RIC Resource Centre Handbook



RIC

ROADS INDUSTRY COUNCIL

www.ric-uganda.com

Representing Uganda's Road Sector



Contents

Foreword
How to use this handbook
Scan the summaries
Read or view the resources in full on the CD or website
Use as a tool
How this guide is organised
1 Road sector policy and strategy
2 Road funding, economics and procurement
3 Governance and audit
4 Road maintenance, low-volume roads and seals, and labour-based methods 20
5 Technology transfer, research and training
6 East African integration and the Northern Corridor
7 Road safety, non-motorised vehicles, motor cycles and urban transport5
8 Poverty alleviation, civil society and gender58
9 CrossRoads reports
10 Useful websites
Abbreviations
Acknowledgements
About the Roads Industry Council
Using the Resource Centre CD

Foreword

The Roads Industry Council (RIC) began as an advisory body for the Creating Opportunities for Sustainable Spending on Roads (CrossRoads) programme – a four-year initiative funded by the Department for International Development (DFID) and the EU to improve both the quality of the road network in Uganda and the efficiency of Uganda's expenditure on roads. However, over time the RIC's role has evolved, and now increasingly focuses on work to raise awareness of the key issues in Uganda's road sector and suggest the best ways to address them.

Following the annual review of the CrossRoads programme in May 2011, it was recommended that CrossRoads should increase its focus on influencing policy makers and, in particular, develop the influencing and advocacy role of the RIC. In line with this, the RIC is now undertaking a programme of influencing and advocacy activities, including facilitating access to key roads sector reports and materials – the RIC Resource Centre is one of many RIC initiatives to provide such access.

As large amounts of material have been produced that are relevant to road development programmes in Uganda, the RIC Resource Centre gathers together a range of informative resources across a number of different organisations, presenting them in an easy-to-access format. This allows for time-efficient identification of information that remains important to the development of the country's roads.

In addition, the RIC Resource Centre provides a long-lasting legacy of knowledge from the roads development sector, which can be easily cross referenced and used by government departments, programmes and civil society organisations to push their own work forwards without repeating work that has already been done. This legacy from the Resource Centre provides a wealth of information, knowledge, experience, insight, ideas and tools relating to the roads development sector – we hope that readers will gain insights into the changes taking place in the Ugandan road sector initiated by the RIC, our partners and other organisations involved in roads development.

This handbook is a user-friendly guide that offers a range of options and choices. A summary of each item is followed by a link indicating where the full resource may be found on the Resource Centre website or attached CD. As such, it is a compact tool that can be used even where there is no internet connection.

We hope that by widely sharing the approaches developed, piloted and successfully launched by the RIC they will reach their full potential. The work presented in this guide provide examples for others to adopt, adapt or develop as they see fit, and we hope to encourage new thinking within the roads development sector.

Eng. Dr Francis BaziraakeChairman, Roads Industry Council

How to use this handbook

This handbook brings together a selection of resources on the roads development sector relating to the RIC. Most have been produced by RIC, our partners or other organisations involved in the roads development sector. A few are generic tools and presentations, including training courses and a list of useful websites.

The handbook is one of many RIC information initiatives aimed at facilitating access to key roads sector reports and materials.

Scan the summaries

The handbook contains easy-to-read summaries of information and knowledge products related to roads development in Uganda. The summaries deal with a range of issues in roads development sector, among others.

Read or view the resources in full on the CD or website

Readers can scan sections and summaries in the guide to quickly find areas and items of interest. The full text of the resources that catch readers' attention can then be easily accessed through a user-friendly, easy-to-search database on the CD attached to the back cover. All these resources are also available on the RIC website: http://ric-uganda.com

Use as a tool

This guide, as the title suggests, has been designed as a pocket-size compact tool that you can carry with you at all times so that it is at hand when you need it. We hope that many different groups of people will find it useful.

Partners in the RIC or CrossRoads programmes, for example, may refer to items in the guide when talking through issues with stakeholders. Or they may refer to it to bring them up to speed on what the RIC has done – policy makers, donors, civil society organisations and the private sector may benefit from knowing what has been done and where. Public servants may find the examples of policies and processes useful in guiding developments in the ministries, departments and agencies where they work.

How this guide is organised

The handbook is divided into ten sections. The first nine sections provide short summaries of RIC, government and other organisations' documents. Readers can refer to the items summarised by typing the item code into the search page on the CD attached to the back of the guide.

Section 1 contains information on road sector policy and strategy: Section 2 includes details on road funding. economics and procurement: Section 3 brings together materials on governance and audit; Section 4 summarises materials that focus on road maintenance, lowvolume roads and seals, and labour-based methods: **Section 5** provides documents on technology transfer, research and training: Section 6 deals with items that focus specifically on East African integration and the Northern Corridor: Section 7 includes documents relating to road safety, nonmotorised vehicles, motor cycles and urban transport: **Section 8** incorporates documents on poverty alleviation, civil society and gender; and Section 9 provides a synthesis of CrossRoads reports.

Finally, **Section 10** lists websites where other resources that may be of use to those involved in the roads development sector may be found.

1 Road sector policy and strategy

Policies set out what a government intends to achieve and how it intends to act. Strategies describe the steps a government will use to implement the policy that is already in place. Getting both policy and strategy right is key to improving and maintaining the road infrastructure of a country.

This section of the Resource Centre includes Uganda's national construction industry policy together with the Uganda National Roads Authority's five year (2012–2017) strategic plan. It also contains the UK Department for International Development's operational plan for 2011–2015 as well as a number of reports that reflect on the development of transport strategies throughout Eastern and Southern Africa.

1.1 A master plan for transport in Uganda

This national transport master plan, including a transport master plan for the Greater Kampala metropolitan area, sets out a framework for the development of the sector over the next 15 years (2008–2023).

It provides a realistic investment plan, covering all forms of transport, addresses the management framework needed, including institutional, legal, financial, land and environmental issues, and sets out a roadmap for stakeholder participation.

The plan reflects the key role that transport plays in the development of agriculture, commerce and trade, the movement of people, and the delivery of health, education and extension services.

The plan's key objectives are to:

- Provide a long-term reference document laying out a comprehensive framework
- Serve as a key input to overall national planning
- Serve as a key input to regional transport planning
- Create a framework for investment decisions
- Establish a permanent high-quality transport planning capability within the Ministry.

Issuing body: Uganda National Roads

Authority

Type: Planning document

Status: Final

Title: [National transport master plan, including a transport master plan for Greater Kampala metropolitan area]

File type: PDF
File size: 1.99 MB
Year of publication: 2008
Number of pages: 197

To read the full document: Please type RPS001 into the search box on the search page of the CD attached to this book.

1.2 Rural roads in sub-Saharan Africa

This report presents the review findings of some 127 projects with rural road components in sub-Saharan Africa. It stresses the urgent need to develop a coherent rural road strategy and support for institutional capability in each country. It refers to the serious bottleneck in the provision of rural transport through poor infrastructure.

Planning is seen as a process involving key constituencies at various levels rather than a methodology. The report says prevailing financial constraints and low traffic volumes suggest that most rural roads in sub-Saharan Africa should be designed to deliver essential access with an emphasis on spot surface improvements for better drainage.

The World Bank recommends the assessment of labour-based operations with a particular emphasis on maximising the employment of women in road maintenance.

The report stresses the need to eventually involve local funding administered by local organisations with technical advice from central authorities.

Issuing body: World Bank **Type:** Technical Paper

Status: Final

Title: Rural roads in sub-Saharan Africa. Lessons from World Bank experience

File type: PDF File size: 787 KB

Year of publication: Unknown

Number of pages: 50

ROYALT STATE OF THE SET OF THE S

1.3 Political economy of road reform in Uganda

This report undertakes a study of the donors and investors influencing the development of Uganda's roads. It builds on previous work showing that investment in roads directly influences economic growth.

It provides an insight into the political context of policy making in Uganda with regard to how roads are being built and roads policy reformed. It discusses the major stakeholders behind this. It then suggests three potential scenarios created by the substantial shift in presidential priorities and policy making style in the country.

The report also discusses the challenge of economic growth in Uganda and the cost of investment in and reform of roads. It considers the sustainability and suitability of the roads budget and asks how various stakeholders are involved in this. Finally, it queries the difficulties for suppliers and other important pressures governing Ugandan road development.

The change process, communications, dialogue and lowering barriers to change are debated. This analysis uses documentary information, previous information-gathering activities in Uganda and interviews and conversations.

Issuing body: Overseas Development

Institute

Type: Research results **Status:** Working paper

Title: Aiding economic growth in Africa. The political economy of roads reform in

. Uganda

File type: PDF File size: 369 KB

Year of publication: 2009 Number of pages: 42

To read the full document: Please type RPS003 into the search box on the search page of the CD attached to this book.

1.4 Country assistance strategy progress report, Uganda

This report shows that the World Bank Group's country assistance strategy for 2011–2015 remains relevant. However, significant adjustments are proposed, reflecting the recent governance and development challenges facing Uganda.

High-level corruption cases in 2012 resulted in a disruption of aid flows and reconfirmed the need to improve governance. The Bank has already responded by linking recent fund disbursements to satisfactory implementation of a government-led plan to strengthen key governance systems and improve accountability.

The World Bank will shift the emphasis from budget support to larger, transformational operations designed to end extreme poverty and promote shared prosperity. There will be a greater focus on infrastructure, agricultural productivity and market access, training and skills development, and expectations management in the oil region. Development policy lending will become more selective, although it may be used to support governance or sector reforms. Lastly, the Bank will broaden governance support to strengthen transparency and accountability in the use of public resources.

Issuing body: World Bank

Type: Report Status: Final

Title: Country assistance strategy progress report for the Republic of Uganda for the period financial year 2011 to financial year 2015

File type: PDF File size: 1.54 MB Year of publication: 2013 Number of pages: 52

To read the full document: Please type RPS004 into the search box on the search page of the CD attached to this book.

1.5 National construction industry policy, Uganda

Uganda's national construction industry policy seeks to improve coordination, regulation and development of a sector that remains fragmented and largely dependent on foreign contractors and consultants. This support is in line with government policy on local capacity building and privatisation. A strategic objective is that 80% of all services in the construction industry are provided by the private sector by 2015.

The document details seven specific policy objectives and the related actions to be taken:

- Harmonising the roles and responsibilities of the public and private sectors
- Regulating the industry
- Strengthening local capacity and supporting participation of local entities
- Increasing access to equipment, credit and work for local contractors and consultants
- Promoting the use of labour-based and new technologies
- Increasing participation of marginalised groups
- Supporting sustainable development.

The document also includes an implementation strategy – publicising the policy, collaborating with the Ministry of Finance and seeking funding – and a financing plan. The budget is USD 4 million (UGX 8 billion) over the five-year period.

Issuing body: Ministry of Works and Transport, Republic of Uganda

Type: Policy document

Status: Final

Title: Policy for development and strengthening the national construction industry

File type: PDF
File size: 440 KB

Year of publication: 2010 Number of pages: 66

To read the full document: Please type RPS005 into the search box on the search page of the CD attached to this book.

1.6 Communication strategies for road management organisations

An effective communications strategy with external stakeholders is an essential element in developing and sustaining financial and political support for road management activities. Unfortunately, most road management organisations fail to recognise the importance of this and have no such strategy in place. The result of this omission is that they are often fighting a rear-guard action to support their vital work. This reactive approach is usually ineffective, wasteful and demoralising to those involved.

This paper highlights why this happens, what are the main characteristics necessary for a successful communications strategy and why this is important. The paper provides a range of recommended actions and strategies, together with some practical examples that can be applied by organisations that are funding or otherwise managing a road network, whether in a developing or a developed country.



Issuing body: Uganda National Roads

Authority **Type:** Report

Title: Developing effective communication

strategies for road management

organisations **File type:** PDF **File size:** 160.49 KB

Year of publication: Unknown

Number of pages: 10

RPSOO6 into the search box on the search page of the CD attached to this book.

1.7 Uganda National Roads Authority five year strategic plan

The document presents a five year strategic plan for Uganda National Roads Authority (from 2012–2013 to 2016–2017). It provides an account of the background to the organisation and the starting point for the plan. It goes on to elaborate the process of formulating the plan, including analysis of the organisation and context. The organisation's grand strategy and stated goals are outlined and then the five year plan is detailed, with objectives, means, indicators and targets given for each goal. Finally, the programme of key development activities is presented.



Issuing body: Uganda National Roads

Authority

Type: Strategy document

Status: Final

Title: Five year corporate strategic plan

File type: PDF File size: 7.16 MB Year of publication: 2012 Number of pages: 58

To read the full document: Please type RPS007 into the search box on the search page of the CD attached to this book.

1.8 The UK's development programme in Uganda

This slide presentation by the United Kingdom's Department for International Development (DFID) outlines the department's 2011–2015 operational plan in Uganda. It follows the release of a bilateral aid review commissioned by the UK government in 2010. The review focused on tackling poverty while ensuring value for money and also assessed the international organisations that DFID funds.

In the four year plan, DFID intends to focus on areas where it has comparative strengths. It will withdraw from agriculture, tax administration and public sector reform. But, among other things, it will aid the health sector in areas that are off target, focus efforts in northern Uganda, address poor transport infrastructure and help young people access skills and opportunities. It will also support the Ugandan government in many areas.

The presentation also outlines how DFID will achieve value for money, partner with aid agencies, evaluate the results of its efforts and strengthen aid transparency.

1.9 East African Community's Roads Development Programme and Transport Strategy

This document presents the main findings of the final report on the East African Community's regional Roads Development Programme and Transport Strategy, as well as related working papers. The study area comprises all five East African Community countries as well as neighbouring states and regions.

After a consideration of the background (Section 1) and an overview of the study area (Section 2), Section 3 covers land use and settlement while Section 4 looks at transport demand. Section 5 contains an analysis of transport system performance and Section 6 provides a projection of how the system is likely to evolve. In Section 7, priority projects are identified, including some rail and road projects in Uganda. This is followed by information on the strategic budget (Section 8). Section 9 contains the implementation plan and a table showing individual projects with their estimated costs.



Issuing body: East African Community

Type: Report Status: Final

Title: EAC Roads Development Programme and Transport Strategy. Summary strategy

File type: PDF File size: 1.04 MB Year of publication: 2010 Number of pages: 38

To read the full document: Please type RPS009 into the search box on the search page of the CD attached to this book.

Issuing body: Department for International

Development **Type:** Presentation **Status:** Final

Title: Operational plan 2011-2015. DFID

Uganda File type: PDF File size: 91.5 KB Year of publication: 2011 Number of pages: 13

To read the full document: Please type RPS008 into the search box on the search page of the CD attached to this book.

1.10 National climate change policy, Uganda

The overarching objective of this multisector national climate change policy is to ensure that stakeholders, including the transport sector, address climate change. The predicted impacts of climate change threaten Uganda's vital transport infrastructure, such as roads and bridges. Also, the transport sector is the largest national contributor of greenhouse gases.

The policy pays attention both to climate change adaptation and to reducing greenhouse gas emissions (mitigation). The report contains a brief analysis of the challenges for the transport sector, policy responses and specific strategies with regard to adaptation. In order to adapt to climate change, transport plans and infrastructure management must reflect climate predictions. The report also contains an analysis of the sector with regard to mitigation. The priorities are to develop and implement a long-term transport policy and plan in order to reduce greenhouse gas emissions, shift to using less carbon-intensive fuels in vehicles and promote 'clean' modes of transport.

Issuing body: Ministry of Water and Environment, Republic of Uganda

Type: Report Status: Final

Title: Uganda national climate change

policy

File type: PDF File size: 1.04 MB Year of publication: 2012 Number of pages: 59

To read the full document: Please type RPS010 into the search box on the search page of the CD attached to this book.



2 Road funding, economics and procurement

Adequate road funding is a prerequisite for both new road construction and subsequent road maintenance. In determining which new roads need to be constructed and what level of maintenance is required to protect the initial investment, decision makers should aim for the best economic return on the investment made. For fairness and transparency, road programmes should follow internationally accepted procurement procedures and guidelines.

This section includes details on funding provided by the Government of Uganda, in particular those funds provided by the Uganda Road Fund, and how this is allocated for maintaining road infrastructure. Other reports address the use of economic models such as the Highway Design and Maintenance Standards Models (HDM-III and HDM-IV) as a tool for prioritising the allocation of road maintenance funds as well as assessing the effectiveness of road fund strategies throughout the world. The section further provides insight into procurement procedures in use in Uganda as well as by international funding institutions such as the European Union and the World Bank.

2.1 Public investment in roads in Uganda

This report summarises findings from a study conducted by the Economic Policy Research Centre reviewing public expenditure on road infrastructure in two districts of Uganda. The study's main message is that public investment in road infrastructure is essential for Uganda's economy.

Based on a literature study of the ways through which infrastructure affects growth. the study argues for the promotion of infrastructure, particularly rural roads. The study used public expenditure tracking and focus group discussions to identify sector constraints. The findings indicate that funding for rural roads is inadequate, not all resources reach the beneficiaries and capacity constraints exist both among the staff and service providers. In addition to increasing public investment, the government's most important tasks should be to strengthen capacity among local government staff, carry out performance audits on contractors and maintain road machinery in good working order, thus ensuring a better and more efficient road network

Issuing body: Economic Policy Research

Centre
Type: Report
Status: Final

Title: Public expenditure tracking on road infrastructure in Uganda: the case study of

Pallisa and Soroti districts

File type: PDF File size: 682 KB

Year of publication: 2010 Number of pages: 62

To read the full document: Please type REP001 into the search box on the search page of the CD attached to this book.

2.2 Beware of the rural access index

This book examines development issues through the prism of the rural access index (RAI), which counts the proportion of the rural population that lives within two kilometres of an all-season road.

Using case studies from Burkina Faso, Cameroon and Uganda, it shows how the use of an index like the RAI can lead to a serious misallocation of resources.

The authors question the definition of 'all-season' road and the types of vehicles that travel them. Crucially the focus of RAI takes resources away from other road investments that might give a greater development return. There is, in particular, the 'missing middle' of secondary roads.

There is also a third problem. It is no secret that politicians like to build roads that benefit their constituencies, thereby distorting the development process.

With this in mind, a new set of criteria to guide decision making on roads is called for, to ensure there is real economic justification for the investment.

