.

B. Destruction of cultural heritage as a result of land take, or during construction operations
Cultural or archaeological heritage may be damaged or lost during construction. In addition, findings of archaeological heritage during excavations are at risk of loss, unless measures are taken due to capture this heritage.

C. Soil erosion
Soil erosion will result around infrastructure, unless it is built according to the required specifications. This includes road, drainage or other infrastructure works including water points (boreholes, pans etc). Erosion can ultimately undermine the foundation of the infrastructure itself, and reduce its operational life greatly. Soil erosion, especially alongside roads, can result in the loss of productive farmland, and the silting of nearby watercourses. Soil erosion may also increase as a result of projects, as a secondary impact of increased deforestation.

D. Deforestation and over-exploitation of natural resources
Timber and poles will be used in construction, placing greater pressure on forest resources, unless they are procured from sustainable sources.

E. Depletion and pollution of surface- and ground-water resources
Water will be required for construction purposes, placing greater demand on both surface and groundwater resources. Drainage systems in urban areas to divert flood water could have a significant adverse environmental impact on water courses, resulting in pollution with solid waste debris, wastewater, and silt, and thereby a significant reduction in the human and ecological value of the water course. Over-extraction of groundwater is a concern.
**CUMULATIVE IMPACTS OF THE PROJECT**

ULGDP infrastructure projects may individually have insignificant adverse environmental impacts. However, several projects in combination, or in combination with other government or private sector activities, could have a larger, more significant cumulative impact. This is particularly likely to be the case for:

⇒ Deforestation due to the exploitation of forest resources, owing to the use of timber and poles for construction, combined with greater access to forests;

⇒ Groundwater depletion owing to the demand for water for construction;

⇒ Surface water depletion, owing to the impact of several diversion schemes on small streams and watercourses.

In addition, resettlement due to the acquisition of land for urban infrastructure projects may combine with induced migration of people (for labour, services etc) to place greater pressure on natural resources in particular areas.

The avoidance and mitigation of cumulative impacts requires: avoidance and mitigation of the impacts of individual projects; careful planning, based on sound technical knowledge, of the location, size, and material requirements of infrastructural projects, within the ULG and regional planning cycles.
Training and Capacity Building Requirements

The training and capacity building activities proposed to support ESMF and RPF implementation are:

a) General training and awareness/sensitization for MWUD/UDCBO, Regional BWUD and ULG executives and staff on the contents and implementation requirements of the ULGDP ESMF and RPF.

b) In-depth training for relevant UDCBO, Regional BWUD and ULG IO and environmental staff on implementation of the ESMF and RPF including all aspects of environmental management, EIA, public consultation, and integration of environmental management into development planning;

c) Technical and financial assistance to each participating Urban Local Government secure local consultancy services to carry out, where the ULG does not have internal capacity or this cannot be provided by the Regional BWUD, to:

⇒ Produce a Screening Report, an EIA TOR, an Environmental Impact Assessment, Environmental Management Plan, Cultural Resources Management Plan or full/abbreviated Resettlement Action Plan; and

⇒ Establish and support operation of systems for monitoring and reporting on EIA, EMP, CRMP and RAP implementation.

d) Appointment of an ULGDP Environmental and Social Specialist in UDCBO responsible for overall ESMF & RPF implementation.

ESMF & RPF Training

Training to ULG IOs, environmental officers, and line agency staff at the ULG level on issues of environmental and social considerations, is required in the form of a phased training. This general training and awareness/sensitization program will be developed as a training module based on ULGDP ESMF and RPF multi sectoral safeguard guideline and checklists. The training will specifically aim to build awareness and sensitize a broad audience, particularly ULG Mayors, Councillors, City Managers, Bureau Heads and BWUD professional staff to the requirements and key aspects ULGDP ESMF and RPF. In addition, a more detailed and specific training module will be developed and delivered to those ULG IO staff, environmental officers, BWUD and MWUD/UDCBO staff directly involved in preparation and implementation of the ULGDP ESMF and RPF. This training will include regular updates and refresher modules delivered during ESMF and RPF implementation. Training and sensitization will be required among the following groups:

⇒ BWUDs, Regional Environmental Bureaus and other key desk officers (water, roads, health, education, etc.);

⇒ ULG executives (Councillors, Mayor, and City Manager), Heads of Bureaus, professional staff in key line bureaus, environmental staff and ULGDP IO staff.

⇒ Line agencies at regional levels; and

⇒ MWUD / UDCBO (staff involved in ULGDP implementation).

Table 8 sets out the training requirements of each of these groups, and the chronological order of training. For each training session, the value of inviting participation of other stakeholders, such as those from local authorities and the local private sector, will be considered. MWUD will prepare a Terms of Reference for procurement of a training supplier to: a) design the generalized and in-depth ESMF and RPF training modules; and b) deliver the training in Regional capital cities.
### Table 8 Proposed Training Packages

<table>
<thead>
<tr>
<th>Intended Audience</th>
<th>Training Component</th>
<th>Length</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>BWUD and Regional Environmental Bureau Staff</td>
<td>Detailed Training in EIA, Public Consultation and Integrating Environment into Development Planning</td>
<td>2 day workshop per region before submission of first ULGDP CIPs. 1 day refresher annually</td>
<td>Regular training to bring selected officers up to required level and regularly update them</td>
</tr>
<tr>
<td>ULG Infrastructure Offices (including environmental staff)</td>
<td>Detailed Training in EIA, Public Consultation and Integrating Environment into Development Planning, tailored to ULG’s needs</td>
<td>4 day workshop submission of first ULGDP CIPs. 2x1 day refresher annually</td>
<td>Regular training to build capacity of ULG level staff and regularly update them</td>
</tr>
<tr>
<td>ULG executives, HoDs, IOs, BWUDs</td>
<td>General (awareness &amp; sensitization) ESMF and RPF objectives, processes and principles</td>
<td>1 day workshop per region submission of first ULGDP CIPs. Once at the start of the project</td>
<td>One-off at ULGDP kick-off</td>
</tr>
<tr>
<td>MWUD/UDCBO ULGDP team</td>
<td>Two day training in use of this ESMF</td>
<td>2 day workshop before August 2008</td>
<td>Repeatedly annually as 1 day refresher</td>
</tr>
</tbody>
</table>

For each group, training will be provided to bring them to a different level of expertise in the different areas (refer to Table 9):

a. In-depth training to a level that allows trainees to go on to train others, including technical procedures where relevant;

b. Sensitization and awareness-raising, in which the trainees become familiar with the issues so that they are capable of identifying their precise requirements for further support; and acknowledge the significance or relevance of the issues, but are not required to have technical or in-depth knowledge.

### Table 9 Training and Sensitization Requirements

<table>
<thead>
<tr>
<th>Training on:</th>
<th>BWUD, Regional Environmental Bureau &amp; ULG executives</th>
<th>ULG IO &amp; Regional Environmental staff</th>
<th>Regional Line Agencies</th>
<th>MWUD/UDCBO</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIA, EMP, CRMP, RAP</td>
<td>S&amp;A</td>
<td>T</td>
<td>S&amp;A</td>
<td></td>
</tr>
<tr>
<td>Public Consultation</td>
<td>S&amp;A</td>
<td>T</td>
<td>S&amp;A</td>
<td></td>
</tr>
<tr>
<td>Integrating Environmental and Social Considerations into ULG development Planning</td>
<td>S&amp;A</td>
<td>T</td>
<td>T</td>
<td></td>
</tr>
<tr>
<td>Applying this ESMF</td>
<td></td>
<td>T</td>
<td>T</td>
<td>T</td>
</tr>
</tbody>
</table>

T = detailed training, S&A = sensitization to the issues and raised awareness.

