



**THE REPUBLIC OF UGANDA**

# **Semi-Annual Budget Monitoring Report**

**Financial Year 2014/15**

**Roads Sub-Sector**

April 2015

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## ABBREVIATIONS AND ACRONYMS

|        |   |
|--------|---|
| AfDB   | African Development Bank                                    |
| CAIP   | Community Agricultural Infrastructure Improvement Programme |
| CH     | Chainage  |
| DBST   | Double Bituminous Surface Treatment                         |
| DLP    | Defects Liability Period                                    |
| DUCAR  | District, Urban and Community Access Roads                  |
| FY     | Financial Year  |
| GKMA   | Greater Kampala Metropolitan Area                           |
| GoU    | Government of Uganda  |
| IDA    | International Development Association                       |
| IFMS   | Integrated Financial Management System                      |
| IPC    | Interim Payment Certificate                                 |
| IPF    | Indicative Planning Figure                                  |
| KCCA   | Kampala Capital City Authority                              |
| KDRP   | Karamoja Drought Response Programme                         |
| Km     | Kilometre   |
| LGMSDP | Local Government Managerial and Service Delivery Programme  |
| MFPEd  | Ministry of Finance, Planning and Economic Development      |
| MoLG   | Ministry of Local Government                                |
| MoWT   | Ministry of Works and Transport                             |
| NCR    | Northern Corridor Route                                     |
| NEMA   | National Environment Management Authority                   |
| OHS    | Occupational Health and Safety                              |
| OPM    | Office of the Prime Minister                                |
| PPDA   | Public Procurement and Disposal of Public Assets Authority  |
| PRDP   | Peace Recovery and Development Programme                    |
| RCC    | Reinforced Cement Concrete                                  |
| RTI    | Road Transport Infrastructure                               |
| STDs   | Sexually Transmitted Diseases                               |
| TSDP   | Transport Sector Development Project                        |
| Ug shs | Uganda Shillings  |
| UNRA   | Uganda National Roads Authority                             |
| URF    | Uganda Road Fund  |
| US\$   | United States Dollars                                       |
| USD    | United States Dollars                                       |
| VAT    | Value Added Tax   |

## FOREWORD

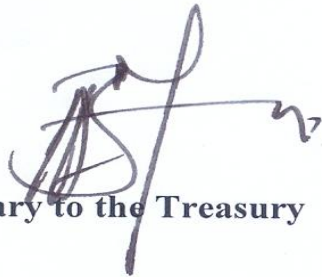
The government has increasingly channeled resources into implementation of public programmes aimed at enhanced service delivery. Effective implementation of these programmes is critical and this calls for monitoring and evaluation.

The Budget Monitoring and Accountability Unit in the Ministry of Finance, Planning and Economic Development makes semi-annual performance assessments on the progress of implementation for selected programmes. This report reviews the half year performance in the priority areas of: Agriculture, Education, Energy, Health, ICT, Industrialization, Public Sector Management, Roads, and Water and Environment for FY 2014/15.

The findings therein should inform implementation decisions in the last half of the year. I urge all institutions to follow up on the related implementation issues that have been identified. The implementation challenges and recommendations made will guide the relevant sectors to ensure enhanced effectiveness of programme implementation.

Patrick Ocailap

**Deputy Secretary to the Treasury**

A handwritten signature in dark ink, appearing to be 'PO', is written over the printed name and title of Patrick Ocailap.

## EXECUTIVE SUMMARY

### BACKGROUND

The overall report reviews selected key vote functions and programmes within the sectors, based on approved plans and significance of budget allocations to the votes. The focus is on nine sectors, including: agriculture, education, energy, health, industrialization, ICT, public sector management, roads; and water and environment. Attention is on large expenditure programmes with preference given to development expenditures, except in the cases of education, health, ICT, public sector management and roads where some recurrent costs are tracked.

Projects selected for monitoring were based on regional sampling, level of capital investment, planned quarterly output, and value of releases by the second quarter of FY 2014/15. The methodology adopted for monitoring included literature review of quarterly progress and performance reports; interviews with the respective responsible officers or representatives of programmes; and observations at site.

### FINDINGS

#### i) Roads Sub-sector

##### Introduction

The monitoring focused on: one project (Interconnectivity Project) and one program (Mechanical Engineering Services) under Vote 016 - MoWT, seven projects under the National Roads Construction Program (Vote 113 - UNRA) and 24 Designated Agencies under the Uganda Road Fund (Vote 118 - URF). The three Votes had a combined budget of Ug shs 2,279.378 billion (98.9% of the roads sub sector budget).

##### Physical performance

The overall physical performance of the three votes was estimated at 39% of the annual targets which is a very good performance. The performance was not excellent because the procurement for the road maintenance contracts and materials took place in the first quarter with implementation commencing in the second quarter. However, the multi-year works were not affected.

The performance of the MoWT was excellent with an average physical performance of 44% at half year. However, the road construction projects implemented by the MoWT have continued to be characterized by prolonged procurement processes. For example, the Interconnectivity Project achieved 46.5km (32.5%) out of the annual planned of 142.7km 31<sup>st</sup> December 2014. This was attributed to the late delivery of the armco culverts and gabion meshes for the drainage works by the MoWT to the contractors which affected the physical progress.

The physical performance of Vote 113- UNRA was excellent at 53%. This was due to the 120.6km (48.2%) of unpaved national roads that were upgraded to bitumen standards out of the annual planned 250km; and 98.3km-equivalent (57.8%) that was rehabilitated out of the annual target of 170km. This excellent performance was as a result of the rate of implementation of ongoing projects that was higher than planned. As a result, the budget provisions are likely to be

inadequate and a supplementary may be required during Quarter Four to maintain the same level of performance.

The physical performance of the National Roads Maintenance program funded by URF but implemented by UNRA was very good as 38% of the annual planned activities were achieved by half year. The performance was not excellent due to: the late release of force account funds to the stations where part of the Q1 funds were received in November 2014 and the Q2 funds in December 2014; and the procurement of most of the periodic and term maintenance contracts which took long to conclude. In January 2015, the new contracts for the stations monitored were either at evaluation or award stage.

Under Districts Roads Maintenance program, the average physical performance of the 18 districts monitored was good at 32% by 31<sup>st</sup> December 2014. Only one district (Mubende) attained a physical target of 50% by the end of Q2 FY 2014/15. Zombo district had the worst performance at 10% of the annual targets which was attributed to the delay in approval of payments by the Accounting Officer.

### **Sector Challenges**

- Prolonged procurement process affected the implementation of projects under MoWT. The progress of contracts under the Interconnectivity Project was affected by the late delivery of armco culverts and gabion meshes supplied by the MoWT.
- The budget of the Regional Mechanical Workshops under the MoWT has not been revised to cater for the increasing prices of service part and consumables; and the newly procured district and zonal road equipment under their docket.
- The current status of the Gulu and Mbarara Regional Mechanical Workshops is not to the required standard; they lack a well established workshop setting like it is in Bugembe.
- Slow progress on land acquisition for the right of way on the Entebbe Expressway and the Mpigi-Kanoni UNRA development projects has affected the works and will result in delayed completion.
- The National Roads Maintenance Program was affected by the late release of force account funds to the stations where part of the Q1 funds were received in November 2014 and the Q2 funds in December 2014; and the procurement of most of the periodic and term maintenance contracts which took long to conclude.
- The mode of release of funds for the DUCAR designated agencies under URF is done in four equal proportions of the annual budget which is not according to the work plans submitted. Activities like rehabilitation of roads require large amounts of money to commence. The agencies wait for at least two quarterly releases before works can be done. This was evident in the PRDP activities of Budaka, Gulu, Sironko and Soroti where 50% of the funds had been released by the end of December 2014 with no expenditure.
- The DUCAR agencies have not been well prepared to take on road maintenance activities on force account. Road works have been affected by the frequent breakdown of equipment accompanied with lack of a complete set of road maintenance equipment units. Districts with rocky and mountainous terrain like Ibanda, Moroto and Kabarole require specialized equipment (bulldozers and heavy graders) to carry out works on the roads.

- The reintroduction of VAT on new contracts in the roads sub sector is likely to limit the amount of annual outputs because some of the money which would have been used for works will be spent on VAT. The net effect is accumulation of debts with resultant accrued interest.

## **Recommendations**

- The prolonged procurement process at MoWT needs to be addressed by top management in order to curb the implementation delays in the project undertaken.
- The MoWT should set up fully equipped mechanical workshops at Gulu and Mbarara Mechanical Regional Workshops and also consider setting up more workshops in the country.
- The MoWT should revise the funding for the Regional Mechanical Workshops to cater for the maintenance of the increasing fleet of road maintenance/construction equipment under its docket.
- The UNRA should also devise a strategy that expedites the valuation, verification and payment process for land acquisition whereby land and properties therein to be acquired are captured and valued, and MoUs signed with the owners as the valuation process is completed. The contractors are then allowed to work in these affected areas as the compensation process is finalised.
- The shift from the six (6) months periodic maintenance contracts under the National Roads Maintenance Program to the three (3) year term maintenance contracts will curb the delays arising from prolonged procurement process.
- The URF should release the funds to the DUCAR designated agencies in accordance with the approved work plans submitted and not in equal quarterly disbursements.
- For the successful implementation of the force account policy in the Local Governments, the GoU should provide districts with a full set of road maintenance equipment (a heavy duty grader, vibrat roller (compactor), water bowser, an excavator, a wheel loader and tipper trucks).
- The roads sub sector agencies should provide for the FY 2014/15 VAT arrears in the FY2015/16 budget.



## CHAPTER 1: BACKGROUND

The mission of the Ministry of Finance, Planning and Economic Development (MFPED) is “*To formulate sound economic policies, maximize revenue mobilization, ensure efficient allocation and accountability for public resources so as to achieve the most rapid and sustainable economic growth and development*”. It is in this regard that the Ministry gradually enhanced resource mobilization efforts and stepped up funds disbursement to Ministries, Departments, Agencies and Local Governments in the past years to improve service delivery.

Although significant improvements have been registered in citizens’ access to basic services, their quantity and quality remains unsatisfactory, particularly in the sectors of health, education, water and sanitation, agriculture and roads. The services being delivered are not commensurate to the resources that have been disbursed, signifying accountability and transparency problems in the user entities.

Although there are several institutions in the accountability sector mandated to monitor and audit public resources, they have not provided comprehensive information for removing key implementation bottlenecks to enhance transparency and accountability and consequently improve service delivery. It is against this background that the Budget Monitoring and Accountability Unit (BMAU) was established in FY 2008/09 in the Ministry of Finance, Planning and Economic Development, under the Budget Directorate, to address this challenge.

The BMAU is charged with tracking implementation of selected government programmes or projects and observing how values of different financial and physical indicators change over time against stated goals and targets. This is achieved through regular field monitoring exercises to verify receipt and application of funds by the user entities. Where applicable, beneficiaries are sampled to establish their level of satisfaction with the service.

The BMAU prepares semi-annual and annual monitoring reports of selected government programmes and projects. The monitoring is confined to levels of inputs, outputs and intermediate outcomes in the following areas:

- Agriculture
- Infrastructure (Energy and Roads)
- Industrialization
- Information and Communication Technologies
- Social services (Education, Health, and Water and Environment)
- Microfinance; and
- Public Sector Management

## **CHAPTER 2:      METHODOLOGY**

### **2.1 Process**

This report is based on selected programmes from the sectors mentioned in chapter one apart from microfinance. The selection was based on a number of criteria;

- Programmes that submitted progress reports by the end of quarter two, FY 2014/15 were followed up for verification as they had specified output achievements.
- Priority expenditure areas in the budget strategy and ministerial policy statements for FY 2014/15 with focus being on large expenditure programmes.
- Regional representation to ensure that coverage of programmes is from varying parts of the country
- Programmes/projects with previously identified critical implementation problems.

### **2.2 Methodology**

The key variables monitored were targets of inputs and outputs; implementation processes and achievement of intermediate outcomes and beneficiary satisfaction where feasible.

#### **2.2.1 Data Collection**

Data was collected through a combination of approaches;

- Review of secondary data sources including: Ministerial Policy Statements for FY 2014/15; National and Sector Budget Framework Papers; Sector project documents and performance reports in the Output Budgeting Tool (OBT), MFPED Budget Documents, Budget Speech, District Performance Reports; Q1 and Q2 Sector Quarterly Progress Reports, Work plans, and Public Investment Plans.
- Review and analysis of data in the Integrated Financial Management System (IFMS) and legacy system; progress reports (Performance Form A and B) and bank statements from implementing agencies.
- Consultations and key informant interviews with project managers in implementing agencies both at the Central and Local Government level.
- Field visits to project areas involving observations and discussions with beneficiaries. Photography was a key data collection tool during the monitoring exercise. In some cases call-backs were done to triangulate information.

### **2.2.2 Sampling**

The projects/programmes monitored were purposively selected from information provided in the FY 2014/15 Ministerial Policy Statement and Quarterly Performance Reports for Q1 and Q2. Priority was given to outputs that were physically verifiable especially those categorized under GoU development expenditure.

Districts in different regions were selected so that as many regions of Uganda as possible are sampled throughout the year. Emphasis was also placed on programmes not monitored in previous quarters. For completed projects, monitoring focused on utilization, quality and beneficiary satisfaction.

### **2.2.3 Data Analysis**

This was mainly simple descriptive statistics of comparing set targets and observed levels of achievement. Physical performance of projects and outputs was assessed through comparing a range of indicators and linking the progress to reported expenditure. The actual physical achievement was determined basing on (weighted) number of activities accomplished for a given output.

## **2.3 Limitations of the report**

- Overstated absorption of some projects due to transfers to subventions being reflected as payments on the Integrated Financial Management System (IFMS).
- Assumption that warrants on IFMS are equal to the release. This also provides misleading information on financial performance.
- Difficulty in ascertaining financial performance of some donor projects due to unavailability of information from project managers. It was also equally difficult to ascertain financial performance of projects off the IFMS.
- Lack of clear indicators, in some programmes, hence difficulty in rating overall performance.
- Unavailability of some critical information. For example, a number of project recipients had limited information on scope of civil works, costs and contract period.
- Sampling of some projects/programmes was affected by misleading information from ministries. Some projects that were reported as implemented in FY 2014/15 had been done in FY 2013/14.

## **2.4 Assessment Criteria**

For purposes of this report, the guide below is used to assess and rate performance.

Physical and financial performance was rated in percentages according to achievement of the planned set targets and the overall utilization of funds for multi-year projects. Table 2.1 shows the assessment criteria for measuring the achieved targets and expenditures.

**Table 2.1: Assessment criteria for measuring achieved targets**

| <b><i>SCORE</i></b>         | <b><i>COMMENT</i></b>   |
|-----------------------------|---|
| <b><i>80% and above</i></b> | <i>Excellent (All set targets achieved and funds well utilized)</i>                       |
| <b><i>70% - 79%</i></b>     | <i>Very good (Most of the set targets achieved and funds absorption is 70% and above)</i> |
| <b><i>60% - 69%</i></b>     | <i>Good (Some core set targets achieved and funds absorbed to 60%)</i>                    |
| <b><i>50% - 59%</i></b>     | <i>Fair (Few targets achieved and funds absorption is average-50%)</i>                    |
| <b><i>Less than 50%</i></b> | <i>Below average (No targets achieved and funds absorption is less than 50%)</i>          |

*Source: BMAU*

## CHAPTER 12: ROADS

### 12.1 Introduction

“Roads” is one of the three sub-sectors<sup>1</sup> under the Ministry of Works and Transport (MoWT) whose mandate is to: (i) plan, develop, and maintain an economic, efficient, and effective transport infrastructure and transport services by road, rail, water and air; (ii) manage public works including government structures; and (iii) promote standards in the construction industry.

#### Mission

The sector mission is to promote adequate safe and well maintained works and transport infrastructure services for social economic development of Uganda<sup>2</sup>.

The key institutions in the roads sub-sector are: MoWT; Uganda National Roads Authority (UNRA); Uganda Road Fund (URF); Kampala Capital City Authority (KCCA), District Local Governments (DLGs), lower local governments (sub-counties) and urban councils. Other institutions outside the works and transport sector that have projects with roads sub-components include: the Office of the Prime Minister (OPM) and the Ministry of Local Government (MoLG).

The overall transport and works sector budget for the FY2014/15 reduced by 6.6% from Ug shs 2,466.82 billion in FY 2013/14 to Ug shs 2,305.30 billion.<sup>3</sup> This is to be utilised by four votes viz: Vote 016-Ministry of Works and Transport Ug shs 122.351 billion (5.3%), Vote 113-Uganda National Roads Authority (Ug shs 1,728.778 - 5%), Vote 118-Uganda Road Fund (Ug shs 352.852 billion -18.6%) and Vote 500- Local governments (Ug shs 26.006 billion - 1.1%).

The sector budget priorities for the FY 2014/15 are: upgrading of 200km of roads from gravel to bitumen standard; reconstruction of 178km of roads; construction of 10 new bridges and rehabilitation of 7 old bridges; regravelling of 12.875km of unpaved roads; construction of 1,700km of ongoing road projects; construction of 659km of new road projects; and maintenance and rehabilitation of 10,000km of national, district, urban and community access roads.

Other priorities include: undertaking remedial measures through the construction of strategic bridges ravaged by floods; improving road safety; axle load control; reduction of maintenance backlog; developing infrastructure in northern Uganda; improvement of railway transport infrastructure and services; improvement of inland water transport infrastructure and services; rehabilitating of upcountry aerodromes; improvement of the capacity of local governments to implement the force account; develop the capacity of local construction industry; and updating the national transport policy and strategy.<sup>4</sup>

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<sup>1</sup> The three sub-sectors under the Ministry of Works and Transport are: 1. Transport Services; 2. Roads; and 3. Construction Standards and Quality Assurance

<sup>2</sup> Ministerial Policy Statement for Ministry of Works and Transport for FY 2014/15

<sup>3</sup> Ministerial Policy Statement for Ministry of Works and Transport for FY 2014/15

<sup>4</sup> Ministerial Policy Statement for Ministry of Works and Transport for FY 2014/15

### 12.1.1 Scope

The road sector has four votes namely;

- Vote 016: Ministry of Works and Transport (MoWT)
- Vote 113: Uganda National Roads Authority (UNRA)
- Vote 118: Uganda Road Fund (URF) and
- Vote 500: Local Governments (LGs).