2.3 Uganda Road Fund and budget allocation

The primary objective of this study was to develop mathematical formulae for use by the Uganda Road Fund (URF) in the allocation of road maintenance funds to different road classes of roads and road agencies.

A literature review showed that although economic growth through efficient transportation remains a long-term goal, short-term objectives should include protection of the current road infrastructure in a way that is equitable to the road users and the designated road agencies.

Funding, from the collection of various moneys from the Uganda Revenue Authority, should be streamlined to allow the rapid collection and direct remittance of road user charges, especially the fuel levy, to a URF account in the Bank of Uganda. This would better local funding of established agencies.

Based on the road maintenance finance review, the URF is underfunded with a current allocation of 30% of total Uganda Revenue Authority collections, says the study.

Issuing body: World Bank

Type: Booklet Status: Final

Title: Rural road investment efficiency. Lessons from Burkina Faso, Cameroon and Uganda

File type: PDF
File size: 4.29 MB
Year of publication: 2010
Number of pages: 128

To read the full document: Please type REPOO2 into the search box on the search page of the CD attached to this book.

Issuing body: Uganda Road Fund

Type: Report Status: Final

Title: Study on the budget allocation

formula
File type: PDF
File size: 2.22 MB
Year of publication: 2012
Number of pages: 125

To read the full document: Please type REP003 into the search box on the search page of the CD attached to this book.

2.4 Strengthening the impact of the roads budget in Uganda

This report reviews Uganda's public expenditure on roads. It examines how the government can improve methods of allocating resources for rural roads and how it can improve cost effectiveness while absorbing substantial additional resources without significantly increasing unit costs.

To best facilitate market access and earning capacity for small-scale farmers, existing rather than new roads should be the focus. Methods used to allocate funds to districts should be refined, and reflect agricultural potential. Farmers and transporters should be assisted in testing international models of coordinating consolidation and deconsolidation of freight.

The sector must improve all aspects of the contract management process, and speed up contract award and implementation times. The review recommends strengthening institutional capacity by introducing a dedicated programme management unit and assisting in the monitoring and evaluation department, as well as streamlining procedures for land take and variation orders, and increased use of locally available and produced materials.

2.5 Uganda transport infrastructure and public-private partnership

This presentation was given by the Ministry of Works and Transport, Uganda regarding the role of public—private partnerships (PPPs) in the country's transport infrastructure.

After opening with key demographic and economic statistics, the presentation outlines Uganda's transport infrastructure by sector in order of importance (i.e. road. air, rail and water). The presentation describes the major transport projects that are being undertaken, including the first PPP in the road transport sector, the Kampala-Entebbe expressway. The presentation summarises the factors currently constraining implementation of PPPs in the sector and the lessons learned from other countries. It states that successful PPP programme management requires a long-term perspective and clear policy, legislative and management frameworks. Also, it needs to be supported by the top level of government. These frameworks should ensure centralised points of contact for PPPs and development of best practice. Consultation with stakeholders should be encouraged to ensure broad-based support.

Issuing body: World Bank

Type: Report Status: Final

Title: Uganda Public expenditure review. Strengthening the impact of the roads budget. Poverty reduction and economic

management 2. Africa region

File type: PDF
File size: 868.75 KB
Year of publication: 2010
Number of pages: 70

To read the full document: Please type REP004 into the search box on the search page of the CD attached to this book.

Issuing body: Ministry of Works and Transport, Republic of Uganda

Type: Presentation
Status: Final

Title: Uganda transport infrastructure and

the public-private partnerships

File type: PDF File size: 630.23 KB Year of publication: 2013 Number of pages: 22

To read the full document: Please type REP005 into the search box on the search page of the CD attached to this book.

2.6 Road maintenance funds

This bulletin contains six articles exploring the use of road maintenance funds in Asia and the Pacific region. The first two articles provide regional overviews while the other four explore country experiences.

The first article concludes that in Latin American countries, road funds provided through fuel taxation have helped counter a rapid decline in road assets and infrastructure. However, the long-term sustainability of road funds remains in question.

The second article observes that in sub-Saharan Africa, raising resources alone is not enough. If funds are to translate into road improvements, more attention should be paid to the overall effectiveness of road management.

The last four articles explore country experiences of road funds in India, Nepal, Pakistan and Tanzania. Topics covered include using agricultural levies and road tolls to finance road maintenance, establishing road funds at both central and state government levels, and dealing with institutional problems and capacity constraints.

2.7 World Bank support for road funds

This paper assesses the effectiveness of the second generation road fund strategy, supported by the World Bank over the last 10 to 15 years. It discusses the results of a literature review, a database analysis and a survey circulated among transport staff at the World Bank.

The paper observes that second generation road funds can be effective in reversing severe deterioration of a country's road network. However, for this to be the case, certain conditions must be met. For example, to involve users and improve accountability, the funds require strong government commitment to commercially oriented reforms, including an independent board with private sector participation.

The paper advises that necessary reforms to road management can be achieved under either the budget or user-pays approach provided the flow of funds is adequate and stable. The paper also observes that monitoring and evaluation systems are needed to quantify the impact of second generation road funds.

Issuing body: United Nations Economic and Social Commission for Asia and the Pacific

Type: Bulletin Status: Final

Title: Transport and communications bulletin for Asia and the Pacific. No. 75.

Road maintenance funds

File type: PDF File size: 1.97 MB

Year of publication: 2005 Number of pages: 131

To read the full document: Please type REP006 into the search box on the search page of the CD attached to this book.

Issuing body: World Bank **Type:** Background paper

Status: Final

Title: Evaluation of Bank support for road funds. Background paper for evaluation of World Bank assistance to the transport

sector, 1995–2005
File type: PDF
File size: 207 KB
Vear of publication:

Year of publication: 2007 Number of pages: 43

To read the full document: Please type REP007 into the search box on the search page of the CD attached to this book.

2.8 Estimating the roughness of unpaved roads

Agencies responsible for road maintenance and planning must be able to assess road roughness. Road roughness affects vehicle safety, comfort and speed of travel, and thus the rate of wear of vehicle parts and, in turn, vehicle operating costs.

Instrumented measurement of roughness is desirable, but not feasible for unpaved roads. In these instances a subjective estimation is needed. This paper presents two possible approaches based on the World Bank's work with the Highway Design and Maintenance Standards Models (HDM-III, and HDM-4):

- The World Bank's 'Guidelines for conducting and calibrating road roughness measurements', provides a methodology using adjectives and some quantitative information to describe road surface conditions and ride sensations
- The 'limiting speeds' approach is based on field measurements in Brazil and Australia and, as it pertains to roughness, is the maximum speed a vehicle can attain given road roughness alone; it is independent of factors such as gradient and engine power.

2.9 Road investment for sustainability of contractors

Many countries have created roads funds and roads agencies to improve the management of their road infrastructure. However, the resulting investment strategies have often failed to ensure either the sustainability of the network, or the development of the domestic construction industry. The paper considers these issues for Suriname, Tanzania and Zambia. It finds that giving appropriate priority to road maintenance at the local level serves to enhance development of both the country's road infrastructure assets and local construction companies.

The paper presents a simple spreadsheet model that can be used to assess the consequences of a country's road investment strategy in terms of such factors as maintenance, backlog and projected change in road asset value. The paper also looks at the outcomes of strategies chosen in this way on the development of the domestic construction industry and provides a range of options that can be used to develop the local companies.

Issuing body: World Bank **Type:** Technical paper

Title: Unpaved roads' roughness estimation by subjective evaluation

File type: PDF File size: 28.84 KB Year of publication: 1999 Number of pages: 3

To read the full document: Please type REP008 into the search box on the search page of the CD attached to this book.

Issuing body: IT Transport Ltd

Type: Report

Title: Road investment for sustainability of

network and domestic contractors

File type: PDF File size: 596.15 KB Year of publication: 2007 Number of pages: 14

To read the full document: Please type REP009 into the search box on the search page of the CD attached to this book.

2.10 European Bank procurement policies and rules

This document sets out the procurement policies and rules of the European Bank for Reconstruction and Development that should be followed in Bank-financed operations. The guidelines first describe the principles and considerations that are applicable to all operations. The document goes on to describe in some detail the rules for procurement applicable to Bankfinanced operations involving the public sector. Procurement rules applicable to the private sector are also considered. Finally the document addresses the selection of consultants by clients in Bank-assisted public sector operations and by the Bank when administering Technical Cooperation Funds or when engaging consultants directly. There is also an annex providing guidance for consultants tendering for a contract.



Issuing body: European Bank for Reconstruction and Development

Type: Guidelines Status: Final

Title: Procurement policies and rules

File type: PDF File size: 280.71 KB Year of publication: 2010 Number of pages: 28

To read the full document: Please type REP010 into the search box on the search page of the CD attached to this book.

2.11 World Bank consultancy policies and procedures

These guidelines define the World Bank's (the Bank's) policies and procedures for selecting, contracting and monitoring consultants required for projects which are financed in whole or in part by:

- A loan from the International Bank for Reconstruction and Development
- A credit or a grant from the International Development Association
- A project preparation advance
- A grant from the Bank
- A trust fund administered by the Bank and executed by a recipient

For the purposes of these guidelines the term 'consultant' includes a wide variety of private and public entities. The guidelines consider methods of selecting consultants, in particular, the quality and cost based selection approach. The guidelines also consider types of contracts and provisions. Annexes present the findings of a review of the selection of consultants and publication of the award of contracts, as well as 'Instructions to consultant' data sheets and guidance to consultants.

Issuing body: World Bank

Type: Guidelines Status: Final

Title: Selection and employment of consultants under IBRD loans and IDA credits and grants by World Bank borrowers

File type: PDF File size: 632.8 KB Year of publication: 2011 Number of pages: 54

To read the full document: Please type REP011 into the search box on the search page of the CD attached to this book.

2.12 Guidelines for unsolicited proposals in the transport sector

The Ministry of Works and Transport (MoWT) seeks to engage with the private sector to develop and deliver transport infrastructure and services. Most projects involving the private sector will be procured through normal competitive processes. However, the MoWT also expects to receive unsolicited bids and proposals from the private sector, offering innovative ideas.

The key objective of this document is to provide guidelines to MoWT staff to ensure a consistent, transparent approach to dealing with unsolicited proposals. A separate summary of the guidelines has been prepared for private sector participants. In particular, the guidelines will help staff to assess whether such proposals further government objectives and provide value for money.

The Guidelines also set out a three-stage process – the initial submission and strategic assessment, the detailed proposal and the final negotiations. This is supplemented by explanatory notes and checklists in the appendices.

Issuing body: Ministry of Works and Transport, Republic of Uganda

Type: Report Status: Final

Title: Guidelines for submission and assessment of unsolicited proposals in the

transport sector

File type: Word document File size: 180 KB Year of publication: 2013 Number of pages: 21

To read the full document: Please type REP012 into the search box on the search page of the CD attached to this book.

2.13 Public Procurement and Disposal of Public Assets Act and Regulations

The Public Procurement and Disposal of Public Assets Act and Regulations provide a set of rules governing all procurement and disposal activities of the Government of Uganda's procuring and disposal entities.

The Regulations (files 2.13.1–2.13.12) are issued under the Public Procurement and Disposal of Public Act, 2003 (reprinted with changes in 2014), and provide detailed rules and to supplement the principles outlined in the Act. The Act takes precedence over the Regulations, but the Regulations incorporate virtually all provisions of the Act and can be used as a detailed reference to the Governments rules on public procurement and disposal.



Issuing body: The Government of Uganda

Type: Regulation Status: Final

Title: Public Procurement and Disposal of

Public Assets Regulations

File type: PDF File size: Multiple

Year of publication: 2014 **Number of pages:** Multiple

To read the full document: Please type REP013 into the search box on the search page of the CD attached to this book.

3 Governance and audit

Good governance is a fundamental requirement for the effective planning, procurement and management of any nation's road infrastructure. To measure the performance of governance, it is important to have in place checks and balances in the form of independent audit procedures, the results of which are subject to public disclosure and hence provide transparency.

This section includes details on the identification and measurement of good governance indicators throughout sub-Saharan Africa; a review by the World Bank of how its funded projects have performed in Uganda; a report on the Construction Sector Transparency Initiative; and a review of how recent strengthening of Uganda's governance systems and accountability has worked in practice. In addition, the section includes several recent annual performance reports of the Ministry of Works and Transport together with details of the annual performance agreement made between the Ministry of Works and Transport and the Uganda National Roads Authority.

3.1 Stakeholder consultations on legislation

The Uganda Roads Sector Support Initiative and CrossRoads Uganda held consultation workshops on two pieces of legislation under review (the Roads Act and Access to Roads Act) in Mbarara, Masaka, Mbale and Gulu.

The workshops were designed to inform stakeholders about the legislation and seek feedback for the proposed amendments. Radio talk shows on the subject sought to raise awareness among a wider public.

The majority of the public, including some of the workshop participants, were found to be unaware of the two Acts.

There was overwhelming agreement that the two pieces of legislation were outdated. Amendments were needed to take account of a growing population, increasing urbanisation and even inflation. Participants also raised the issue of the non-enforcement of existing legislation (leading, for example, to individuals constructing on road reserves) as well as corruption and accountability. The weak capacity or lack of planning personnel within the districts is also a constraint.

Issuing body: Uganda Roads Sector

Support Initiative
Type: Report
Status: Final

Title: Awareness and consultations on the Roads and Access to Roads Acts report

File type: PDF File size: 1.44 MB Year of publication: 2012 Number of pages: 48

To read the full document: Please type GAA001 into the search box on the search page of the CD attached to this book.

3.2 A 2009 engineering audit on50 Ugandan road projects

This report presents the findings of an engineering audit in Uganda conducted by the Office of the Auditor General in the 2008/2009 financial year. The audit examines 50 road projects out of the more than 100 implemented by the Uganda National Roads Authority. The report includes responses submitted by Uganda National Roads Authority and recommendations on these responses.

Road projects selected to be audited were required to have a value of more than UGX 2 billion and carry some risk for the contractors executing the works, irrespective of the value of the project.

The audit sought to evaluate the existence and effectiveness of the internal controls needed for sound management and engineering principles and practices. It also sought reasonable assurance that the roads were constructed or rehabilitated and maintained to a reasonable quality, in accordance with specifications and sound engineering principles, practice and technical management policies.

3.3 Assessing national road maintenance activities

This report assesses the performance of road maintenance activities planned, funded and implemented across the public roads network in 2011/2012. It highlights what has been delivered, what has not, and why. It provides accountability for the spending of the Uganda Road Fund (URF) budget and outlines key areas of performance. It is intended as a baseline for subsequent trend analyses of annual outputs and achievements of URF disbursements.

In 2011/2012, URF's second full year of operation, UGX 280.95 billion was provided from parliamentary appropriations for planned road maintenance and related services. Total disbursements at year end were UGX 252.26 billion, representing a 92.4% budget performance.

Key issues identified included:

- Poor budget discipline
- Poor absorption of road maintenance funds
- Inaccuracies in reporting
- Lethargy of agencies in complying with reporting requirements
- Widely varying unit costs
- Risk of loss of funds through end of year procedures
- Grave underperformance of periodic maintenance works.

Issuing body: Office of the Auditor General,

Republic of Uganda **Type:** Report **Status:** Final

Title: Engineering audit of Uganda National

Roads Authority (UNRA), 2009

File type: PDF File size: 5.94 MB Year of publication: 2010 Number of pages: 383

To read the full document: Please type GAA002 into the search box on the search page of the CD attached to this book.

Issuing body: Uganda Road Fund

Type: Report Status: Final

Title: Report on physical and financial performance of URF designated agencies –

financial year 2011/12 **File type:** PDF

File size: 2.03 MB Year of publication: 2012 Number of pages: 48

To read the full document: Please type GAA003 into the search box on the search page of the CD attached to this book.

3.4 Identifying indicators of good transport governance

This working paper addresses the poor performance and governance in the sub-Saharan transport system. It draws from a study by the Sub-Saharan Africa Transport Policy Program between September 2011 and January 2012, which sought to define a set of suitable transport governance performance indicators that can be easily collected and consistently replicated in several countries. The indicators are expected to help track the main issues in the transport sector, advocate for policy change and demonstrate in a measurable way the quality of governance in a particular country, sector or sub-sector.

The study collected data from Mali, Tanzania, Kenya and Zambia to determine whether there is a consensus on what transport sector governance means in practice. It also sought to show why governance matters, how it can be measured, in what priority ways improvements in governance might make a real difference in the sector and its contribution to national development.

3.5 Reviewing World Bank projects in Uganda

This review paper reports on the 17 World Bank projects implemented in Uganda in 2013 with a combined net commitment of USD 1,505 million.

The sector distribution of the projects emphasises infrastructure development – particularly in energy (21% of total), urban development (12% of total) and transport (18% of total). Other sectors include:

- Water (9%)
- Agriculture and rural development (9%)
- Education (12%)
- Finance and the private sector (2%)
- Health, nutrition and population (9%)
- Public sector governance (1%)
- Social protection (7%).

The review paper examines the progress in implementing the projects, discusses the challenges to timely and effective project implementation and seeks agreement on measures to accelerate this. It notes there have been performance improvements over the last two years, although this is still below that of the last five years, and some serious issues remain in project implementations.

Issuing body: Sub-Saharan Africa Transport

Policy Program

Type: Working paper No. 95

Status: Final

Title: Transport governance indicators for

sub-Saharan Africa File type: PDF File size: 1.55 MB Year of publication: 2013 Number of pages: 114

To read the full document: Please type GAA004 into the search box on the search page of the CD attached to this book.

Issuing body: World Bank

Type: Review Status: Final

Title: Uganda country portfolio

performance review. File type: PDF File size: 1.02 MB

Year of publication: 2013 Number of pages: 49

To read the full document: Please type GAA005 into the search box on the search page of the CD attached to this book.

3.6 Transparency in the construction sector

The construction sector plays a vital role in supporting social and economic development, yet it consistently ranks as one of the most corrupt sectors. Corruption in public sector projects can increase contract prices and result in unnecessary, unsuitable, defective or dangerous projects, often subject to severe delays. The complexity of the causes and types of corruption means that they cannot be addressed by a single initiative.

This report on the initial design for piloting a Construction Sector Transparency Initiative (CoST) seeks to enhance the transparency and accountability of publicly financed construction projects. Improved transparency will be supportive of better management of public finances and reduced corruption. CoST will build on existing country and international initiatives to increase transparency and reduce corruption.

