



**ERA**  
**Ethiopian Roads**  
**Authority**

# **Wereda and Community Roads Maintenance and Asset Management Policy**

**February 2010**





## Contents

List of Abbreviations .....	ii
Glossary.....	iii
1 Preface .....	1
2 Maintenance and Asset Management Policy .....	2
2.1 Vision .....	2
2.2 Maintenance Objectives.....	2
2.3 Performance Indicators .....	2
2.4 Policy Directions .....	3
2.4.1 Institutional .....	3
❖ Classification and designation of roads.....	3
❖ Ownership and Management.....	3
❖ Planning and Programming Criteria .....	4
2.4.2 Financial .....	4
❖ Funding.....	4
❖ Reporting, M&E and Audits.....	4
2.4.3 Technical .....	5
❖ Standards.....	5
❖ Choice of Technology .....	5
❖ Method of Implementation.....	5

## List of Abbreviations

DFID	UK Department for International Development
ERA	Ethiopian Roads Authority
ETB	Ethiopian Birr
GoE	Government of Ethiopia
M&E	Monitoring and Evaluation
PSNP	Productive Safety Net Programme
TI-UP	Technology, Infrastructure and Urban Planning (Resource Centre)
UK	United Kingdom
URRAP	Universal Rural Road Access Programme

## Glossary

All weather road	A road that is usually passable to motorised traffic in both wet and dry weather.
Asset management	A systematic process of effectively maintaining, upgrading and operating assets, combining engineering principles with sound business practice and economic rationale, and providing the tools to facilitate a more organised and flexible approach to making decisions necessary to achieve the public's expectations.
Block grants	A sum of money granted by the national government to regional or wereda authorities with only general provisions as to the way it is to be spent.
Cross Drainage	Culverts, drifts and other structures that channel surface water across the road line.
Dry weather road	A road that is usually only passable to motorised traffic in dry weather. This could be because of a soft and slippery road surface and/or streams that are not passable after heavy rain.
Emergency Maintenance	Maintenance and repairs of an urgent and unforeseen nature often required to re-open or keep open a road. This includes clearing landslips that block or partially block the road, repairing collapsed culverts , etc.
Labour-based	A technology that applies a labour/equipment mix that gives priority to labour, supplementing it with appropriate equipment where necessary for reasons of quality or cost.
Lengthperson	An individual given responsibility for the maintenance of a specified section or length of road over an extended period of time (usually at least one year).
Periodic maintenance	Activities on a section of road at regular and relatively long intervals (3-8 years) with the aim of preserving the structural integrity of the road. The operations require the mobilisation of equipment and skilled personnel. In the context of low-volume roads, typical works include the re-shaping of the road and side ditches and the repair of structures. If a gravel surface is provided, replenishing and re-compacting the gravel layer is included.
Routine maintenance	Routine maintenance comprises a range of small scale and simple activities - usually carried out at least once a year - but usually widely dispersed. Typical activities include roadside verge clearing

and cutting back encroaching vegetation, cleaning of silted ditches and culverts, patching and pothole repair, and light grading/reshaping of unsealed surfaces.

Spot repairs

Repairs to a road that are carried out in one or more short sections or “spots” only. This could include the repair of the road surface, the road shoulders, the side ditches or the cross drainage structures and associated embankments.

User charges

Charges imposed directly on the users of the road (i.e. vehicle operators). These include fixed charges such as annual licence fees and variable charges such as road tolls and fuel levies.

# 1 Preface

Ethiopia has an extensive tertiary network of wereda and community roads. There is no precise measurement of the length of this network but it has been estimated to be at least 90,000 kilometres in length. The majority of the roads have an earth surface and only a very small proportion have been constructed to fully engineered standard i.e. with a standard cross section, drainage works, etc. For this reason, most of the roads are only reliably passable in dry weather.

These roads are important for the local movement of goods and people between villages and markets. They connect the wereda centre to kebele centres and link with the primary and secondary road network. They also connect villages with the kebele centres and with neighbouring villages.

Some kebele centres and many villages do not have a motorable road connection. Programmes such as the Productive Safety Nets Programme (PSNP) are steadily adding to the network of wereda and community roads by the construction of new roads. However, the roads built under these projects are typically poorly designed or constructed and often do not last more than one year.

The Universal Rural Roads Access Programme (URRAP), commencing in 2010, will complete the missing links to currently unconnected kebele centres and as well as upgrade existing wereda roads to all weather standard. These roads will be built to a higher standard than PSNP roads and will need to be maintained to preserve the significant investments made. A complementary activity to constructing new roads is to improve the passability of existing tracks by upgrading spots that are currently impassable during adverse weather conditions. These activities are small scale, locally identified and can thus be considered as part of a road maintenance strategy.

A major problem with the current wereda and community roads is the almost complete lack of maintenance. Consequently, many roads that have been constructed or improved under projects have fallen back into a state of disrepair. The underlying issue leading to this situation is a lack of clarity about who is responsible for maintaining this network, from where the resources for maintenance should be sourced and the details of how maintenance should be carried out. For this reason, the Ethiopian Roads Authority decided that an operational maintenance and asset management policy for wereda and community roads was necessary.

In 2008, Consultants were appointed through the Ti-UP Resource centre funded by DFID to assist in the process of preparing a maintenance and asset management policy and strategy. An Inception Report was produced in late 2008. This was followed by an identification of the key issues and options based on various meetings and discussions at federal, regional and wereda levels. This was documented in an Issues and Options Report that was discussed in a stakeholder workshop in July 2009.

This document sets out an operational maintenance and asset management policy for wereda and community roads. It is intended that this will guide the planning and implementation of the maintenance of wereda and community roads at regional and wereda levels. It may eventually be incorporated into a wider roads policy document. A separate document describes the strategy to be followed to accomplish this policy.