However, Vote 500: Local Governments (LGs) was not monitored for the half year performance because it had the smallest share of the budget that is 1.1%. This chapter therefore reports on selected road development projects and road maintenance programmes from three votes for their semi-annual performance of the FY 2014/15 as outlined in Table 12.1. It highlights the progress made on key planned outputs as well as the financial performance of the projects/programmes, and outlines implementation challenges identified, policy issues, and recommendations.

**Table 12.1: Project/programmes monitored for FY 2014/15**

| Implementing Institution                      | Project/programme  |
|---|--|
| Ministry of Works and Transport<br>– Vote 016 | Interconnectivity Project<br>Regional Mechanical Workshops   |
| Uganda National Roads<br>Authority – Vote 113 | National Roads Construction/Rehabilitation Programme<br>Gulu-Atiak-Nimule (104 km)<br>Jinja - Kamuli (57 km)<br>Kampala Entebbe Expressway (51km)<br>Kiryandongo-Kamudini-Gulu (123 km)<br>Mpigi - Kanoni (65 km)<br>Ntungamo-Kabale/Katuna, Lot 3 (75km)<br>Vurra-Arua-Koboko-Oraba (92km)  |
| Uganda Road Fund – Vote 118                   | A) District, Urban Community Access Roads (DUCAR)<br>Maintenance programme in the following DLGs:<br>Budaka, Bushenyi, Gulu, Ibanda, Isingiro, Jinja, Kabarole, Kiboga,<br>Luwero, Lyantonde, Mityana, Moroto, Mubende, Mukono, Rakai,<br>Sironko, Soroti, and Zombo.<br>B) National Roads Maintenance Programme at the following<br>UNRA stations:<br>Arua, Fort Portal, Jinja, Kabale, Masaka and Moroto |

*Source: Author's Compilation*

## Findings

### 12.1.2 Overall Sector Performance

#### Financial performance

The overall financial performance in the three votes by the end of December 2014 was excellent as the budget release and absorption were at 50.6% and 99% respectively as seen in Table 12.2.

**Table 12.2: Overall Financial Performance of the Votes monitored by 31<sup>st</sup> December 2014**

| Votes        | Vote Names | Approved Budget (Ug shs billion) | Release (Ug shs billion) | Spent (Ug shs billion) | % Budget released | % Budget Spent | % Release Spent |
|--------------|------------|----------------------------------|--------------------------|------------------------|-------------------|----------------|-----------------|
| 016          | MoWT       | 122.364                          | 57.661                   | 51.392                 | 47.1%             | 42.0%          | 89.1%           |
| 113          | UNRA       | 1,728.908                        | 880.516                  | 876.716                | 50.9%             | 50.7%          | 99.6%           |
| 118          | URF        | 428.106                          | 214.051                  | 212.712                | 50.0%             | 49.7%          | 99.4%           |
| <b>Total</b> |            | <b>2,279.378</b>                 | <b>1,152.228</b>         | <b>1,140.820</b>       | <b>50.6%</b>      | <b>50.0%</b>   | <b>99.0%</b>    |

*Source: Vote 016: MoWT, UNRA and URF Q2 Performance Reports for FY 2014/15*

#### Physical performance

The overall physical performance of the three votes monitored was estimated at 39% of the annual target which is a very good performance. The performance was not excellent because the procurement for the road maintenance contracts and materials took place in the first quarter with implementation commencing in the second quarter. However, the multi-year works were not affected.

The physical performance of the MoWT was excellent with an average of 44% at the end of December 2014. However, the road construction projects implemented by the MoWT have continued to be characterized by prolonged procurement processes.

The physical performance of the National Roads Construction/Rehabilitation program was excellent at 53%. This was due to the 120.6km (48.2%) of unpaved national roads that were upgraded to bitumen standards out of the annual planned 250km; and 98.3km-equivalent (57.8%) that were rehabilitated out of the annual target of 170km by the end of December 2014. This excellent performance was as a result of the rate of implementation of ongoing projects that was higher than planned.

The physical performance of the National Roads Maintenance program implemented by UNRA was very good as 38% of the annual planned activities were achieved by the end of December 2014. The performance was not excellent due to the late release of force account funds to the stations in Quarters 1 and 2; and the procurement of most of the periodic and term maintenance contracts which took long to conclude.

Under Districts Roads Maintenance program, only one district (Mubende) out of the 18 districts monitored attained its physical target of 50% and this was followed by Mukono district which attained a physical progress of 45.1% by the end of Q2 FY 2014/15. However, the average physical performance of the monitored districts was good at 32% as at the end of December 2014.

The cumulative outputs for the DUCAR programme up to the end of Q2-FY2014/15 could not be established due to the lethargy in submission of quarterly accountability reports by designated agencies

From the above, it can be concluded that the overall sector performance for the roads sector was very good.

## 12.2 Ministry of Works and Transport- Vote 016

The Ministry of Works and Transport (MoWT) mission is “to promote adequate, safe and well maintained works and transport infrastructure and services for socio-economic development of Uganda.”<sup>5</sup> Under the vote, midyear monitoring covered two projects namely: Interconnectivity Project and Regional Mechanical Workshops.

### Vote Financial Performance

The approved budget for FY 2014/15 is Ug shs 122.364 billion having been reduced by 17.9% from Ug shs144.2392 billion in the FY 2013/14. This was allocated as shown in Table 12.3.

**Table 12.3: Financial Performance of MoWT by 31<sup>st</sup> December 2014**

| <i>(i) Excluding Arrears, Taxes</i> |          | <b>Approved Budget<br/>(Ug shs billion)</b> | <b>Release<br/>(Ug shs billion)</b> | <b>Spent<br/>(Ug shs billion)</b> | <b>% Budget released</b> | <b>% Budget Spent</b> | <b>% Release Spent</b> |
|-------------------------------------|----------|---|-------------------------------------|-----------------------------------|--------------------------|-----------------------|------------------------|
| Recurrent                           | Wage     | 8.867                                       | 4.433                               | 3.236                             | 50.0                     | 36.5                  | 73.0                   |
|                                     | Non-wage | 24.062                                      | 11.762                              | 10.033                            | 48.9                     | 41.7                  | 85.3                   |
| Development                         | GoU      | 66.194                                      | 32.282                              | 28.98                             | 48.8                     | 43.8                  | 89.8                   |
|                                     | Donor    | 23.169                                      | 9.143                               | 9.143                             | 39.5                     | 39.5                  | 100.0                  |
| <b>Total GoU</b>                    |          | <b>99.122</b>                               | <b>48.478</b>                       | <b>42.249</b>                     | <b>48.9</b>              | <b>42.6</b>           | <b>87.2</b>            |
| <b>Total GoU + Ext Fin. (MTEF)</b>  |          | <b>122.291</b>                              | <b>57.621</b>                       | <b>51.392</b>                     | <b>47.1</b>              | <b>42.0</b>           | <b>89.2</b>            |
| <i>(ii) Arrears and Taxes</i>       | Arrears  | 0.013                                       | 0.010                               | 0.000                             | 75.0                     | 2.4                   | 3.2                    |
|                                     | Taxes    | 0.060                                       | 0.030                               | 0.000                             | 50.0                     | 0.0                   | 0.0                    |
| <b>Total Budget</b>                 |          | <b>122.364</b>                              | <b>57.661</b>                       | <b>51.392</b>                     | <b>47.1</b>              | <b>42.0</b>           | <b>89.1</b>            |

*Source: MoWT, Q2 Performance Report for FY 2014/15*

The overall budget performance and release absorption of the Vote by 31<sup>st</sup> December 2014 was at 47.1% and 89.1% respectively. The release and expenditure of the vote components for the first half of the FY was excellent with exception of the wage expenditure which was at 73% (Table 13.2).

Under this vote, midyear monitoring covered two development projects namely: Interconnectivity Project and Regional Mechanical Workshops. The Interconnectivity project is

<sup>5</sup> Ministerial Policy Statement for Ministry of Works and Transport for FY 2014/15



implemented by contracting while the Regional Mechanical Workshop activities are undertaken by the three regional mechanical workshops of MoWT at Bugembe (Jinja), Gulu and Mbarara. The findings obtained from the monitoring of these two projects are presented hereafter.

### **12.2.1 Interconnectivity Project**

#### **Background**

The Interconnectivity Project was designed to allow for budgetary provisions to the MoWT for the timely response in undertaking specific road works under the presidential directives, emergency response to disaster, and for general improvement of interconnectivity in areas with road links that are in critical condition across the country.

The project commenced in July 2008 and was expected to be complete in June 2013, with a total planned expenditure of Ug shs 13.125 billion. The project was extended to July 2017.<sup>6</sup> The project was expected to improve, rehabilitate or upgrade a total of 700kms of roads outside the mandate of UNRA or DLGs across the country.

Most of the interventions are on the district and community access roads network due to capacity problems at the districts and are mainly earth/gravel roads though some paved roads in peri-urban areas have been worked upon.

The objectives of this project are;

- Timely response to H.E the president's directives to improve sections of major road corridors in strategic areas of the country which are not economically attractive to development partners.
- Be in a better state of preparedness to respond to emergency of natural calamities to save the population from prolonged suffering.
- Improved interconnectivity of the country by rehabilitated critical road links.

This project is funded by the GoU is implemented by MoWT through contracting local contractors. The roads designs and works supervision is done by the MoWT.

In the FY 2014/15, planned activities for this project are: 142.7km of roads in the districts of Bulisa, Kyankwanzi, Buhweju, Dokolo, Hoima, Buvuma, Rakai, Buyende, Soroti, Ibanda, Ntungamo, Kasese, Serere, Busia, Kibale, Ngora, Kumi, Kapchorwa Moroto, National Leadership Institute (NALI), Accesses to Mwiri and Buwanda Convent rehabilitated and maintained; supervise, monitor, and prepare performance reports and work certificates for the district projects; engineering design of Akright roads completed; 400km of district roads and 20 road camps surveyed; 400lines of culverts installed; and 20 land titles for the road camps processed.

#### **Findings**

##### **i) Financial Performance**

###### **a. Past Performance**

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<sup>6</sup> MoFPED Public Investment Plan, FY 2014/15-2016/17

The financial performance of the project since the FY2011/12 to the end of December 2014 is summarised in Table 12.4.

**Table 12.4: Financial Performance of the Interconnectivity Project**

| <b>FY</b>    | <b>Annual Budget Estimates<br/>(Ug Shs Billions)</b> | <b>Releases<br/>(Ug Shs Billions)</b> | <b>Expenditure<br/>(Ug Shs Billions)</b> | <b>% of Budget Released</b> | <b>% of Releases Spent</b> |
|--------------|--|---------------------------------------|--|-----------------------------|----------------------------|
| 2011/12      | 6.36   | 5.64                                  | 5.64                                     | 88.7%                       | 100.0%                     |
| 2012/13      | 4.00   | 3.93                                  | 3.69                                     | 98.2%                       | 93.9%                      |
| 2013/14      | 5.09   | 5.03                                  | 3.42                                     | 98.8%                       | 68.0%                      |
| 2014/15-Q2   | 5.10   | 2.95                                  | 2.88                                     | 57.8%                       | 97.7%                      |
| <b>Total</b> | <b>20.55</b>   | <b>17.55</b>                          | <b>15.63</b>                             | <b>85%</b>                  | <b>89.1%</b>               |

*Source: MoWT Ministerial Budget Policy Statement FY 2012/13; MoWT Q4 Performance Reports FY 2012/13 and FY2013/14; MoWT Q2 Performance Report FY2014/15.*

#### **b. Current performance**

In the FY 2014/15, the project has an approved budget of Ug shs 5.10 billion as seen in Table 12.3. By the end of December 2014, 57.8% of the budget had been released of which 97.7% was expended which was an excellent release and expenditure performance.

#### **ii) Physical Performance**

By the end of December 2014, the achievements of the Interconnectivity Project in the FY 2014/15 were reported: the rehabilitation and maintenance works of 46.5km (32.6%) of roads in Kyankwanzi, Buhweju, Dokolo, Hoima, Buvuma, Rakai, Buyende, Soroti, Ibanda, Ntungamo, Kasese, Serere, Busia, Kibale, NALI, Accesses to Mwiri and Buwanda Convent, supervision and monitoring, and preparation of performance reports and work certificates; procurement of advertising, submission of tenders, evaluation, approval by contracts committee for the consultant to carry out engineering designs of Akright roads under Interconnectivity Project; surveying of 20.3km (5%) of district roads and 9 (45%) road camps; and processing of 2 (10%) land titles.

A summarised performance of the Interconnectivity Project in FY2014/15 by the end of December 2014 is presented in the Table 12.5.

**Table 12.5: The summary of the progress of the Interconnectivity Project in FY 2014/15 by 31<sup>st</sup> December 2014**

| <b>SN</b> | <b>ROAD NAME</b>  | <b>DISTRICT</b> | <b>CONTRACTOR</b>   | <b>CONTRACT AMOUNT (Ug shs)</b> | <b>CONTRACT DATES</b> | <b>PHYSICAL PROGRESS (%)</b> | <b>FINANCIAL PROGRESS (Ug shs)</b> |
|-----------|---|-----------------|---------------------|---------------------------------|-----------------------|------------------------------|------------------------------------|
| 1         | Mabona-Kicuzi-Rwabatenga Road (17km) in Ibanda District | Ibanda          | M/s Kato United Ltd | 560,000,000                     | End:8/12/2014         | 30                           | 112,000,000                        |

| SN | ROAD NAME   | DISTRICT   | CONTRACTOR                           | CONTRACT AMOUNT (Ug shs) | CONTRACT DATES                      | PHYSICAL PROGRESS (%) | FINANCIAL PROGRESS (Ug shs) |
|----|---|------------|--------------------------------------|--------------------------|-------------------------------------|-----------------------|-----------------------------|
| 2  | Tourism Roads in Kisoro District  | Kisoro     | M/s Multiplex Ltd                    | 2,200,000,000            | End: 03/02/2015                     | 60                    | 1,040,000,000               |
| 3  | Namugombe-Mubale (7.0km) and Kikonge – Katuba (8.9km)   | Buvuma     | M/s Semeo Enterprises Ltd            | 500,991,000              | End: 14/05/2014                     | 20                    |                             |
| 4  | Kakaala - Galigatya road (3.3km), Namirembe - Kanyogoga - Magada - Natyole (7.5km) and Buyita - Nakasejele - Kalangalo - Kaweli - Kalangalo road (7.4Km)  | Mukono     | M/s Esmouc Engineering Solutions Ltd | 462,176,000              | Start: 18/08/2014<br>End:26/03/2015 | 65                    | 92,435,200                  |
| 5  | Kyankwanzi - River Kafu road (22Km)   | Kyankwanzi | M/s Kato Investments Limited         | 525,433,750              | Start: 27/08/2014<br>End:07/04/2015 | 40                    | 105,086,750                 |
| 6  | Kizinga road (5.0Km), Mpama - Kisamba - Kilowoza (9.2Km), Kibingo - Nakabazi (3.0Km) and Bikalabo (Mitamu) - Katete - Kibati (6.5Km)  | Rakai      | M/s Rukara Enterprises Ltd           | 503,919,000              | Start: 11/09/2014<br>End:18/05/2015 | 45                    | 100,783,800                 |
| 7  | Abutadi – Adwala P/S – Amunamu (8.5Km)  | Dokolo     | M/s Rocktrust Contractors (U) Ltd    | 451,422,000              | Start: 18/08/2014<br>End:26/03/2015 | 95                    | 0                           |
| 8  | Rwajere primary School-Kikombe Trading centre (5.5Km), Kikombe Trading centre-Lyashisha-Kyambura river crossing-Mukatojo(15.8Km), Kikombe loop (0.15Km), Lyashisha-Nyakahita Primary School (0.6Km) | Buhweju    | M/s AM & ML Investments Ltd          | 442,546,000              | Start: 07/11/2014<br>End:07/05/2015 | 25                    | 88,509,200                  |

| SN | ROAD NAME  | DISTRICT | CONTRACTOR                                     | CONTRACT AMOUNT (Ug shs) | CONTRACT DATES                      | PHYSICAL PROGRESS (%) | FINANCIAL PROGRESS (Ug shs) |
|----|--|----------|--|--------------------------|-------------------------------------|-----------------------|-----------------------------|
| 9  | Kigaya – Kyabwemi-Nyakabongi-Kinogozi-Kisenyi Primary School (18.7Km), Kinogozi – Kampala road (1.2Km)   | Hoima    | M/s Juco Logistics Ltd                         | 422,690,000              | Start: 26/11/2014<br>End:26/05/2015 | 0                     | 0                           |
| 10 | Rubumbo – Nkoko – Rutoma-Mwitanzigye (15.7Km)  | Kibaale  | M/s CGH Ltd                                    | 314,358,000              | Start: 24/10/2014<br>End:24/04/2015 | 55                    | 0                           |
| 11 | Rukanga Primary School – Kabumba (4.5Km), Nyakatojo-Nyamuka (4.2Km), Kikonje – Rwashamaire (6Km)   | Ntungamo | M/s Near Construction Co. Ltd                  | 367,494,000              | Start: 26/11/2014<br>End:21/05/2015 | 70                    | 0                           |
| 12 | Katooke-Kayembe-Nyangonge(4Km), Maliba-Kitoko(6.7Km)   | Kasese   | M/s Express Logistics Group Ltd                | 457,193,400              | Start: 14/05/2014<br>End:14/05/2014 | 20                    | 91,438,680                  |
| 13 | Gigire – Lugangu(2.5Km), Buwaiswa-Makate-Kabayingire(3.3Km), Mpomu-Kasutaime(0.9Km), Minoni-Wairama(1Km) Nabikoma - Nakidubuli(2.1Km), Kiwere-Nakasis(2.0Km) | Mayuge   | M/s Wiyeda General Suppliers & Contractors Ltd | 374,735,000              | Start: 18/08/2014<br>End:24/02/2015 | 43                    | 0                           |