This report has been prepared for countries involved in piloting CoST, to help identify and resolve practical challenges to CoST implementation to be reflected in a final design.

3.7 Ministry of Works and Transport annual performance report, 2012/2013

This report serves as the definitive record of the performance of the transport sector in Uganda for the financial year 2012/2013. All transport sectors are considered (i.e. road, rail, air and inland waterways), as are relevant institutions and the key policy documents and plans for the sector. The document provides support for resultsbased management and reports against previously identified key performance indicators.

Overall, the report finds that sector performance was positive, but inefficient and needs to improve. The rail sector is identified as being particularly weak and the underfunding of road maintenance is noted as a significant problem. The report identifies challenges in the following areas:

- Policy and strategic orientation
- Institutional reforms
- Planning and implementation
- Financial performance.

The current state of affairs is a potential impediment to the competitiveness of Uganda in regional and international markets.

Issuing body: Construction Sector

Transparency Initiative

Type: Report

Status: Final (reissued)

Title: Construction sector transparency initiative. Design for pilot phase

File type: PDF

File size: 2.17 MB

Year of publication: 2007 (reissued 2008)

Number of pages: 29

To read the full document: Please type GAA006 into the search box on the search page of the CD attached to this book.

Issuing body: Ministry of Works and Transport, Republic of Uganda

Type: Report

Status: Final

Title: Annual sector performance report,

financial year 2012/13 **File type:** PDF

File size: 2.91 MB Year of publication: 2013 Number of pages: 129

To read the full document: Please type GAA007 into the search box on the search page of the CD attached to this book.

3.8 Performance of Uganda's transport sector, 2011/2012

This document is the annual performance report for Uganda's Ministry of Works and Transport for the 2011/2012 financial year. It includes all areas of the transport sector in Uganda, including road, rail air and inland waterways.

The report summarises the ministry's and the transport sector's performances over the period. It details key performance indicators and compares them to baselines from the 2010/2011 financial year. It also reports on the policy and strategic challenges faced over the period.

The provision of transport infrastructure and services has contributed to the country's economic growth, but this growth has placed burdens on the transport sector. Also population increases have added to the demand for transport infrastructure within the country. Uganda's five year National Development Plan identified priorities for investment in all of the transport sub-sectors — roads, railways, water and air transport — and the report demonstrates how the sector has performed in response to the plan's interventions.

3.9 Works and transport sector's performance report, 2010/2011

This report of the Joint Transport Sector Review contains an evaluation of progress made in the transport sector during financial year 2010/2011 and analyses the main challenges to the sector. A new monitoring and evaluation framework was used to evaluate sector performance and it will also be used in future annual performance reports. The intention is to support high-level strategic management of the sector.

After establishing the context, the report looks at the overall state of the sector and at budgeting and financial considerations. The road, rail, air and inland water subsectors are then analysed in some detail. Progress towards integrating cross-cutting policy commitments on the environment, gender and HIV/AIDS into sector policies is noted.

The authors highlight that in some cases policies and strategic directions need to be changed. They also identify a need for institutional reforms, improved planning and implementation, and better financial performance.

Issuing body: Ministry of Works and Transport, Republic of Uganda **Type:** Performance report

Status: Final draft

Title: Works and transport sector annual performance report, financial year

2011/12 File type: PDF File size: 5.17 MB Year of publication: 2012 Number of pages: 127

To read the full document: Please type GAA008 into the search box on the search page of the CD attached to this book.

Issuing body: Ministry of Works and

Transport, Republic of Uganda **Type:** Report

Status: Master draft

Title: Works and transport sector's performance report, financial year

2010/11 File type: PDF File size: 2.71 MB Year of publication: 2011 Number of pages: 143

To read the full document: Please type GAA009 into the search box on the search page of the CD attached to this book.

3.10 Management of Uganda's national roads network

This report describes the annual performance agreement made between the Minister of Works and Transport and the Uganda National Roads Authority (UNRA). It concerns the management, by UNRA, of the national roads network and includes all activities necessary to develop and maintain the national roads in a satisfactory state. It covers the financial year 1 July 2011 to 30 June 2012 and describes the key outputs, in terms of performance indicators and targets, which UNRA should achieve within those dates.

Issuing body: Uganda National Roads

Authority

Type: Report Status: Final

Title: Annual performance agreement between the Minister for Works and Transport and the Uganda National Roads Authority (UNRA) for financial year 2011/12

File type: Word document

File size: 425 KB

Year of publication: 2011

Number of pages: 17

To read the full document: Please type GAA010 into the search box on the search page of the CD attached to this book.



4 Road maintenance, low-volume roads and seals, and labour-based methods

Road infrastructure provides the basis for most developing countries' economic and social enhancement. This is particularly true in the case of Uganda where the large majority of goods and people are transported via the road network. Having developed a national road network, it is important that this asset is well maintained to achieve predicted economic and social benefits. year on year. Unfortunately, road maintenance programmes are often bottom of the list in politics, so do not receive enough funding to ensure that roads are kept in good condition. In order to maximise the effectiveness of the limited funding available, there has been a growing need to research and develop low-cost construction and maintenance alternatives to traditional methods and materials.

This section provides details on the cost of maintaining roads in developing countries, the importance of providing adequate funding for road maintenance and the impact of insufficient road funding on social and economic development. It also includes reports on designs for low-volume roads, the application of low-cost seals for reducing maintenance costs, and guidelines for implementing labour-intensive programmes for the construction and maintenance of gravel and low-volume sealed roads.

4.1 Improving rural roads and transportation for better access

This report presents the outcomes of the Africa Community Access Programme's workshops on rural road infrastructure and transport services at the 6th Africa Transportation Technology Transfer (T²) conference.

The main points emerging from the workshops were:

- Designs for low-volume sealed roads should be revised
- The overriding criteria for geometric design should be safety
- Current economic models are not entirely appropriate for low-volume roads
- Cost-benefit analysis tools should be developed to estimate economic returns from investment in transport research projects
- More research is needed into the use of emulsions for Otta seals
- More research is needed into the provision of transport services in conflict-affected areas
- Community engagement in road safety is critical
- Advocacy is essential to promote the key role of the transport sector
- It is imperative to get a transport indicator into the post-Millennium Development Goals period.

Issuing body: Africa Community Access

Programme

Type: Conference proceedings

Status: Final

Title: AFCAP workshop summaries on rural infrastructure and transport services. 6th Africa Transportation Technology Transfer (T²) Conference, Gaborone, Botswana, 4–8

March 2013 File type: PDF File size: 1.05 MB Year of publication: 2013 Number of pages: 36

To read the full document: Please type RLL001 into the search box on the search page of the CD attached to this book.

4.2 Approaches to district road maintenance. Tanzania

This document is a conference presentation outlining various approaches to district road maintenance in Tanzania. District roads have long been underfunded and badly maintained. Now that road funds provide more reliable funding, decisions have to be made as to which systems of maintenance contracting are appropriate for district roads remembering that:

- Most are unpaved
- Many are earth surfaced
- Few are built to a fully-engineered standard
- There is very little traffic
- Capacity for planning and supervision is weak.

Four systems have been selected for evaluation:

- Area-based long-term framework contracts
- Area-based long-term framework contracts using small-scale contractors
- Area-based long-term performance contracts
- Community contracting two forms.

The effectiveness of these systems will be monitored for at least two years in Tanzania and the strengths and weaknesses of each system evaluated. Factors assessed will include cost, increased time the road is passable during the rains and the ease of supervision and procurement.

4.3 Alternative surfacing for rural roads, Tanzania

A combination of paving methods are to be used and materials selected according to their local availability and construction costs.

Earth and gravel roads are unsustainable and costly to maintain, and gravel is becoming increasingly scarce and expensive. More durable road surfaces avoid the need for gravel and reduce maintenance costs, vehicle operating costs, travel times and dust pollution.

The Africa Community Access Programme seeks to improve rural roads through cost-effective, community-based methods and to extend the knowledge of rural road construction by upgrading selected demonstration sections.

In Tanzania, the Africa Community Access Programme used environmentally optimised design and spot improvement design techniques to identify and map problematic sections (steep gradients or sharp bends), which prevent basic access during the rainy season, on two important roads.

A durable pavement structure was applied in these locations, while the remainder of the road was upgraded with less expensive structures.

Issuing body: Africa Community Access

Programme

Type: Conference paper

Status: Final

Title: Alternative approaches to district road maintenance. Workshop on rural access and mobility, Arusha, 22–24

November 2012 File type: PDF File size: 609 KB

Year of publication: 2012 Number of pages: 18

To read the full document: Please type RLL002 into the search box on the search page of the CD attached to this book.

Issuing body: Africa Community Access

Programme

Type: Presentation
Status: Final

Title: Alternative surfacing for low volume rural roads

File type: PDF File size: 5.35 MB Year of publication: 2010 Number of pages: 59

To read the full document: Please type RLL003 into the search box on the search page of the CD attached to this book.

4.4 Labour-based methods for low-volume sealed roads

This guideline document is targeted at small-scale contractors and supervisors working on low-volume roads using labour-based methods — ones that substitute manual labour for specialised machines.

Traditional approaches to building low-volume sealed roads have mainly originated in Europe and the USA under conditions different from those in developing countries. In the developing countries many of these imported approaches are inappropriate.

The document counters a common claim that labour-based construction is inferior and does not merit detailed design scrutiny. It documents innovative low-volume road design, construction and maintenance methods. It also covers procedures and best practices tried and proved through research and actual implementation in South Africa over the 10 years prior to 2013. Many of these procedures and practices have been replicated in several other countries, including Indonesia, Tanzania and Kenya.

The document provides essential design standards and specifications as well as offering guidelines and recommendations on practical work methods.

Issuing body: International Labour

Organization **Type:** Guidelines **Status:** Final

Title: Construction of low volume sealed roads: good practice guide to labour-based methods

File type: PDF
File size: 5.76 MB
Year of publication: 2013

Number of pages: 207

To read the full document: Please type RLL004 into the search box on the search page of the CD attached to this book.

4.5 Dynamic cone penetrometer design method

This manual provides road builders with a rational, appropriate and affordable approach to designing a low-volume sealed road in Malawi and serves as a standard reference and source of good practice for using the dynamic cone penetrometer method, which has been employed in Malawi for over 20 years.

A low-volume sealed road is a road carrying less than about 300 vehicles per day and less than about one million equivalent standard axles over its design life.

The manual uses the body of local research information that has been available from previous research and investigations carried out both in Malawi and the wider region. It consolidates the latest approaches, including developments in pavement design and surfacing technology and the use of road building techniques that allow maximum use of local materials.



Issuing body: Ministry of Transport and Public Works, Republic of Malawi

Type: Design manual

Status: Final

Title: Design method for low volume sealed roads using the DCP design method

File type: PDF File size: 3.23 MB

Year of publication: 2013 Number of pages: 182

To read the full document: Please type RLL005 into the search box on the search page of the CD attached to this book.

4.6 Designing low-volume roads

This presentation covers building low-volume roads – roads carrying less than 200 vehicles per day and less that about 1 million equivalent standard axles over its design life. It was delivered at the 5th Africa Transportation Technology Transfer (T²) Conference for the Africa Community Access Programme workshop on rural accessibility and mobility.

The presentation includes:

- Engineered earth roads
- Gravel roads
- Low-volume sealed roads
- A performance review of Malawi's lowvolume sealed roads
- The dynamic cone penetrometer method of pavement design.

Engineering a low-volume road requires imagination and innovation while working with nature and locally sourced materials. Projects should also maximise the involvement of local communities and contractors. The presentation suggests using *in situ* structures as much as possible when dealing with existing gravel roads. These have generally been well compacted by traffic and should not be disturbed unnecessarily.

Issuing body: Africa Community Access Programme

Type: Conference presentation

Status: Final

Title: Design of low volume roads: AFCAP workshop on rural accessibility and

mobility
File type: PDF
File size: 4.15 MB
Year of publication: 2011
Number of pages: 95

To read the full document: Please type RLL006 into the search box on the search page of the CD attached to this book.

4.7 Cost-benefits of the low-volume sealed road approach

This report examines the economic benefits of the low-volume sealed road approach to providing affordable and sustainable sealed roads where traffic volumes are too low to justify a conventional upgrade from gravel to a sealed surface. It also evaluates the value for money received by the Africa Community Access Programme from its efforts to promote this approach. It is designed to address the lack of such analyses in the many studies that have been conducted into the engineering aspects of the approach.

The report uses a standard cost-benefit analysis to determine if there has been a substantial economic benefit from implementing and expanding the low-volume sealed road approach. It concludes that support for this approach from Africa Community Access Programme represents a worthwhile application of the organisation's resources. An annex on the impact of an increase in sealed road length on connectivity is included.



Issuing body: Africa Community Access

Programme Type: Report Status: Final

Title: Economic cost, benefit and value for money: analysis of AFCAP research outputs

File type: PDF
File size: 1.01 MB
Year of publication: 2013
Number of pages: 41

To read the full document: Please type RLL007 into the search box on the search page of the CD attached to this book.

4.8 Geographical information technologies

This study set out to develop a framework within which the use of geographical information technologies (GITs) can be enhanced in road infrastructure maintenance (RIM) in Uganda.

The thesis established that the main constraints to GIT use in RIM related to data and organisational matters, rather than technical issues. A participatory methodology was adopted around six strategic components. Conceptual and logical data models were developed and proposed for the sector.

In order to enhance GIT use and maximise the benefits for RIM, the study recommends that data concerns and organisational relationships are accorded the same importance as the technical aspects of system set ups.

The study recommends formally involving the public in data collection regarding road conditions so as to reduce costs and improve cooperation. It also recommends being more innovative in developing strategies and in using off-the-shelf equipment and software in order to foster better informed decision making.

4.9 Low-volume rural road surfacing and pavements

This guide is for those involved with the planning, design, construction or maintenance of low-volume rural roads in developing and emerging regions, primarily in the tropical and sub-tropical regions of Africa, Asia and, possibly, South America.

The guide provides information on a range of tried and tested road surfacing and paving techniques that are relatively low cost and offer sustainable solutions for road works. The techniques focus on the optimal use of local resources, in often challenging physical and operational environments.

Recent pavement research highlights the importance of locally-oriented solutions, based on available local resources and the local road environment, in developing local 'good practice' to support the development of affordable and sustainable rural road infrastructure.

The document deliberately avoids extensive technical detail, but provides reference to technical methodologies available for adaptation to local conditions and resources. An online strategy was adopted to increase flexibility and enable easier access to review and update information.

Issuing body: Blekinge Institute of

Technology

Type: Doctoral dissertation, Lydia Mazzi

Kayondo-Ndandiko **Status:** Final

Title: Geographical information

technologies - decision support for road

maintenance in Uganda

File type: PDF File size: 18.55 MB Year of publication: 2012 Number of pages: 229

To read the full document: Please type RLL008 into the search box on the search page of the CD attached to this book.

Issuing body: Africa Community Access

Programme
Type: Report
Status: Final

Title: Low-volume rural road surfacing and pavements. A guide to good practice

File type: PDF File size: 3.07 MB

Year of publication: 2013 Number of pages: 134

To read the full document: Please type RLL009 into the search box on the search page of the CD attached to this book.

4.10 Transferring road maintenance to the private sector

This report carries out a literature review for the Department for International Development project R6889, 'Transferring road maintenance to the private sector'.

It summarises the literature available on the subject in 1998 and describes a proposed direction for the project. It looks at the key elements needed to carry out road maintenance from the client, manager and contractor perspectives.

The paper might be useful for commissioning organisations seeking an example of what comprises a knowledge review and study proposal.

However, practical information is limited, not only by the scope of this document, but by its date. Since 1998, far more recent work on roads maintenance and the private sector has been completed. This will prove more useful in terms of practical advice and findings. Additionally, today the private sector has more experience in African operations.



Issuing body: Transport Research

Laboratory

Type: Project report Status: Unpublished

Title: Transferring road maintenance to the private sector: preliminary literature review and proposed study area for the project

File type: PDF
File size: 1.69 MB
Year of publication: 1998
Number of pages: 36

To read the full document: Please type RLL010 into the search box on the search page of the CD attached to this book.

4.11 Cost of road maintenance in developing countries

This policy brief recommends that national funding for the maintenance of the classified road network for most developing countries should be between 0.2% and more than 1% of GDP. This does not include any backlog of maintenance, rehabilitation or network improvement. The total road sector infrastructure allocation needs can be expected to be in the region of 3–5% of GDP. Requirements should be developed for each country based on careful consideration of local factors

Because of the demonstrably higher economic and social benefits attributable to road maintenance, over network rehabilitation or upgrading, the highest priority should be given to allocating available funds to routine and periodic maintenance of the existing network.

A rural transport sustainable development target of reducing by 90% the number of people without access to maintained allweather roads or adequate transport (road or water) services by 2030 is proposed.

Issuing body: Intech Asset Management

Type: Policy brief Status: Final

Title: How much should developing countries spend on road maintenance?

File type: PDF
File size: 648 KB
Year of publication:

Year of publication: 2013 **Number of pages:** 10

To read the full document: Please type RLL011 into the search box on the search page of the CD attached to this book.

4.12 Guidelines for labour-intensive infrastructure programmes

Private sector involvement in public works projects is rapidly increasing, leading to opportunities for job creation, involvement of the domestic construction industry and waste reduction.

These guidelines describe how large-scale, labour-based infrastructure programmes carried out by contract should be developed. They show in practical terms how socioeconomic objectives (employment, working conditions and labour standards) can be promoted and integrated – an approach that can contribute significantly to employment intensive growth.

The guidelines cover aspects fundamental to the lasting success of such programmes:

- Project delivery systems
- Contractor identification
- Contracting procedures
- Contractors' access to resources
- Management of tools and equipment
- Enabling environment for contracting
- Training
- Labour issues.

Each section is structured so that the lefthand pages present the key issues, information required by the different parties involved and a summary of relevant project experience, and the right-hand pages give practical examples and illustrate related project experience.

Issuing body: International Labour

Organization **Type:** Guidelines **Status:** Final

Title: Employment-intensive infrastructure programmes: capacity building for contracting in the construction sector guidelines

File type: PDF File size: 2.86 MB Year of publication: 1999 Number of pages: 244

To read the full document: Please type RLL012 into the search box on the search page of the CD attached to this book.