An example of an agenda for a proposed 2 day training workshop on ESMF implementation is given in Box 2, and the requirements for improved integration of environment into development planning are provided in Box 3

**Box 2. Possible Agenda for a 2-day Workshop Introducing the ESMF**

**Day 1**

a. **Introduction to Environmental and Social Management Plans** This section will introduce participants to the theory and application of ESMF as a decision making tool. It
will outline the principles of ESMF and provide clear definitions on EMP practice
terminology (e.g. screening and scoping, impacts [negative, positive, cumulative, strategic]
natural resource base (water, soil, land, biodiversity, air, etc., mitigation and monitoring)
and social baseline (employment, social, health, literacy etc)). It will also provide guidance
on the criteria required for the development of an effective ESMF in practice.

b. **World Bank Safeguard Policies and Ethiopian Legislation** This section will discuss the
principal World Bank safeguard policies and their application to ULG investment projects
under the ULGDP. Each policy will be discussed in detail. In addition, the applicable
Ethiopian legislation will be discussed in terms of the relevant environmental and social
laws and policies which apply to activities under the program.

c. **Screening of ULG investment projects.** A list of potential activities to be financed under
the projects will be discussed. Application of the screening checklist will be explained using
case studies.

**Day 2**

a. **Impact Identification.** Potential impacts related to various types of activities will be
discussed, in terms of their significance (adverse or minimal, positive or negative),
magnitude (long term versus short term), and impact category (localized or cumulative).

b. **Mitigation and Monitoring** Mitigation measures as they apply to various types of local
investment activities will be discussed, in terms of their application, cost and feasibility.
Monitoring measures will also be recommended to measure the effectiveness of mitigation
plans and to monitor performance.

c. **Responsibilities for Planning and Reporting** For each target audience, responsibilities
for environmental and social management will be discussed as they relate to ULGDP
implementation. This will include responsibilities for planning, management of impact
identification and mitigation/monitoring, partnerships with NGOs and technical service
providers, partnerships among community members, and reporting.

**Box 3. Integration of Environmental Management into Development Planning**

Integrating environmental and social considerations into development planning will encompass:

⇒ **Defining process, procedures and responsibilities** for environment related activities
   and actions into the preparation of the ULG development plans and budgets;

⇒ **Systematic environmental data collection** at the ULG level to inform decision-making
   and prioritization of actions;

⇒ **Enhancing the mechanisms for community involvement** in priority setting at the ULG
   level;

⇒ **Environmental awareness and outreach programs** for ULG officials, private sector
   and local communities;

⇒ **Training of development agents** working at the kebele level on sustainable resource
   management.

**TECHNICAL AND FINANCIAL ASSISTANCE**

MWUD will carry out a consultative assessment exercise to determine the existing
capacity/capability and the support requirements for each of the participating ULGs in
terms of their ability to successfully:

⇒ Produce a Screening Report
⇒ Produce an Environmental Impact Assessment, Environmental Management Plan, Cultural Resources Management Plan or Resettlement Action Plan
⇒ Establish and support operation of systems for monitoring and reporting on EIA, EMP, CRMP and RAP implementation.

Where additional support is identified, and cannot be provided by a neighbouring ULG or by the BWUD, a Terms of Reference will be drafted that secure the services of one or more local consultants to provide the support required. A budget has been provided as described in Section 0.

APPOINTING AN ULGDP ENVIRONMENTAL AND SOCIAL SPECIALIST TO MWUD

It is important that an Environmental and Social Specialist be part of the UDCBO/MWUD to provide overall support in supervising the implementation of the ESMF and RPF guidelines and coordinating with the relevant stakeholders involved in the Project. The Specialist will contribute to the objectives of the Project which include:

⇒ The preparation, together with the implementing entities, of annual work programs and budgets;
⇒ Monitoring project progress as it relates to compliance with the ESMF guidelines, resolving implementation bottlenecks, and ensuring overall that project implementation proceeds smoothly;
⇒ Collecting and managing information relevant to the project and accounts (i.e. environmental monitoring and audit reports); and
⇒ Ensuring that the implementing bodies are supported adequately and that they adhere to the principles of the project, specific to compliance with ESMF guidelines.

The Specialist should be hired on a fulltime basis and will report to the main bodies responsible for execution of the Project.

Terms of Reference for ULGDP Environmental and Social Specialist

OBJECTIVE: To provide technical advice on environmental management and mitigation, and ensure that the ULGDP ESMF is fully implemented.

TASKS
⇒ Establish the system of screening forms and EIA set out in this ESMF, and oversee their smooth operation including advice to ULGs on the procurement of consultants for any required EIA or RAP studies;
⇒ Liaise with the Ethiopia EPA on a regular basis;
⇒ Commission an independent consulting firm to carry out an environmental performance audit of ULGDP, on an annual basis;
⇒ Provide specific technical advice on mitigation measures for labour intensive projects;
⇒ Provide technical advice to ULGs on all technical issues related to natural resources and environmental management. These issues will relate to impacts on surface water, groundwater, agricultural resources and vegetation, sourcing of materials used in construction, human health, ecology and protected areas, land and soil degradation;
⇒ Raise awareness and proactively create demand for this technical advice among ULG officers;
⇒ Liaise with the BWUDs and ULGs to ensure the project’s compliance with the RPF and all resettlement aspects of the project;
⇒ Be responsible for collating information related to the RPF and resettlement;
⇒ Be involved in preparing a country specific entitlement matrix under the ULGDP;
⇒ Undertake review of RAPs to ensure compliance with the RPF; and
⇒ Lead the delivery of capacity building programs for ULG officers.
MONITORING OF ESMF IMPLEMENTATION

Annual audit on ESMF and RPF implementation will be prepared by the MWUD/UDCBO Environmental and Social Specialist and delivered to EPA. In addition, any Schedule 1 project financed by ULGDP that has been subject to an EIA study (or RAP etc) will also be required to produce an annual audit report, for delivery to EPA.

An independently-commissioned environmental and social audit will be carried out on an annual basis. This will be conducted as part of MWUD’s annual audit of the ULGDP program. The audit team will report to the MWUD and the World Bank. An audit is necessary to indicate:

a) To what extent environmental and social considerations are being incorporated into the local government planning process;

b) That mitigation measures are being identified and implemented by ULGs, and

c) To check that ULG investment projects are being correctly screened. The audit will be able to identify any amendments in the ESMF approach that are required to improve its effectiveness.

The annual audit also provides a strong incentive for MWUD to ensure that the ESMF will be implemented, and individual EMPs, CRMPs and RAPs are developed and implemented for Schedule 1 and 2 projects. The Report will include:

⇒ A summary of the environmental and social performance of the ULGDP, based on a sample of investment projects;

⇒ A presentation of compliance and progress in the implementation of the project EMPs, CRMPs and RAPs;

⇒ A synopsis of the environmental monitoring results from individual project monitoring measures (as set out in the project EMPs, CRMPs and RAPs).