## 2 Maintenance and Asset Management Policy

### 2.1 Vision

The vision or ultimate objective of the maintenance and asset management policy is a wereda and community road network that connects all kebeles and villages and provides safe and reliable passage throughout the year.

### 2.2 Maintenance Objectives

The objectives of the maintenance policy are:

Quality and Level of Service:

- Maximise the length of the wereda and community road network that is passable by motorised and non-motorised traffic throughout the year;
- Minimise transport costs for goods and people and integrate markets;
- Maximise access and mobility by giving priority to routes that promote the development of export-led agriculture and serve larger populations.

Sustainability:

- Preserve the investment made in constructing, upgrading or rehabilitating the wereda and community roads and associated structures in a way that is effective and economically efficient.

### 2.3 Performance Indicators

The main performance indicators that will be used in the assessment of the performance of the network are:

Indicator	Measure
Length of wereda roads that is passable throughout the year	Kilometres
Length of community roads that is passable throughout the year	Kilometres
Change in transport costs for goods	ETB per tonne-kilometre
Change in transport costs for passengers	ETB per passenger-kilometre
Net change in accessible road length between start and end of the financial year	Kilometres



Percentage of population within 5 kilometres of an all-weather road	Percentage
Net change in road network asset value between start and end of the financial year	ETB million

The baselines and targets will be set and measured at wereda level and each wereda will have its own set of indicators. For reporting purposes, the measurement of indicators will be consolidated such that performance will be measured at wereda, regional and federal levels. Baselines will be established for all these indicators at wereda, regional and federal levels.

## 2.4 Policy Directions

### 2.4.1 Institutional

#### ❖ Classification and designation of roads

- Each road in the tertiary network shall be classified as either a wereda road or a community road.
- Wereda roads shall be those roads connecting kebele centres and other important local facilities to the wereda centre or the nearest main road.
- All other roads will be community roads.
- Wereda roads will be designated roads with their start and end points and their lengths defined.
- These classes may be further subdivided to suit the needs of the planning system and management strategy e.g. community roads may be further subdivided into kebele roads and village roads.

#### ❖ Ownership and Management

- Ownership of the Wereda Roads shall be vested in the Wereda Councils. The wereda administration, with support from regional and federal authorities, shall have management responsibility for these roads on behalf of the Wereda Council through a strengthened technical capacity.
- Ownership and management of the Community Roads shall be vested in the beneficiary communities. Village Development Committees with support from the kebele and wereda administrations shall have management responsibility for these roads on behalf of the communities.

## ❖ **Planning and Programming Criteria**

- Annual road maintenance plans shall be produced for each wereda based on an annual condition survey of the network. The plans shall contain budgets, work programmes and clearly identified works to be carried out located where possible on wereda maps.
- A network planning approach shall be used for planning the maintenance (and improvement) of wereda and community roads.
- Priority shall be given to routine maintenance.
- Priority shall be given to the maintenance of roads connecting kebele centres with the wereda headquarters and the main road network.
- A basic access approach shall be used in planning of road maintenance whereby the primary objective shall be the preservation of motorable access along existing roads.
- The planning of road maintenance works shall pay due attention to the preservation or improvement of road safety on the road network.
- The planning of road maintenance works shall pay due attention to the preservation or improvement of the environment.

## **2.4.2 Financial**

### ❖ **Funding**

- Funds for the routine maintenance of wereda roads will be provided from the Road Fund and Federal/Regional contributions.
- Funds for the periodic maintenance of wereda roads will be provided from the Road Fund and Federal/Regional contributions.
- Funds/Resources for the routine maintenance of community roads will be provided by the beneficiary communities.
- Funds/Resources for the periodic maintenance of community roads will be provided by the beneficiary communities and wereda authorities.

### ❖ **Reporting, M&E and Audits**

- Wereda authorities will produce regular reports of the financial and physical progress of road maintenance activities measured against annual plans for submission to the Wereda Council and the Regional Authorities.
- At least once per year a report shall be produced by each wereda showing progress made in the achievement of the performance indicators given above.

- Regional authorities will consolidate the wereda reports into regional maintenance reports for submission to the Road Fund.
- The Road Fund will consolidate the regional maintenance reports into national maintenance reports.
- An independent technical and financial audit of road maintenance activities shall be carried out annually. This audit shall be managed by the Road Fund.

### **2.4.3 Technical**

#### **❖ Standards**

- Improved wereda and community roads will be maintained with the aim of restoring the roads to their original standard. Where minor improvements are carried out, e.g. upgrading spots that are not passable, the appropriate ERA engineering design standard will be followed.
- Standards and quality of materials used on the maintenance of improved roads shall be checked during and after the maintenance works are carried out.
- Unimproved wereda and community roads shall be maintained to provide safe passage for normal motorised and non-motorised traffic throughout the year.

#### **❖ Choice of Technology**

- The technology used for the maintenance of wereda and community roads shall maximise the use of local resources including local labour and local materials.
- Due attention shall be paid to environmental sustainability by prioritising the control of surface water and stability of slopes in roadworks.

#### **❖ Method of Implementation**

- Preference in implementation shall be given to methods that promote local involvement in the maintenance works.
- The role of the wereda authorities will move steadily to that of manager of the network. For this reason, preference shall be given to local small scale contracts and the engagement of lengthpersons for maintenance works.
- The method of implementation of maintenance works on community roads shall be organised and managed by the communities with advice and support from the kebele and wereda administrations.
- Because of the importance of small river crossings for basic access, priority will be given to the improvement and maintenance of these elements.

\*\*\*\*\*