4.13 Study on capacity building for contracting

This summary contains the major findings of an International Labour Organization study in 11 countries, carried out between 2008 and 2010.

Through its employment intensive investment programme, the International Labour Organization has led the development of approaches and systems to better manage the growing number of decentralised, private sector-run infrastructure projects.

The survey examines the extent to which the employment intensive investment programme contracting approach has been effective. It looks at three aspects fundamental to creating a sustainable domestic construction sector – ensuring an enabling environment, developing implementing agencies and the domestic private construction sector, and developing skills and training capacity.

The survey finds that projects have allowed a significant number of emerging and small-scale contractors to enter the construction market. Contract work has created short-term employment opportunities and labour-based works are now considered an effective growth and anti-poverty measure. However, sustainability of the sector beyond the lifetime of a project remains weak.

Issuing body: International Labour

Organization
Type: Study
Status: Final

Title: Employment intensive investment programme. Capacity building for contracting. Institutional assessment and

contractor tracing study

File type: PDF File size: 546 KB

Year of publication: 2010 Number of pages: 28

To read the full document: Please type RLL013 into the search box on the search page of the CD attached to this book.

4.14 Road maintenance gets transport moving

This booklet provides a generic, 15-minute briefing for senior decision makers regarding the importance of road maintenance.

The booklet outlines how much it costs to maintain roads and highlights the costs of neglecting road maintenance. It gives examples to illustrate how maintenance of existing roads should be prioritised over constructing new roads. It discusses the impact on businesses and the economy. and on families and society.

This short paper also details the need for:

- Appropriate financial planning and ways to secure funding for road maintenance
- Scheduling and prioritising maintenance to meets needs and conditions on the ground
- Accurate, reliable and timely information for decision makers.

Last to be discussed are:

- The need for an appropriate institutional
- The importance of participation by customers and communities
- The importance of ensuring that the human capital available is sufficient to provide the skilled personnel needed for immediate and long-term road maintenance requirements.

4.15 Low-cost road seal options in Uganda

This report contains a detailed assessment of low-cost seal (LCS) technology as proposed for low-volume roads in Uganda.

LCS technology is being mainstreamed under the rural transport infrastructure component of the U-Growth Programme and the Government of Uganda's National Development Plan. The technology uses locally available materials, so small-scale contractors can construct LCSs using relatively little capital and labour-based methods. They provide a cost-effective and sustainable alternative to natural gravel surfaces, with more manageable maintenance requirements and lower transport costs.

The report provides a detailed justification for the adoption of LCS technology. After establishing the context, the authors present an overview of LCSs. They then provide a detailed assessment of institutional, technical, economic and financial, and contractual and implementation issues pertaining to the use of LCSs in Uganda. The report ends with a list of specific recommendations in each of these areas.

Issuing body: World Road Association -PIARC

Type: Booklet

Title: Save your country's roads: how road maintenance gets transport moving

File type: PDF File size: 591.58 KB Year of publication: 1999 Number of pages: 23

To read the full document: Please type RLL014 into the search box on the search page of the CD attached to this book.

Issuing body: Danish International

Development Agency

Type: Report Status: Final

Title: Review of low-cost seal technology options on low-volume roads in Uganda

File type: PDF File size: 2.27 MB Year of publication: 2013 Number of pages: 69

To read the full document: Please type **RLL015** into the search box on the search page of the CD attached to this book.

4.16 Rural road maintenance: improving access

The authors of this report analyse the technical, institutional and financial problems associated with poorly-maintained rural roads in Asia and provide suggestions on how they can be addressed.

Rural roads are often the most important parts of the network for rural populations. Despite this, many rural roads in Asia are poorly maintained, limiting access to services and markets. Ensuring the provision of regular and timely maintenance to an entire road network entails considerable efforts of sustained support and capacity development.

After an introductory chapter, the authors assess rural road maintenance in Asia (Chapter 2). Chapter 3 covers the economic and social costs of poor maintenance. Chapter 4 looks at institutional issues, particularly the negative effect of decentralisation. Chapter 5 draws together the lessons learned from recent experience and studies. In Chapter 6 practical solutions, based on good practice in the region, are proposed.

Issuing body: International Labour

Organization
Type: Report
Status: Final

Title: Rural road maintenance. Sustaining

the benefits of improved access

File type: PDF File size: 1.48 MB Year of publication: 2007 Number of pages: 112

To read the full document: Please type RLL016 into the search box on the search page of the CD attached to this book.



5 Technology transfer, research and training

If key stakeholders in Uganda's road construction industry are to plan, design, construct and maintain the country's road network in an efficient and effective manner, it is vital that they have all the necessary knowledge and skills. To this end, it is important that institutional strengthening of Uganda's labour, technical and managerial human resources is put into place through technology transfer, bespoke training, research, and manuals or guidelines appropriate for use in Uganda.

This section includes a number of technical reports that have been developed by the Danish International Development Agency for specific use and application in Uganda, together with details of research and technology developed in sub-Saharan Africa but with possible application in Uganda. It also includes a complete set of training course material, prepared under the CrossRoads Programme for the Training of Contractors in Financial and Business Management.

5.1 Research and innovation for rural mobility and access

This report includes the text of 15 papers presented at the 2012 Africa Community Access Programme conference discussing the technical, social and economic aspects of road construction in different African countries. Reliable access is essential for rural communities in Africa to reach basic services and other economic and social opportunities. Unreliable access reduces growth opportunities and negates the benefits from investment in other sectors directed at improving rural livelihoods.

Although most of the papers deal with specialised road construction techniques, presentations are included that focus on training for construction in Ethiopia, a public-private partnership for road rehabilitation and maintenance in Cameroon, rural freight transport operations in Kenya, increasing access to rural health throughout sub-Saharan Africa and maternal care in northern Nigeria, the use of bicycles by children in Ghana and developing a regional plan for a major road network in South Africa.



Issuing body: Africa Community Access

Programme

Type: Conference proceedings

Status: Final

Title: 2nd AFCAP Practitioners' Conference, Maputo, Mozambique, 3–5 July 2012. Africa's pre-eminent conference for rural

transport professionals

File type: PDF File size: 10.6 MB

Year of publication: 2012 Number of pages: 220

To read the full document: Please type TRT001 into the search box on the search page of the CD attached to this book.

5.2 Transport and environment research capacity in Uganda

The local Transport and Environment Science Technology Network in Uganda examined the research capacities of various transport and environment bodies for traffic flow management, air pollution and road safety. Transport and Environment Science Technology also hosted a national stakeholders' workshop, which identified research and training needs in the three areas

Research on transport is undertaken in an *ad hoc*, uncoordinated way. There is a lack of the required research infrastructure and capacity, especially in universities. No Ugandan university offers a specific degree programme on transport. The resulting effect is a low number of consultancy firms and nongovernmental organisations working on traffic flow and road safety.

The two main environmental research agencies are limited by institutional fragility and a lack of resources. Research on air pollution has also been neglected because of the lack of air pollution standards and guidelines.

In general, research efforts in Uganda are also adversely affected by the absence of a centralised database. Most research outputs are in the form of unpublished reports written by government-contracted consultants.

Issuing body: Stockholm Environment

Institute
Type: Report
Status: Final

Title: Transport and environment research capacity and needs in Uganda. Year 1 Final

report 2010 File type: PDF File size: 4.07 MB Year of publication: 2010

Number of pages: 57

To read the full document: Please type TRT002 into the search box on the search page of the CD attached to this book.

5.3 The use of sand in road construction in the SADC region

This guideline looks at the use of sand in the construction of low-volume roads (less than 300 vehicles per day) in the Southern African Development Community (SADC) region and is structured to provide practitioners with a good understanding of its engineering properties.

Traditional road building materials are increasingly scarce and expensive, especially for all-weather, low-volume rural roads.

Southern Africa has an abundance of sand. The guideline shows how local sand resources could be used in local road construction and focuses on the use of neat sand as a pavement material for paved and unpaved roads. Research and experience in some SADC countries, notably Botswana and South Africa, as well as in Australia, have demonstrated that, when correctly selected, tested, designed and constructed, sand can prove a suitable construction material in all layers of a road pavement. The guideline's recommendations apply to all SADC countries.

Issuing body: Africa Community Access

Programme
Type: Report
Status: Final

Title: Guideline on the use of sand in road

construction in the SADC region

File type: PDF
File size: 8.59 MB
Year of publication: 2013
Number of pages: 90

To read the full document: Please type TRT003 into the search box on the search page of the CD attached to this book.

5.4 Transport knowledge and research capacity

This paper addresses the need to consolidate and coordinate Africa-specific knowledge about road infrastructure provisions that has been generated from various research projects.

The paper looks at the value of research. knowledge generation and transfer, and the knowledge transfer processes that have been used to successfully implement primary research findings and outputs in practice. The benefits of a holistic approach to knowledge management and implementation of research projects are highlighted. The paper identifies the need for a sustainable source of African knowledge; and the transfer of that knowledge, through the institutionalising of research activities and centres in Africa. A framework is proposed for knowledge transfer and the implementation of research and technology development findings to maximise the benefits of research investment. The paper suggests the development of national research centres and regional hubs; and use of the African Road Maintenance Fund Association is recommended for regional coordination.

5.5 Training contractors on low-volume roads, Mozambique

This report assesses private contractor training activities for improving the standard of unpaved low-volume roads. It uses the 'targeted interventions' (spot improvements) approach.

The report could be used to research and prepare approaches to training road contractors in areas including:

- Work specifications, contract documentation and drawings
- Materials specifications and testing
- Construction operations gravel extraction and stockpiling, hauling and dumping gravel, and compaction
- Surfacing (surfacing types and specifications, and equipment requirements)
- Surveying basics setting out and level control
- Equipment management and use
- Work programming and resource planning
- Progress monitoring and control
- Ouality assurance
- Work measurement and claiming, and cash flow implications.

The report is particularly suitable for researching local training approaches. Data covers earthworks, pavement layers, drainage works, bitumen stabilised road bases and thin bituminous seals.

Issuing body: Africa Community Access

Programme

Type: Technical paper

Status: Final

Title: Institutionalising rural transport knowledge and research capacity in sub-

Saharan Africa File type: PDF File size: 413.92 KB Year of publication: 2013 Number of pages: 23

To read the full document: Please type TRT004 into the search box on the search page of the CD attached to this book.

Issuing body: Scott Wilson Mozambique

Type: Report and analysis of road contractor training programmes **Status:** Draft final report

Title: Training contractors for targeted interventions on low-volume roads in Mozambique

File type: PDF File size: 2.59 MB Year of publication: 2011 Number of pages: 82

To read the full document: Please type TRT005 into the search box on the search page of the CD attached to this book.

5.6 Training on dynamic cone penetrometer design methods. Kenya

This report covers a training exercise, which applies the dynamic cone penetrometer (DCP) design method, to create a draft Kenya DCP manual. The DCP method helps designers use local materials for pavements more effectively. This can reduce the cost of upgrading gravel and earth roads to sealed road standards.

The training objectives covered include:

- Giving the trainees hands-on experience in carrying out the DCP testing in the field
- Showing correct handling of the equipment
- Determining acceptable tests and which tests to abort and/or reject
- Demonstrating the main features of the DCP software and giving the trainees hands-on experience in data entry and analysis.

It is evident that extensive training and guidance is needed for the successful application of the DCP design method. Therefore, this document would be especially useful to planners considering using that approach.

Issuing body: Africa Community Access

Programme

Type: Report and analysis into paved rural

road network training

Status: Final

Title: Training report on DCP design method D415 Muruka - Kandara, Muranga Region 03-07.12.2012. AFCAP/KEN/089

File type: PDF File size: 1.16 MB Year of publication: 2012 Number of pages: 24

To read the full document: Please type TRT006 into the search box on the search page of the CD attached to this book.

5.7 Eco-road building for emerging economies

The construction and maintenance of road surfaces and pavements requires sealers and binders which are currently based on highenergy, environmentally damaging fossil fuels (bitumen and asphalt) or cement. Furthermore, developing countries find that importing and transporting these products is costly and that the heavy loads damage domestic road infrastructure.

A 'technology scouting' methodology identified promising alternative technologies that could develop sustainable, low-carbon footprint solutions using local resources and initiate local employment in developing countries. These could arise from local agricultural and manufacturing operations, and waste streams from industrial activities and power generation.

Six potential technology areas recommended for further examination are:

- Wood or palm lignin
- Pine resin or tall oil
- Drying oils and semi-drying oils
- Oil, resin and biomaterial blends
- Pozzolanas as cement substitutes and other waste streams
- Geotextiles and biofibre reinforcement.

These technologies could contribute to achieving provision of affordable and sustainable universal access across the developing world.

Issuing body: Global Transport Knowledge Practice

Type: Report

Title: Eco-road building for emerging economies: an initial scan for promising alternative technologies

File type: PDF File size: 1.9 MB

Year of publication: 2008 Number of pages: 20

To read the full document: Please type TRT007 into the search box on the search page of the CD attached to this book.

5.8 Training in financial and business management: basic introduction

The main objective in providing this training was to assist roads contractors in Uganda to acquire financial and business management skills, knowledge and capabilities to enable them to better manage their businesses and more effectively interact with financial institutions and employers for mutual benefit. In general, this training was directed to micro, small and medium enterprises engaged in road contracting in Uganda.

These documents (files 5.8.1–5.8.20) contain the training course content for 'Module 1: Basic Introduction', delivered to contractors, which covered the following:

- Setting up in business, types of business enterprises, forming a limited liability company
- Understanding the roads contracting sector and the roads contracting business cycle
- Value for money concept and ethics of contracting
- Introduction to finance, keeping of books and records
- An overview of costing and pricing, contract management and procurement, project and resources management, and taxation
- Support for the roads contractor, industry associations, networking, etc.

Issuing body: Crossroads

Type: Multiple
Title: Multiple
File type: Multiple
File size: Multiple

Year of publication: Multiple Number of pages: Multiple

To read the full documents: Please type TRT008 into the search box on the search page of the CD attached to this book.

5.9 Training in projections and business plans

This is the second module from a training course to assist roads contractors in Uganda to acquire financial and business management skills, knowledge and capabilities (see Section 5.8).

These documents (files 5.9.1–5.9.23) contain the training course content for 'Module 2: Projections and Business Plans', delivered to contractors, which covered the following:

- Preparing cash flow projections
- Preparing profit projections
- Preparing business plans.



Issuing body: Crossroads

Type: Multiple
Title: Multiple
File type: Multiple
File size: Multiple
Very of publication

Year of publication: Multiple Number of pages: Multiple

To read the full documents: Please type TRT009 into the search box on the search page of the CD attached to this book.

5.10 Training in management reporting and budgeting

This is the third module from a training course to assist roads contractors in Uganda to acquire financial and business management skills, knowledge and capabilities (see Section 5.8).

These documents (files 5.10.1–5.10.15) contain the training course content for 'Module 3: Management Reporting and Budgeting', delivered to contractors, which covered the following:

- Management reports
- Key performance indicators (including value for money) for roads contracting
- Effective budgeting
- Managing revenues and costs.



Issuing body: Crossroads

Type: Multiple
Title: Multiple
File type: Multiple
File size: Multiple

Year of publication: Multiple Number of pages: Multiple

To read the full documents: Please type TRT010 into the search box on the search page of the CD attached to this book.

5.11 Training in finance

This is the fourth module from a training course to assist roads contractors in Uganda to acquire financial and business management skills, knowledge and capabilities (see Section 5.8).

These documents (files 5.11.1–5.11.13) contain the training course content for 'Module 4: Finance', delivered to contractors, which covered the following:

- Risk management in the roads contracting sector
- Understanding and interpreting financial statements, profit and loss, balance sheets and cash flow
- Accounting policies specific to the contracting business, revenue recognition, work in progress and accounts receivable.



Issuing body: Crossroads

Type: Multiple
Title: Multiple
File type: Multiple
File size: Multiple

Year of publication: Multiple Number of pages: Multiple

To read the full documents: Please type TRT011 into the search box on the search page of the CD attached to this book.

5.12 Training in banking

This is the fifth module from a training course to assist roads contractors in Uganda to acquire financial and business management skills, knowledge and capabilities (see Section 5.8).

These documents (files 5.12.1–5.12.13) contain the training course content for 'Module 5: Banking', delivered to contractors, which covered the following:

- Basic banking practices and credit concepts as they relate to the roads contracting business
- Letters of credit
- Bid bonds, performance bonds, insurance, advance payments guarantees and bank arrangement and management fees
- New construction guarantee fund for performance bonds for contractors and consultants
- Financing working capital and equipment acquisition
- Sources of finance
- Preparing and submitting financing proposals to financial institutions
- Effective negotiating skills in dealing with financial institutions.

5.13 Training in costing, tenders, procurement, contract and resource management

This is the sixth module from a training course to assist roads contractors in Uganda to acquire financial and business management skills, knowledge and capabilities (see Section 5.8).

These documents (files 5.13.1–5.13.25) contain the training course content for 'Module 6: Costing, Tenders, Procurement, Contract and Resource Management', delivered to contractors, which covered the following:

- Costing and pricing for roads contracts
- Taxation
- Dealing with tenders and the bidding process
- Understanding the different types of contracts
- Contract documents
- Inventory/materials management
- Pre-qualification.



Issuing body: Crossroads

Type: Multiple
Title: Multiple
File type: Multiple
File size: Multiple

Year of publication: Multiple Number of pages: Multiple

To read the full documents: Please type TRT013 into the search box on the search page of the CD attached to this book.

Issuing body: Crossroads

Type: Multiple Title: Multiple File type: Multiple File size: Multiple

Year of publication: Multiple Number of pages: Multiple

To read the full documents: Please type TRT012 into the search box on the search page of the CD attached to this book.

5.14 Action research plan: Matugga-Semuto-Kapeeka road pilot project

This document presents the action research plan for the third stage of a pilot project on the Matugga-Semuto-Kapeeka road that demonstrates the appropriateness of innovative techniques in constructing low traffic volume, bitumen-sealed roads in Uganda.

This document takes into consideration the findings from the construction phase and puts in place performance monitoring for the following six years. This monitoring will produce scientifically acceptable evidence to support the introduction of innovative technologies in constructing sealed, low traffic volume roads. The document includes a scope of work covering equipment, staff and budget needs.

It is expected that the resulting research will provide justification for adopting existing specifications from countries with similar construction environments. One cited example is less restrictive materials specifications to permit the use of locally available natural clayey gravels and sand, of suitable quality, as construction materials. Design manuals, specifications and guidelines will be developed.