The main tasks of the audit study will be:

⇒ Consideration of the description of the project;

⇒ Indicate the objective, scope and criteria of the audit;

⇒ Study all relevant environmental law and regulatory frameworks on health and safety, sustainable use of natural resources and on acceptable national and international standards;

⇒ Verify the level of compliance by the proponent with the conditions of the environmental management plan;

⇒ Evaluate the implementing agencies’ knowledge and awareness of and responsibility for the application of relevant legislation;

⇒ Review existing project documentation related to all infrastructure facilities and designs;

⇒ Examine monitoring programs, parameters and procedures in place for control and corrective actions in case of emergencies;

⇒ Examine records of incidents and accidents and the likelihood of future occurrence of the incidents and accidents;

⇒ Inspect all buildings, premises and yards in which manufacturing, testing and transportation takes place within and without the project area, as well as areas where goods are stored and disposed of and give a record of all significant environmental risks associated with such activities;
⇒ Examine and seek views on health and safety issues from the project employees, the local and other potentially affected communities; and
⇒ Prepare a list of health and environmental concerns of past and ongoing activities.
PROPOSED IMPLEMENTATION BUDGET

The breakdown of estimated costs for putting the ESMF into operation is provided in Table 10. This includes the costs of providing the capacity building and training set out in Chapter 0. The total estimated costs for mainstreaming environment into the ULGDP project is USD 250,000, consisting of:

a) USD 145,000 to be incurred on providing technical assistance support to participating ULGs in the preparation and implementation of Screening Reports, Environmental Impact Assessments – including Environmental Management Plans, Cultural Resource Management Plans and Resettlement Action Plans.

b) USD 10,000 for the preparation of ESMF and RPF training materials;

c) USD 55,500 for delivery of ESMF and RPF training as described in Section 0;

d) USD 30,000 for provision of an Environmental and Social expert in UDCBO for duration of the ULGDP;

e) USD 9,500 for printing and distribution of the ESMF and RPF documents plus training materials.

The above costs will be funded partly from ULGDP Component 2 and partly from PSCAP. Where funds are required to be used before the ULGDP Effective Date (August/September 2008), it will be necessary to use PSCAP funds.

The ULGDP Environmental and Social Specialist will report on ULGDP ESMF expenditure. This will be one way of monitoring the extent that environmental and social issues are being addressed.

Costs related to the required mitigation measures for ULGDP investment projects are not set out in the budgets presented here. These will be assessed and internalized by ULG IOs as part of the overall ULG investment project cost. It is extremely difficult to estimate the proportion of project costs that can be expected to be devoted to mitigation measures. However, a rough rule of thumb is that they should be expected to cost between 2% and 5% of the total project cost.

Compensation and resettlement costs will be borne by ULGs.
<table>
<thead>
<tr>
<th>Activity</th>
<th>YR1</th>
<th>YR2</th>
<th>YR3</th>
<th>YR4</th>
<th>YR5</th>
<th>TOTAL</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Assistance support for ESMF &amp; RPF Screening Reports, EIAs, EMPs, CRMPs, RAPs</td>
<td>95,000</td>
<td></td>
<td>50,000</td>
<td></td>
<td></td>
<td>145,000</td>
<td>Assume 19 cities require support totalling approximately USD 5,000 per city and about 10 cities in Year 3</td>
</tr>
<tr>
<td>Training supplier develops training modules</td>
<td>10,000</td>
<td></td>
<td></td>
<td></td>
<td>10,000</td>
<td></td>
<td>Assume lump sum USD 10,000 for development of training modules</td>
</tr>
<tr>
<td>Training supplier delivers ULGDP ESMF &amp; RPF training</td>
<td>25,500</td>
<td>7,500</td>
<td>7,500</td>
<td>7,500</td>
<td>7,500</td>
<td>55,500</td>
<td>Assume 200 participants x USD 25 pd awareness raising courses + 100 participants x USD 35 pd in-dept courses</td>
</tr>
<tr>
<td>UDCBO E&amp;SM expert</td>
<td>6000</td>
<td>6000</td>
<td>6000</td>
<td>6000</td>
<td>6000</td>
<td>30,000</td>
<td>Assume USD 500 (Birr 4,700 per month total including travel, DSA, computer, etc.)</td>
</tr>
<tr>
<td>Printing, dissemination of ESMF, RPF &amp; training materials</td>
<td>7500</td>
<td></td>
<td></td>
<td>2000</td>
<td></td>
<td>9,500</td>
<td>1,000 copies of each document at say USD 2.5 per copy</td>
</tr>
<tr>
<td><strong>Total ESMF &amp; RPF costs</strong></td>
<td>144,000</td>
<td>13,500</td>
<td>13,500</td>
<td>65,500</td>
<td>13,500</td>
<td>250,000</td>
<td></td>
</tr>
</tbody>
</table>
### Annex A: List of Regional EPA Contacts

<table>
<thead>
<tr>
<th>Region</th>
<th>Contact Name</th>
<th>Contact Title and Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addis Ababa</td>
<td>Dr. Hailu, Director General or Ato Tekle Woldegeremu</td>
<td>Addis Ababa Environmental Protection Authority</td>
</tr>
<tr>
<td>Dire Dawa</td>
<td>Ato Alem Kidanu</td>
<td>Environmental Protection Authority of the Provisional Administration of Dire Dawa</td>
</tr>
<tr>
<td>Amhara</td>
<td>Dr. Zerfu Hailu (currently out of Ethiopia on secondment to the Global Environmental Facility)</td>
<td>Environmental Protection and Land Administration and Use Authority</td>
</tr>
<tr>
<td>Oromia</td>
<td>Ato Siraj Bekele</td>
<td>Environmental Protection Authority</td>
</tr>
<tr>
<td>Southern Nations &amp; Nationalities &amp; Peoples’</td>
<td>Ato Mamo Gedebo</td>
<td>Environmental Protection Land Administration and Use Authority</td>
</tr>
<tr>
<td>Somali</td>
<td>Ato Mohamed Tahir Hash</td>
<td>Environmental Protection Bureau</td>
</tr>
<tr>
<td>Tigray</td>
<td>Ato Hadish Berhe</td>
<td>Environmental Land Administration and Use Authority</td>
</tr>
<tr>
<td>Harari</td>
<td>Ato Efendi Ahmed</td>
<td>Plan and Economy Development Bureau</td>
</tr>
<tr>
<td>Afar</td>
<td>Ato Mahomed Mahomed</td>
<td>Animals, Agriculture and Natural Resource Development Bureau</td>
</tr>
<tr>
<td>Gambella</td>
<td>Ato Aman Agua</td>
<td>Environmental Protection and Energy Development Authority</td>
</tr>
<tr>
<td>Benshangul Gumuz</td>
<td>Ato Mesfin Kebede</td>
<td>Environmental Protection and Land Administration and Use Authority</td>
</tr>
</tbody>
</table>
Annex B: Screening Form

ULGDP investment project name:
Location (include map/sketch): (e.g. region, district, etc)
Type of activity : (e.g. new construction, rehabilitation, periodic maintenance)
Estimated Cost: (Birr)
Proposed Date of Works Commencement
Technical Drawing and Specifications Reviewed : (circle answer): Yes No

This report is to be kept short and concise.

1. Site Selection:

   Physical data: Yes/No answers and bullet lists preferred except where descriptive detail is essential.