| SN | ROAD NAME   | DISTRICT | CONTRACTOR                               | CONTRACT AMOUNT (Ug shs) | CONTRACT DATES                      | PHYSICAL PROGRESS (%) | FINANCIAL PROGRESS (Ug shs) |
|----|---|----------|--|--------------------------|-------------------------------------|-----------------------|-----------------------------|
| 14 | Bukizibu-Kabuka(10.3Km), Malongo-Nango Beach(0.8Km), Malongo-Mukorongo (2.2km), Namdhi-Namavundu-Kyondo(1.5Km), Bukagabo T.C – Buluta-Kitogo Beach (2.4Km), Kitogo TC – Bukagabo B (2.1Km), Namdi TC-Namdi beach(2.8Km), Magala-wamala Beach(0.8Km) | Mayuge   | M/s Kasu & Sons Engineering Workshop Ltd | 353,879,000              | Start: 18/08/2014<br>End:24/02/2015 | 60                    | 0                           |
| 15 | Bukyonza-Nawandyo Lamba's road(2.6Km), Bukyonza – Bukozi (2.4Km), Bukyonza-Nawaikoke (5.0Km), Busiwa-Bukoloto (2.0Km), Nawangoma-Isinywa-Busandha(2.0Km), and Musunu-Bulukaire (Nakakabala)-Wabangawa T.C road (3.6Km)                              | Kamuli   | M/s Ubuntu Services Ltd                  | 256,697,600              | Start: 18/08/2014<br>End:24/02/2015 | 50                    | 0                           |
| 16 | Nsomba P/S - Karikabyo Junction - Igaza (8.0km), Irapa-Budoloto - Kigweri (12.5km)  | Buyende  | M/s Jofah Associates Ltd                 | 424,622,500              | Start: 18/08/2014<br>End:24/02/2015 | 50                    | 0                           |
| 17 | Mudimbu – Highland (3.0Km), Juma-Mukama-Hamzata – Mia – hasahya-Musa(4.5Km), Kachonga-Bufuja(3.5Km), Mazimasa B – Guli (2.7Km)  | Butaleja | M/s Akaaba Enterprises Ltd               | 359,850,000              | Start: 18/08/2014<br>End:24/02/2015 | 40                    | 71,970,000                  |

| SN   | ROAD NAME   | DISTRICT | CONTRACTOR                       | CONTRACT AMOUNT (Ug shs) | CONTRACT DATES  | PHYSICAL PROGRESS (%) | FINANCIAL PROGRESS (Ug shs) |
|--|---|----------|----------------------------------|--------------------------|---|-----------------------|-----------------------------|
| 21   | Angole – Omagoro Kachinga (5.8Km), Kampala – Kachinga (4.2Km), Sapir – Ojara – Amakio (8.4km) | Serere   | M/s Wao (U) Ltd                  | 382,797,500              | Start: 18/08/2014<br>End:24/02/2015                                     | 20                    | 0                           |
| 22   | Adweny-Toror – kilembe (9.5Km), Olwa – Obangin – Otob (14.7Km)                                | Serere   | M/s Canaansites Ltd              | 353,960,500              | Start: 18/08/2014<br>End:24/02/2015                                     | 40                    | 0                           |
| 23   | Construction of Mbogo Bridge in Ibanda District   | Ibanda   | M/s Kisinga Construction Co. Ltd | 402,554,350              | Start: 20/10/2014<br>End:5/05/2015                                      | 10                    | 0                           |
| <b>TOTAL</b>                                       |   |          |                                  | <b>12,944,641,650</b>    |   |                       | <b>4,044,979,680</b>        |
| <b>Karamoja Roads Development Programme (KRDP)</b> |   |          |                                  |                          |   |                       |                             |
|  | Completion of Outstanding works for Karamoja Rural Development Programme                      | Karamoja |                                  |                          | Bidding documents submitted to Contracts Committee and PP Form 5 Signed |                       |                             |

**Source: MoWT**

Twelve contracts being implemented in 10 districts of Buhweju, Butaleja, Buyende, Dokolo, Ibanda, Kamuli, Kibaale, Kyankwanzi, Ntungamo and Serere in the FY 2014/15 were monitored in January and February 2014. The findings are presented below.

### **A. Buhweju District**

The MoWT signed a contract with M/s AM & ML Investments Ltd to construct the following roads in Buhweju district; Rwanjere Primary School-Kikombe Trading Centre (5.5km), Kikombe Trading Centre-Lyashisha-Kyambura river crossing-Mukatojo (15.8km), Kikombe Loop (0.15km) and Lyashisha-Nyakahita Primary School (0.6km). The contract commencement date was 28<sup>th</sup> October 2014 and is expected to end on 7<sup>th</sup> May 2015.

The scope of works includes site preparatory works, setting out and site clearance, earthworks, drainage works including culvert installation, concrete works and gravelling works. A summary of the project data is shown in Table 12.6.

**Table 12.6: Project Summary of the Interconnectivity Project in Buhweju district as at the end of December 2014**

|                                |   |
|--------------------------------|---|
| Project Name                   | Rwajere primary School-Kikombe Trading centre (5.5km), Kikombe Trading centre-Lyashisha-Kyambura river crossing-Mukatojo(15.8km), Kikombe loop (0.15km), Lyashisha-Nyakahita Primary School (0.6km) |
| Source of Funding              | Government of the Republic of Uganda  |
| Contract No.                   | MoWT/Wks/IP/14-15/06  |
| Implementing Agency            | Ministry of works and Transport   |
| Supervisor                     | Ministry of Works and Transport   |
| Contractor                     | M/S AM & ML Investments Ltd   |
| Possession of Site             | 28 <sup>th</sup> October 2014   |
| Supervision Commencement Date  | 2 <sup>nd</sup> December 2014   |
| Construction Commencement Date | 7 <sup>th</sup> November 2014   |
| Construction Completion Date   | 7 <sup>th</sup> May 2015  |
| Original Contract Price        | Ug shs 442,546,000  |
| Contract Period                | 6 Months  |
| Contract Time Elapsed          | 3 Months  |
| Advance payment                | Ug shs 88,509,200   |
| Works Payments Certified       | Ug shs 108,145,720  |
| Payments to the contractor     | No payments made yet apart from advance payment   |
| Physical Progress              | 45%   |
| Financial Progress             | 20%   |

*Source: MoWT*

### **Financial Performance**

The contractor received an advance payment of Ug shs 88.509 million (20% of the contract sum). The contractor had also submitted one IPC amounting to Ug shs 108.145 million (24.4% of the contract sum) but was still under review by the client.

It is projected that an additional Ug shs 85 million will be required to cater for extra works along River Kyambura. The works will include; diversion of the river from the road, the high volume of cuts and rock fills.

### **Physical performance**

The contractor had completed site preparatory works, setting out and site clearance, excavation in soft material. However, grading and shaping, gravelling and site clearance in hilly and rocky sections were pending.

The current physical performance of the project was estimated at 45% against a planned progress of 40%. The project was on schedule and is anticipated to be completed within time.



**Section along Kikombe Trading centre-Lyashisha-Kyambura river crossing-Mukatojo road which requires deep cuts; Incomplete section along Kikombe Trading centre-Lyashisha-Kyambura river crossing-Mukatojo which has been graded**

## Conclusion

No delays had been experienced in this contract whose physical performance was estimated at 45% against a contract time progress of 50% as at the end of February 2015. It was however projected that the contract price would increase by 19.2% to cater for the diversion of the river from the road; and the high volume of cuts and rock fills which was estimated at Ug shs 85 million.

## B. Butaleja District

The project roads are found in Mazimasa and Kachonga sub counties. Four roads totalling to 13.7km in Butaleja County in Butaleja district will be improved under the project. The contract for the works was awarded to M/s Akaaba Enterprises Ltd at a contract price of Ug shs 359.85 million. A summary of the project data is presented in Table 12.7.

**Table 12.7: Project Summary of the Interconnectivity Project in Butaleja district as at the end of December 2014**

|                        |   |
|------------------------|---|
| Project Name           | Rehabilitation of Mudimbu - Highland (3.0km), Juma-Mukama-Hamzata - Mia - Hasahya-Musa (4.5km), Kachonga-Bufuja (3.5km), Mazimasa B - Guli (2.7km) in Butaleja County, Butaleja District-Lot 15 |
| Contract No.           | MOWT/Wks/IP/14-15/015   |
| Source of Funding      | GoU   |
| Implementing Agency    | MoWT  |
| Supervision Consultant | In house - MoWT   |
| Contractor             | M/s Akaaba Enterprises Ltd  |
| Design Consultant      | In house - MoWT   |



|                                |                                     |
|--------------------------------|-------------------------------------|
| Project Road Length            | 13.7km                              |
| Construction Commencement Date | 8 <sup>th</sup> September 2014      |
| Construction Completion Date   | 13 <sup>th</sup> March 2015         |
| Contract Price                 | Ug shs 359,850,000                  |
| Contract Period                | 6 Months                            |
| Contract Time Elapsed          | 4 Months as at end of January 2015  |
| Advance payment                | Ug shs 71,970,000                   |
| Works Payments Certified       | Ug shs 90,479,825 (1 IPC)           |
| Payments to the contractor     | Ug shs 71,970,000 (Advance payment) |
| Physical Progress              | Achieved 75% against planned of 70% |
| Financial Progress             | Achieved 20% against planned of 68% |

**Source: MoWT**

The scope of works in the contract on all the four roads involved: site clearance (clearing and grubbing; removal of top soil, large trees and tree stumps); common excavation or cut to spoil of soft material; shaping of road formation by heavy grading; spot gravelling using approved granular material; and drainage works (excavating for open drains, culvert and gabion installation, construction of culvert end structures, etc.).



**Left: An access culvert and a gravelled section on Mudimbu- Highland road in Mazimasa sub county; Center: A 300m raised swamp section with side drains of 2m width at Km 1+200 on Mazimasa B - Guli road; Right: A raised swampy section along Kachonga-Bufujja road at Km 1+400 in Kachonga sub county**

By 10<sup>th</sup> February 2015 when the project time progress was at 84% with a physical progress estimated to be at 90%. The roads were in a good condition and the quality of works done was satisfactory. The pending activities were: gravelling of 3km of road, providing of end structures to the culverts installed which was ongoing and installation of five lines of culverts as emergency works.

The contractor had only received advance payment amounting to Ug shs 71.97 million (20%). Interim Payment Certificate (IPC) No.1 amounting to Ug shs 90,479,825 was processed awaiting payment. There was no variation issued or anticipated for the project.

It was observed that the grading, shaping and forming works of the road surfaces were done properly. However, one of the culverts installed along Kachonga-Bufujja road at Km 1+400 in Kachonga sub county was not installed properly.

### **Challenges**

- There was a delay in provision of culverts by the MoWT which stalled the works.
- The material for the gravelling activity was not easily available in the project area.

### **Analysis**

- *Link between financial and physical performance*

The contract had achieved a physical progress of 75% against a financial progress of 20% as at the end of December 2014. This contractor had however, submitted a certificate which was under processing for payment.

- *Achievements in terms of set targets*

The contract had achieved a physical progress of 75% against a planned progress of 70%. The roads works so far done were meeting the specifications of the MoWT apart from one of the culvert lines at along Kachonga-Bufujja road at Km 1+400 in Kachonga sub county which was not installed properly.

### **Conclusion**

The contract was ahead of schedule with works done according to the specifications of MoWT apart from the installed culvert lines works along Kachonga-Bufujja road required to be redone in order to stop the occurrence of damming of water.

#### ***Good practices or lessons learnt on the project***

Early execution of planned activities avoids delays on projects.

### **Recommendations**

- The MoWT should devise ways to expedite the internal procurements process which affected the delivery of culverts onsite.
- The MoWT should check levels of the culverts line along Kachonga-Bufujja road at km 1+400 in Kachonga sub county should be checked to avoid damming when the swamp water level rises.

### **C. Buyende District**

The project covers two roads in Buyende district totalling to 20.5km namely; Nsomba P/S – Karikabyo Junction – Igaaza road (8km) in Kagulu sub county and Irapa- Budoloto – Kigweri (12.5 Km) in Bugaya sub county. The contract was awarded to M/s Jofah Associated Ltd at a contract price of Ug shs 424.62 million. A summary of the project data is presented in Table 12.8.

**Table 12.8: Project Summary of the Interconnectivity Project in Buyende District by the end of January 2014**

|              |  |
|--------------|--|
| Project Name | Rehabilitation of Nsomba P/S – Karikabyo Junction – Igaaza (8km), Irapa- Budoloto – Kigweri (12.5 Km), Buyende District – Lot 14 |
|--------------|--|

|                              |   |
|------------------------------|---|
| Contract No.                 | MoWT/Wks/IP/14 – 15/ 014                    |
| Source of Funding            | GoU   |
| Implementing Agency          | MoWT  |
| Supervision Consultant       | In house - MoWT                             |
| Contractor                   | M/s Jofah Associates Ltd                    |
| Design Consultant            | In house - MoWT                             |
| Possession of Site           | 1 <sup>st</sup> September 2014              |
| Project Road Length          | 20.5 km                                     |
| Contract Commencement Date   | 8 <sup>th</sup> September 2014              |
| Construction Completion Date | 13 <sup>th</sup> March 2015                 |
| Original Contract Price      | Ug shs 424,622,500 (VAT Exclusive)          |
| Contract Period              | 6 Months                                    |
| Contract Time Elapsed        | 4 Months as at end of January 2015          |
| Advance payment              | None  |
| Works Payments Certified     | Ug shs 171, 144,163 (40% of contract price) |
| Payments to the contractor   | None  |
| Physical Progress            | 75%   |
| Financial Progress           | 0%  |

**Source: MoWT**

The scope of works in the contract involved: site clearance (clearing and grubbing; removal of top soil, large trees and tree stumps); common excavation or cut to spoil of soft material; shaping of road formation by heavy grading; spot gravelling using approved granular material; and drainage works (excavating for open drains, culvert and gabion installation, construction of culvert end structures, etc.).

By 5<sup>th</sup> February 2015, the project time progress was at 82%. The activities that had been completed were site clearance, shaping of road formation by heavy grading, excavation for open drains and swamp raising. The contractor was not on site and works had come a standstill because MoWT had delayed to deliver armco culverts and gabion meshes. However, at the time of monitoring the culverts had been delivered.

The incomplete activities observed on the project roads were: culvert and gabion installation; back filling using excavated material and filling using approved granular material. It was also observed that there are more offshoots required along the two road sections and the need for more gravel beyond the spot gravelling provided for in the contract. The physical progress of works at the time of monitoring was estimated at 75%.

The contractor had not received any payment since the project started. However, there was going to be a variation of 17% in the contract price because VAT was not included in the contract sum.



**Left: A swamp section at Km 6.0 along Nsomba P/s-Igalaza road which need to be gravelled; Center: A bush cleared and shaped road section with an offshoot at Km 1.4 on Irapa-Kigwesi road; Right: A swampy section along Irapa-Kigwesi road between Km 5.4 and Km 7.1 where culverts were to be installed.**

### **Challenge experienced by the project**

- Late delivery of culverts by the MoWT which stalled the contract works due to delays in procurement.

### **Analysis**

- *Link between financial and physical performance*

The contract had achieved a physical progress of 75% against a financial progress of 0% by 31<sup>st</sup> December 2014. The contractor had however submitted a certificate amounting to 40% of the contract price which was under payment processing.

- *Achievements in terms of set targets*

The contract had achieved a physical progress of 75% against a contract time progress of 67% by the end of January 2015.

### **Conclusion**

The contractor should expediate the remaining works so that he can still finish the works within the contract also prevent the already completed works from getting damaged.

### **Recommendation**

- The MoWT should devise ways to expedite procurement of culverts.

### **D. Dokolo District**

This project covers improvement of an 8.5km road with an average width of 6.5m in Adwala sub-county in Dokolo district. The contract for the works was awarded to M/s Rocktrust Contractors (U) Ltd at a contract price of Ug shs 451.42 million. A summary of the project data is presented in Table 12.9.

**Table 12.9: Summary of the Interconnectivity Project in Dokolo District by the end of January 2015**

|              |  |
|--------------|--|
| Project Name | Rehabilitation of Abutadi-Adwala P/S –Amunamu road (8.5km) |
|--------------|--|

|                                |   |
|--------------------------------|---|
|                                | in Adwala Sub-county, Dokolo District.  |
| Contract No.                   | MoWT/Wks/IP/14-15/005   |
| Source of Funding              | GoU   |
| Implementing Agency            | MoWT  |
| Supervision Consultant         | In house - MoWT   |
| Contractor                     | M/s Rocktrust Contractors(u) Ltd  |
| Design Consultant              | In house - MoWT   |
| Possession of Site             | 15 <sup>th</sup> Sept,2014  |
| Project Road Length            | Actual Length of Road Executed is 9.2km as opposed to 8.5km in the Signed Contract. |
| Construction Commencement Date | 15 <sup>th</sup> Sept,2014  |
| Construction Completion Date   | 16 <sup>th</sup> March,2015   |
| Contract Price                 | Ug shs 451,422,000  |
| Contract Period                | 6months   |
| Contract Time Elapsed          | 67% as of January 2015  |
| Advance payment                | NIL   |
| Works Payments Certified       | Ug shs 151,528,592 (IPC No.1)   |
| Payments to the contractor     | Ug shs 151,528,592 IPC No.1 (33.6% of contract price)                               |
| Physical Progress              | 95% achieved against planned of 100%  |
| Financial Progress             | 34% achieved against planned of 100%  |

**Source: MoWT**

The scope of works in the contract involved: site clearance (clearing and grubbing; removal of top soil, large trees and tree stumps); common excavation or cut to spoil of soft material; shaping of road formation by heavy grading; full gravelling using approved granular material; swamp raising; and drainage works (excavating for open drains, culvert installation, construction of culvert end structures, etc.).