5.15 Community access planning

This is a practical manual which details how to identify, prioritise and select investments in rural transport infrastructure on both community access roads and off-road interventions in Uganda.

A five-step process is provided:

- Participatory parish level identification and ranking
- Sub-county level selection and ranking of investment projects
- Technical assessment
- Sub-county final prioritisation meeting
- Pre-implementation preparation.

A participatory approach is adopted in which community members are given the opportunity to take a lead role in the process.

The community access manuals are intended to assist the lower levels of local governments to plan, implement and maintain improvements to community transport infrastructure. These manuals should be read in conjunction with the district roads manuals, especially volumes 2, 3 and 5.

Issuing body: Ministry of Works, Housing and Communications, Republic of Uganda

Type: Report Status: Final

Title: Consultancy services for feasibility study, detailed engineering design and construction supervision of Matugga-Semuto-Kapeeka road using innovative

technologies
File type: PDF
File size: 2.73 MB
Year of publication: 2012
Number of pages: 66

To read the full document: Please type TRT014 into the search box on the search page of the CD attached to this book.

Issuing body: Ministry of Works and Transport, Republic of Uganda

Type: Manual Status: Final

Title: Volume 6: community access. Manual A: community access planning

File type: PDF
File size: 4.26 MB
Year of publication: 2009
Number of pages: 34

To read the full document: Please type TRT015 into the search box on the search page of the CD attached to this book.

5.16 Standard designs for rural transport infrastructure

This is a practical, technical manual providing standard designs for rural transport infrastructure in Uganda.

The document comprehensively addresses the various components of rural transport infrastructure in turn, providing detailed drawings, as per the following list:

- Rural access roads, tracks and footpaths
 - Site works
 - Typical steps designs
 - Footpath widening
 - Cross-drainage structures
 - Footbridges
 - Wetland structures Bio-engineering
- Community access roads
 - Site works
 - Cross-drainage structures
 - Bridges.

The document goes on to provide detailed technical specifications in support of the above components, broken down in to description, work method, quality control. measurement and payment.

5.17 Communication strategy 2007-2010, Uganda

This document presents the communication strategy for the road sub-sector in Uganda for the period 2007-2010.

The Ministry of Works and Transport oversees road infrastructure, the most important means of transport in the country.

The Ministry recognises that certain social and environmental factors undermine the use of and access to opportunities offered by the sector, and has identified five thematic areas as cross-cutting issues requiring attention to address this imbalance. These thematic areas are:

- Gender
- HIV/AIDS
- Occupational health and safety
- **Environment**
- People with disabilities and the elderly.

The Ministry has developed policies on these issues, but compliance remains problematic.

This communication strategy is part of the efforts to address these cross-cutting issues in the road sub-sector and achieve better integration in the overall road policy framework; specifically the planning process, and programmes and activities of the Ministry. A communication strategy is presented for each thematic area, followed by an overall implementation plan.

Issuing body: Ministry of Works and Transport, Republic of Uganda

Type: Manual Status: Final

Title: Volume 6: community access. Manual B1: standard designs for rural

transport infrastructure File type: PDF

File size: 11.17 MB Year of publication: 2006 Number of pages: 98

To read the full document: Please type TRT016 into the search box on the search page of the CD attached to this book.

Issuing body: Ministry of Works and Transport, Republic of Uganda

Type: Report Status: Final

Title: Communication strategy for the road

sub-sector: 2007-2010 File type: Word document File size: 1.81 MB Year of publication: 2006 Number of pages: 44

To read the full document: Please type **TRT017** into the search box on the search page of the CD attached to this book.

5.18 Guidelines for environmental impact assessment, Uganda

The guidelines for the environmental impact assessment (EIA) of road projects in Uganda set out the process for determining whether or not a project will have an adverse impact on the environment. They describe how to carry out EIAs in the sector.

Part I of the guidelines gives an overview of EIA requirements and procedures. Part 2 gives specific guidelines for road projects. The guidelines harmonise with the procedures of the National Environment Management Authority and development partners for EIAs, but have been specifically adapted to the standard road project cycle. The purpose and procedures for each step are clearly described.

The guidelines stress the need for public participation throughout assessments and for integrating compensation and resettlement issues. They also deal with managing environmental and social considerations during road maintenance.



Issuing body: Ministry of Works, Housing and Communications, Republic of Uganda

Type: Guidelines Status: Final draft

Title: Environmental impact assessment

guidelines for road projects File type: Word document File size: 2.33 MB Year of publication: 2004 Number of pages: 103

To read the full document: Please type TRT018 into the search box on the search page of the CD attached to this book.

5.19 Uganda health and safety policy

The health and safety policy for the roads sector in Uganda sets out the requirements for improving working conditions and productivity. The objectives of the policy are to:

- Provide and maintain a healthy work environment and safe workplace practices
- Institutionalise occupational health and safety (OHS) in roads sector policies, programmes and plans
- Promote efficient road safety management practices
- Contribute to safeguarding the physical environment.

The policy applies to all work environments in the roads sector and provides a framework for mainstreaming OHS. Separate guidelines provide step-by-step instructions for translating the policy into action and in planning and carrying out projects.

The anticipated outcomes of implementing the policy are:

- Enhanced capacity to comply with OHS
- Improvements in work environments and quality of life of workers and beneficiaries
- Better awareness of OHS regulations, policies and guidelines
- Fewer accidents and injuries.

Issuing body: Ministry of Works, Housing and Communications, Republic of Uganda

Type: Policy Status: Unknown

Title: Health and safety policy for the roads

sub-sector

File type: Word document File size: 144 KB Year of publication: 2005 Number of pages: 29

To read the full document: Please type TRT019 into the search box on the search page of the CD attached to this book.

5.20 District road works: planning

Volume 1 is the first of five district road works volumes. Each volume is made up of manuals covering different aspects of district road works. The manuals provide detailed instructions for organising, planning, implementing and administering district road networks. They encourage community participation, promote labourbased methods and gender balance. Stipulated practices for contracting ensure protection of the environment, foster work place health and safety, and support the local construction industry. Target audiences for the manuals are road engineers, planners and managers involved in planning and managing district road works.

Volume 1 comprises:

- 5.20.1: Manual A. Functional road classification system and route numbering
- 5.20.2: Manual B. Annual district road inventory and condition surveys
- 5.20.3: Manual C. Rehabilitation and maintenance planning system
- 5.20.4: Manual D. Annual district road work plan for routine and periodic maintenance, rehabilitation and spot repairs
- 5.20.5: Manual E. GPS mapping manual for the rehabilitation and maintenance planning system module.

Issuing body: Ministry of Works, Housing and Communications, Republic of Uganda

Type: Manual Status: Final

Title: District road works planning manuals

Volume 1
File type: PDF

File size: Multiple documents Year of publication: 2002

Number of pages: Multiple documents To read the full documents: Please type TRT020 into the search box on the search page of the CD attached to this book.

5.21 District road works: contract documentation

Volume 2 is the second of five district road works volumes. Each volume is made up of manuals covering different aspects of district road works. The manuals provide detailed instructions for organising, planning, implementing and administering district road networks. They encourage community participation, promote labour-based methods and gender balance. Stipulated practices for contracting ensure protection of the environment, foster work place health and safety, and support the local construction industry. Target audiences for the manuals are road engineers, planners and managers involved in planning and managing district road works.

Volume 2 comprises:

- 5.21.1: Manual A1. Contract documents for rehabilitation, periodic maintenance and minor works
- 5.21.2: Manual A2. Technical specifications for rehabilitation, periodic maintenance and minor works
- 5.21.3: Manual A3. Bills of quantity for rehabilitation, periodic maintenance and minor works
- 5.21.4: Manual A4. Unit rate analysis for rehabilitation works, periodic maintenance and minor works
- 5.21.5: Manual B. Contract documentation and procedures for labour-based routine maintenance.

Issuing body: Ministry of Works, Housing and Communications, Republic of Uganda

Type: Manual Status: Final

Title: District road works contract documentation manuals Volume 2

File type: PDF

File size: Multiple documents Year of publication: 2002

Number of pages: Multiple documents To read the full documents: Please type TRT021 into the search box on the search page of the CD attached to this book.

5.22 District road works: implementation and monitoring

Volume 3 is the third of five district road works volumes. Each volume is made up of manuals covering different aspects of district road works. The manuals provide detailed instructions for organising, planning, implementing and administering district road networks. They encourage community participation, promote labourbased methods and gender balance. Stipulated practices for contracting ensure protection of the environment, foster work place health and safety, and support the local construction industry. Target audiences for the manuals are road engineers, planners and managers involved in planning and managing district road works.

Volume 3 comprises:

- 5.22.1: Manual A. Contract management and administration
- 5.22.2: Manual B. Preparation of quarterly progress reports.



Issuing body: Ministry of Works, Housing and Communications, Republic of Uganda

Type: Manual Status: Final

Title: District road works implementation and monitoring manuals Volume 3

File type: PDF

File size: Multiple documents Year of publication: 2002

Number of pages: Multiple documents To read the full documents: Please type TRT022 into the search box on the search page of the CD attached to this book.

5.23 District road works: technical manuals

Volume 4 is the fourth of five district road works volumes. Each volume is made up of manuals covering different aspects of district road works. The manuals provide detailed instructions for organising, planning, implementing and administering district road networks. They encourage community participation, promote labourbased methods and gender balance. Stipulated practices for contracting ensure protection of the environment, foster work place health and safety, and support the local construction industry. Target audiences for the manuals are road engineers. planners and managers involved in planning and managing district road works.

Volume 4 comprises:

- 5.23.1: Manual A. Technical manual
- 5.23.2: Manual B. Standard design manual.



Issuing body: Ministry of Works, Housing and Communications, Republic of Uganda

Type: Manual Status: Final

Title: District road works technical manuals

Volume 4

File type: PDF File size: Multiple documents

Year of publication: 2004

Number of pages: Multiple documents To read the full documents: Please type TRT023 into the search box on the search page of the CD attached to this book.

5.24 District road works: administrative and operational guidelines

Volume 5 is the fifth of five district road works volumes. Each volume is made up of manuals covering different aspects of district road works. The manuals provide detailed instructions for organising. planning, implementing and administering district road networks. They encourage community participation, promote labourbased methods and gender balance. Stipulated practices for contracting ensure protection of the environment, foster work place health and safety, and support the local construction industry. Target audiences for the manuals are road engineers, planners and managers involved in planning and managing district road works.

Volume 5 comprises:

- 5.24.1: Manual A. Policy document for road maintenance
- 5.24.2: Manual B. Environmental guidelines
- 5.24.3: Manual C. Gender guidelines
- 5.24.4: Manual D. HIV/AIDS guidelines
- 5.24.5: Manual E. Occupational health and workplace safety guidelines
- 5.24.6: Manual G. Guidelines for selection of isolated and poor subcounties for prioritisation of community access roads.

Issuing body: Ministry of Works, Housing and Communications, Republic of Uganda

Type: Manual Status: Final

Title: District road works district administrative and operational guidelines Volume 5

File type: PDF

File size: Multiple documents Year of publication: 2003

Number of pages: Multiple documents To read the full documents: Please type TRT024 into the search box on the search page of the CD attached to this book.



6 East African integration and the Northern Corridor

Uganda is a landlocked country and is heavily reliant on the road, rail and maritime infrastructure of neighbouring countries, such as Kenya and Tanzania, for both inward and outward transportation of raw materials and manufactured goods and produce. For Uganda to achieve its economic and social development goals, it is essential that it participates with neighbouring partner countries in the strategic planning and development of the transport infrastructure that links these countries.

This section includes details of the Northern Corridor Infrastructure Transit Agreement between member countries that include Kenya, Tanzania, Rwanda, Burundi, the Democratic Republic of Congo, Ethiopia and South Sudan, It also includes a report on recent developments and benefits of trade facilitation in the East African Community; a strategy for regional intermodal transport and an action plan including the policy, legal and institutional framework; a report on the state of infrastructure in the East African Community; a comparison of transportation costs along the Northern Corridor route, together with the findings of a stakeholder survey along the route; and a report, commissioned by the Norwegian Ministry of Foreign Affairs, on how the fast-tracking of East African integration can be achieved.

6.1 Regional transport strategy and action plan in the East African Community

The report was produced to inform a comprehensive regional transport strategy and action plan for the countries of the East African Community, and was designed to form the basis for a technical workshop.

The report reviews the economic environment and customer base, including traffic characteristics. It conducts a performance analysis of the Northern and Central transport corridors, according to transport mode, and looks at infrastructure, services, procedures, planned interventions and critical barriers to trade.

The report examines the policy, legal and institutional frameworks at national and regional levels, including cargo-transit procedures (which it compares to international best practice), licensing and regulation, compliance of domestic policies with regional frameworks and sector financing.

Lastly, the report identifies development options for each transport corridor and allocates them across four levels (regional network reinstatement, capacity bottlenecks and black spots, access to the corridor and increasing capacity) as well as considering institutional development options.

Issuing body: World Bank

Type: Report Status: Draft

Title: A regional transport intermodal strategy and action plan in the countries of

the East African Community

File type: PDF File size: 14.02 MB Year of publication: 2013 Number of pages: 352

To read the full document: Please type **EAIOO1** into the search box on the search page of the CD attached to this book.

6.2 Analytical comparative transport cost

The Northern Corridor is the busiest transport corridor in East and Central Africa, linking the Kenyan seaport of Mombasa with Uganda, Rwanda, Burundi, the Democratic Republic of Congo and southern Sudan. It is a multi-modal transport corridor combining road, rail, waterways and pipeline modes of transport.

This report is the result of a study which was carried out to enable the Transit Transport Co-ordination Authority of the Northern Corridor to reformulate policy to reduce transport costs along the corridor and to guide investment in transport infrastructure.

This is the second volume of the report and it comprises four appendices:

- Appendix A contains the terms of reference for the study
- Appendix B shows the results of the start-up meeting
- Appendix C has a table of the stakeholders interviewed (November 2009–May 2010)
- Appendix D summarises a benchmarking exercise that was undertaken to compare the Northern Corridor with five other international corridors.

6.3 Fast-tracking East African integration

This report was commissioned by the Norwegian Ministry of Foreign Affairs. It assesses the feasibility of the time schedule proposed by the 'fast-track committee' for establishing an East African political federation by 2010.

The authors of this report consulted with integration stakeholders in the government, business, research and donor sectors. None of these respondents saw the 2010 target date for a political federation as a feasible proposition. Most subscribed to a gradual building-block approach instead.

The report identified that all East African states have democratic deficits and internal security problems. It concludes that although the small East African Community secretariat is effective, its capacity is overstretched and dangerously close to overload.

The report recommends that to aid East African integration, the Norwegian Ministry of Foreign Affairs should contribute to the planned East African Community Development Fund and engage in efforts to build new institutions.

Issuing body: CPCS Transcom Limited

Type: Report Status: Draft final

Title: Analytical comparative transport cost study along the Northern Corridor region.

Volume 2: Appendices File type: PDF

File size: 3.01 MB Year of publication: 2010 Number of pages: 75

To read the full document: Please type EAI002 into the search box on the search page of the CD attached to this book.

Issuing body: Chr. Michelsen Institute

Type: Project report Status: Final

Title: Fast-tracking East African integration.

Assessing the feasibility of a political

federation by 2010 File type: PDF File size: 365 KB

Year of publication: 2005 Number of pages: 52

To read the full document: Please type EAI003 into the search box on the search page of the CD attached to this book.

6.4 Corridor diagnostic study

The main report for the corridor diagnostic study assesses the performance of East Africa's Northern and Central Corridors. It includes an action plan to remove identified impediments to transport logistics.

The corridor diagnostic study assessment involved a series of literature reviews and interviews with stakeholders, including shippers, transport service providers, freight forwarders and government ministries and agencies.

The assessment found that the two corridors are operating at a level that generally corresponds to 'fair' compared to other international corridors. But the report also concludes that future traffic demand will overwhelm existing infrastructure, leading to epic levels of congestion which will constrain economic growth.

The report recommends substantial and targeted investment in regional transport infrastructure now and over the next several decades. Developments identified for investment include new container terminals at the ports of Mombasa and Dar es Salaam, increased freight capacity on regional railways and road improvement schemes.

Issuing body: Nathan Associates Inc.

Type: Project report **Status:** Final

Title: Corridor diagnostic study of the Northern and Central Corridors of East Africa. Action plan. Volume 1: Main report

File type: PDF File size: 7.57 MB Year of publication: 2011 Number of pages: 97

To read the full document: Please type EAI004 into the search box on the search page of the CD attached to this book.

6.5 Corridor diagnostic study: regulatory framework and transport policy

This working paper analyses the transport policies and laws, and regional cooperation frameworks of the East African Community (EAC).

The analysis identified common problems with formulating policy. For example, the development process is overlong, undermining the relevance and effectiveness of policy agreements. Also, policies tend to reflect national preoccupations and pay only lip service to regional commitments.

The legal frameworks of nation states are also flawed, particularly in relation to road transport. For example, despite having been officially adopted almost 10 years ago, the EAC's Tripartite Agreement on Road Transport has still not been fully implemented.

The paper makes several recommendations. For example, regional economic communities should rationalise existing transport agreements to eliminate any overlap and member states should build the capacity required to make sure regional agreements are implemented. In particular, a start should be made in developing a Common Transport Policy, as set out in Art 89 of the EAC Treaty.

Issuing body: Nathan Associates Inc.

Type: Working paper Status: Final

Title: Corridor diagnostic study of the Northern and Central Corridors of East Africa. Action plan. Volume 2: Technical papers. D. Regulatory framework and

transport policy File type: PDF File size: 1.55 MB Year of publication: 2011 Number of pages: 93

To read the full document: Please type EAI005 into the search box on the search page of the CD attached to this book.

6.6 Corridor diagnostic study: lake transport

This technical paper proposes action that can be taken over the next three to five vears to improve maritime trade on Lake Victoria and Lake Tanganvika. The importance of these lakes as a conduit for trade has declined dramatically over the last decade, largely because of a lack of investment in port and rail infrastructure. and insecurities caused by regional conflicts.