   Site area in ha

   Extension of or changes to existing alignment

   Any existing property to transfer to project

   Any plans for new construction

   Refer to project application for this information.

2. Impact identification and classification:

   When considering the location of a ULG investment project, rate the sensitivity of the proposed site in the following table according to the given criteria. Higher ratings do not necessarily mean that a site is unsuitable. They do indicate a real risk of causing undesirable adverse environmental and social effects, and that more substantial environmental and/or social planning may be required to adequately avoid, mitigate or manage potential effects. The following table should be used as a reference.

   **Table 11 Impact Identification and Classification**

<table>
<thead>
<tr>
<th>Issues</th>
<th>Site Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural habitats</td>
<td>Low</td>
</tr>
<tr>
<td>Water quality and water resource availability and use</td>
<td>Medium</td>
</tr>
<tr>
<td>Natural hazards vulnerability, floods, soil stability/ erosion</td>
<td>High</td>
</tr>
<tr>
<td>Cultural property</td>
<td>Low</td>
</tr>
</tbody>
</table>

   Issuess:

   1. Site Selection:

   2. Impact identification and classification:

   When considering the location of a ULG investment project, rate the sensitivity of the proposed site in the following table according to the given criteria. Higher ratings do not necessarily mean that a site is unsuitable. They do indicate a real risk of causing undesirable adverse environmental and social effects, and that more substantial environmental and/or social planning may be required to adequately avoid, mitigate or manage potential effects. The following table should be used as a reference.

   **Table 11 Impact Identification and Classification**

<table>
<thead>
<tr>
<th>Issues</th>
<th>Site Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural habitats</td>
<td>Low</td>
</tr>
<tr>
<td>Water quality and water resource availability and use</td>
<td>Medium</td>
</tr>
<tr>
<td>Natural hazards vulnerability, floods, soil stability/ erosion</td>
<td>High</td>
</tr>
<tr>
<td>Cultural property</td>
<td>Low</td>
</tr>
</tbody>
</table>
### 3. Checklist of impacts

#### Roads, Footpaths & Street lighting

<table>
<thead>
<tr>
<th>Potential for Adverse Impacts</th>
<th>None</th>
<th>Low</th>
<th>Med</th>
<th>High</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil erosion or flooding concerns (e.g., due to highly erodable soils or steep gradients)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of stream crossings or disturbances</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wet season excavation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creation of quarry sites or borrow pits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significant vegetation removal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wildlife habitats or populations disturbed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmentally sensitive areas disturbed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural or religious sites disturbed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic or physical resettlement required</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New settlement pressures created</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Water supply

<table>
<thead>
<tr>
<th>Potential for Adverse Impacts</th>
<th>None</th>
<th>Low</th>
<th>Med</th>
<th>High</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>New access (road) construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing water sources supply/yield depletion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing water users disrupted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Downstream water users disrupted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased numbers of water users due to improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased social tensions/conflict over water allocation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensitive ecosystems downstream disrupted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic or physical resettlement required</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local incapacity/inexperience to manage facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Other (specify):

<table>
<thead>
<tr>
<th>Urban Drainage and Flood Control</th>
<th>Potential for Adverse Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>None</td>
</tr>
<tr>
<td>Soil erosion or flooding concerns (e.g., due to highly erodible soils or steep gradients)</td>
<td></td>
</tr>
<tr>
<td>Number of stream crossings, junctions or disturbances</td>
<td></td>
</tr>
<tr>
<td>Wet season excavation</td>
<td></td>
</tr>
<tr>
<td>Creation of quarry sites or borrow pits</td>
<td></td>
</tr>
<tr>
<td>Significant vegetation removal</td>
<td></td>
</tr>
<tr>
<td>Wildlife habitats or populations disturbed</td>
<td></td>
</tr>
<tr>
<td>Environmentally sensitive areas disturbed</td>
<td></td>
</tr>
<tr>
<td>Cultural or religious sites disturbed</td>
<td></td>
</tr>
<tr>
<td>Economic or physical resettlement required</td>
<td></td>
</tr>
<tr>
<td>New settlement pressures created</td>
<td></td>
</tr>
<tr>
<td>Other (specify):</td>
<td></td>
</tr>
</tbody>
</table>

### Integrated multiple infrastructure & services to land for housing, MSE & industrial development

<table>
<thead>
<tr>
<th>Potential for Adverse Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
</tr>
<tr>
<td>Soil erosion or flooding concerns (e.g., due to highly erodible soils or steep gradients)</td>
</tr>
<tr>
<td>Number of stream crossings or disturbances</td>
</tr>
<tr>
<td>Wet season excavation</td>
</tr>
<tr>
<td>Creation of quarry sites or borrow pits</td>
</tr>
<tr>
<td>Significant vegetation removal</td>
</tr>
<tr>
<td>Wildlife habitats or populations disturbed</td>
</tr>
<tr>
<td>Environmentally sensitive areas disturbed</td>
</tr>
<tr>
<td>Cultural or religious sites disturbed</td>
</tr>
<tr>
<td>Economic or physical resettlement required</td>
</tr>
<tr>
<td>New settlement pressures created</td>
</tr>
<tr>
<td>Other (specify):</td>
</tr>
</tbody>
</table>

### Built Facilities – Markets, MSE facilities, Abattoirs

<table>
<thead>
<tr>
<th>Potential for Adverse Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
</tr>
<tr>
<td>Disturbance of economic activities leading to loss of property or income</td>
</tr>
<tr>
<td>Number of stream crossings or disturbances</td>
</tr>
<tr>
<td>Wet season excavation</td>
</tr>
<tr>
<td>Creation of quarry sites or borrow pits</td>
</tr>
<tr>
<td>Significant vegetation removal</td>
</tr>
<tr>
<td>Wildlife habitats or populations disturbed</td>
</tr>
<tr>
<td>Environmentally sensitive areas disturbed</td>
</tr>
<tr>
<td>Cultural or religious sites disturbed</td>
</tr>
<tr>
<td>Economic or physical resettlement required</td>
</tr>
<tr>
<td>New settlement pressures created</td>
</tr>
<tr>
<td>Other (specify):</td>
</tr>
</tbody>
</table>

### 4. Detailed questions:  

1. **Preliminary Environmental Information:**  
   - Yes/No answers and bullet lists preferred except where descriptive detail is essential.  
   - State the source of information available at this stage (ULG report, EIA or other environmental study).  
   - Has there been litigation or complaints of any environmental nature directed against the proponent or ULG investment project  
   - Refer to application and/or relevant environmental authority for this information.  

2. **Identify type of activities and likely environmental impacts:**  
   - Yes/No answers and bullet lists preferred except where descriptive detail is essential.  
   - What are the likely environmental impacts, opportunities, risks and liabilities associated with the project  
   - Refer to ESMF – Impact, Mitigation and Monitoring Guidelines  

3. **Determine environmental screening category:**  
   - Yes/No answers and bullet lists preferred except where descriptive detail is essential.  
   - After compiling the above, determine which category the ULG investment project falls under based on the environmental categories A, B and C.  
   - Refer to ESMF – Screening and Review Process  

4. **Mitigation of Potential Pollution:**  
   - Yes/No answers and bullet lists preferred except where descriptive detail is essential.  
   - Does the ULG investment project have the potential to pollute the environment, or contravene any environmental laws and regulations?  
   - Will the ULG investment project require pesticide use?
If so, then the proposal must detail the methodology and equipment incorporated in the design to constrain pollution within the laws and regulations and to address pesticide use, storage and handling.