By the 12<sup>th</sup> February 2015, the project physical progress was estimated to be at 95% against a time progress was at 82% .The activities of site clearance, drainage works, heavy grading, full gravelling and swamp raising had been completed. The drainage activities of culvert installation and construction of culvert end structures were near completion.



**Left: A 600mm diameter access culvert with a head wall at the beginning of the road; Center: A gravelled section with a mitre drain; Right: Excavating for a culvert line along the project road**

One payment certificate amounting to Ug shs 151.52 million (34% of the contract sum had been paid to the contractor. However, there was a three months delay in payment of the certificate as it was submitted in October 2014 and paid in January 2015. This brought the financial progress of the contract to 34%.

There were no challenges experienced on this project

### **Conclusion**

The road works done were observed to be of a good quality as the contractor adhered to the specifications of the MoWT. This contract works was going to be finished in one month to the end of the project completion date.

### ***Good practices or lessons learnt on the project***

- Early execution of planned activities avoid delays on projects
- Regular communication between the contractor and site supervisors enables resolution of project issues that may come up in a timely manner.

## **E. Ibanda District**

In Ibanda district, the Interconnectivity Project is the construction of Mbogo Bridge. The bridge site is located at the border between Ibanda and Kiruhura districts approximately 12km along Kigalama – Rwobuzizi – Mbogo Road across River Ekyambu, a tributary to River Kageera.

The contract was awarded to M/s Kisinga Construction Company Ltd at a contract sum of Ug shs 402,554,350 exclusive of VAT for a period of six months. The works commenced on 20th October 2014 while the completion date is 5<sup>th</sup> May 2015. The project is supervised directly the MoWT staff in collaboration with a site supervisor appointed by the Ibanda district to carryout day-to-day supervision. A summary of the contract data is presented in Table 12.10.

The main objective of the project is to improve the connectivity between Ibanda and Kiruhura districts along Kigalama – Rwobuzizi – Mbogo road across river Ekyambu so as to enhance the socio-economic activities in the area.

The scope of works involves bush clearing, protection works using gabions, construction of a reinforced concrete double cell box culvert and approach roads ancillary works such as guard rails and bridge warning signs.

**Table 12.10: Summary of the Interconnectivity Project in Ibanda district by the end of February 2015**

|                               |   |
|-------------------------------|---|
| <b>Project Title</b>          | <b>Construction of Mbogo Bridge in Ibanda District</b>                      |
| Source of Funding             | GoU   |
| Contract No.                  | MOWT/Wks/IP/14-15/018   |
| Implementing Agency           | MoWT  |
| Supervision Consultant        | In house - MoWT   |
| Contractor                    | M/s Kisinga Construction Company Ltd  |
| Design Consultant             | In house - MoWT   |
| Possession of Site            | 2 <sup>nd</sup> October, 2014   |
| Supervision Commencement Date | 20 <sup>th</sup> October, 2014  |
| Construction Completion Date  | 5 <sup>th</sup> May, 2015   |
| Original Contract Price       | Ug shs 402,554,350 VAT Exclusive  |
| Contract Period               | Six (6) months Construction Period, Six (6) months Defects Liability Period |
| Contract Time Elapsed         | Four (4) Months   |
| Advance payment               | 20% of Contract Sum   |
| Works Payments Certified      | None  |
| Payments to the contractor    | None  |
| Physical Progress             | 33% achieved against planned of 66%   |
| Financial Progress            | 0% achieved against planned of 50%  |

*Source: MoWT*

By February 2015, no payments have been made to the contractor.

The physical progress of the project was estimated to be at 33% against the targeted 66%. The contract was behind schedule and this was attributed to severe flooding in the period from mid-November to mid-December 2014 which hampered progress of works. Foundation works for the main structure had been completed. Steel reinforcement works for vertical and wing walls were on going according to specifications. Table 12.11 summarises the progress of project activities by February 2015.

**Table 12.11: Summary of physical progress of the various activities by end of February 2015**

| <b>Description</b>           | <b>Progress (%)</b> | <b>Comments</b>                 |
|------------------------------|---------------------|---------------------------------|
| Contractor's Preliminary and | 100%                | Contractor has fully mobilized. |

| <b>Description</b>   | <b>Progress (%)</b> | <b>Comments</b>  |
|--|---------------------|--|
| General Obligations  |                     |  |
| Accommodation of traffic   | 100%                | A temporary footbridge has been constructed and is in use.                                     |
| Occupational Health and Safety, HIV/AIDS and Gender                      | 66%                 | OHS, HIV/AIDS issues are being addressed. In addition, safety & warning signs to be installed. |
| Pitching, Stonework and Protection against Erosion                       | 0%                  | Activity is yet to commence. Gabions from MoWT on site.  |
| Clearing, Grubbing and Removal of Topsoil                                | 100%                | The site has been cleared and top soil removed   |
| Earthworks   | 0%                  | Activity is yet to commence.   |
| Pavement Layers of Natural Gravel Materials                              | 40%                 | 1.2km of approaches from the Kiruhura side have been completed.                                |
| Ancillaries  | 7.5%                | Project signs were installed.  |
| Foundation for Structures  | 64%                 | Foundation structures complete. Geotechnical investigations done.                              |
| False Work, Form Work and Concrete Finish                                | 10%                 | Formwork for foundation elements complete.   |
| Steel Reinforcement for Structures                                       | 70%                 | Steel reinforcement works for bottom slab, vertical walls and wing walls are complete.         |
| Concrete for Structures  | 26%                 | Bottom slab and foundation for wing walls complete.  |
| No- Fines Concrete; Joints; Bearings; Parapets and Drains for Structures | 0%                  | Activity is yet to commence.   |
| Special tests requested by the Engineer                                  | 0%                  | Material testing ongoing.  |

**Source: MoWT and Field findings**

Following a detailed topographical survey and design review, two culvert crossings of diameter 1500mm at the approaches to cater for severe periods of floods were recommended and these variations were awaiting approval by the contracts committee.





**Left: Fixing of reinforcement bars for the bridge and Right: Construction material on site**

### **Challenge**

There was severe flooding in the period from mid-November to mid-December. This hampered progress of works.

### **Analysis**

- *Link between physical and financial performance*

The contract had achieved 33% physical progress however, no payments have been received by the contractor.

- *Achievement of set targets*

The physical progress was 33% against the targeted 66%. The contractor had not received any payments for the work so far done. The project was behind schedule both physically and financially.

### **Conclusion**

The construction works on this project were ongoing across the various activities in spite of the non-payments to the contractor. Smooth implementation of the project was interrupted by the rains within the period November – December 2014. The project can however be returned on schedule with increased speed of work and proper planning.

### **Recommendations**

The contractor should speed up works so that he can make up for lost time. There is need for a revised work program indicating how lost time will be made up for.

## F. Kamuli District

This project involving the improvement of six roads in Buzaya County in Kamuli district totalling to 17.6km was awarded to M/s Ubuntu Services Ltd at a contract price of Ug shs 256.69 million. A summary of the project data is presented in Table 12.12.

**Table 12.12: Project Summary of the Interconnectivity Project in Kamuli District**

|                              |   |
|------------------------------|---|
| Project Name                 | Rehabilitation of Works of Bukyonza-Nawandyo-Lamba`S (2.6km), Bukyonza-Bukozi (2.4km), Bukyonza-Nawaikoko (5km), Busiimwa-Bukoloto (2km), Nawangoma-Isinywa-Busandha (2km), Musoni-Bulukaire (Nakakabala)-Wabangawa T/C (3.6km) in Buzaya County , Kamuli District – Lot 13 |
| Contract No.                 | MoWT/Wks/IP/14 – 15/ 013  |
| Source of Funding            | GoU   |
| Implementing Agency          | MoWT  |
| Supervision                  | In house - MoWT   |
| Contractor                   | M/s UBANTU Services Ltd   |
| Designed by                  | In house - MoWT   |
| Possession of Site           | 1 <sup>st</sup> September 2014  |
| Project Road Length          | 17.6 Km   |
| Contract Commencement Date   | 18 <sup>th</sup> August 2014  |
| Construction Completion Date | 18 <sup>th</sup> February 2015  |
| Contract Price               | Ug shs 256,697,600 (Vat Exclusive)  |
| Contract Period              | 6 Months  |
| Contract Time Elapsed        | 5 Months in January 2015  |
| Advance payment              | None  |
| Works Payments Certified     | None  |
| Payments to the contractor   | None  |
| Physical Progress            | 85%   |
| Financial Progress           | 0%  |

**Source: MoWT**

The scope of works in the contract involved: clearing and grubbing; shaping road surface by heavy grading; spot gravelling; and drainage works of excavating for open drains, culvert and gabion installation, construction of culvert end structures, etc. Civil works commenced in Q1 in August 2014 and are supposed to be completed in February 2015.

The project was monitored on 29<sup>th</sup> January 2015 when it had a contract time progress of 85%. Completed activities were site clearance, shaping of road formation, excavation for open drains

and swamp raising. The activities observed to be ongoing were: culvert and gabion installation, back filling using the excavated material and filling using approved granular material. In January 2015, the contractor had achieved a physical progress of 85%.

There had been delays experienced in meeting the contractor's payments as the contractor had not been paid since the commencement of the project. There is also going to be a variation of 17% of the contract price due to the fact that VAT was not included in the original contract price.

There had also been a delay in the project implementation caused by the MoWT which provided the Armco culverts for the interconnectivity project. The late delivery of culverts on site brought the works to standstill as the contractor could not carry on with some road works until the culverts had been installed.



**Kamuli district: Left: A completed section on Musunu-Bulukaire-Nakabala road; Center: A swamp raised and gravelled section on Bukyonza-Bukozi road; Right: Armco culvert material and gabion meshes supplied by MoWT one of the project sites**

### ***Challenge***

- Late delivery of culverts by the MoWT which affected the contractors progress of works.

### **Analysis**

- ***Link between financial and physical performance***

The project had achieved a physical progress of 85% against a financial progress of 0% at a contract time progress of 83% as at the end of January 2015. The contractor intended to submit one certificate for the contract after all the works had been done.

- ***Achievement in terms of set targets***

The physical progress of 85% against a contract time progress of 83% implied that the contract was not experiencing any delays in terms of implementation.

### **Recommendations**

- The MoWT should devise ways to expedite the internal procurements process which affected the delivery of culverts onsite.
- The contractor should expedite the remaining works so that he is not affected by the incoming rainy season.

## G. Ntungamo District

The MoWT entered into contract with M/s Near Construction Ltd for rehabilitation of Rukanga Primary School – Kabumba (4.5km), Nyakatojo – Nyamuka (4.2km) and Kikonje – Rwashamire (6km) roads in Ntungamo district at a contract sum of Ug shs 367.494 million for a contract period of 6 months. The contract commencement date is 20<sup>th</sup> November 2014 and is expected to expire 21<sup>st</sup> May 2015. The project aimed at rehabilitating the above roads so as to enhance the reliability of the road network in the district.

The scope of works involved; bush clearing including top soil removal, heavy grading and shaping, cut and fill sections, spot gravelling, Gabion installation and culvert installation. The project was monitored in January 2015 and a summary of the project data is presented in Table 12.13.

**Table 12.13: Project summary for the Interconnectivity project roads in Ntungamo district as at the end of December 2014**

|                                |   |
|--------------------------------|---|
| Source of Funding              | Government of Uganda                              |
| Contract No.                   | MoWT/Wks14-15/IP/009                              |
| Implementing Agency            | Ministry of works and Transport- Kampala.         |
| Supervision Consultant         | Ministry of works and Transport- Kampala.         |
| Contractor                     | Near Construction Company.                        |
| Design Consultant              | Ministry of works and Transport- Kampala.         |
| Project Road Length            | 14.7km  |
| Possession of Site             | 20 <sup>th</sup> November, 2014                   |
| Construction Commencement Date | 26 <sup>th</sup> November, 2014                   |
| Construction Completion Date   | 21 <sup>st</sup> May 2015                         |
| Original Contract Price        | Ug shs 367,494,000                                |
| Contract Period                | Six (6) Months                                    |
| Contract Time Elapsed          | Two (2) months                                    |
| Advance payment                | None  |
| Works Payments Certified       | Ug shs 240,920,740 (1 IPC)                        |
| Payments to the contractor     | Nil   |
| Physical Progress              | 71.4% Achieved against planned progress of 47.06% |
| Financial Progress             | NIL   |

*Source: MoWT Contract Manager*

### Financial Performance

The contractor had submitted one IPC amounting to Ug shs 240.92 million but had not yet received payments. The certificate was still being reviewed by the MoWT contract manager.

## Physical performance

The overall physical progress for the contract was estimated at 71.4% against a planned progress of 47.06%. Most of the earthworks had been completed as indicated in Table 12.14.

**Table 12.14: Progress of individual activities for the project roads in Ntungamo**

| Activity description           | %age progress |
|--------------------------------|---------------|
| Bush clearing                  | 100.0         |
| Heavy grading and shaping      | 97.6          |
| Filling of sections            | 68.2          |
| Culvert installation           | 0.0           |
| Gabion installation            | 0.0           |
| Gravelling of approved section | 0.0           |

*Source: MoWT*

Site preparatory works, bush clearing, heavy grading had been completed. The project was a head of the planned schedule with only culvert installation, spot gravelling, gabion installation and final shaping pending completion.

The three roads in this contract were inspected to check the physical progress of the activities.

### **Rukanga Primary School – Nyakatojo – Kabumba**

The road is broken down into two sections; Rukanga Primary School – Kabumba (4.5km), Nyakatojo – Nyamuka (4.2km). The scope for rehabilitation of these roads involved widening of the road width, grading, spot gravelling and drainage works. At the time of monitoring in January 2015, widening of the road to an average width of 6m and grading of the entire road length had been completed. The pending activities were gravelling and installation of culverts. Physical progress on this road was estimated to be at about 75%.

### **Kikonje – Rwashamire (6km)**

The road was widened to an average width of 6m, grading of the entire road length had been completed. This road has a swampy section at km 0+200 where works have not started because the contractor had not yet received culverts from the MoWT.



**L-R: Graded section of Rukanga Primary School road ready to receive gravel; very well graded section of Nyakatojo – Kabumba section; Unworked on swampy section at 0+200 along Kikonje – Rwashamire road, works have not yet started because of lack of culverts.**

## Challenges

- The area experiences heavy rains and these slowed down progress of the earthworks. This is a likely a cause for time extensions on this project.
- The contractor has experienced a delay in receiving materials such as culverts and gabions which according to the contract were supposed to be supplied by the MoWT.
- Delay by the MoWT to certify payment requisitions by the contractor.

## Analysis

- *Link between physical and financial performance*

The contractor has continued to work even though he had not received any payments. The project's physical progress was estimated at 71.4%. The contractor needs to be paid to avoid cash flow issues and interest charges as a result of delayed payments.

- *Achievement of set targets*

The progress is ahead of schedule with most of the major works near to completion. The physical targets of the project have been met. On the other hand the financial performance of the project is not commensurate with the work done by the contractor.

## Conclusion

The project will be completed within the stipulated contract time if the pace at which the contractor is working is maintained. This contract may however attract interest if payments to the contractor continue to delay.

## Recommendations

- The MoWT should expedite the delivery of materials to avoid further delays
- The MoWT should ensure timely payments to the contractors so as to avoid payment damages associated with such delays.

## H. Serere District – Serere County

This project involving the improvement of three roads in Serere County in Serere district totalling to 19.4km was awarded to M/s Ms Wao (U) Ltd at a contract price of Ug shs 382.79 million. A summary of the project data is presented in Table 12.15.

**Table 12.15: Summary of Interconnectivity Project in Serere County in Serere District as at end of January 2015**

|                     |   |
|---------------------|---|
| Project Name        | Rehabilitation of Works of Angole-Amagoro-Kampala road (5.8km), Kampala-Kachinga road (5.2km) and Sapir-Amakio road (8.4km) community access roads in Serere County, Serere District - Lot 16 |
| Contract No.        | MoWT/Wks/IP/14-15/16  |
| Source of Funding   | GoU   |
| Implementing Agency | MoWT  |

|                              |                                |
|------------------------------|--------------------------------|
| Supervision                  | In house - MoWT                |
| Contractor                   | M/s Ms Wao (U) Ltd             |
| Designed by                  | In house - MoWT                |
| Possession of Site           | 1st September 2014             |
| Project Road Length          | 17.6 km                        |
| Contract Commencement Date   | 8 <sup>th</sup> September 2014 |
| Construction Completion Date | 13 <sup>th</sup> March 2015    |
| Contract Price               | Ug shs 382, 797,500            |
| Contract Period              | 6 Months                       |
| Contract Time Elapsed        | 5 Months in January 2015       |
| Advance payment              | Ug shs 76,559,500              |
| Works Payments Certified     | None                           |
| Payments to the contractor   | None                           |
| Physical Progress            | 70%                            |
| Financial Progress           | 20%                            |

*Source: MoWT*

The scope of works in the contract involved: clearing and grubbing; shaping road surface by heavy grading; protection of the embankments of using gabions mattresses; spot gravelling; and drainage works (excavating for open drains, opening of miter drains, culvert installation and construction of culvert end structures). Civil works commenced in Q1 in September 2014 and are supposed to be completed in March 2015.

The project was monitored on 11<sup>th</sup> February 2015 when it had a contract time progress of 84%. Completed activities on all three roads were site clearance, shaping of road formation, excavation for open and mitre drains. The activities observed to be ongoing were: culvert and gabion installation, back filling using the excavated material and swamp raising using approved granular material.