The paper proposes five projects for inclusion in the action plan of the corridor diagnostic study of the Northern and Central Corridors of East Africa, These projects are:

- Rehabilitating ports, dredging and protecting against siltation
- Establishing roll-on/roll-off services on Lake Tanganyika and Lake Victoria
- Restructuring wagon ferries to carry Mafi trailers
- Developing vessel maintenance capacity on Lake Tanganyika
- Enhancing safe navigation.

Because these project options are systemic in nature, they will require cooperation between the private and public sectors in all of the countries involved.

6.7 The East African logistics chain

The report identifies significant improvements in East African logistics during the period 2011 and 2012.

Cargo dwell times at the ports of Mombasa and Dar es Salaam are down, but remain well in excess of international standards. The report points to the important role of a range of public and private sector entities, additional to the ports authorities, in the goods clearance process.

The efficiency of the Northern and Southern transport corridors has increased slightly. largely as a result of road infrastructure improvements and reductions in non-tariff barriers. However, average truck-turnaround times remain far longer than industry standards, with road traffic impeded by numerous checkpoints and urban congestion. Inadequate rail systems are unable to relieve the road sector.

Border crossing times are significantly reduced, but further improvements are hampered by the lack of harmonised crossborder laws and regulations. Information and communications technology facilities are unable to support information sharing and more advanced clearance procedures.

Issuing body: Nathan Associates Inc.

Type: Technical paper

Status: Final

Title: Corridor diagnostic study of the Northern and Central Corridors of East Africa, Action plan, Volume 2: Technical

papers. F. Lake transport

File type: PDF File size: 4.74 MB

Year of publication: 2011 Number of pages: 60

To read the full document: Please type EAl006 into the search box on the search page of the CD attached to this book.

Issuing body: Shippers Council of Eastern

Africa

Type: Report Status: Final

Title: The East Africa logistics performance survey 2012. Cost, time and complexity of

the East African logistics chain

File type: PDF File size: 887.06 KB Year of publication: 2013 Number of pages: 45

To read the full document: Please type EAIOO7 into the search box on the search page of the CD attached to this book.

6.8 Northern Corridor infrastructure master plan

This is a strategic development plan for the Northern Corridor infrastructure until 2030. It encompasses the five Northern Corridor Transit Agreement member countries – Kenya, Uganda, Rwanda, Burundi and the Democratic Republic of Congo – Ethiopia, northern Tanzania and the southern Sudan region.

The key challenges faced are constraints to expanding the port of Mombasa and the inadequacy of the Mombasa-Kampala railway, issues already identified by the governments of Kenya and Uganda. The governments are engaged in developing a new port in Lamu and upgrading the railway line to standard gauge. The master plan supports these projects, and the recommended actions and investments (totalling USD 2.1 billion) are designed to incorporate them.

Other priority projects are road access to the port of Mombasa, the Eldoret bypass, the Eldoret-Lokichogio road to Sudan, maintenance of the Mombasa-Kampala railway, the ports of Banana, Lamu and Kisangani, and transport on Lake Victoria and the Congo River.

6.9 Northern Corridor stakeholders survey

The report presents the findings of a stakeholder survey carried out to identify and address non-tariff barriers on sections of the Northern Corridor.

The report finds that border stations require better internet connectivity to enable electronic customs declaration and information exchange, and that parking, warehousing and verification sheds are often inadequate. Customs authorities should improve information exchange and take measures to reduce the diversion of goods in transit. Road infrastructure should meet East African Community standards, with gabions added where needed.

The route from Burundi and Rwanda through Tanzania to Mombasa should be re-directed to reduce transit time by taking advantage of upgraded sections. The Port of Bujumbara on Lake Tankanyika would benefit from improving the rail system linking it to Mombasa and Dar es Salaam. Road infrastructure would see reduced heavy container traffic.

Raising awareness among stakeholders would assist implementation of trade facilitation measures.

Issuing body: Transit Transport Coordination Authority of the Northern

Corridor Type: Report Status: Final

Title: Northern Corridor infrastructure master plan: final report. Executive

summary File type: PDF File size: 969.08 KB Year of publication: 2011 Number of pages: 27

To read the full document: Please type EAI008 into the search box on the search page of the CD attached to this book.

Issuing body: Transit Transport Coordination Authority of the Northern Corridor

Type: Report Status: Final

Title: Northern Corridor stakeholders survey of Kigali-Rubavu/Goma and Kigali-Akanyaru/Kanyaru Haut-Bujumbura-Gatumba/Kavimvira transit sections

File type: PDF File size: 4.3 MB

Year of publication: 2013 Number of pages: 62

To read the full document: Please type EAI009 into the search box on the search page of the CD attached to this book.

6.10 State of infrastructure in Fast Africa

This brief outlines the principal infrastructure challenges currently facing the East African sub-region in five sectors – water and sanitation, energy production, electricity, surface transportation, and information and communications technology.

The paper evaluates progress in view of recent studies and the Africa Infrastructure Knowledge Program.

East Africa's infrastructure generally ranks behind that of other African sub-regions, with exceptions in water and sanitation and internet density. In these areas the subregion's performance is comparable to Southern Africa, the regional leader. Road infrastructure also ranks well.

However, major infrastructure problems remain. These are notably energy generation and access to electricity for cooking (both are among the lowest of all African sub-regions), and surface transport logistic costs (the most expensive in the world). The information and communications technology sector is characterised by high costs and low penetration. There remain substantial challenges across all sectors, principal among which is the lack of a regional vision for infrastructure provision.

6.11 Facilitating trade in the EAC

This report outlines improvements to facilitate trade measures among East African Community (EAC) countries – Burundi, Kenya, Rwanda, Tanzania and Uganda – and the resulting potential benefits. Trade facilitation includes customs policies and procedures, and the transport of goods before or after they clear borders.

The report identifies that required trade documents and inspections remain numerous and unpredictable, but targeted for harmonisation. Progress is being made towards targeting only riskier cargoes for physical inspection and towards adopting electronic customs data interchange systems and harmonised customs information sharing.

The Northern Corridor and the Central Corridor are the EAC's main transport routes; facilitating trade movement along these corridors is essential to increasing the volume and profitability of EAC countries' trade. Infrastructure improvements are underway, but are not keeping pace with rising traffic and trade flows. Administrative problems raise shippers' costs, rail is unreliable and air is a small, but growing, sector.

Progress by country is detailed.

Issuing body: African Development Bank

Type: Report Status: Final

Title: State of infrastructure in East Africa

File type: PDF File size: 3.67 MB Year of publication: 2013 Number of pages: 31

To read the full document: Please type **EAI010** into the search box on the search page of the CD attached to this book.

Issuing body: United States International

Trade Commission
Type: Report
Status: Final

Title: Trade facilitation in the East African Community: recent developments and

potential benefits File type: PDF File size: 4.72 MB Year of publication: 2012 Number of pages: 103

To read the full document: Please type EAI011 into the search box on the search page of the CD attached to this book.

6.12 Uganda's economic challenges: harnessing regional trade potential

This report addresses the challenges Uganda faces following the economic slowdown of recent years – down to 3.4% in 2010 from 9.3% between 2001 and 2008. Challenges include achieving enough sustainable growth to keep pace with rapid population growth, creating sufficient employment and fulfilling the goal of becoming a middle-income country. To achieve this, the report recommends harnessing the potential of regional trade by:

- Increasing agricultural exports, particularly of foodstuffs, within the region
- Diversifying Uganda's export base into higher value exports
- Diversifying more deeply into services.

In doing this Uganda will need to address constraints to business growth, agricultural transformation and productivity as well as easing access to markets by reducing transportation costs. This involves improving infrastructure as well as trade and transport logistics, addressing nontariff barriers to trade to allow the free flow of goods and services plus accelerating reforms in regulations and service restrictions.

Issuing body: World Bank

Type: Report Status: First edition

Title: Uganda economic update. Bridges across borders. Unleashing Uganda's

regional trade potential **File type:** PDF

File size: 4.43 MB Year of publication: 2013 Number of pages: 92

To read the full document: Please type EAI012 into the search box on the search page of the CD attached to this book.

6.13 Overhauling infrastructure, the engine of growth

This report analyses the current situation in Africa with regard to infrastructure. It provides an overview against which future improvements in infrastructure can be measured.

The purpose of the report is twofold – to provide a foundation for prioritising investments and designing policy reforms, and to help in monitoring the results achieved as a result of donor support.

The report concludes that the limited coverage and high cost of Africa's infrastructure are extreme, even when measured against other low-income countries around the world. It identifies that the cost of fixing this problem is much higher than previously reckoned.

However, the report acknowledges that funding prospects are better today that they have been for some time. It also recognises that institutional and structural reforms are critical to ensure that funds and resources are used to their full potential.



Issuing body: World Bank **Type:** Summary report

Status: Draft

Title: Executive summary. Africa infrastructure country diagnostic. Overhauling the engine of growth:

infrastructure in Africa

File type: PDF File size: 768 KB

Year of publication: 2008 Number of pages: 26

To read the full document: Please type EAI013 into the search box on the search page of the CD attached to this book.

6.14 Transport cost study for the Northern Corridor

The Northern Corridor is the busiest transport corridor in East and Central Africa, linking the Kenyan seaport of Mombasa with Uganda, Rwanda, Burundi, the Democratic Republic of Congo and southern Sudan. It is a multi-modal transport corridor combining road, rail, waterways and pipeline modes of transport.

A study was carried out to enable the Transit Transport Co-ordination Authority of the Northern Corridor to reformulate policy to reduce transport costs along the corridor and to guide investment in transport infrastructure. This is the executive summary of the report for this study.

The executive summary explores why logistics costs along the Northern Corridor are high. It examines transport sectors and identifies the key issues faced in each sector. The executive summary also presents priority policy measures to enhance transit movement, lower logistics costs and enhance competitiveness.



Issuing body: CPCS Transcom Ltd.

Type: Report
Status: Draft final

Title: Analytical comparative transport cost study along the Northern Corridor region.

Executive summary File type: PDF File size: 1.4 MB Year of publication: 2010 Number of pages: 15

To read the full document: Please type EAI014 into the search box on the search page of the CD attached to this book.

6.15 Lakes Tanganyika and Victoria: integrated transport strategy

This document is the recommended transport strategy for Lake Tanganyika and Lake Victoria. These two lakes form a central component of the central development corridor that links the coastal port of Dar es Salaam with Eastern Africa and the great lakes region. Currently neglected and under-performing, lake transportation could improve the region's competitiveness when appropriately integrated with other transport modes. This document should be read in conjunction with Volume II (background information and analysis).

The document first explains the need for a strategy, and details the current role and characteristics of inland waterways, ports and shipping services for both lakes. It goes on to analyse forecasted and potential freight and passenger volumes, and the regulatory environments and information available to, and needed by, mariners. Next the strategy is presented in short-, mediumand long-term horizons. Lastly, details regarding strategy implementation, including cost estimates, are provided.

Issuing body: Marine Logistics Ltd

Type: Report Status: Final

Title: Integrated transport strategy – Lakes Tanganyika and Victoria. Volume I. Recommended transport strategy

File type: PDF

File size: 831.57 KB Year of publication: 2009 Number of pages: 35

To read the full document: Please type EAI015 into the search box on the search page of the CD attached to this book.

6.16 Lakes Tanganyika and Victoria: background information and analysis

This document provides background information and analysis for the recommended transport strategy for Lake Tanganyika and Lake Victoria. The lakes form a central component of the central development corridor (CDC) that links the coastal port of Dar es Salaam with Eastern Africa and the great lakes region.

The document examines the CDC's existing transport infrastructure, including comparative distances for different transport modes. The situation regarding inland waterways, ports and shipping services is detailed for both Lakes Tanganyika and Victoria, as are the regulatory environments and information available to, and needed by, mariners. The document then moves to analyse existing and future trade in CDC. Firstly the situation in the gateway port of Dar es Salaam specifically current through-put volumes is presented. Next future trade and traffic demand is considered, before discussion of the potential of the extraction and other industries. Lastly the economics of inland waterways shipping is considered.

Issuing body: Marine Logistics Ltd

Type: Report Status: Final

Title: Integrated transport strategy - Lakes Tanganyika and Victoria. Volume II. Situation analysis and background

information File type: PDF File size: 5.1 MB

Year of publication: 2009 Number of pages: 81

To read the full document: Please type EAI016 into the search box on the search page of the CD attached to this book.

6.17 Reducing costs in East African transport corridors

The Northern Corridor is a network of roads, rail lines, inland waterways and an oil pipeline linking Mombasa, Kenya, with Uganda, Rwanda, Burundi and the Democratic Republic of Congo. These five countries are signatories to a cooperation agreement on the Northern Corridor, which also provides links to South Sudan, Ethiopia and northern Tanzania. Average transport costs using East African corridors are higher than those in West Africa and Southern Africa.

This document reports on a study undertaken to quantify the logistics costs involved in using the Northern Corridor, particularly the costs of delays and hidden expenses. Costs were compared with those of five other major transport corridors in Africa, Asia and Latin America. The study sought to identify reasons behind the high logistics costs and to propose policies and measures to improve the flow of goods across the region, decrease logistics costs and increase the competitiveness of the corridor.



Issuing body: CPCS Transcom Limited

Type: Report Status: Final

Title: Analytical comparative transport cost study along the Northern Corridor region.

Volume 1: Main report File type: PDF

File size: 2.92 MB

Year of publication: 2010 Number of pages: 263

To read the full document: Please type EAI017 into the search box on the search page of the CD attached to this book.

6.18 The Northern Corridor: preferred route in East and Central Africa

This second five year strategic plan developed by the Transit Transport Coordination Authority of the Northern Corridor builds on the achievements and lessons learned from implementing the 2007–2011 Strategic Plan. The Northern Corridor links the landlocked countries of Burundi, Rwanda, Uganda and the Democratic Republic of the Congo to the Kenyan maritime port of Mombasa. The corridor also links South Sudan and northern Tanzania to the port of Mombasa. The Northern Corridor is a multi-modal corridor encompassing road, rail, pipeline and inland waterways transport.

The focus of the Strategic Plan is to reduce the cost of doing business through the harmonisation of transport policies and regulations, simplification of trade procedures and enhanced involvement of the private sector in the improvement of Northern Corridor transport infrastructure facilities and services. The Transit Transport Co-ordination Authority of the Northern Corridor vision is to develop the most efficient trade and transport logistics chain, with a view to contributing towards regional integration and socio-economic development of the region.

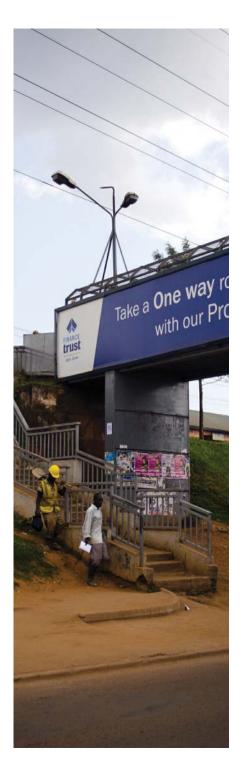
Issuing body: Transit Transport Coordination Authority of the Northern Corridor

Type: Report Status: Final

Title: Northern Corridor strategic plan

2012–2016
File type: PDF
File size: 12.4 MB
Year of publication: 2012
Number of pages: 78

To read the full document: Please type EAI018 into the search box on the search page of the CD attached to this book.



7 Road safety, nonmotorised vehicles, motor cycles and urban transport

Road crashes kill more people than malaria worldwide, with the cost to developing countries estimated at USD 100 billion per year. With one of the highest incidents of road crashes in the world. Uganda is no exception to this trend. Its capital city, Kampala, suffers from major traffic congestion; addressing this problem means providing an efficient and affordable public transport system. In rural areas, the cost of running motorised vehicles is prohibitive in relation to rural incomes; protecting these vulnerable road users means encouraging the use of affordable non-motorised vehicles that provide access to vital services and employment and help reduce air pollution.

This section provides details on the level of road crashes and fatalities in Uganda; steps being taken by the government to reduce crashes and fatalities, and action associated with the Decade of Action for Road Safety initiative; an evaluation of the true cost of crashes prepared by the International Road Assessment Programme; and guidelines prepared by the World Bank on preventing road traffic injury. It also provides details on a public transport policy for Kampala and a policy for nonmotorised transport, together with a set of design guidelines for non-motorised transport.

7.1 Road safety in Uganda

This presentation provides data relating to road accidents in Uganda from 2000 to 2009, and compares these figures with those from neighbouring countries.

Most accidents (80%) are caused by human error, with the rest resulting from defective vehicles, road conditions and environmental factors. Uganda's approach to accident prevention focuses on education, engineering and legislation.

Constraints to accident prevention include:

- Road safety strategy not yet in place
- Inadequate funding and resources
- Weak enforcement of regulations
- Resistance to enforcement from pressure groups, e.g. transport operators
- Insufficient data on road accidents
- Limited safety education
- Inadequate rescue services and care facilities.

Current plans include:

- Collaboration with regional and international organisations
- Introduction of more regulations
- Creation of a National Road Safety Authority
- Safety education and publicity
- Creation of a road safety database
- Pre-registration inspection of vehicles
- National road safety policy and strategy
- Improvement of road infrastructure
- Promotion of private sector initiatives.

Issuing body: Ministry of Works, Housing and Communications, Republic of Uganda

Type: Presentation Status: Final

Title: Road safety in Uganda File type: PowerPoint

File size: 917 KB

Year of publication: Unknown

Number of pages: 16

To read the full document: Please type RST001 into the search box on the search page of the CD attached to this book.

7.2 Keeping death off the roads in Uganda

Today, says this report, Uganda has the highest rate of road accidents in Africa and the world, after Ethiopia. In 2011 there were 22,272 accidents accounting for 3,343 deaths. Pedestrians accounted for over 39% of casualties, constituting the class of road user with the highest number killed.

In addition to the human loss, there are serious economic losses associated with road accidents which hinder development. The latest figures show this cost as UGX 800 billion a year.

The Uganda Police say that the majority of accidents are a result of careless or reckless driving and poor maintenance of vehicles.

Initiatives to improve safety have included an increased police presence on the roads and better enforcement of traffic regulations. The report states that one key recommendation is to increase road reserve widths from 15 metres to 40 metres to allow room for traffic to keep apart and avoid accidents.