Does the design adequately detail mitigating measures?

Refer to ESMF– Impact, Mitigation and Monitoring Guidelines

<table>
<thead>
<tr>
<th>5. Environmental Assessment Report or environmental studies required:</th>
<th>Yes/No answers and bullet lists preferred except where descriptive detail is essential.</th>
</tr>
</thead>
<tbody>
<tr>
<td>If Screening identifies environmental issues that require an EIA or a study, does the proposal include the EIA or study?</td>
<td></td>
</tr>
<tr>
<td>Indicate the scope and time frame of any outstanding environmental study.</td>
<td></td>
</tr>
<tr>
<td>Required Environmental Monitoring Plan:</td>
<td></td>
</tr>
<tr>
<td>If the screening identifies environmental issues that require long term or intermittent monitoring (effluent, gaseous discharges, water quality, soil quality, air quality, noise etc), does the proposal detail adequate monitoring requirements?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. Public participation/information requirements:</th>
<th>Yes/No answers and bullet lists preferred except where descriptive detail is essential.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the proposal require, under national or local laws, the public to be informed, consulted or involved?</td>
<td></td>
</tr>
<tr>
<td>Has consultation been completed?</td>
<td></td>
</tr>
<tr>
<td>Indicate the time frame of any outstanding consultation process.</td>
<td></td>
</tr>
</tbody>
</table>

Refer to relevant legislative acts in Ethiopia.

<table>
<thead>
<tr>
<th>7. Land and resettlement:</th>
<th>Yes/No answers and bullet lists preferred except where descriptive detail is essential.</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the likelihood of land purchase for the ULG investment project?</td>
<td></td>
</tr>
<tr>
<td>How will the proponent go about land purchase?</td>
<td></td>
</tr>
<tr>
<td>Will people’s livelihoods be affected in any way, therefore requiring some form of compensation?</td>
<td></td>
</tr>
<tr>
<td>Will people need to be displaced, and therefore require compensation and resettlement assistance?</td>
<td></td>
</tr>
<tr>
<td>Are the relevant authorities aware of the need for a Resettlement Process, involving a census, valuation, consultation, compensation, evaluation and monitoring?</td>
<td></td>
</tr>
<tr>
<td>What level or type of compensation is planned?</td>
<td></td>
</tr>
<tr>
<td>Who will monitor actual payments?</td>
<td></td>
</tr>
</tbody>
</table>

Refer to the Resettlement Policy Framework.
### 8. Actions:

<table>
<thead>
<tr>
<th>Description</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>List outstanding actions to be cleared before ULG investment project appraisal.</td>
<td></td>
</tr>
<tr>
<td>Approval/rejection&lt;br&gt;Yes/No answers and bullet lists preferred except where descriptive detail is essential</td>
<td></td>
</tr>
<tr>
<td>If proposal is rejected for environmental reasons, should the ULG investment project be reconsidered, and what additional data would be required for reconsideration?</td>
<td></td>
</tr>
</tbody>
</table>

### Recommendations:

- [ ] Requires an EIA to be submitted on date
- [ ] Does not require further environmental or social studies

Reviewer:
- Name: [Signature: ____________________________ Date: ____________________________]
Annex C: Terms of Reference for EIA

An environmental and social impact assessment (EIA) report for an infrastructure project should focus on the significant environmental and social issues of the proposed project, whether it is/or includes new construction or rehabilitation. The report’s scope and level of detail should be commensurate with the project’s potential impacts.

The EIA report should include the following items (not necessarily in the order shown):

a. **Executive summary.** Concisely discusses significant findings and recommended actions.

b. **Policy, legal, and administrative framework.** Discusses the policy, legal, and administrative framework within which the EIA is carried out. Identifies relevant international environmental agreements to which the country is a party.

c. **Project description.** Concisely describes the proposed project and its geographic, ecological, social, and temporal context, including any offsite investments that may be required. Indicates the need for any resettlement plan. Normally includes a map showing the project site and the project’s area of influence.

d. **Baseline data.** Assesses the dimensions of the study area and describes relevant physical, biological, and socioeconomic conditions, including any changes anticipated before the project commences. Also takes into account current and proposed development activities within the project area but not directly connected to the project. Data should be relevant to decisions about project location, design, operation, or mitigation measures. The section indicates the accuracy, reliability, and sources of the data.

e. **Environmental and social impacts.** Predicts and assesses the project’s likely positive and negative impacts, in quantitative terms to the extent possible. Identifies mitigation measures and any residual negative impacts that cannot be mitigated. Explores opportunities for environmental enhancement. Identifies and estimates the extent and quality of available data, key data gaps, and uncertainties associated with predictions, and specifies topics that do not require further attention.

f. **Analysis of alternatives.** Systematically compares feasible alternatives to the proposed project site, technology, design, and operation—including the “without project” situation—in terms of their potential environmental impacts; the feasibility of mitigating these impacts; their capital and recurrent costs; their suitability under local conditions; and their institutional, training, and monitoring requirements. For each of the alternatives, quantifies the environmental impacts to the extent possible, and attaches economic values where feasible. States the basis for selecting the particular project design proposed and justifies recommended emission levels and approaches to pollution prevention and abatement.

g. **Environmental management plan (EMP).** Covers mitigation measures, monitoring, budget requirements and funding sources for implementation, as well as institutional strengthening and capacity building requirements.

h. **Appendixes**
   i. **List of EIA report preparers** – individuals and organizations.
   ii. **References** - written materials both published and unpublished, used in study preparation.
   iii. **Record of interagency and consultation meetings**, including consultations for obtaining the informed views of the affected people and local nongovernmental organizations (NGOs). The record specifies any means other than consultations
(e.g., surveys) that were used to obtain the views of affected groups and local NGOs.

iv. **Tables presenting the relevant data** referred to or summarized in the main text.

v. **List of associated reports** (e.g., socio-economic baseline survey, resettlement plan)
Annex D: Example of Environmental Contract Clauses

Proper environmental management of construction projects can be achieved only with adequate site selection and project design. As such, the EIA for projects involving any new construction, or any rehabilitation or reconstruction for existing projects, should provide information as to screening criteria for site selection and design including the following:

SITE SELECTION
Sites should be chosen based on community needs for additional projects, with specific lots chosen based on geographic and topographic characteristics. The site selection process involves site visits and studies to analyze: (i) the site’s urban, suburban, or rural characteristics; (ii) national, state, or municipal regulations affecting the proposed lot; (iii) accessibility and distance from inhabited areas; (iv) land ownership, including verification of absence of squatters and/or other potential legal problems with land acquisition; (v) determination of site vulnerability to natural hazards, (i.e. intensity and frequency of floods, earthquakes, landslides, hurricanes, volcanic eruptions); (vi) suitability of soils and subsoils for construction; (vii) site contamination by lead or other pollutants; (viii) flora and fauna characteristics; (ix) presence or absence of natural habitats (as defined by OP 4.04) and/or ecologically important habitats on site or in vicinity (e.g. forests, wetlands, coral reefs, rare or endangered species); and (ix) historic and community characteristics.