The contractor received an advance payment of Ug shs 76.559 million (20% of contract price) in November 2014. This was delayed as it was received two months after the contract had commenced. However, this boosted the contractor's ability to mobilize for additional equipment to the project. There were also further delays by the MoWT in meeting the payments for the certificates raised by the contractor.





**Serere County, Serere: Left: A dusty graded section of Sapir-Ojara-Amakio road in Olio sub county; Center: A bush cleared section at Km 2+200 on Kampala-Kachinga road in Kyere sub county; Right: Swamp raising after culvert installation with gravel at Km 3+400 on Angole-Omagoro-Kachinga road in Kyere sub county**

To ensure that the contract works were executed according to MoWT specifications, regular inspection and supervision was done by district site agent nominated by the CAO Serere district. In addition, the contractor was given instructions to test the gravel material from a reputable laboratory and furnish the project management team with the same prior to placement of the gravel on the road as pavement layer.

During the Inspection, the following were observed: mitre drains and offshoots on all the two road clusters were not sufficient, undulations and unevenness, some sections which were not properly formed and some culverts not properly installed on Angole-Amagoro-Kampala road.

The physical progress as at the end of January 2015 was estimated at 70% against the time progress of 80%. This implies that the contractor is behind schedule. The delay in physical progress was majorly attributed to: delay in delivery of culverts by the MoWT as some activities like swamp raising could proceed; resistance by the community regarding re-alignment of some road sections; and a demand for compensation by a resident for compensation along Kampala-Kachinga road for the alleged destruction of the grave yard of his late grandfather by the contractor. Accordingly, the contractor has submitted a request seeking for time extension of by one month.

### ***Challenges experienced by the project***

- Late delivery of culverts by the MoWT interfered with works in low lying areas since activities like gravelling could not be done.
- Demand for compensation by Mr Enyeru Eric for the alleged destruction of the grave yard of his late grandfather by the contractor has affected progress of works along the Kachinga Section.
- Poor quality of works on some roads especially on Angole-Amagoro-Kampala road.

### **Analysis**

- ***Link between physical and financial performance***

The contract had achieved a physical progress of 70% against a financial progress of 20% as at the end of January 2015. The contractor had not yet submitted any certificate to be considered for payments.

- ***Achievement of set targets***



The project was slightly behind schedule. However the works in some sections had not been well done. These need to be rectified by the contractor before the contract winds up.

### **Recommendations**

- The MoWT should devise ways to expedite the internal procurements process which affected the delivery of culverts on site.
- The MoWT project management team should liaise with the district road committees to sensitize the communities along the roads about the relevance of the projects to enable them host the projects.
- The MoWT should ensure that the contractor makes rectifies the sections that were poorly worked on.

### **I. Serere District – Kasilo County**

This project involving the improvement of two roads in Kasilo County in Serere district totalling to 24.2km was awarded to M/s Canaansites Ltd at a contract price of Ug shs 353.96 million. These roads are: Adweny-Toror – kilembe (9.5km) found in two sub counties of Bugondo and Kadungulu and Olwa – Obangin – Otob (14.7km) in Labwor and Pingiri sub counties. A summary of the project data is presented in Table 12.16.

**Table 12.16: Summary of Interconnectivity Project in Kasilo County in Serere District as at end of January 2015**

|                              |   |
|------------------------------|---|
| Project Name                 | Rehabilitation of Works of Adweny-Toror – kilembe (9.5km), Olwa – Obangin – Otob (14.7km) community access roads in Kasilo County, Serere District - Lot 17 |
| Contract No.                 | MoWT/Wks/IP/14-15/17  |
| Source of Funding            | GoU   |
| Implementing Agency          | MoWT  |
| Supervision                  | In house - MoWT   |
| Contractor                   | Ms CanaanSites (U) Ltd  |
| Designed by                  | In house - MoWT   |
| Possession of Site           | 1st September 2014  |
| Project Road Length          | 24.2 km   |
| Contract Commencement Date   | 8 <sup>th</sup> September 2014  |
| Construction Completion Date | 13 <sup>th</sup> March 2015   |
| Contract Price               | Ug shs 353,960,500 (VAT Exclusive)  |
| Contract Period              | 6 Months  |
| Contract Time Elapsed        | 5 Months in January 2015  |
| Advance payment              | Ug shs 70,792,100   |
| Works Payments Certified     | None  |

|                            |      |
|----------------------------|------|
| Payments to the contractor | None |
| Physical Progress          | 60%  |
| Financial Progress         | 20%  |

*Source: MoWT*

The scope of works in the contract involved: clearing and grubbing; shaping road surface by heavy grading; protection of the embankments of using gabions mattresses; spot gravelling; and drainage works (excavating for open drains, opening of miter drains, culvert installation and construction of culvert end structures). Civil works commenced on 13th September 2014 and are supposed to be completed on the 13th March 2015.

The project was monitored on 11<sup>th</sup> February 2015 when it had a contract time progress of 84%. Physical progress of works was estimated to be at 80% on Adwenyi-Toror-Kilembe road and at 60% on Olwa-Obangin-Otoba road as at the end of January 2015. Pending works on Adwenyi-Toror-Kilembe road were the spot gravelling which was at 50% and the installation of culverts which had not yet started. On Olwa-Obangin-Otoba road, the only completed activity was clearing and grubbing. Shaping and forming of the road at Otoba and excavation for the pipe culverts at different sections of the road were the activities observed to be ongoing at the time of monitoring.



**Serere District, Kasilo County: Adwenyi-Toror-Kilembe road: Left: The straightened re-aligned section at km 2+200 with the old section of the road (path) on the left; Center: A section of the old road that was avoided at Km 1+600; Right: Assembling of the Armco culvert pipe culverts at Apapa Police Post**

The contractor received an advance payment of Ug shs 70.792 million (20% of contract price) on the 16<sup>th</sup> of January 2015 four months after he had submitted his request. This however boosted his ability to mobilize for additional equipment to the project.

The physical progress of works at the time of monitoring was estimated at 75% against the time progress of 84%. This implies that the progress of works was behind schedule. The lag in physical progress was majorly attributed to delay by the MoWT to supply culverts for the drainage works and resistance of the road realignment by the community. Accordingly, the contractor submitted a request seeking for time extension of one month from 13<sup>th</sup> March 2015 to -13<sup>th</sup> April 2015 without costs.



Serere district, Kasilo County, Olwa-Obangin-Otoba road: Left: Excavated trench for pipe culvert installation at Km 4+200; Center: Swamp raising at Km 6+600; Right: Grading and shaping of the road at Otoba

### ***Challenges and setbacks experienced by the project***

- Late delivery of culverts by the MoWT interfered with works in low lying areas since activities like gravelling could not be done.
- Resistance of the road realignment by the community along Adwenyi-Toror-Kilembe road.

### **Analysis**

- ***Link between physical and financial performance***

The contract had achieved a physical progress of 75% against a financial progress of 20%. The contractor had not yet submitted any certificate to be considered for payments.

- ***Achievement of set targets***

The project was behind schedule. However the works in the sections which been completed were well done. There was no doubt that the project would improve accessibility and connectivity to the surrounding communities when completed.

### **Recommendations**

- The MoWT should expedite the internal procurements process which affected the delivery of culverts on site.
- The MoWT project management team should liase with the district road committees to sensitize the communities along the roads about the relevance of the projects.

## **Overall for the Interconnectivity Project**

### **Implementation Issues**

- The MoWT delayed to deliver the drainage materials (armco culverts and gabion meshes) for the Interconnectivity Projects which slowed down works.
- There were delays experineced in processing of contractors payments by the MoWT.
- Obstruction of works by communities especially on roads which had to be realigned.
- Lack of key road construction material within the project areas like gravel and water. The lack of water in the dry season affected the compaction of road works.

- In some districts like Kamuli, Butalejja, Buyende and Mayuge, some of clustered projects roads were far apart from each other, for example in two sub counties, making the project mobilization and supervision a hard exercise.
- The contract managers did not have reliable transport for supervision and monitoring of the project activities.
- The introduction of VAT in road construction activities in the FY 2014/15 after the signing of contracts will cause variations in the contract prices of the project activities.

## **Analysis**

### ***Link between the financial and physical performance***

The financial performance of this project was excellent as 57.8% of the annual approved budget was released and 98.8% of the release was expended by the end of December 2014. This was an excellent financial performance. This was against a physical progress of 32.6% which was a good performance.

### ***Achievements in terms of set targets***

By the end of December 2014, 46.5km (32.6%) of roads had been rehabilitated out of the annual target of 142.7km. Other project achievements were: procurement of the consultant to carry out engineering designs of Akright roads; surveying of 20.3km (5%) of district roads and 9 (45%) road camps; and processing of 2 (10%) land titles.

The underperformance was attributed to: the procurement process which take place in Q1; failure by the MoWT to deliver the armco culverts and gabion meshes for the projects on time; the lack of sound and adequate supervision vehicles for the MoWT staff to go to the field; land acquisition delays; and the delayed payment or no payment of facilitation allowance for field work. The acquisition of land titles for the road camps was however, underway in Mubende-Kyenjonjo (8 titles), Nateete-Wakaliga - Bakuli (2 titles) and Kibuye Zzana (4 titles).

### ***Comparative analysis of similar projects between districts***

Out of the nine (9) contracts monitored in eight districts, the works for only two (2) contracts in Ibanda and Serere districts were behind schedule. Serere district had two contracts but it was the contract in Kasilo county that was experiencing delays. The delays in the two contracts had been attributed to the rains which caused flooding in Ibanda and the delayed delivery of drainage materials by MoWT. Five (5) out of the seven (7) contracts that were performing well were ahead of schedule and this was in the districts of Butaleja, Buyende, Dokolo, Kamuli and Ntungamo.

The best performing contracts were in Dokolo and Ntungamo districts. In Dokolo district the works were substantially completed one month to the end of the contract end date.

## **Conclusion**

### ***Key Conclusions in terms of project objectives***

The project achieved 32.6% of its annual core activities by the end of December 2014. This low performance was attributed to the delayed delivery of Armco culverts and gabion meshes to the contractors by the MoWT. However, there is no doubt that when the roads are completed they

would help improve accessibility and connectivity of communities in Uganda that have been inaccessible due lack of roads.

#### ***Good practices/lessons learnt***

- Early execution of planned activities avoids delay on projects
- Regular communication between the contractor and site supervisors enables the ironing of any project issues that may come up in a timely manner.

These were lessons drawn from the projects implemented in Butalejja and Dokolo districts whose works were going to be completed ahead of the contract end dates.

#### **Recommendations**

- The MoWT should devise ways to expedite the internal procurements process which affected the delivery of culverts on site.
- The contractors should expedite the remaining works especially since the materials had been delivered on all the projects so that the contracts works are completed before the rainy season sets in.
- The MoWT should pay the contractors on time in order to avoid risks that come with payment delays.
- The MoWT should liaise with the District Authorities so that communities along the project roads to be worked on are sensitized so as to create project awareness and education on the relevance of the project.
- The procurement of three supervision vehicles for the Interconnectivity project was ongoing this FY with funds already set aside.

### **12.2.2 MoWT Regional Mechanical Workshops**

#### **Project Background**

In FY 1999/2000, Regional Feeder Roads Mechanical Workshops were established to facilitate the repair of the specialised district feeder roads equipment, which could not be handled by the individual districts. The key objectives of the mechanical workshops included: to enhance repair of specialised heavy equipment which individual districts could not handle; to preserve the investment in the district road equipment by undertaking major repairs at regional level; and to provide a framework for provision of equipment that could be shared at regional level, like cranes, low beds and mobile workshops.

Other key objectives were: to provide on-job training to district mechanical staff and promote the retention of the trained staff to facilitate bulk purchase of tools and spares for the district equipment; to carry out equipment inventories and advise the respective district local governments on the condition of their respective equipment; and to undertake monitoring and evaluation of equipment usage on behalf of MoWT and provide technical advice as necessary.

The three regional mechanical workshops in Gulu, Bugembe (Jinja) and Mbarara were established in Uganda to take charge of equipment in the respective districts due to lack of technical personnel, special tools/equipment and financial capacity at the local governments.

The regional workshops offer technical support and advice to district engineering departments in the areas of minor repairs and maintenance of road equipment. The support services also extend to other projects including repair of vehicles and equipment for urban councils. In addition the workshops offer transport for specialized equipment such as bulldozers, wheel loaders, motor graders, excavators, etc to areas of operation.

The monitoring for the semi-annual performance of this Vote was done at the three Region Mechanical Workshops and the findings are presented hereafter.

## Findings

### iii) Financial Performance

In the FY 2014/15, the Mechanical Engineers Services Vote Function has an approved budget of Ug shs 17.77 billion of which a total of Ug shs 9.36 billion (52.7%) was released by the end of December 2014 and Ug shs 8.47 billion (90.5%) was spent. This was an excellent financial performance.

The budget allocation for the one program and two projects under this Vote Function was as follows: Mechanical Engineering Services – Ug shs 9.67 billion (54.4%); Road Equipment for District Units – Ug shs 6 billion (33.8%) and Rehabilitation of Bugembe Workshop – Ug shs 2.1 billion (11.8%).

Monitoring of the Vote activities was done at the three regional mechanical workshops because the Ug shs 7.931 billion (84.7%) of the release is transferred directly to these entities where implementation takes place.

By the end of December 2014, 89.81% of the total funds received at all the regional workshops was expended. Mbarara Regional Mechanical Workshop had expended all the funds received while Bugembe and Gulu had expended 79.71% and 88.71% respectively. This was an excellent financial performance. A summary of the financial performance of the regional mechanical workshops by the end of December 2014 is shown in **Table 12.17**.

**Table 12.17: Financial Performance of the Regional Feeder Roads Mechanical Workshops by the end of December 2014**

| Location of Regional Mechanical Workshop | Semi-Annual - Indicative Planning Figure (Ug Shs) | Receipts (Ug Shs Millions) as at end of Nov 2012 | Expenditure (UShs Millions) as at end of Nov 2010 | % of IPF Received | % of Receipts Spent |
|--|---|--|---|-------------------|---------------------|
| Bugembe (Jinja)                          | 2,741,871,324                                     | 2,741,871,324                                    | 2,185,578,397                                     | 100.00%           | 79.71%              |
| Gulu                                     | 2,227,507,416                                     | 2,227,507,416                                    | 1,975,960,330                                     | 100.00%           | 88.71%              |
| Mbarara                                  | 2,961,664,354                                     | 2,961,664,354                                    | 2,961,664,354                                     | 100.00%           | 100.00%             |
| Total                                    | 7,931,043,094                                     | 7,931,043,094                                    | 7,123,203,081                                     | 100.00%           | 89.81%              |

*Source: Workshop Managers and Field Findings*

### i) Physical Performance

The findings at the three regional workshops that were visited during the monitoring exercise in the months of January and February 2015 are presented in this section.

#### A) Bugembe Regional Mechanical Workshop

The workshop mainly deals with the major repairs of vehicles, road equipment and plant for 52 district local governments. It also operates, maintains and manages a fleet of core vehicles or equipment and workshop machinery that offers support to the previous activities.

The districts served by the workshop are; Amuria, Budaka, Bududa, Bugiri, Buikwe, Bukedea, Bukwo, Bulambuli, Buliisa, Busia, Butaleja, Butambala, Buvuma, Buyende, Gomba, Iganga, Kyankwanzi, Jinja, Kaberamaido, Kalangala, Kaliro, Kamuli, Kampala, Kapchorwa, Katakwi, Kayunga, Kiryandongo, Kiboga, Kibuku, Kumi, Kween, Kibaale, Luuka, Luwero, Manafwa, Masindi, Mayuge, Mpigi, Mbale, Mityana, Mubende, Mukono, Nakaseke, Nakasongola, Namayingo, Namutumba, Ngora, Pallisa, Serere, Sironko, Soroti, Tororo and Wakiso.

The semi-annual workplan for FY 2014/15 was budgeted for Ug shs 2.741 billion and details of the planned activities are presented in Table 12.18.

**Table 12.18: A detailed semi-annual workplan for Bugembe Regional Mechanical Workshop for FY 2014/15**

| S/N | Activity  | Quantity   | Estimated costs (Ug shs) |
|-----|---|--|--------------------------|
| 1   | Preventive maintenance, major repair of breakdowns and supply of fast moving parts:<br>For road equipment<br>9 Bull dozer<br>90 Motor graders<br>12 Chain loaders<br>9 Wheel loaders<br>20 Rollers<br>20 Agric Tractor with trailers<br>For vehicles<br>102 Tippers<br>104 Pickups<br>2 Low loaders<br>30 Workshop machinery<br>2 Mobile workshops<br>A Mobile crane<br>8 Water bowzers | 160 pieces<br><br><br><br><br><br><br><br><br><br><br>249 pieces | 2,171,715,830            |
| 2   | Fuels and lubricants for:<br>Mobilisation and demobilisation of local government equipment for repairs<br>Inspection and monitoring maintenance of operational equipment  | Fuel   | 110,000,000              |

| S/N         | Activity   | Quantity   | Estimated costs (Ug shs) |
|-------------|--|------------|--------------------------|
|             | Supervision Transport<br>Testing before and after repairs<br>Cleaning of parts during repairs  | Lubricants | 60,000,000               |
| 3           | Wages and allowances<br>Wages and gratuity to staff on contract<br>Allowances to staff on Permanent terms<br>Allowances payable to technical staff to carry out inspection, monitoring and field repairs | 44 persons | 260,155,494              |
| 4           | Office Expenses (Consumables, utilities plus other goods and services)   | Assorted   | 40,000,000               |
| 5           | Maintenance of workshop structures, civil works  | Assorted   | 100,000,000              |
| GRAND TOTAL |  |            | 2,741,871,324            |

*Source: Workshop Manager*

### Financial performance

By the end of Q2, FY 2014/15, the workshop had received Ug shs 2.741 billion (100% of the semi-annual budget) of which Ug shs 2.185 billion (79.7%) was expended (See Table 12.19) resulting into an excellent financial performance.