Issuing body: Uganda Roads Sector

Support Initiative **Type:** Report **Status:** Final

Title: Road safety issues in Uganda

File type: Word document File size: 223 KB

Year of publication: Unknown

Number of pages: 2

To read the full document: Please type RST002 into the search box on the search page of the CD attached to this book

7.3 Country guidelines for preventing traffic injury

This report provides guidelines for low- and middle-income countries working to implement the recommendations of the 'World report on road traffic injury prevention', published jointly by the World Bank and the World Health Organization.

The findings of the report culminated in six overarching recommendations that set out the strategic initiatives necessary to improve road safety performance. The guidelines presented in this report are a pragmatic approach to implementing these recommendations in a way that overcomes institutional capacity barriers and achieves sustainable results.

The report contains information on how to conduct reviews of road management capacity. It specifies how to implement lead agency reforms, investment strategies and projects that can eliminate road deaths and serious injury through the 'safe system' approach. And it includes a wide range of case studies detailing experiences in implementing road safety initiatives from five good practice countries and two transitional ones.

Issuing body: World Bank

Type: Report Status: Final

Title: Implementing the recommendations of the World Report on Road Traffic Injury Prevention. Country guidelines for the conduct of road safety management capacity reviews and the specification of lead agency reforms, investment strategies and safe system projects

File type: PDF File size: 2.22 MB Year of publication: 2009 Number of pages: 329

To read the full document: Please type RST003 into the search box on the search page of the CD attached to this book.

7.4 A decade of action for road safety

This brochure highlights the 'Decade of action for road safety', launched by the United Nations in 2011, which seeks to stabilise and then reduce global road deaths by 2020. Up to 5 million lives could be saved and 50 million injuries prevented during the decade.

Ten reasons why the world should act on road deaths:

- 1. 1.3 million people are killed annually on roads worldwide
- 2. Crashes kill more people than malaria
- 3. 50 million people are injured
- 4. 90% of casualties occur in developing countries
- 5. Annual deaths will rise to 1.9 million by 2020
- 6. It is the leading cause of death in young people worldwide
- By 2015 it will be the leading health burden for children over five in developing countries
- 8. The cost to developing countries is USD 100 billion a year
- 9. Injuries place immense burdens on health systems
- 10. Road crashes are preventable.

7.5 The true cost of road crashes

Road accidents kill over 1 million people each year and cost up to 3% of global GDP. Understanding the real cost of a fatality or serious injury in a particular country would allow for more informed decision making and more efficient resource allocation in road safety measures.

This research paper provides a practical, useable answer for any country seeking to save the most lives for the available budget.

The authors discuss the background to the valuation of safety benefits, including consideration of levels of income. They briefly review the main methodologies in use for the valuation of the prevention of fatalities (human capital or gross output method and willingness-to-pay method), and propose a more practical, less costly 'rule of thumb approach' that draws on existing data from a range of countries.

The paper's final section discusses a methodology for the valuation of serious injuries, and concludes by setting out recommended values of prevention for both fatalities and serious injuries as percentages of GDP per capita.

Issuing body: United Nations

Type: Brochure Status: Final

Title: Ensuring the decade *is* action: UN

decade of action for road safety

2011–2020 File type: PDF File size: 626 KB

Year of publication: Unknown

Number of pages: 9

To read the full document: Please type RST004 into the search box on the search page of the CD attached to this book.

Issuing body: International Road

Assessment Programme

Type: Paper Status: Final

Title: The true cost of road crashes. Valuing

life and the cost of a serious injury

File type: PDF File size: 2.08 MB

Year of publication: Unknown

Number of pages: 12

To read the full document: Please type RST005 into the search box on the search page of the CD attached to this book.

7.6 Building a public transport system in Kampala

This consultation paper discusses issues facing the Ugandan government in its move to establish a public transport system in the capital city, Kampala.

There is currently no public transport in the city. A 2012 attempt to establish a private bus service quickly failed and the only non private transport in Kampala are taxis and boda-bodas — motorcycles operating as informal taxis. The main method of travel is by walking; 48% of journeys in the city are made this way.

The government plans to introduce a bus rapid transit network in the city and both preliminary and full feasibility studies have been conducted. A legislative base is needed for tendering the bus franchise and the process of creating a Metropolitan Transport Authority to deal with public transport has begun.

The paper discusses how policy in this area is poor and covers the many aspects that will need to be focused on to remedy this.



Issuing body: Ministry of Works and Transport, Republic of Uganda **Type:** Consultation paper

Status: Draft

Title: Development of a public transport

policy for Kampala File type: Word document File size: 882 KB Year of publication: 2013 Number of pages: 45

To read the full document: Please type RST006 into the search box on the search page of the CD attached to this book,

7.7 Non-motorised transport policy

Most locomotion in Uganda is in the form of walking or bicycling. Yet increasing motorisation and poorly-maintained infrastructure have made non-motorised transport (NMT) unsafe and NMT is rarely considered when roads are improved.

The main objectives of this policy are to:

- Increase recognition of walking and cycling in transport planning and provision
- Provide safe infrastructure for pedestrians and cyclists
- Mainstream resources for walking and cycling in the financial planning of agencies
- Develop and adopt universal design standards to facilitate access for elderly and disabled people
- Improve regulation and enforcement in order to enhance safety.

The document begins with an analysis of the current situation. This is followed by a consideration of the various types of NMT used in Uganda and the related infrastructure along with analyses of institutional and administrative issues and a list of relevant policy statements. The final section contains imminent policy targets.

Issuing body: Ministry of Works and Transport, Republic of Uganda

Type: Policy document

Status: Final

Title: Non motorised transport policy

File type: Word document File size: 1,996 KB Year of publication: 2013 Number of pages: 47

To read the full document: Please type RST007 into the search box on the search page of the CD attached to this book.

7.8 Design guidelines for nonmotorised transport in Africa

These guidelines, developed by the UN Environment Programme as part of its 'Share the Road' initiative, aim to help policy makers and local authorities in planning and designing non-motorised transport (NMT) facilities. In developing countries most people are NMT users, and are disadvantaged on road systems designed for motor vehicles. Investing in road infrastructure for walking and cycling can reduce air pollution and greenhouse gas emissions, protect vulnerable road users, and increase affordable access to vital services and employment.

The introductory chapter explains the motivations, policies and objectives of promoting walking and cycling and is followed by sections on pedestrian facilities, cycling infrastructure and modifications to road space. There is an overview of the interface between NMT and other transport modes and the final chapter suggests further steps to promote, implement and advocate for NMT, offering recommendations from case studies in Africa. A variety of case studies and key messages are presented.

7.9 Rural transport services in Sub-Saharan Africa Transport Policy member countries

This paper proposes an affordable assessment methodology to rapidly and efficiently assess the provision of rural transport services in Sub-Saharan Africa Transport Policy member countries. In these countries there is often little known about the quantity and quality of the provision of rural transport services, other than that they are inadequate. While there are known methodologies for assessing urban transport services, no such methodology existed for rural transport services, particularly not for medium to long distances (5-200 km). Passenger and goods transport needs improving to stimulate rural economies and reduce poverty.

The methodology described (costing an estimated USD 40,000 per country) is based on a hub-and-spoke model and is carried out in a representative rural region of a particular country. This paper contains practical advice relating to local observations, interview techniques, survey opportunities and traffic counts. Illustrative data forms and checklists of possible topics are provided, for modification according to local needs.

Issuing body: Ministry of Works and Transport, Republic of Uganda

Type: Guidelines Status: Final

Title: Share the road: design guidelines for non motorised transport in Africa

File type: PDF
File size: 13.5 MB

Year of publication: 2013 **Number of pages:** 62

To read the full document: Please type RST008 into the search box on the search page of the CD attached to this book.

Issuing body: Sub-Saharan Africa Transport

Policy

Type: Working paper Status: Working Paper

Title: A methodology for rapid assessment

of rural transport services

File type: PDF File size: 1.69 MB

Year of publication: 2007 Number of pages: 92

To read the full document: Please type RST009 into the search box on the search page of the CD attached to this book.

7.10 Motorcycles in Uganda

This report contains an analysis of the operation of motorcycle taxis in urban centres in Uganda. It focuses on issues affecting supply and demand, service characteristics, options for managing growth, road safety and environmental impact.

Motorcycle imports are increasing rapidly. This is a consequence of supply and demand factors, such as the promotion of motorcycle taxis by the government and poor public transport services. The widespread use of motorcycle taxis in Uganda has both positive and negative outcomes. For instance, it has helped to fill the public transport gap and has created employment, but at the cost of increased urban traffic congestion and road safety challenges.

The report ends with recommendations regarding infrastructure, regulations, road safety, the environment, financing and national cross-cutting policies on gender and HIV/Aids prevention. While some of these are specific to motorcycles and their users, others address the wider road and transport services context.

Issuing body: Sub-Saharan African

Transport Policy
Type: Report
Status: Final Draft

Title: Consultancy services for investigating the impact of motorcycles in Africa: case study of a few selected cities. Uganda case

study

File type: PDF File size: 917 KB Year of publication: 2008 Number of pages: 58

To read the full document: Please type RST010 into the search box on the search page of the CD attached to this book.



8 Poverty alleviation, civil society and gender

Decisions on where a road should be constructed, what standard is acceptable and how the road is to be maintained are often made at central and local government level. For the most part, members of communities. women in particular, are not consulted. The result is a lack of local ownership with roads being seen as "their road' (government) rather than "our road" (community). Involving communities in the planning, design, construction and maintenance of roads can lead to a sense of ownership with communities taking on greater responsibility for the long-term well-being of the road, either in financial contribution or in kind.

This section contains details of how civil society views the road sector in Uganda. It also includes details on the country's commitments to gender equality and sustainability development goals for the transport sector. In addition, the section includes reports prepared by the Danish International Development Agency covering gender mainstreaming, HIV policy, health and safety guidelines, and a review of its socio-economic development sub-component.

8.1 Civil society's view of the road sector

This civil society statement was presented by the Uganda Road Sector Support Initiative to the 8th Joint Transport Sector Review. It outlines civil society's view (largely favourable) of the sector and of the Government of Uganda and its development partners over recent years. It recognises the great improvement in the state of the national roads.

Three key projects of paramount importance are eagerly awaited – the Kampala express, the new Jinja bridge, and the second phase of the Kampala northern bypass.

The key issues affecting road development and maintenance in Uganda are identified as:

- Delays in awarding contracts, and commencing and executing works
- Defective drainage systems
- Large variations in contract amounts
- Work starting without a supervising consultant
- Road failures before completion of work
- Safety of road users and workers neglected
- Contract duration increased excessively
- Unprotected road edges
- Slow progress because of frequent breakdowns.

Issuing body: Uganda Road Sector Support

Initiative

Type: Conference paper

Status: Final

Title: Statement by civil society, presented at the 8th Joint Transport Sector Review

2012 File type: PDF File size: 305 KB

Year of publication: 2012 Number of pages: 7

To read the full document: Please type PCG001 into the search box on the search page of the CD attached to this book.

8.2 Transport sector's sustainable development goals

Transport services are essential for economic and social development, but to ensure sustainability they must be improved. This policy brief identifies key sustainable development goals (SDGs) in the transport sector that can be achieved using existing cost-effective policies and technologies:

- Urban transport: An SDG should be to double the number of people with access to affordable, quality mass transit
- Rural transport: An SDG should be to reduce by 90% the number of people without access to all-weather roads has been proposed as a target
- Air quality: The transport sector can lead by implementing an SDG to bring the air quality within World Health Organization guidelines
- Road safety: An SDG of halving road fatalities worldwide is achievable
- Energy and climate: The SDGs should include doubling the efficiency of the global vehicle fleet.

The brief also includes a two-page reasoned commentary proposing changes to the final text.

8.3 Uganda's gender equality policy commitments

From both economic efficiency and gender equity standpoints it is vital to address women's needs together with those of men in Uganda's road infrastructure and transport services. This document contains a review of how Uganda's gender equality commitments are being implemented in the sector. It highlights several issues, including:

- Weak coordination between the Ministry of Gender, Labour and Social Development and the Ministry of Works and Transport, which is reflected in road policy
- Ugandan women's and men's mobility patterns and access needs tend to be different
- More women than men report concerns about their personal safety when using roads and public transport
- Cultural stereotypes limit women's potential to benefit from the road sector through employment
- The Ministry of Works and Transport's gender policy and guidelines have not been fully disseminated, with the result that investments in the road sector may not be benefiting women as much as they benefit men.

Issuing body: United Nations

Type: Policy brief Status: Draft

Title: TST issue brief: sustainable transport

File type: Word document File size: 1.93 MB Year of publication: 2013 Number of pages: 10

To read the full document: Please type PCG002 into the search box on the search page of the CD attached to this book.

Issuing body: World Bank

Type: Report Status: Final

Title: Support to the implementation of the Government of Uganda's gender equality policy commitments in the road sub sector

File type: Word document File size: 1.92 MB Year of publication: 2013 Number of pages: 87

To read the full document: Please type PCG003 into the search box on the search page of the CD attached to this book.

8.4 Markets for the rural poor

This chapter gives an overview of the many physical, structural, informational and organisational constraints that prevent poor rural people in developing countries from accessing markets. The part entitled 'The high physical cost of accessing markets' (pp. 163–167) provides a useful introduction to the role of roads and transport in reducing rural poverty.

In Africa in particular, poor access to roads and transport blights rural economies. These problems are especially acute in areas specialising in the production of roots and tubers, such as cassava. Such produce has high weight/value ratios and tends to be more perishable than grains.

The physical costs of market access can be reduced by road construction, road maintenance and improved transport. New roads encourage diversification in village economies by opening up the market for labour, artisanal products and agricultural produce.



Issuing body: The International Fund for Agricultural Development

Type: Report chapter

Status: Final

Title: Markets and the rural poor (Chapter 5. Rural poverty report, 2001: the

challenge of ending rural poverty)

File type: PDF File size: 253 KB

Year of publication: 2001 Number of pages: 30

To read the full document: Please type PCG004 into the search box on the search page of the CD attached to this book.

8.5 Gender mainstreaming in the road sector in Uganda

This short paper describes Danish International Development Agency's (Danida's) gender mainstreaming work in the Ugandan roads sector 1998–2008. The paper explains Danida's approach, objectives and work:

- To integrate gender into sector policies, strategies, plans, programmes and projects
- To enable girls and women as well as boys and men to express their views and participate in decision making in the sector.

The specific challenges Danida addressed in gender mainstreaming were:

- The view of the roads sector as a male domain
- Lack of measures to ensure compliance with gender equality
- Failure to clearly report and communicate results.

The paper describes how Danida addressed the challenges, the indicators for measuring to what extent these efforts were successful and the results achieved. It concludes by presenting a set of lessons learned.

Issuing body: Danish International

Development Agency

Type: Paper presented to the Embassy gender review workshop, January 2008

Status: Final

Title: Gender mainstreaming in the road

sector in Uganda

File type: Word document File size: 57.5 KB Year of publication: 2008

Number of pages: 2

To read the full document: Please type PCG005 into the search box on the search page of the CD attached to this book.

8.6 HIV/AIDS policy statement, Uganda

The Uganda Ministry of Works, Housing and Communications' policy statement on HIV/AIDS is a framework for mainstreaming prevention in the roads sector. The statement builds on existing HIV/AIDS policies and national development frameworks.

The objectives of the policy are to exploit the potential of road infrastructure and transport services related to roads:

- To reduce the vulnerability and risk of HIV/AIDS transmission in the roads sector
- To mitigate the effects of HIV/AIDS in the roads sector
- To improve the sector's capacity to respond to the HIV/AIDS pandemic.

The policy provides guidance for programming, designing, appraising, implementing, and monitoring and evaluating interventions. It is important for the effective mainstreaming of HIV/AIDS interventions in the roads sector and shows how the Ministry of Works, Housing and Communications supports and contributes to the national HIV/AIDS multi-sector response.

8.7 Occupational health and safety guidelines, Uganda

The Uganda Ministry of Works, Housing and Communications' guidelines for occupational health and safety (OHS) were developed to help translate OHS policy into action in the roads sector institutions, policies, plans, programmes and budgets. The document incorporates district guidelines.

The objective of the guidelines is to strengthen capacity to mainstream OHS in the roads sector. Mainstreaming OHS will reduce work-related hazards, injuries and illnesses and improve the well-being of workers and the quality of their work environment. The process of developing the guidelines involved consultations with roads sector stakeholders at both the national and local government levels. The guidelines draw on good practices for mainstreaming OHS in other sectors, programmes and projects in Uganda and elsewhere.

The guidelines provide clear step-by-step tools and methods to address OHS in planning, implementing, monitoring and evaluating activities in the roads sector. Included in the guidelines is a checklist that can be used for monitoring compliance.

Issuing body: Ministry of Works, Housing and Communications, Republic of Uganda

Type: Policy statement Status: Unknown

Title: [Roads sub-sector HIV/AIDS policy

statementl

File type: Word document File size: 162 KB Year of publication: 2003 Number of pages: 42

To read the full document: Please type PCG006 into the search box on the search page of the CD attached to this book.

Issuing body: Ministry of Works, Housing and Communications, Republic of Uganda

Type: Guidelines Status: Unknown

Title: [Occupational health and safety

guidelinesl

File type: Word document File size: 5.13 MB Year of publication: Unknown

Number of pages: 41

To read the full document: Please type PCG007 into the search box on the search page of the CD attached to this book.

8.8 Rehabilitation of the Mubende-Kyenjojo trunk road

This report documents the achievements and sustainability of a Danish International Development Agency project to rehabilitate 284 km of the Kampala-Fort Portal trunk road. The project was designed to generate income opportunities for the poor, women and other vulnerable groups based on improvements to the highway. This novel approach aligned with Uganda's Poverty Eradication Action Plan and national development policies.

Lessons learned from the project were:

- Involvement of stakeholders is beneficial, but takes time and good communication
- Lack of holistic planning leads to fragmented action
- Local implementing organisations require significant support
- The diversity, the magnitude of the tasks involved and the competencies required for socio-economic development were substantially underestimated.

Project achievements included the employment of over 300 people, thus reducing poverty. Local contracting capacity was strengthened and gender awareness increased. The report concludes that the main focus of technical assistance should be on building local capacity to plan, implement and monitor projects.

Issuing body: Danish International

Development Agency **Type:** Completion report

Status: Final

Title: Socio-economic development subcomponent Mubende-Kyenjojo road

File type: Word document File size: 655 KB Year of publication: 2002 Number of pages: 73

To read the full document: Please type PCG008 into the search box on the search page of the CD attached to this book.