PROJECT DESIGN
Project design criteria include, but are not limited to, the consideration of aspects such as heating, ventilation, natural and artificial light energy efficiency, floor space (in square feet) per bed/ward, requirements for x-ray rooms, adequacy of corridors for wheel chair/bed access, adequate water supply and sanitation systems, historical and cultural considerations, security and handicapped access.

CONSTRUCTION ACTIVITIES AND ENVIRONMENTAL RULES FOR CONTRACTORS
The following information is intended solely as broad guidance to be used in conjunction with local and national regulations. Based on this information, environmental rules for contractors should be developed for each project, taking into account the project size, site characteristics, and location (rural vs. urban).

After choosing an appropriate site and design, construction activities can proceed. As these construction activities could cause significant impacts on and nuisances to surrounding areas, careful planning of construction activities is critical. Therefore the following rules (including specific prohibitions and construction management measures) should be incorporated into all relevant bidding documents, contracts, and work orders.

PROHIBITIONS
The following activities are prohibited on or near the project site:

⇒ Cutting of trees for any reason outside the approved construction area;
⇒ Hunting, fishing, wildlife capture, or plant collection;
⇒ Use of unapproved toxic materials, including lead based paints, asbestos, etc.
⇒ Disturbance to anything with architectural or historical value;
⇒ Building of fires;
⇒ Use of firearms (except authorized security guards);
⇒ Use of alcohol by workers.
CONSTRUCTION MANAGEMENT MEASURES

Waste Management and Erosion:
Solid, sanitation, and, hazardous wastes must be properly controlled, through the implementation of the following measures:

Waste Management:
⇒ Minimize the production of waste that must be treated or eliminated.
⇒ Identify and classify the type of waste generated. If hazardous wastes (including health care wastes) are generated, proper procedures must be taken regarding their storage, collection, transportation and disposal.
⇒ Identify and demarcate disposal areas clearly indicating the specific materials that can be deposited in each.
⇒ Control placement of all construction waste (including earth cuts) to approved disposal sites (>300 m from rivers, streams, lakes, or wetlands). Dispose in authorized areas all of garbage, metals, used oils, and excess material generated during construction, incorporating recycling systems and the separation of materials.

Maintenance:
⇒ Identify and demarcate equipment maintenance areas (>15m from rivers, streams, lakes or wetlands).
⇒ Ensure that all equipment maintenance activities, including oil changes, are conducted within demarcated maintenance areas; never dispose spent oils on the ground, in water courses, drainage canals or in sewer systems.
⇒ Identify, demarcate and enforce the use of within site access routes to limit impact to site vegetation.
⇒ Install and maintain an adequate drainage system to prevent erosion on the site during and after construction.

Erosion Control
⇒ Erect erosion control barriers around perimeter of cuts, disposal pits, and roadways.
⇒ Spray water on dirt roads, cuts, fill material and stockpiled soil to reduce wind induced erosion, as needed.
⇒ Maintain vehicle speeds at or below 10mph within work area at all times.

Stockpiles and Borrow Pits
⇒ Identify and demarcate locations for stockpiles and borrow pits, ensuring that they are 15 meters away from critical areas such as steep slopes, erosion prone soils, and areas that drain directly into sensitive water bodies.
⇒ Limit extraction of material to approved and demarcated borrow pits.

Site Cleanup
⇒ Establish and enforce daily site cleanup procedures, including maintenance of adequate disposal facilities for construction debris.

SAFETY DURING CONSTRUCTION
The Contractor’s responsibilities include the protection of every person and nearby property from construction accidents. The Contractor shall be responsible for complying with all national and local safety requirements and any other measures necessary to avoid accidents, including the following:
⇒ Carefully and clearly mark pedestrian-safe access routes.
⇒ If school children are in the vicinity, include traffic safety personnel to direct traffic during school hours.
⇒ Maintain supply of supplies for traffic signs (including paint, easel, sign material, etc.), road marking, and guard rails to maintain pedestrian safety during construction.
⇒ Conduct safety training for construction workers prior to beginning work.
⇒ Provide personal protective equipment and clothing (goggles, gloves, respirators, dust masks, hard hats, steel-toed and –shanked boots, etc.) for construction workers and enforce their use.
⇒ Post Material Safety Data Sheets for each chemical present on the worksite.
⇒ Require that all workers read, or are read, all Material Safety Data Sheets. Clearly explain the risks to them and their partners, especially when pregnant or planning to start a family. Encourage workers to share the information with their physicians, when relevant.
⇒ Ensure that the removal of asbestos-containing materials or other toxic substances be performed and disposed of by specially trained workers.
⇒ During heavy rains or emergencies of any kind, suspend all work.
⇒ Brace electrical and mechanical equipment to withstand seismic events during the construction.

**NUISANCE AND DUST CONTROL**

To control nuisance and dust the Contractor should:

⇒ Maintain all construction-related traffic at or below 15 mph on streets within 200 m of the site.
⇒ Maintain all onsite vehicle speeds at or below 10 mph.
⇒ To the extent possible, maintain noise levels associated with all machinery and equipment at or below 90 db.
⇒ In sensitive areas (including residential neighbourhoods, hospitals, etc.) more strict measures may need to be implemented to prevent undesirable noise levels.
⇒ Minimize production of dust and particulate materials at all times, to avoid impacts on surrounding families and businesses, and especially to vulnerable people.
⇒ Phase removal of vegetation to prevent large areas from becoming exposed to wind.
⇒ Place dust screens around construction areas, paying particular attention to areas close to housing, commercial areas, and recreational areas.
⇒ Spray water as needed on dirt roads, cut areas and soil stockpiles or fill material.
⇒ Apply proper measures to minimize disruptions from vibration or noise coming from construction activities.

**COMMUNITY RELATIONS**

To enhance adequate community relations the Contractor should:

⇒ Following the country and EIA requirements, inform the population about construction and work schedules, interruption of services, traffic detour routes and provisional bus routes, as appropriate.
Limit construction activities at night. When necessary ensure that night work is carefully scheduled and the community is properly informed so they can take necessary measures.

At least five days in advance of any service interruption (including water, electricity, telephone, and bus routes) the community must be advised through postings at the project site, at bus stops, and in affected homes/businesses.

**Chance Find Procedures for Culturally Significant Artefacts**

The Contractor is responsible for familiarizing themselves with the following “Chance Finds Procedures”, in case culturally valuable materials are uncovered during excavation, including:

- Stop work immediately following the discovery of any materials with possible archaeological, historical, paleontological, or other cultural value, announce findings to project manager and notify relevant authorities;
- Protect artefacts as well as possible using plastic covers, and implement measures to stabilize the area, if necessary, to properly protect artefacts.
- Prevent and penalize any unauthorized access to the artefacts.
- Restart construction works only upon the authorization of the relevant authorities.