**Table 12.19: Financial performance of Bugembe Regional Mechanical Workshop by the end of December 2014**

| Annual Budget (Ug shs) | Releases (Ug shs)  | Release dates                  | Total Release (Ug shs)                 | Total Expenditure (Ug shs)       |
|------------------------|--------------------|--------------------------------|--|----------------------------------|
| 7,347,632,000          | 1,293,823,045 (Q1) | 08 <sup>th</sup> August 2014   | 2,741,871,324 (37.3% of annual budget) | 2,185,578,397 (79.7% of release) |
|                        | 1,448,048,279 (Q2) | 14 <sup>th</sup> November 2014 |  |                                  |

*Source: Workshop Manager*

### Physical performance

The workshop had executed 98.6% of its semi-annual work plan by the end of December 2014. The target of 100% was not achieved because some works for Q2 were still in progress (See Table 12.20). The workshop undertook activities of maintenance and repair on: core equipment and vehicles; district equipment; zonal equipment; monitoring, evaluation and assessment of government vehicles under the program area.

The activities of maintenance involved engine overhaul or repair, tandem system repair, circle gear repair, servicing, body repair, suspension system overhaul or repair, hydraulic system repair, fuel system repair, and work equipment repair or overhaul.





**Left: Kamuli motor grader undergoing maintenance; Centre: Komatsu grader from Butambala; Right: Truck excavator from Katakwi**

**Table 12.20: Summary of activities not completed at Bugembe the end of December 2014**

| ITEM | DESCRIPTION   | Location (District)                             | PROGRESS (%age Completed) |
|------|---|---|---------------------------|
| 1    | Komatsu Motor Grader-LG0029-19 GD511A   | Kibaale   | 5%                        |
| 2    | Komatsu Bull dozer-LG 0039-27 D53A<br>Komatsu Motor Grader-LG 0063-12 D511A   | Luweero<br>Jinja                                | 20%                       |
| 3    | Fiat Kobelco Motor Grader LG0013-54   | Sironko   | 40%                       |
| 4    | Fiat Motor Grader-LG0084-24 Model 140   | Kumi  | 55%                       |
| 5    | Komatsu Motor Grader-UG0003-27 GD521A<br>Komatsu Motor Grader-LG0014-16 GD511A  | Nakasongola<br>Kamuli                           | 60%                       |
| 6    | Caterpillar Motor Grader-LG0002-34 Model 120H   | Mpigi   | 70%                       |
| 7    | Caterpillar Traxcavator -UR2299-29 Model 953C<br>Komatsu Motor Grader-UG0059-34 GD521A<br>Fiat Hitachi Traxcavator-LG0024-30 FL 145<br>Dynapac Roller-UG0059-34 Model CA 151<br>International Bull Dozer-UG0059-34 Model TD15 | Kiboga<br>Butambala<br>Katakwi<br>Mbale<br>Kumi | 80%                       |
| 8    | Komatsu Bull dozer- LG0122-34 D53A  | Masindi   | 90%                       |

*Source: Workshop Manager*

### **Equipment inventory as at 31<sup>st</sup> December 2014**

The equipment at Bugembe Regional Mechanical Workshop comprises a recovery truck, a water bowser, a cargo truck, 2 generators, 6 pickups, 2 low loaders, 2 mobile workshops, 3 station wagons and an air compressor. There is a fleet of equipment that was assigned to the Saaka Swamp project implemented by the MoWT under the Construction of Selected Bridges project that consists of an excavator, a motor grader, a bull dozer, a wheel loader, a roller, a water bowser and 6 dump trucks.

The works shop is also in-charge of zonal equipment established at Mbale. This Mbale District Rural Roads Unit consists of a roller, a bull dozer, a wheel loader, a water bowser, 2 motor graders and 7dumps. The status of all the equipment above was not established.

## Challenges

- The workshop budget has not been revised to cater for the increasing prices and the newly procured equipment in regard to maintenance and repair.
- Inadequate capacity of mechanics and operators affects equipment maintenance. In some instances, the trained operators by the MoWT are sidelined at the districts.
- High maintenance costs; the old equipment requires rehabilitation (replacement of most parts) and the new equipment (from China) suffers from frequent breakdowns.

## Analysis

- ***Link between financial and physical performance***

The very good absorption of funds (79.7%) was due to the excellent physical performance of 98.6 % of the semi-annual targets.

- ***Achievement of set targets***

The workshop achieved almost all its semi-annual targets (98.6%). This was attributed to the timely procurement of supplies like spare parts, lubricants and oils.

## Conclusion

The workshop budget currently caters for only general repair of the old/existing equipment. However, there is need to identify funding for other key activities/programs which are summarized in Table 12.21.

**Table 12.21: A summary of other workshop activities which require funding**

| S/N          | Description  | Budget (Ug shs)      |
|--------------|--|----------------------|
| (1)          | Rehabilitation of the old existing road equipment (part of the 3 year programme)   | 5,116,000,000        |
| (2)          | General repair of the new equipment for Local Governments, DRRU and URRU plus training of operators and mechanical staff | 4,080,000,000        |
| (3)          | Rehabilitation and re-equipping the workshop and construction of a classroom block (part of the 3-year programme)        | 2,000,000,000        |
| <b>Total</b> |  | <b>11,196,000000</b> |

*Source: Workshop manager*

## Recommendations

- The MoWT should consider revising the workshop budget to cater for maintenance of newly purchased equipment in terms of tools, spare parts, oils and lubricants.
- The MoWT should organise more refresher trainings for mechanics and operators.

## B) Gulu Regional Mechanical Workshop

This workshop serves 30 districts and these are; Abim, Adjumani, Agago, Alebtong, Amolator, Amudat, Amuru, Apac, arua, Dokolo, Gulu, Kaabong, Kitgum, Koboko, Kole, Kotido, Lamwo, Lira, Maracha, Moroto, Moyo, Nakapiripirti, Napak, Nebbi, Nwoya, Otuke, Oyam, Pader, Yumbe and Zombo.

The annual work plan for FY 2014/15 covers: operational costs for the workshop; costs for repairs, fuel, oil and lubricants for maintenance of both district feeder roads equipment and acquired zonal equipment. Details of this work plan in Table 12.22.

**Table 12.22: A detailed semi-annual work plan for Gulu regional mechanical workshop for FY 2014/15**

| S/N                | Activity   | Quantity  | Estimated costs (Ug shs)                             |
|--------------------|--|---|--|
| 1                  | Preventive maintenance, repairs of breakdowns and supply of fast moving parts:<br>For road equipment<br>8 Bull dozer<br>37 Motor graders<br>2 Track loaders<br>9 Wheel loaders<br>13 Vibro rollers<br>2 Excavators<br>For vehicles<br>60 Tippers<br>55 Pickups<br>3 Low loaders<br>A Generator<br>2 Mobile van | 70 pieces<br><br><br><br><br><br><br><br><br><br>121 pieces | 1,510,841,116  |
| 2                  | Fuels, Oils and lubricants for:<br>Mobilisation and demobilisation of local government equipment for repairs<br>Inspection and monitoring maintenance of operational equipment<br>Supervision Transport<br>Testing after repairs<br>Cleaning of parts during repairs   | Fuel<br><br><br><br>Lubricants                              | 122,000,000<br><br><br>58,000,000                    |
| 3                  | Wages and allowances<br>Wages and gratuity to staff on contract<br>Allowances to staff on Permanent terms<br>Allowances payable to technical staff to carry out inspection, monitoring and field repairs   | 35 persons  | 200,000,000  |
| 4                  | Office equipments and workshop expenses (Consumables, utilities plus other goods and services)   | Assorted  | 92,000,000   |
| 5                  | Workshop maintenance civil works   | Assorted  | 244,666,600  |
| <b>GRAND TOTAL</b> |  |   | <b>2,227,507,716 (38.4% of the annual work plan)</b> |

*Source: workshop manager*

## Financial performance

By the end of December 2014, the workshop had received Ug shs 2.227 billion (100% of the semi-annual budget) of which Ug shs 1.975 billion (88.7%) was expended (See Table 12.23). This was an excellent financial performance.

**Table 12.23: Financial performance of Gulu regional mechanical workshop by the end of Q2, FY 2014/15**

| Annual Budget<br>(Ug shs) | Releases(Ug shs)   | Release dates                  | Total Release<br>(Ug shs) | Total<br>Expenditure<br>(Ug shs) |
|---------------------------|--------------------|--------------------------------|---------------------------|----------------------------------|
| 5,800,000,000             | 1,030,588,163 (Q1) | 08 <sup>th</sup> August 2014   | 2,227,507,416             | 1,975,960,330                    |
|                           | 1,196,919,253 (Q2) | 20 <sup>th</sup> November 2014 |                           |                                  |

*Source: Workshop Manager*

## Physical performance

The workshop had executed 76% of its semi-annual work plan by the end of Q2, FY 2014/15. Some targets were not achieved because some activities were not completed by the end of December 2014 (See Table 12.24). The workshop undertook activities of: repairs on core equipment and vehicles, district equipment, and zonal equipment; monitoring, evaluation and assessment of equipment and vehicles in all the 30 districts; renovation of the office block; and upgrade of the workshop yard from gravel to concrete (pavers) which was observed to be ongoing at the time of monitoring.

**Table 12.24: A summary of activities not completed by the end of Q2, FY 2014/15**

| ITEM | DESCRIPTION   | ACTIVITIES  | PROGRESS<br>(%age Completed) |
|------|---|---|------------------------------|
| 1    | Komatsu Motor Grader-<br>LG0006-04<br>GD521A-1<br>Adjumani District | Engine Overhaul<br>Hydraulic System Overhaul<br>Body Repair<br>Transmission System Repair<br>Final Drive Overhaul                   | 80%                          |
| 2    | Komatsu Motor Grader-<br>LG0006-04<br>GD511A-1<br>Apac District     | Engine Overhaul<br>Suspension System Overhaul<br>Hydraulic System Overhaul<br>Body Repair<br>Transmission System Repair             | 85%                          |
| 3    | Mitsubishi Dump Truck-<br>LG0022-56<br>FM617P<br>Yumbe District     | Hydraulic System Repair<br>Clutch System Repair<br>Suspension System Overhaul<br>Diff Overhaul<br>Body Repair<br>Fuel System Repair | 90%                          |

| ITEM | DESCRIPTION  | ACTIVITIES   | PROGRESS<br>(%age Completed) |
|------|--|--|------------------------------|
| 4    | Mitsubishi Dump Truck<br>FM617P<br>Kotido District               | Clutch System Repair<br>Body Repair<br>Hydraulic System Repair<br>Electrical System Repair<br>Steering System Repair<br>Suspension System Repair | 60%                          |
| 5    | Isuzu Dump Truck -LG0022-56<br><br>Arua District                 | Engine Overhaul<br>Body Repair<br>Suspension Overhaul<br>Hydraulic System Overhaul<br>Electrical System Overhaul                                 | 50%                          |
| 6    | Fiat Hitachi Motor Grader<br>LG0008052<br>Nakapiripirit District | Electrical System Overhaul<br>Hydraulic System Overhaul<br>Suspension System Overhaul<br>Work Equipment Overhaul                                 | 30%                          |
| 7    | Office Block   | Renovation and remodeling  | 95%                          |

*Source: Workshop Manager*



**Left: Compound paving works; Centre: Part of the office under renovation; Right: Internal view of the renovated room**

### **Equipment inventory**

The zonal centre equipment for Gulu regional mechanical workshop consists of a mobile workshop, a vibro roller, a bull dozer, a wheel loader, a low bed, 2 water bowzers, 2 motor graders, 2 dump trucks and 3 motor cycles. These were all operational at the time of monitoring.

The equipment for force account at Gulu regional mechanical workshop comprises a station wagon, a pick-up, 2 vibro rollers, a wheel loader, a water bowser, 2 motor graders, 4 dump trucks and 2 motor cycles. However, the status of the equipment was not established.



**Left: A wheel loader for the MoWT force account unit in Northern Uganda; Centre: A dynapac roller from Kotido district to be boarded off; Right: A repaired dump truck from Adjumani district that is awaiting to be sprayed**

## **Challenges**

- Inadequate funding relative to the prevailing demand at the workshop for equipment maintenance and repair.
- Equipment failures are unpredictable therefore, the budget can never be certain to cover all demands promptly.
- The workshop gets overwhelmed by maintenance of the district equipment since the districts receive meagre funds for mechanical imprest. In addition, they also lack the manpower and technical capacity to service and maintain their own equipment.
- The workshop needs to be upgraded because it was not well established like Bugembe and also requires more space for storage.

## **Analysis**

### ***Link between financial and physical performance***

The absorption of funds was excellent (88.7%). This was brought about by the very good physical performance at 76%.

### ***Achievement of set targets***

The workshop achieved almost all its semi-annual targets as the physical performance was very good at 76% by the end of December 2014. This was attributed to the timely release and the frame work contracts which were running. Procurement of supplies like spare parts, lubricants and oils was also timely.

## **Conclusion**

The current status of the workshop is not to the standard for; it lacks a full set of tools to carry out maintenance works and a well established structure to harbour workshop works. Therefore, the MoWT should consider setting up a proper structure for mechanical works as well as equipping the workshop with full sets of tools.

## **Recommendations**

- The MoWT should revise the funding to the workshop to cater for maintenance of the increasing fleet of equipment.
- The MoWT should provide for an emergency budget to cater for abrupt breakdowns.
- The MoWT should consider a pool fund for minor repairs and maintenance for the districts rather than spreading funds thinly.

- The MoWT should consider upgrading the workshop by equipping it with the required tools and creation of more space for mechanical works.

### **C) Mbarara Regional Mechanical Workshop**

This workshop serves a total of 29 districts, 9 municipalities and 61 town councils in the west and south western Uganda.

For the FY2014/15, the workshop has an annual budget allocation of Ug shs 8.890 billion. For first and second quarters, the regional workshop planned to: carry out preventive maintenance; major repairs of breakdowns and supply of fast moving parts for the road equipment (250pieces) and vehicles (292 pieces); civil works for the workshop; and procurement of fuel and lubricants. The total budget for this period was Ug shs 4.290 billion of which Ug shs 2.070 billion (49.2%) was for Q1 and Ug shs 2.220 billion (51.8%) was for Q2 activities.

#### **Financial Performance**

During Q1 the workshop received Ug shs 1.410 billion (100% of the Q1 budget) and Ug shs 1.551 billion was received in Q2 (100% of Q2 budget). Cumulatively a total of Ug shs 2.961 billion (100% of the Q1 and Q2 combined budget) was released. All the funds were expended on planned outputs. This was an excellent financial performance for the mechanical workshop.

#### **Physical Performance**

The following activities have been executed by the workshop:

- Fourteen (14) districts in Q1 and thirteen (13) in Q2 were supported in repairing their road equipment. The districts which benefited from the workshop support were: Ntungamo, Kabarole, Rukungiri, Ibanda, Bushenyi, Kanungu, Mbarara, Kisoro, Isingiro, Ssembabule, Kiruhura, Hoima and Kyenjojo in Q1 while Ntungamo, Kabarole, Kasese, Rukungiri, Ibanda, Kabale, Bushenyi, Kisoro, Ssembabule, Hoima and Kamwenge were supported in Q2.
- The workshop stocked the stores with common spares of road equipment; a total of 125 pieces for road equipment and 146 for vehicles were procured in each of the quarters. 100% of the planned outputs were achieved. The workshop also utilized part of the funding in completion of the civil works for the administration block. The physical progress of the administration block was estimated to be at 95%.



**L-R: Part of the un-stocked workshop; A truck belonging to Kabale district which had been brought for repairs; One of the graders from the local governments brought for repairs at the workshop**



## **Challenges**

- The workshop lacks essential machines such as lathe machines, fabrication workshops and testing equipment. These would facilitate the workshops to produce essential accessories such as bolts and nuts. Therefore in the absence of these essential workshop machines, the regional workshop resorts to procurement of the small accessories to enable them carry out repairs.
- The regional workshop has an overwhelming demand from the local governments which is not matched with the available resources. The station serves 99 agencies which have equipment for light grading and these are not suitable for heavy maintenance activities.
- The lack of qualified machine operators, electricians, and mechanics in local government. The existing staff in local governments have not received specialized training in mechanics to handle repair and maintenance of heavy equipment and as a result they end messing them up.

## **Conclusion**

Mbarara Regional Mechanical Workshop is an essential component of sustainability of equipment maintenance management in the western region. The workshop is the only one in the region and has an overwhelming demand which can only be reduced by setting of additional workshops.

## **Recommendations**

- The GoU/MoWT should prioritize refurbishment of the workshop as well as installation of the essential equipment for a well-stocked mechanical workshop.
- The GoU/MoWT should set up additional workshops within western Uganda so as to relieve the burden on the Mbarara regional mechanical workshops as well as appropriate the available resources to meet the increasing demand of maintenance activities.
- The MoWT should start up a training institute/centre to facilitate the training of machine operators. This will enable constant supply of competent machine operators, mechanics to both government entities and the private sector.

## **Overall Performance, challenges and recommendations for the MoWT Regional Mechanical Workshops**

### **Implementation Issues**

- The state of the Mbarara and Gulu workshops hinders operations as they do not have a mechanical services workshop setting.
- The mechanical engineering services budget has not been revised to cater for the increasing prices and the newly procured equipment in regard to maintenance and repair.
- Recovering of the old equipment and incorporating them into zonal units is a problem as the districts are still holding onto them. The situation is made worse as this issue is being politicized.



- High maintenance costs; the old equipment requires rehabilitation (replacement of most parts - 30% of the cost of the new equipment) and the new equipment (from China) suffers from frequent breakdowns.
- Absence of regular mechanical personnel to oversee minor mechanical repairs and routine maintenance of the equipment at the districts had undermined the general management of the equipment.
- Late release of funds, which in turn delayed procurement of spares and therefore delayed repair of the equipment.
- Lengthy and laborious procurement process, which delayed repair of equipment especially given that some of the required spare parts are identified during the process of repairing the defects identified in the preliminary diagnosis. The multiple stage diagnosis and procurement of required spare parts rendered the procurement process extremely tedious and prolonged repair times for the equipment.
- Inadequate capacity of mechanics and operators affects equipment maintenance. In some instances, the trained operators by the MoWT are sidelined at the districts.