9 CrossRoads reports

CrossRoads is a four year programme funded by the UK Department for International Development and the European Union to improve the quality of the road network in Uganda. Its purpose is to improve the efficiency of government expenditure on roads towards two key outputs: public institutions better able to manage the road network, and increased capability and competition in the roads sector.

The overarching approach applied in CrossRoads is market systems development. This approach supports key stakeholders in the roads sector in tackling blockages and opportunities. It also creates a more competitive domestic road construction and maintenance industry by supporting institutions with a proven track record in delivering finance, equipment and technical and business management skills to contractors.

This section includes an inception report prepared by the CrossRoads Secretariat that provides an overview of the approach and work schedule of the CrossRoads programme, together with appendices of individual reports that formed the basis for the development of programme. It also includes the results of an annual road user satisfaction survey; a short report on the progress made in improving Uganda's road sector; key findings of a study of institutional constraints in the Ugandan road sector; and a report on the Road Industry Council's advocacy

9.1 Ugandan road user satisfaction

An annual road user satisfaction survey is to be carried out as part of CrossRoads programme in Uganda. This report by the market research agency Limelight, covers the first year's baseline survey, which was conducted in 2012. It explains the methodology and presents the findings of the survey.

A total of 2,857 respondents were interviewed, comprising at least 400 road users from each of six user groups, such as truck drivers or cyclists, drawn from six regions of Uganda. Among other things, interviewees were asked about their levels of satisfaction, reasons for dissatisfaction, priorities for improving roads and willingness to pay road tolls.

Overall, Uganda's road users are 'dissatisfied' with the state of the roads; truck drivers and motor cyclists are the two most dissatisfied road user groups. The most commonly-mentioned reasons for dissatisfaction included narrow roads, potholes and poorly-maintained roads.

Issuing body: CrossRoads

Type: Report Status: Final

Title: 2012 road user satisfaction survey

File type: PDF File size: 1.67 MB Year of publication: 2012 Number of pages: 43

To read the full document: Please type XRR001 into the search box on the search page of the CD attached to this book.

9.2 Improving Uganda's road sector

This short, accessible report outlines the work of the CrossRoads programme in Uganda during its first two years. CrossRoads seeks to create a sustainable road market that will encourage public and private sector actors to develop a more efficient and competitive road industry over the long term. The programme addresses a wide range of interconnected issues by working in five strategic areas. These are developing a better understanding of Uganda's existing road sector resources, understanding road users' views, improving financing in the sector, developing innovation and building business management, finance and vocational skills.

CrossRoads' measurable impacts include a new facility to train equipment operators, the funding of innovative proposals from Ugandan companies through the CrossRoads Challenge Fund, and the use by contractors of the Construction Guarantee Fund to bid on contracts worth UGX 60 billion (approximately USD 25 million).



Issuing body: CrossRoads

Type: Report Status: Final

Title: Two years of progress towards improving Uganda's road sector

File type: PDF File size: 1.95 MB Year of publication: 2013 Number of pages: 13

To read the full document: Please type XRR002 into the search box on the search page of the CD attached to this book.

9.3 CrossRoads inception report

This report was prepared on completion of the inception phase of the CrossRoads programme. It provides an overview of the approach to and work programme for delivery of the CrossRoads programme.

The report includes:

- An update on the Secretariat's mobilisation status
- An overview of the approach to be followed to achieve the programme's objectives, using a market systems development approach
- An updated programme logframe based on the CrossRoads' Secretariat's findings during the inception phase
- Annexed reports from specialists engaged during the inception period.
- A preliminary review of the Public Procurement and Disposal Authority's standard procurement and disposal documents used by the Uganda National Roads Authority
- The terms of reference for the consultancy services for independent parallel evaluation of bids and review of the Uganda National Roads Authority's procurement procedures
- A training report
- An outline work plan for the implementation stage of the programme together with estimates of the costs related to the possible interventions.

Issuing body: CrossRoads

Type: Report

Title: Inception report – Volume 1

File type: Word document File size: 1.49 MB Year of publication: 2011 Number of pages: 69

To read the full document: Please type XRR003 into the search box on the search page of the CD attached to this book.

9.4 Sustainable spending on roads in Uganda

This document is Volume 2 of an inception report for a project to create opportunities for sustainable spending on roads in Uganda. Volume 2 contains the detailed reports of consultants as follows:

- Appendix B. Communications and visibility strategy report
- Appendix C. Finance report
- Appendix D. Microfinance report
- Appendix E. Road price index report
- Appendix F. Plant and equipment report
- Appendix G. Preliminary review of Public Procurement and Disposal of Public Assets Authority standard documents
- Appendix H. Terms of reference for consultancy services for independent parallel evaluation of bids and review of Uganda National Roads Authority's procurement procedures
- Appendix I. Training report.



Issuing body: CrossRoads

Type: Inception report appendices

Status: Final

Title: Inception report - Volume 2

File type: PDF File size: 3.21 MB Year of publication: 2011 Number of pages: 241

To read the full document: Please type XRR004 into the search box on the search page of the CD attached to this book.

9.5 Institutional constraints in the Ugandan roads sector

This document presents the findings of a study of the institutional constraints in the Ugandan roads sector and recommendations for ways forward. The report:

- Identifies the causes and effects of key constraints to better performance and indicates the institutional changes necessary to address the constraints
- Maps stakeholders, analyses their interests and identifies sources of support or opposition to institutional change
- Identifies institutional changes that may be possible in the short term
- Recommends an influencing and advocacy strategy to sustain the CrossRoads programme's technical interventions and to improve performance in the sector.

The report provides detailed guidance and a timetable for immediate steps that can be taken to implement the proposed influencing and advocacy strategy:

- Improving information, raising awareness and engaging decision makers
- Disseminating information and evidence to build strong coalitions and broaden stakeholder engagement.

Issuing body: CrossRoads

Type: Report Status: Final

Title: Sector analysis, institutional change

and advocacy

File type: Word document File size: 243 KB Year of publication: 2013

Number of pages: 51

To read the full document: Please type XRR005 into the search box on the search page of the CD attached to this book.

9.6 Institutional constraints: key findings

This document presents the key findings of the report 'Sector analysis, institutional change and advocacy'. The study focused on institutional constraints that are:

- Important to the CrossRoads programme's stakeholders
- Can be addressed by expertise in the Roads Industry Council (RIC)
- Complement existing or planned CrossRoads' initiatives
- Are not addressed by other stakeholders
- Have the potential to achieve progress within the resources and lifespan of the CrossRoads project.

The study concluded that advocacy to influence policy makers and address institutional barriers is the way forward, through:

- Building the profile of the RIC
- A programme of advocacy activities sponsored by the RIC
- Synchronising CrossRoads and RIC advocacy work
- Engaging a wider stakeholder constituency
- Developing a strategy for the RIC to sustain advocacy in the longer term.

9.7 Roads Industry Council advocacy and influencing workshop

This is a report of a Roads Industry Council (RIC) workshop which took place in August 2013. The main goal of the workshop was to develop an RIC influencing and advocacy programme for the following year, using the institutional change and advocacy study (April 2013) as a starting point. The workshop participants decided to focus on supporting the sustainability of RIC achievements and on addressing significant institutional constraints to road sector reform. This entails using an evidence-based approach and building the organisation's profile as a 'think tank' for the roads sector. Workshop participants chose 10 intervention areas for the influencing and advocacy programme. The report contains:

- The workshop programme and materials
- A summary of conclusions and decisions
- A proposed programme for advocacy and influencing activities
- Proposed detailed action plans for each of the intervention areas selected
- A summary of responsibilities and a list of actions to be taken.

Issuing body: CrossRoads **Type:** Abridged report

Status: Final

Title: Sector analysis, institutional change

and advocacy

File type: Word document File size: 82.1 KB Year of publication: 2013 Number of pages: 4

To read the full document: Please type XRR006 into the search box on the search page of the CD attached to this book.

Issuing body: Roads Industry Council

Type: Report Status: Final

Title: Report of RIC advocacy and

influencing workshop

File type: PDF File size: 4.17 MB

Year of publication: 2013 Number of pages: 59

To read the full document: Please type XRR007 into the search box on the search page of the CD attached to this book.

10 Useful websites

http://afcap.org

The African Community Access Programme undertakes research and provides advice to help deliver safe and sustainable access to rural communities.

www.afdb.org

The African Development Bank Group is a regional multilateral development finance institution established to contribute to the economic development and social progress of African countries that are the institution's Regional Member Countries.

www.cmi.no

The Chr. Michelsen Institute is an independent development research institute that communicates research-based knowledge on poverty, human rights, conflict and sustainable social development.

www.cpcs.ca

Canadian Pacific Consulting Services provides infrastructure development advisory services to public and private sector clients, developing strategies for sustainable infrastructure service delivery and economic growth.

www.constructiontransparency.org

The Construction Sector Transparency Initiative is a multi-stakeholder initiative designed to promote transparency and accountability in publicly financed construction, working with government agencies to gather, verify and disclose information into the public realm.

http://um.dk

Danida is responsible for the planning, implementation and quality assurance of Denmark's development cooperation, which is an area of activity under the Ministry of Foreign Affairs of Denmark

www.dfid.gov.uk

The Department for International Development is a UK government department set up to promote sustainable development and eliminate world poverty.

www.eac.int

The East African Community is the regional intergovernmental organisation of the Republics of Burundi, Kenya, Rwanda, the United Republic of Tanzania, and the Republic of Uganda, with the vision of a prosperous, competitive, secure, stable and politically united East Africa.

www.ebrd.com

The European Bank for Reconstruction and Development is a bank that invests in projects that foster transition to open market economies, investing in change in more than 30 countries across Europe, central Asia and the southern and eastern Mediterranean.

www.eprc.or.ug

The Economic Policy Research Centre is Uganda's leading think-tank in economics and development policy oriented research and policy analysis.

www.gtkp.com

Global Transport Knowledge is a comprehensive resource centre that features the latest information on road infrastructure and transport, including case studies, research papers, publications, reports and presentations.

www.ifad.org

The International Fund for Agricultural Development is a specialised agency of the United Nations, for improving rural food security and nutrition, and enabling rural women and men to overcome poverty.

www.ilo.org

The International Labour Organization is a specialised agency of the United Nations, devoted to promoting social justice and internationally recognised human and labour rights, and pursuing its founding mission that labour peace is essential to prosperity.



www.irap.net

The International Road Assessment
Programme is a registered charity dedicated
to preventing road deaths, by providing
tools and training to help automobile
associations, governments, funding
agencies, research institutes and other nongovernment organisations in more than 70
countries.

www.ittransport.co.uk

IT Transport Ltd specialises in the development of transport and other infrastructure with the aim of poverty alleviation, providing consultancy services to a wide range of clients in the UK and overseas.

www.marinelogistics.co.uk

Marine Logistics Ltd specialises in procurement for the marine industry.

http://mwe.go.ug

The Ministry of Water and Environment, Republic of Uganda is responsible for setting national policies and standards, managing and regulating water resources, and determining priorities for water development and management in Uganda.

www.works.go.ug

The Ministry of Works and Transport, Republic of Uganda, plans, develops and maintains the transport infrastructure and transport services by road, rail, water, and air in Uganda, and promotes standards in the construction industry.

www.nathaninc.com

Nathan Associates Inc consults on a wide range of sectors - from primary products to services and from manufacturing to transportation and communications.

www.odi.org.uk

The Overseas Development Institute is the UK's leading independent think-tank on international development and humanitarian issues, working with partners in the public and private sectors to conduct applied research, practical policy advice, and policy-focused dissemination and debate.

www.piarc.org/en/publications/

The World Road Association-PIARC Virtual Library brings together technical reports, dictionaries/lexicons and articles published in the magazine Routes/Roads, from the road administrations of 120 governments and other members from over 140 countries.

www.sei-international.org

The Stockholm Environment Institute is an independent international research institute engaged in environmental and developmental issues at local, national, regional and global policy levels.

www.shipperscouncilea.org

The Shippers Council of Eastern Africa is a business membership organisation that represents the interests of importers and exporters in Kenya and the Eastern Africa Region, providing a platform to concerns and demands to service providers and government regulatory institutions.

www.ssatp.org

The Sub-Saharan Africa Transport Policy Program is an international partnership that comprises 38 African countries, Regional Economic Communities, continental institutions, UN Agencies, public and private sector organisations, and international development agencies and organisations to assist African countries in strengthening their policies and strategies to promote sustainable transport for economic growth and ending poverty.

www.trl.co.uk

The UK's Transport Research Laboratory is an international research centre providing research, consultancy and product testing covering all aspects of transport.

www.ttcanc.org

The Northern Corridor Transit Transport Coordination Authority contributes to the sustainable social and economic development of the Northern Corridor, a corridor linking the land-locked countries of Uganda, Rwanda and Burundi with Kenya's maritime port of Mombasa, through an integrated transport system that promotes national, regional and international trade.

https://unp.un.org

The United Nations Publications website brings together over 5,300 titles produced by the Organisation and its key agencies, offering online access to its complete catalogue in a range of formats.

www.ugandaroadsector.org

The Uganda Road Sector Support Initiative is a not-for-profit non-governmental organisation established to facilitate coherent and timely development and planning of road transport and urban development in Uganda, with particular emphasis on roads, municipal planning and sustainable transport management.

www.unra.go.ug

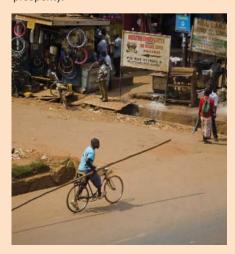
The Uganda National Roads Authority was established to develop and maintain the national roads network, advise Government on general roads policy and contribute to addressing of transport concerns of Uganda.

www.usitc.gov

The United States International Trade Commission is an independent, quasi-judicial federal agency with broad investigative responsibilities on matters of trade, including the effects of dumped and subsidised imports on domestic industries and global safeguard investigations.

http://elibrary.worldbank.org

The World Bank eLibrary offers full-text access to the complete backlist of all books, working papers, and journal articles published by the World Bank since the 1990s, in support of its mission to end extreme poverty and promote shared prosperity.



Abbreviations

AFCAP: Africa Community Access Programme

CDC: Central development corridor

CoST: Construction Sector Transparency Initiative CPCS: Canadian Pacific Consulting Services

CrossRoads: Creating Opportunities for Sustainable Spending on Roads

Danida: Danish International Development Agency

DCP: Dynamic cone penetrometer

DFID: The Department for International Development (UK)

EAC: East African Community

EIA: Environmental impact assessment

GDP: Gross domestic product

GIT: Geographical information technologies

IBRD: International Bank for Reconstruction and Development

IDA: International Development Association

LCS: Low-cost seal

MoWT: Ministry of Works and Transport

NMT: Non-motorised transport

OHS: Occupational health and safety PPP: Public-private partnerships

RAI: Rural access index
RIC: Roads Industry Council

RIM: Road infrastructure maintenance

SADC: Southern African Development Community

SDG: Sustainable development goal TST: Technical Support Team

UNRA: Uganda National Roads Authority

URF: Uganda Road Fund



Acknowledgements

The Roads Industry Council (RIC) would like to acknowledge all the government officials, and RIC and CrossRoads staff and consultants, who produced the various documents and resources described in this handbook. In particular, the RIC would like to acknowledge Danida for support given for Section 5.

To obtain any subsequent document updates to those presented in this Resource Centre, please contact the document issuing body listed in the relevant section summary.

About the Roads Industry Council

The RIC comprises capable and committed individuals from the Ugandan public and private sectors, plus representatives of from the World Bank, EU and DFID. It provides a platform for public—private dialogue and review, and approves interventions proposed by the Secretariat. The RIC informs the Secretariat and development partners of new opportunities and emerging challenges, and contributes towards setting the strategic direction of the Programme.

In addition, the RIC provides strategic oversight for the CrossRoads programme. This is a four-year programme funded by the DFID and the EU to improve the quality of the road network in Uganda and improve the efficiency of Government of Uganda's expenditure on roads.

You can find out more about the RIC and the work it does on the CrossRoads website: http://ric-uganda.com.



Using the Resource Centre CD

Why do we provide a CD?

The CD attached to the back cover of this book contains a full copy of the 2014 RIC Resource Centre. This means that if you are interested in any of the documents talked about in this handbook, you can get instant access to them without needing to use the internet or contact RIC. This will be especially useful for anyone in areas where internet speeds are slow.

Opening the CD

To open the Resource Centre, simply put the CD in your computer. In many cases it will either play automatically or an 'Autoplay dialogue box' will open. Just choose the 'open folder' option and then choose the icon that says 'Start_Resource_Centre'.

Searching the CD

We've designed the CD to be very easy to use and search in a variety of different ways. The basic points to be aware of are the 'Resource Centre sections tab'and the 'Search box'

The Resource Centre sections tab

The 'Resource Centre sections' tab at the top of the homepage opens a drop down menu. You can use this menu to quickly browse to the subject area that interests you, and then read a list of all the summaries/documents that fall within that subject area.

The search box

The search box on the homepage (which also appears on every other page) allows you to search for documents in lots of different ways.

Using document codes: You can type in the unique document code given at the bottom of each summary, and the search engine will provide you with a link to the summary and the full document it refers to.

Simple word search: You can also search for specific words or acronyms. So searching for 'EAC' will call up all documents containing 'EAC'.

Match all search words: For more precision, you can also tick the 'all search words' button under the search box on the homepage. Choosing this option and searching for 'Northern Corridor' will only return documents containing both words.

Excluding words: You can also exclude words by using a hyphen (without a gap) before any word in the search box. So a search for 'EAC –audit' would return only documents that contain the word "EAC" and do not contain the word 'trade'.

Wildcards, using the *: You can use an asterisk (*) to stand in for letters in a word when you want to search for variations of that word. So a search for financ* would return only documents containing words like finance, financing, financial, etc.

Wildcards, using the ?: The question mark allows you to search a document and replaces any given character. So, for example, if you wanted to search for an acronym and you weren't sure of one of the letters you could search for CO?T. This will bring up any documents containing words such as COST, coat and colt.

The Resource Centre online

As an alternative to the CD, you can also access the 2014 RIC Resource Centre online, at http://ric-uganda.com





Contact us

To find out more about the RIC and what it does, please contact our Chairman:

Dr Francis Baziraake

Chairman - Roads Industry Council Email: fbaziraake@ric-uganda.com