**Environmental Supervision during Construction**

The bidding documents should indicate how compliance with environmental rules and design specifications would be supervised, along with the penalties for non-compliance by contractors or workers. Construction supervision requires oversight of compliance with the manual and environmental specifications by the contractor or his designated environmental supervisor. Contractors are also required to comply with national and municipal regulations governing the environment, public health and safety.
### Annex E: Format of an Annual Environmental Report

<table>
<thead>
<tr>
<th>Relevant environmental authority:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Reporting dates:</td>
<td></td>
</tr>
<tr>
<td>ULG/Kebele:</td>
<td></td>
</tr>
<tr>
<td><strong>Subprojects approved:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Subproject title</strong></td>
<td><strong>Activities</strong></td>
</tr>
<tr>
<td>(name, location, title or reference)</td>
<td>(new construction, rehabilitation, maintenance)</td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>etc</td>
<td></td>
</tr>
<tr>
<td><strong>Subprojects rejected:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Subproject title</strong></td>
<td><strong>Activities</strong></td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Etc</td>
<td></td>
</tr>
</tbody>
</table>

---

9 Subproject phase will be one of the following: (a) under project preparation or appraisal, (b) appraised, or (c) implementation

10 Issues: accidents, litigation, complaints or fines are to be listed

11 e.g. if an environmental permit was not granted, explain why
### Table 12 Urban Roads & Drainage: Mitigation & Monitoring Checklist

<table>
<thead>
<tr>
<th>Type of Activity</th>
<th>Potential Impacts</th>
<th>Generic Mitigation Measures</th>
<th>Monitoring Indicators</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>Negative social and economic effects on local people and communities, such as:</td>
<td>• Work with affected communities to anticipate and plan for enhanced access to and demand on local public infrastructure and services</td>
<td>Participation of communities in local planning</td>
<td>ULG</td>
</tr>
<tr>
<td></td>
<td>• Unplanned commercial development</td>
<td>• Provide project funds to strengthen local public infrastructure and services (e.g. health clinics, markets, schools)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Demand for local public infrastructure and services increases beyond existing capacities</td>
<td>• Avoid creating congested and unsafe road conditions at intersections, and in villages and towns</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Disruption of traditional lifestyles</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Induced population movements and natural resource exploitation activities, due to improved access (e.g. conversion of forest to pasture, or of sustainable land use to unsustainable, short-cycle cropping; illegal or unsustainable hunting)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Displacement of housing or farms or involuntary resettlement</td>
<td>• Purchase of replacement land and resettlement of affected people</td>
<td>Number of project affected people adequately compensated and resettled</td>
<td>ULG/ Land Use Administration</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Monetary compensation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss of natural areas, important habitats, biodiversity</td>
<td>Avoid infringing on:</td>
<td></td>
<td>ULG / Bureau of Agriculture and Rural Development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Critical habitats or areas with significant biodiversity (e.g. wetlands)</td>
<td>• Degree of biodiversity (number of species) in road vicinities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Protected natural sites and wilderness areas</td>
<td>• Extent of critical habitats</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Damage valuable historic, religious, cultural, and archaeological resources</td>
<td>Avoid areas of cultural, historical, or religious significance Apply chance find procedures in construction clauses</td>
<td>Participation of communities in local planning</td>
<td>ULG/ Land Use Administration</td>
<td></td>
</tr>
<tr>
<td>Social disruption during construction (e.g. enhanced transmission of STDs and TB)</td>
<td>• Comprehensive community participation in construction planning and management</td>
<td>Occurrence of illness or disease</td>
<td>ULG / Bureau of Health</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Education on avoiding communicable diseases/hygiene</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use regional labour where possible</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental and Social Management Framework</td>
<td>MWUD Draft 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>---------------</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| **Creation of stagnant water in construction** | Assess ecology of disease carriers in road corridor, and employ suitable mitigation measures (e.g. proper drainage of construction areas and road sides, effective road maintenance) | • Occurrence of illness or disease  
• Drive roads after moderate rains to identify areas that collect or gully water | ULG |
| **borrow pits and quarries, and on road sides, that breed disease carriers** | Impact of road noise on surrounding habitation | Plant 30 meter tree buffer strips between road and surrounding habitation | Number of community complaints to local authorities about noise | ULG |
| Dust | Contaminate surface water and generate trash due to lack of solid waste management | • Stabilize the road surface with gravel and other rocky surfacing materials | Number of community complaints to local authorities about noise | ULG |
| | • Provide temporary sanitation (e.g. latrine), where this is not possible, instruct crews to employ soil mining (digging a pit for human waste and covering with soil immediately after use)  
• Collect all solid waste from all site areas and dispose of either in local landfill or well-screened waste pits | Local complaints of excessive waste and odours | ULG |
| | Increased soil erosion leading to sediment in runoff and, possibly, gully formation from:  
• Construction activities such as grading, excavations, and borrowing/quarrying  
• Inadequate design of culverts and drainage controls | Design:  
• Use surface drainage controls and mulch on vulnerable surfaces and slopes  
• Line receiving surfaces with stones or concrete  
• Locate and design borrow/quarry sites for erosion control during road construction and future maintenance operations  
• Identify the most environmentally sound source of materials within budget  
Construction:  
• Limit earth movement and soil exposure to the dry season  
• Balance cut and fill for minimum deposition of earth  
• Provide sedimentation basins  
• Resurface and re-vegetate exposed surfaces | • Quality of soil/productivity  
• Integrity of road structures  
• Accidents due to erosion of road | ULG |
| Post-Construction and Operation | Landslides, slumps and slips | • Avoid areas of soil, slope or geological instability and unstable river crossing sites  
• Stabilize slopes by planting vegetation  
• Minimize vertical road cuts  
• Install drainage ditches to diver water away from road | • Quality of road  
• Degree of erosion | ULG |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accidents and safety risks</td>
<td>Construct basic speed bumps and employ traffic signs where possible</td>
<td>• Number of accidents reported per month to local government</td>
<td>ULG</td>
<td></td>
</tr>
</tbody>
</table>
| Increased soil erosion leading to sediment in runoff and, possibly, gully formation from inadequate maintenance of road surface, ditches, borrow/ quarry sites, and drainage and erosion control measures | • Ensure proper and timely maintenance of erosion control and drainage measures along the road and at borrow/ quarry sites  
• Clean out culverts and side channels/ runout when they begin to fill with sediment  
• Fill mud holes and pot holes with quality gravel  
• Use water from settling basins and retention ponds for road maintenance | • Quality of soil/ productivity  
• Integrity of road structures  
• Accidents due to erosion of road  
• Collection of water in drainage system | ULG |
| Quarry used for construction may become a health hazard | • Discuss with local community the usefulness of using pits as water collection pits for cattle, irrigation  
• High light issues of disease transmission and the need to prohibit its use for drinking, bathing, and clothes washing | Occurrence of disease or illness | ULG |
<p>| Impact of road noise on village | Plant 30 meter tree buffer strips between road and village | Number of community complaints to local authorities about noise | ULG |
| Dust due to traffic | • Implement agreed dust control measures such as wetting dirt roads, truck washing for trucks exiting site, and monitoring dust emissions | Number of community complaints to local authorities about dust | ULG |</p>
<table>
<thead>
<tr>
<th>Potential Impacts</th>
<th>Generic Mitigation Measures</th>
<th>Monitoring Indicators</th>
<th>Responsibility</th>
</tr>
</thead>
</table>
| Illness or disease related to poor source water quality or from contaminants entering water supply system | • Ensure that water is fit for drinking (make regular testing a part of the project if possible)  
• Ensure planning, design, and maintenance of supply, sanitation, and wastewater works is appropriate to local needs, and to soil and water table conditions | • Occurrence of illness or disease  
• Regular testing (if possible)  
• Involve community in local planning process | Local government/Community |
| Contaminated soils from disposal of inadequately decomposed wastewaters | Ensure planning, design, and maintenance of supply, sanitation, and wastewater works is appropriate to local needs, and to soil and water table conditions | Involve community in local planning process | Local government/Community |
| Contamination of water source supply                       | • Protect groundwater sources from surface runoff (e.g. rainwater, spillage around wells, wastewater from latrines or homes) that may enter as drainage from above or as seepage from below  
• Locate source well away from latrines, septic systems, traditional defecating areas, and animal pens  
• Protect surface water sources from contamination from:  
  • Runoff from nearby agricultural areas (e.g. silt, agrochemicals, animal waste)  
  • Other uses such as bathing, laundering, and animal watering  
  • Garbage and vegetative debris | • Occurrence of illness or disease  
• Decrease in production due to water contamination (e.g. stunted growth, no growth)  
• Complaints/problems documented form local community | Local government/Community |
| Groundwater contamination                                  | • Ensure adequate design, installation, and maintenance of latrines, holding tanks, septic systems and wastewater soak-aways  
• Ensure adequate spacing between latrines and soak-aways | • Occurrence of illness or disease  
• Decrease in production due to water contamination (e.g. stunted growth, no growth) | Local government/Community |
| Surface water contamination                                | • Ensure proper maintenance of latrines, holding tanks, septic systems and wastewater soak-aways  
• Locate latrines, septic systems and soak-aways at least 30 meters from any waterbody (e.g. stream, lake, river) | • Occurrence of illness or disease  
• Decrease in production due to water contamination (e.g. stunted growth, no growth) | Local government/Community |
### Table 14  Waste Management: Mitigation & Monitoring Checklist