## **Analysis**

### ***Link between the financial and physical performance***

Out of the annual approved budget of Ug shs 17.77 billion, a total of Ug shs 9.36 billion (52.7%) had been released by the end of December 2014 of which Ug shs 8.46 billion (90.5%) had been spent. This was an excellent financial performance. However, the physical progress could not easily be determined because of the nature of services offered which are demands driven in nature.

### ***Achievements in terms of set targets***

The achievement of set targets of this project could not easily be determined because of the services offered by the workshops are demand driven in nature. That is, the equipment break down in any specified period or region cannot be predetermined.

## **Conclusion**

Annual work plans for all the workshops essentially comprised of equipment inventories under the districts rather than actual expected maintenance interventions, thereby making quarterly outputs similar to annual outputs and rendering performance indicators vague and difficult to measure.

The regional workshops in a bid to improve their services have drafted a proposal for retrieval and rehabilitation of the old road equipment in local governments. This will enhance the equipment base at the workshops. The total budget for this intervention is Ug shs 28 billion over a period of 3 years. In addition, there is a proposal for institutional support to regional mechanical workshops for the repair of the new road equipment acquired in 2012 through the US \$100 million loan from China. With support from the GoU, the effecting of these proposals will be the glory of the mechanical workshops.

## **Recommendations**

- The GoU/MoWT should prioritize refurbishment of the Gulu and Mbarara workshops.
- The GoU/MoWT should set up additional workshops in Uganda so as to relieve the burden on the existing three regional mechanical workshops.

- The MoWT should revise the funding to the workshops to cater for maintenance of the increasing fleet of equipment.
- The GoU should consider a pool fund for minor repairs and maintenance for the districts rather than spreading funds thinly through URF.
- The MoWT should effect a deliberate strategy to employ skilled staff at the district to deal with equipment operation and minor repairs.
- The MoWT should start up a training institute/centre to facilitate the training of machine operators. This will enable constant supply of competent machine operators, mechanics to both government entities and the private sector.
- The MoWT should provide for an emergency budget to cater for abrupt breakdowns.

### 12.3 Uganda National Roads Authority (UNRA)-Vote 113

#### Background

The UNRA became operational on 1<sup>st</sup> July 2008. The mandate of UNRA is to develop and maintain the national roads network, advise Government on general roads policy and contribute to addressing of transport concerns, among others. The Mission is “*To develop and maintain a safe national roads network that fosters the economic development of Uganda*”<sup>7</sup>.

The national roads network was estimated at 10,000 km by June 2009 however, this has grown since to about 22,000 km. UNRA executes its mandate under two programmes and these are; National Road Construction/ Rehabilitation and National Road Maintenance.

National Road Construction/Rehabilitation Programme is funded by both the GoU and other development partners (donors) and it mainly caters for only paved roads. The entire development budget of UNRA is allocated to this programme.

National Road Maintenance Programme mandate is carried out by 22 UNRA stations across the country. The stations undertake maintenance works on all national unpaved roads and minor repairs on paved national roads. The works under the programme are financed by the GoU through Vote 118-Uganda Road Fund (URF). Details of the findings are presented under URF.

#### National Road Construction/Rehabilitation Programme

The programme started in July 2008 with the establishment of the UNRA. In fulfillment of the obligation, numerous road projects are funded by the GoU and donors for various road activities.

The annual planned outputs under the programme in FY 2014/15 on national roads are: 250 km of gravel upgraded to bitumen standard; 170 km of old paved reconstructed; 2225 km of unpaved and 100km of paved periodically maintained.

UNRA is undertaking numerous projects across the country and below are a few details.

Completed projects under bridges by December 2014 were; Mbarara-Kikagati-Murongo Bridge, Ayugi and Ire bridges on Atiak-Moyo-Afogi road, Daga, Ure, Ewanture and Uzurongo bridges on Wandu-Yumbe road while those under roads were; Hoima-Kaiso-Tonya, Jinja-Kamuli and Tororo-Mbale.

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<sup>7</sup> UNRA's magazine Issue No.33, January 2015

On the other hand, there are over 1900km under construction/upgrading and these were; Gulu-Atiak, Vurra-Arua-Koboko-Oraba, Ishaka-Kagamba, Nakapiripirti-Moroto, Kampala-Entebbe expressway, Kamwenge-Fort Portal, Gulu-Atiak-Nimule, Kamdini-Kiryandongo, Kiryandongo-Kamdini, Mbarara-Bypass, Mpigi Kanoni, Ntungamo-Kakitumba /Mirama hills, Expansion of Kampala Northern Bypass, Mukono-Katosi-Kyetume/Kisoga-Nyenga, and Luuku-Kalangala. Roads under reconstruction were Kampala (Busega)-Masaka Phase II, Mbale-Soroti, Kawempe-Luwero-Kafu, Mbarara (Buteraniro)-Ntungamo, Ntungamo-Katuna and Mukono-Jinja.

Eight projects under the programme were sampled and monitored.

## Findings

### Financial performance

In FY 2014/15, the programme has an approved budget of Ug shs 1,727.945 billion. The financial performance is as seen in Table 12.25.

**Table 12.25: Financial Performance of UNRA by 31st December 2014 (Ug shs Billion)**

| Source of funding     | Approved Budget | Release | Expenditure | Budget Released | Budget Spent | Release spent |
|-----------------------|-----------------|---------|-------------|-----------------|--------------|---------------|
| GoU                   | 1,269.856       | 603.198 | 599.398     | 47.5%           | 47.2%        | 99.4%         |
| Donor                 | 457.639         | 277.318 | 277.318     | 60.6%           | 60.6%        | 100%          |
| Total (GoU and Donor) | 1,727.945       | 880.516 | 876.716     | 51.0%           | 50.8%        | 99.6%         |

*Source: UNRA Q2-FY2014/15 Progress Report*

The half-year release and expenditure performance was excellent at 51% and 99.6% respectively. The excellent absorption of funds was attributed to attainment of targets for most of the ongoing projects.

Table 12.26 shows the financial performance of UNRA projects monitored for half-year performance.

**Table 12.26: Financial performance of UNRA projects monitored by 31<sup>st</sup> December 2014**

| S/N | Project                                 | Financial Performance |                                  |                          |                              |                   |                 |
|-----|---|-----------------------|----------------------------------|--------------------------|------------------------------|-------------------|-----------------|
|     |   | Funding Source        | Approved Budget (Ug Shs Billion) | Release (Ug Shs Billion) | Expenditure (Ug Shs Billion) | % Budget Released | % Release Spent |
| 1   | Kampala Entebbe Express Highway (51 km) | GoU                   | 80.00                            | 57.20                    | 57.20                        | 71.5              | 100             |
|     |   | Donor                 | 50.00                            | 96.00                    | 96.00                        | 192.0             | 100             |

|   |  |  |       |        |        |       |     |
|---|--|--|-------|--------|--------|-------|-----|
| 2 | Reconstruction of Mbarara-Katuna road (155 km)                     | GoU  | 20.00 | 9.29   | 9.29   | 46.4  | 100 |
|   |  | Donor  | 70.19 | 103.8  | 103.8  | 148.0 | 100 |
| 3 | Upgrade of Gulu - Atiak - (74 km) and Atiak- Bibia/ Nimule (35 km) | GoU  | 5.00  | 3.17   | 3.17   | 63.4  | 100 |
|   |  | Donor  | 45.00 | 25.41  | 25.41  | 56.5  | 100 |
| 4 | Upgrading of Mpigi-Kanoni (65 Km)                                  | GoU  | 20.00 | 2.12   | 2.12   | 10.06 | 100 |
|   |  | Donor  | 70.20 | 22.706 | 22.706 | 32.35 | 100 |
| 5 | Upgrade Vurra - Arua - Koboko - Oraba (92 km)                      | GoU  | 5.00  | 2.37   | 2.37   | 47.4  | 100 |
|   |  | Donor  | 25.00 | 13.37  | 13.37  | 54.0  | 100 |
| 6 | Jinja-Kamuli (58 km)   | <p>The projects had no releases however their expenditures in 2014/15 were as follows:</p> <p><i>Jinja-Kamuli</i> expended Ug shs 5,751,727,708 as payments to the contractor .The consultant received no payment.</p> <p><i>Kiryandongo-Kamdini</i> expended Ug shs 297,280,430 as payments to the consultant and Ug shs 297,280,430 as payments to the contractor.</p> <p><i>Kamdini-Gulu</i> expended Ug shs 13,151,126,354 as payments to the contractor and Ug shs 391,598,700 as payments to the contractor.</p> |       |        |        |       |     |
| 7 | Kiryandongo-Kamdini (43 km)  |  |       |        |        |       |     |
| 8 | Kamdini-Gulu (65 km)   |  |       |        |        |       |     |

Source: UNRA Q2-FY2014/15 Progress Report and UNRA

## Physical Performance

The execution of semi-annual workplan for both upgrade and reconstruction was at 96.48% and 115.65% respectively. This was an excellent physical performance. Details of the physical performance of the programme are presented in 12.27.

**Table 12.27: Physical performance of the National Road Construction/Rehabilitation achievements by 31<sup>st</sup> December 2014**

| S/N | Planned Activity                                   | Annual Target (km) | Expected semi-annual Achievement (km) | Achieved target by the end of Q2 (km) | Achievement by Q2 baing on semi-annual Target |
|-----|--|--------------------|---------------------------------------|---------------------------------------|---|
| 1   | Upgrade of national roads to bitumen standards     | 250                | 125                                   | 120.6                                 | 96.48%  |
| 2   | Reconstruction or rehabilitation of national roads | 170                | 85                                    | 98.3                                  | 115.65%                                       |

Source: UNRA Q2 progress report, FY 2014/15

A summary of the physical performance of the projects monitored by 31<sup>st</sup> December 2014 is presented in Table 12.28.

**Table 12.28: Physical progress of UNRA projects monitored by 31<sup>st</sup> December 2014**

| S/N | Project   | FY 2014/15 |          | Cumulative achievement |
|-----|---|------------|----------|------------------------|
|     |   | Target     | Achieved |                        |
| 1   | Kampala Entebbe Express Highway (51 km)                                       | 20%        | 7.7%     | 32%                    |
| 2   | Periodic maintenance of Jinja-Kamuli (58 km)                                  | 13%        | 11%      | 98%                    |
| 3   | Reconstruction of Mbarara-Katuna road (155 km) - Lot 3: Kabale-Katuna (65 km) | 25%        | 13.40%   | 79.40%                 |
| 4   | Reconstruction of Kiryandongo-Kamdini (58 km)                                 | 20%        | 11%      | 11%                    |
| 5   | Reconstruction of Kamdini-Gulu (65 km)  | 20%        | 11%      | 11%                    |
| 6   | Upgrade Gulu - Atiak (74 km) and Atiak- Bibia/ Nimule (35 km)                 | 25%        | 19.40%   | 94.98%                 |
|     |   | 25%        | 18.20%   | 41.90%                 |
| 7   | Upgrading of Mpigi- Kanoni (65 Km)  | 20%        | 6.38%    | 13.06%                 |
| 8   | Upgrade Vurra - Arua - Koboko - Oraba (92 km)                                 | 25%        | 17.4%    | 91.65%                 |

*Source: UNRA Q2-FY2014/15 Progress Report*

## **Field findings**

### **12.3.1 Kampala-Entebbe Expressway Project (49.62kms)**

#### **Project Background**

The Kampala-Entebbe Expressway project is located in the Mid-South region of Uganda, starting from Kampala city and ending at Entebbe Airport (36.94km) and another route from Kajjansi to Munyonyo (12.68km). The project is part of the measures to decongest and enhance trade movement through, within and out of the Greater Kampala Metropolitan Area (GKMA). The urban congestion is increasing in Kampala at an estimated rate of 4.5% annually with increased motorization. Thus Kampala is facing heavy traffic jam, especially during the peak hours.

The proposed New Kampala – Entebbe Highway is consistent with the recommendations and objectives of the Master Plan of the GKMA by providing an efficient mass transit route between two vital cities in the region. This project forms a crucial part of government’s overall strategy for decongesting Kampala through construction of an inner beltway comprising the Kampala Northern and Southern Bypasses as well as an outer beltway along the edges of the GKMA.

Entebbe International Airport is the largest and busiest airport in Uganda. The current road, known as Kampala-Entebbe road, is narrow, congested, and is poorly suited to handle the heavy

traffic that traverses it today. On a normal day commuting between Kampala and Entebbe takes at least 40 minutes, it stretches to two hours as commuters and motorists rush to work in the morning and return home in the evening.

In 2009, the GoU began consultations with the Government of China regarding the construction of a four-lane (dual-carriage) highway connecting Entebbe and Kampala. Accordingly, the contract for the Design and Build of Kampala – Entebbe and a Kajjansi – Munyonyo spur project of approximately 51.4km was awarded to M/s China Communications Construction Company Ltd (as the Contractor) on 26<sup>th</sup> October 2010.

The highway is estimated to cost US\$476 million (Ug shs 1.19 trillion). Of this, US\$350 million (Ug shs 875 billion) is a loan from the Exim Bank of China. The remaining US\$126 million (Ug shs 315 billion) will be provided by the GoU. The government will provide another US\$40 million (Ug shs 100 billion) to compensate land owners along the route of the proposed highway. When the loan is repaid, the future toll revenues would be used to finance the development of other critical road infrastructure. Upon completion, it is anticipated that the road project will go a long way in reducing congestion on the busy Kampala- Entebbe Road.

### **Project description**

The Kampala – Entebbe route will start from Busega Interchange and is aligned to the south direction to Kajjansi Interchange, joining the existing Kampala – Entebbe road at Abayita Ababari Interchange. From Abayita Ababari to Entebbe, the project is along the existing route and ends at the gate of the Entebbe Airport. The first 24.9km (Busega Interchange to Abayita Ababari Interchange) is along a new route (toll expressway) while the remaining 12.04km is along the existing Kampala – Entebbe route of which 7.4km will be widened and 4.64km will be upgraded with additional pavement.

The second part of the project, Kajjansi Interchange – Munyonyo Highway will start from the main expressway at Kajjansi Interchange and is directed to the east through Lweza and connects to Munyonyo, a prominent resort and conventional suburb of Kampala, located at the northern shores of Lake Victoria.

### **Project objectives**

- Improve traffic conditions through decongestion of urban areas functioning both as a bypass and distributor road.
- Contribute to urban development by inducing land use and betterment of the urban and road environment.
- Complement other strategic projects of national importance, e.g., Bus Rapid Transit (BRT) system on major corridors in GKMA; Master plan for the redevelopment of Entebbe International Airport; and Kampala Industrial Business park.

### **Project Scope**

As the project is a Design and Build type, the scope includes all design works, construction and documentations. The detailed scope of works as per the contract involves:

- Road opening that involves bush clearing and grubbing plus tree removal.

- Restructuring of existing drainage structures, curbs, sidewalks, median paving, steel safety barrier, bituminous and cement concrete pavement and signs.
- Roadway excavation and embankment construction.
- Construction of pavement layers, i.e., sub base, crushed stone base, bituminous prime coat, bituminous tack coat, asphaltic concrete wearing and binder courses plus asphaltic overlay courses.
- Installation of drainage structures like pipe culverts and box culverts.
- Construction of structures like underpasses, overpasses, via ducts, intersection, interchanges, safety barriers, concrete curbs, ditch linings, sidewalks, median pavings, major and minor bridges.
- Installation of traffic control signs and markings as well as road furniture like reflectionised thermoplastic yellow and white traffic lanes, reflectionised thermoplastic traffic control markings, highway signs (ground mounted, cantilever and gantry), speed hump and kilometre posts.
- Construction of toll plazas.
- The contractor will also: establish vegetation on the cut and fill slopes and in areas where the natural vegetation will have been cleared or covered; do landscaping and aesthetic improvement; and restore wetlands and streams.

The major concrete structures works of the project comprise of: 3 mainline toll gates; 4 interchanges and one roundabout; 5 main bridges (span in the range of 75m to 1450m); 19 over bridges (total linear sum = 1188m); 17 pedestrian and vehicular underpasses (total linear sum = 460.1m); 74 reinforced concrete pipe culverts; and 44 box and slab culverts. Table 12.29 shows the toll plaza stations.

**Table 12.29: Stations of Toll Plaza**

| No. | Chainage | Name                       | No. of Toll-Lanes | Notes                 |
|-----|----------|----------------------------|-------------------|-----------------------|
| 1   | K2+160   | Busega Toll Plaza          | 6                 | To charge at entrance |
| 2   | K23+300  | Abayita-Ababiri Toll Plaza | 6                 | To charge at entrance |
| 3   | LK0+350  | Kajjansi Toll Plaza        | 5                 | To charge at entrance |

*Source: UNRA Monthly Progress Report No. 31, Kampala-Entebbe Expressway Project*

**Note:** The station column prefix “K” indicates Kampala-Entebbe Express section and “L” indicates Kajjansi-Munyonyo Express section.

Table 12.30 shows a summary of the contract data and progress of the construction works on the road as at the end of January 2014.