<table>
<thead>
<tr>
<th>Potential Impacts</th>
<th>Generic Mitigation Measures</th>
<th>Monitoring Indicators</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Displaced land uses</td>
<td>Involve community in locating project sites and access routes as well as developing practices &amp; responsibilities for managing project activities and sites</td>
<td>Survey of local population regarding land uses</td>
<td>Local government/ Community</td>
</tr>
<tr>
<td>Disruption or destruction of sites of cultural, religious or historical importance</td>
<td>Involve community in locating appropriate project sites and access routes that avoid such resources</td>
<td>Survey of local population regarding problems with culturally sensitive areas</td>
<td>Local government/ Community</td>
</tr>
<tr>
<td>Human settlements and land uses near landfill and composting sites</td>
<td>Involve community in locating project sites and access routes</td>
<td>Survey of local population regarding siting of facility</td>
<td>Local government</td>
</tr>
<tr>
<td>Windblown garbage, dust and smoke</td>
<td>Spread and compact incoming refuse, and cover with soil, daily</td>
<td>Complaints from community</td>
<td>Local government</td>
</tr>
<tr>
<td>Increased traffic to/from the sites</td>
<td>Pave access roads, or use water spraying to reduce dust</td>
<td>Complaints from community</td>
<td>Local government</td>
</tr>
<tr>
<td>Odours</td>
<td>• Provide for safe ventilation of decomposition gases • Spread and compact refuse, and cover with soil daily</td>
<td>Complaints from community</td>
<td>Local government</td>
</tr>
<tr>
<td>Containment of water sources</td>
<td>• Ensure site layout and management practices, including working training, are adequate • Install adequate surface drainage control measures • Maintain erosion and surface drainage control measures during operations</td>
<td>• Incidences of illness or disease • Decrease in agricultural production</td>
<td>Local government</td>
</tr>
<tr>
<td>Creation of stagnant water sources</td>
<td>• Ensure site layout is adequate for drainage • Install adequate surface drainage control measures • Maintain erosion and surface drainage control measures during operations</td>
<td>Periodic check for pooling water due to inadequate drainage</td>
<td>Local government</td>
</tr>
<tr>
<td>Creation of stagnant water in project sites that breed disease carriers</td>
<td>Assess ecology of disease carriers in project area and employ suitable mitigation measures (e.g. proper drainage)</td>
<td>• Increase in disease carriers • Occurrence of illness or disease</td>
<td>Local government / Community</td>
</tr>
<tr>
<td>Loss of natural area, important habitats, biodiversity</td>
<td>Avoid infringing on: • Protected natural areas and wilderness areas • Critical habitats or areas with significant biodiversity (e.g. wetlands)</td>
<td>Survey land area and community for environmentally sensitive areas/habitats</td>
<td>Local government / Community</td>
</tr>
<tr>
<td>Soil erosion</td>
<td>• Minimize time of exposure of areas cleared, graded or excavated • Stabilize and revegetate disturbed areas • Install adequate surface drainage control measures • Maintain erosion and surface drainage control measures during operations</td>
<td>• Degree of erosion</td>
<td>Local government / Community</td>
</tr>
</tbody>
</table>
Contamination of surface and groundwater with landfill runoff and leachate

- Protect water resources by locating landfills:
  - Where the underlying soils are relatively impermeable, and have a high capability for containing chemical contaminants (e.g. clays)
  - So that the bottom of the landfill is above the water table
  - Away and down gradient from surface waters, and groundwater recharge areas sources, whose use could be affected by contamination unless the distance to the receiving water is adequate to dilute and disperse potential contamination
- Use a landfill liner (e.g. clay, synthetic)
- Collect surface runoff and discharge to safe area
- Install test wells at landfill perimeter, and monitor water quality during operations, for early identification and mitigation of emerging adverse effects

- Complain from community
- Lower agricultural productivity
- Increased instances of illness or disease

Local government / Community

<table>
<thead>
<tr>
<th>Types of Activities</th>
<th>Potential Impacts</th>
<th>Generic Mitigation Measures</th>
<th>Monitoring Indicators</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management of health care wastes at facilities (health centres, laboratories, maternity clinics)</td>
<td>Disease transmission through infectious waste, sharps, and contaminated water</td>
<td>• Community waste management plan</td>
<td>Schedule for periodic review of compliance to and effectiveness of plan</td>
<td>Ministry of Health/ NGO/ Community</td>
</tr>
<tr>
<td></td>
<td>Chemical and toxic threats through chemical and pharmaceutical exposure</td>
<td>• Clearly assigned staff responsibilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Community guidelines for generation, handling, storage, treatment and disposal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Staff trained in handling, storage, treatment, and disposal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Protective clothing available (provide thick gloves and aprons for staff handling healthcare waste)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Good hygiene practices (soap and water readily available)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Vaccinated workers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Temporary storage containers in designated locations</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Minimization, reuse, and recycling procedures • Segregate waste</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Treatment methods for hazardous or highly hazardous waste (open-air burning or incineration of healthcare waste on site)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Designate a final disposal site (bury waste on site in clay-lined pit)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 15 Health and Sanitation: Mitigation & Monitoring Checklist
| Planning a new facility | • Spread of disease  
• Environmental impact | • Select a location with easy access to safe drinking water (source should be dedicated exclusively to the facility, if possible, to reduce spreading disease)  
• Install adequate sanitation facilities to prevent the spread of disease from infected patients  
• Avoid locations adjacent to schools to minimize children’s risk of exposure  
• Pick a location where waste can be safety buried (e.g. above the water table and protected from scavenging) or easily shipped off site for safe disposal in a sanitary landfill | Involve community in siting facility and other planning measures | Ministry of Health/NGO/Community |