**Table 12.30: Kampala-Entebbe Expressway**

|                                |  |
|--------------------------------|--|
| Source of Funding              | China EXIM Bank and the government of Uganda   |
| Contract No.                   | UNRA/PR/133  |
| Implementing Agency            | Uganda National Roads Authority  |
| Supervision Consultant         | Beijing Expressway Supervision Co. Ltd (BES)   |
| Contractor                     | China Communication Construction Company(CCCC)   |
| Design Consultant              | Project is of design and build nature  |
| Possession of Site             | 50%  |
| Project Road Length            | Total of 49.62km comprised of Kampala-Entebbe (36.94km) and Spur road (12.68)                |
| Supervision Commencement Date  | 25 July 2012   |
| Construction Commencement Date | 30 July 2012 (Initial), 19 November 2012 (Revised)   |
| Construction Completion Date   | 17 May 2017 (Initial), 18 November 2017 (Revised)  |
| Original Contract Price        | US\$ 476,000,000   |
| Revised Contract Price         | US\$ 479,172,020.74  |
| Supervision Contract Price     | US\$ 4,998,300 inclusive of all local taxes  |
| Contract Period                | 1825 calendar days (5 years)   |
| Contract Time Elapsed          | 799 days (43.7%)   |
| Advance payment                | US\$ 142,800,000   |
| Works Payments Certified       | US\$ 229,557,850.43 and Ug shs 142,864,756,375 (9 IPCs)                                      |
| Payments to the contractor     | US\$ 209,912,697.53 and Ug shs 130,534,721,724 ( Up to IPC 7)                                |
| Consultant Invoices Submitted  | US\$ 3,106,894.75 (62.2% of supervision contract value)30 invoices as of end of January 2015 |
| Payments to the Consultant     | US\$ 2,721,793.88 (54.5% of supervision contract price and 87.6% of invoices submitted)      |
| Physical Progress              | 34.82% (achieved) against 36.11% (planned)   |
| Financial Progress             | 54.6% achieved   |
| Contract Exchange rate         | US \$ 1= Ug. 2510.55   |

*Source: CCCC & BES*

The Kampala-Entebbe Expressway was monitored on 25<sup>th</sup> February, 2015 and the findings are presented below:

### **Financial Performance**

In FY 2014/15, the project had an approved of Ug shs 130 billion of which 61.5% was to be funded by GoU while 38.5% was from China Exim Bank. By the end of Q2, 153% of the budget



was released of which was an excellent performance. However, the half year release surpassed the approved annual budget by 17% (See Table 12.31).

**Table 12.31 shows the financial performance of the project by 31<sup>st</sup> December 2014**

| Source of funding | Approved budget (Ug shs billions) | Release(Ug shs billions) | % release | Expenditure (Ug shs billions) | % Expenditure |
|-------------------|-----------------------------------|--------------------------|-----------|-------------------------------|---------------|
| Gou               | 80.0                              | 57.20                    | 71.5%     | 57.20                         | 100%          |
| Donor             | 50.0                              | 96.00                    | 192.0%    | 96.00                         | 100%          |
| Total             | 130.0                             | 153.20                   | 117.85%   | 153.20                        | 100%          |

*Source: UNRA Q2 Progress Report FY 2014/15*

**Payments:** The contractor received an advance payment totaling to US\$ 142.8million (Ug shs 358.5 billion) in two installments between June and November 2012. The contractor submitted 9 IPCs between November 2012 and January 2015 totaling to US\$ 286.557 million (59.8% of revised contract value). Seven IPCs had been paid totaling to US\$ 261.907 million, inclusive of advance (54.6% of revised contract value and 91.4% of certified amount).

The supervision consultant submitted 30 invoices between August 2013 and January 2015 totaling to US\$ 3.107 million (62.2% of supervision contract price). A total of 27 invoices had been paid amounting to US\$ 2.721 million (87.6% of submitted invoices and 54.5% of contract price).

One variation order has so far been issued to the contractor. The purpose of this variation order is to increase the provisional sum for the relocation of utilities of US\$ 100,000 to US\$ 3,272,020.74 and included it in the contract sum. As a result of this variation, the contract cost of the project was revised to US\$ 479,172,020.74 (0.6% of original contract price).

The project's cumulative financial progress was estimated at 54.6%. The project has experienced delays in the payments to the contractor which also reflects a lag in the physical progress of works.

## **Physical Progress**

### **a. Past performance**

This project was last monitored in February 2013, when the physical progress of works was 15.51% against the planned 16.59%.

### **b. Present performance**

The progress of works by 31<sup>st</sup> December 2014 was 7.7% against an annual target of 20%. This was a very good performance as 77% of the half year targets were achieved. This brought cumulative progress to 32% against the planned 33%. The project further achieved a cumulative physical progress of 34.82% against a planned progress of 36.11% and a contract time progress of 43.7% as at the end of January 2015. The project thus, had a slippage of 1.29% in the physical progress which was mainly attributed on delayed land compensation on 50% of project area.

Completed activities were: the survey report, hydrology and hydraulics report and the supervision engineer's facilities (office, laboratory and housing). While ongoing activities were: clearing and grubbing, treatment of swamp and pool, earth works (cut; to spoil/fill, borrow to fill), production of crushed and stock piled base stone, construction of culverts (pipe, box and slab), underpasses and bridges (over and under).

The following activities were observed to be ongoing: construction of pile foundation, pile caps, piers and pier caps for the mainline bridges at K13+781 and K20+980; production of post tensioned pre-stressed box girders; temporary and permanent swamp treatments and their embankment; earthwork involving clearing and grubbing, cut to spoil, cut and borrow to fill (embankment construction); construction of pipe, slab and box culverts; construction of over bridges; production of crushed aggregate base and concrete aggregate; and the production of precast elements such as New Jersey barrier, concrete bricks for ditch lining, ditch cover and production of RCC pipes .

The contractor's already mobilized equipment; in the light of the current progressive right of way clearance is below requirement.

The Table 12.32 shows the percentage progress of key activities for this project as at end of January 2015.

**Table 12.32: Percentage progress of Key Activities as at the end of January 2015**

| Activity                               | Situation | Progress |
|--|-----------|----------|
| Survey Report                          | Completed | 100%     |
| Hydrology and Hydraulic Report         | Completed | 100%     |
| Soil and Materials Report              | Completed | 100%     |
| Geotechnical Report                    | Completed | 100%     |
| Structural Report                      | Completed | 100%     |
| Geometric Design Report                | Completed | 100%     |
| Pavement Report                        | Completed | 100%     |
| Shop Drawing Design                    | Completed | 100%     |
| Clearing and Grubbing                  | Ongoing   | 68.2%    |
| Treatment of Swamp and Pool            | Ongoing   | 101.6%   |
| Cut to Fill & Borrow to Fill           | Ongoing   | 89.6%    |
| Cut to Spoil                           | Ongoing   | 83.5%    |
| Crushed and Stockpiled Base Stone      | Ongoing   | 116.3%   |
| Concrete Pipe Culvert                  | Ongoing   | 69.2%    |
| Box Culvert & Slab Culvert & Underpass | Ongoing   | 97.9%    |
| Bridges including over-bridges         | Ongoing   | 110%     |
| Office for the Engineer                | Completed | 100%     |

|  |           |      |
|--|-----------|------|
| Laboratory for the Engineer                                    | Completed | 100% |
| Office Furniture and Equipment                                 | Completed | 100% |
| Laboratory Furniture and Equipment                             | Completed | 100% |
| Housing for the Engineer                                       | Completed | 100% |
| Construction and Maintenance of Temporary Bridges and Platform | Completed | 100% |

*Source: BES*



**L-R: Obstruction of works at km 9+100 by fish ponds; Fixing of reinforcement at Busega Bridge; Earthworks ongoing at km24+500**

### **Box 1: Occupational Health and Safety on the Project**

- **Safety:** It was noted that workers were given safety shoes and overalls. Drinking water for workers was also provided in some sections
- **Health:** A specialist subcontractor, Support for Integrated Health Care Initiative (SIHCI) has continued with HIV/AIDS alleviation campaign since January, 2013. The following activities have continued to be carried out: operating a clinic to conduct HIV/AIDS counselling and testing; treating all Opportunistic Infections (OIs) among HIV positive clients; screening, testing and treating other Sexually Transmitted Diseases (STDs) as well as managing injuries and other work related pains. SIHCI is also conducting outreach based HIV counselling and testing, and distributing condoms to all workers at the different construction sites.

### **Challenge**

The main challenge the project has faced is delayed acquisition of land pending compensation by UNRA/GoU. Details of the issues at different sections along the ROW are presented in Table 12.33.

**Table 12.33: Major issues related to the Kampala Entebbe Expressway**

| Concern                | Remarks/ Actions to be taken |
|------------------------|------------------------------|
| Right of Way Clearance |                              |

| Concern   | Remarks/ Actions to be taken   |
|---|--|
| <p><b>Obstruction at site:</b></p> <ul style="list-style-type: none"> <li>• <b>K6+120 – 6+400</b>-compensation not yet finalized.</li> <li>• <b>K7+800</b> – there are graves whose families are not compensated within the ROW limit</li> <li>• <b>K7+900</b>- there is a house within the ROW of which the owner is yet to be compensated</li> <li>• <b>K9+100</b> – fish ponds not yet compensated</li> <li>• <b>K11+100</b> – Water collection system for Sun Fish Farm in the middle of ROW</li> <li>• <b>K11+700</b> – there is a tea estate area where people who claim that they had their relatives buried in the area denied the contractor access to the ROW</li> <li>• <b>LK9+00-LK11+00</b>- section of the Spur where the project design proposes to construct Kaagwa Bridge. The contractor needs this area for construction of access roads, mobilization of pile drilling equipment and to start with swamp treatment</li> <li>• <b>K24+000 – 25+000</b> – contractor is looking for early clearance of obstacle so that he can mobilise and carry out the construction in this section before dismantling the temporary steel bridge.</li> <li>• <b>K31+750-K36+850</b> – the contractor is looking for possession of this section where he has planned to start asphalt overlay works within March 2015</li> </ul> | <p>Compensation for land within the ROW was in process and is expected to proceed.</p> |

*Source: Field findings/CCCC & BES*

## Analysis

- ***Link between physical and financial performance***

The expenditure performance of the project was 117% of the annual budget by the end of Q2. However, 7.7% of the physical target was achieved against the annual planned 20%. Similarly, the cumulative financial progress of the project inclusive of advance payments was 54.6% against a physical progress of 34.82%. This means that more funds have been expended on the project than the physical works done.

- ***Achievement of set targets***

The half year target was not achieved. The works executed were 77% of the half year planned output. In addition, the cumulative achievement by the end of January 2015 was 34.82% against a planned target of 36.11% hence, a slippage of 1.29%.

## **Conclusion**

The project did not achieve the planned outputs for the semi-annual period hence, suffering a slippage of 1.29%. This was majorly because the contractor does not have possession of the entire ROW due to delay in finalization of land compensation. There is need for this exercise to be fast tracked to avoid likely claims from the contractor.

## **Recommendation**

The MFPED and UNRA should expedite the finalization of compensation to smoothen the progress of works.

### **12.3.2 Periodic maintenance of Jinja-Kamuli (58km)**

#### **Background**

The road is approximately 58km from Jinja to Kamuli. The road starts at the Mpumudde roundabout, approximately 3.2km from Jinja Town along the Jinja - Iganga Highway and spans northwards through the Buwenge township terminating at the roundabout in Kamuli Town. This road also connects the Busoga region to the north of Jinja to the northern corridor route which links Kampala City to the Eastern, Northern and North Eastern parts of the country in addition to Kenya.

The Jinja - Kamuli road is a Class II paved road with a 6.0m wide carriageway and 1.0m wide gravel shoulders. Its pavement structure consists of a double bituminous surface treatment (DBST) on lime stabilized gravel base.

Since the construction of the road, there had been very limited interventions which were insufficient to prevent the deterioration of both its structural and functional condition. At that time, the road was in critical condition most notably the Jinja – Buwenge section requiring urgent intervention to stem further deterioration.

To this effect, UNRA (the Employer), signed the contract of executing the civil works for the Periodic Maintenance of Jinja-Kamuli Road (58km) with M/s Dott Services Ltd on 13<sup>th</sup> December 2010. M/s Professional Engineering Consultants (PEC) was also contracted to undertake supervision services on 4<sup>th</sup> February 2011 on behalf of the client (UNRA).

A detailed pavement design review was carried out by the consultant (PEC) to update the existing design. The updated scope of works was found to have changed mainly due to revisions to the required work quantities and inclusion of some missing work items in the bills of quantities. The consultant recommended that the client adopts the construction of a 7.0m carriageway with 1.0m shoulders similar to that contained in the original Design Report with a wearing course of asphalt concrete covering both the carriageway and shoulders.

#### **Project objectives**

- To link the people of Busoga region to the north of Jinja to the northern corridor route which links Kampala city to the eastern, northern and north-eastern parts of the country in addition to Kenya
- To deliver a road pavement that can safely carry the increased traffic loads for 10 years and also reduce the travel time between Jinja and Kamuli towns as well as reduce the vehicle maintenance costs of the motorist that ply this route

## Scope of works

The road is to be upgraded to a class I B bituminous paved road standard. The cross section adopted is 7m carriageway paved with shoulders of 1.0m in rural areas and 2.5m in urban centres. The works involved rehabilitating and widening of the existing road.

The reconstruction works consisted of;

- i. Milling the existing pavement and improving it with Crushed Run Rock (CRR) to form the new sub base layer.
- ii. Construction of a new CRR base layer of thickness, 150mm and asphalt concrete wearing course of thickness, 50mm.
- iii. Other works were: improvement of drainage structures as well as installation of safety features like road signs, guard rails, km and edge mark posts, road humps, rumble strips and road marking.

For the past two financial years (FY 2012/13 and 2013/14), the road project has been having an excellent physical performance. The achieved annual progress of 33% for both years had been surpassing the annual targets of 30%.

Table 12.34 shows a summary of the contract data and progress of the construction works on the project road as at 26<sup>th</sup> January 2015.

**Table 12.34: Summary of the contract data for Jinja-Kamuli Road as at 26<sup>th</sup> January 2015**

| Project Title                          | Periodic maintenance of Jinja-Kamuli Road (58km) |
|--|--|
| Source of Funding                      | GoU  |
| Contract No.                           | UNRA/WORKS/2009-10/00001/02/05                   |
| Implementing Agency                    | Uganda National Roads Authority (UNRA)           |
| Design and Supervision consultant      | Professional Engineering Consultants Ltd (PEC)   |
| Contractor                             | Dott Services Ltd (DOTT)                         |
| Road length                            | 58 km  |
| Supervision Commencement Date          | 17 <sup>th</sup> January 2011                    |
| Construction Commencement Date         | 1 <sup>st</sup> August 2011                      |
| Construction completion date (initial) | 31 <sup>st</sup> January 2013                    |
| Construction completion date (revised) | 31 <sup>st</sup> October 2014                    |
| Original Contract Price                | Ug shs 47,486,000,340                            |
| Revised Contract Price                 | Ug shs 79,846,300,359 (68% increment)            |
| Supervision Contract Price(initial)    | Ug shs 1,219,500,000                             |

|  |   |
|--|---|
| Supervision Contract Price (1 <sup>st</sup> Revised) | Ug shs1,856,583,370   |
| Supervision Contract Price (2 <sup>nd</sup> Revised) | Consultant asked to submit a new proposal as per PPDA guidelines  |
| Contract Duration                                    | 39 months or 1188 days (up to 30 <sup>th</sup> Oct 2014)  |
| Contract Time Elapsed                                | 42 months (107%) ; Currently in Defects Liability Period  |
| Advance Payment                                      | Ug shs 9,497,200,068 (20 % of Original contract price and was fully recovered)  |
| Works Payments Certified                             | 17 IPCs - Ug shs 74,425,420,512   |
| Payments to the contractor                           | Ug shs 68,673,692,804 (16 IPCs as at the end of October 2014)   |
| Consultant Invoices Submitted                        | 34 Invoices<br>Ug shs 1,996,787,661 (up to July 2014)   |
| Payments to the Consultant                           | Ug shs 1,832,092,965; Consultant not paid since April 2014  |
| Physical Progress (cumulative)                       | 98.50% Vs 100%<br>The works were substantially completed by 31 <sup>st</sup> October 2014. The contractor was then working on snags |
| Financial Progress                                   | Ug shs73,332,394,888 (95.43% Achieved)  |

*Source: Professional Engineering Consultants Ltd (PEC)*

## Financial Performance

The cost of the project increased by 68% because of increased scope of works especially for water drainage, earthworks and pavement layers. The overall financial progress of this project was estimated at 95.43%.

**Payments:** The contractor had been paid Ug shs 68.673 billion (16 IPCs of the 17 submitted). Therefore, the cash flow of the contractor was timely. On the other hand, the consultant had not been paid since April 2014. There were five outstanding invoices by the end of October 2014 because the revised amount of the original contract had exceeded the acceptable limit hence, was still awaiting clearance from the auditor general.

## Physical Performance

The project works were substantially complete by 31<sup>st</sup> October 2014. By the end of Q2, FY 2014/15, the project was already in the DLP. The contractor was only working on snags that had been identified.

The works of clearing and grubbing, subgrade, subbase and cross culvert installation were complete while those of base and asphalt concrete were 99.4% complete. A total of 57.65km were substantially complete out of 58.



**Left: Guard rails at km38+000; Centre: four pipe culverts at km 38+000; Right: Kamuli round about where the road ends at km 58+000**

Ongoing activities observed on 18<sup>th</sup> February 2015 were:

- Completion of base and asphalt concrete at a high embankment section of 350m at km 9+000 which had been left for about 2 months to undergo settlement
- Road marking
- Installation of road signs, guard rails, km posts and road reserve marker posts
- Grouted stone pitching to side ditches at earmarked sections between km 7+000 and 22+000
- Construction of access junctions



**Left: A section still under construction at Km 9+000; Centre: Stone pitching works at km 6+186; Right: A trial marked section at km 24+990**

## **Box 2:Occupational Health and Safety; and Gender activities**

These activities are instituted in the works contract to complement the smooth running of the project.

The contractor implemented the activities set in the management plan regarding health, safety and gender throughout the construction period. Sensitisation (workshops that include the workers and local populace) were held every month during which people were informed about HIV/AIDS and work related health issues of the workers. In addition, materials like first aid boxes and protection gadgets were distributed during workshops or at the camp.

However, some issues posed a challenge to the contractor and these were;



- Adequacy of signs at the work stations at times
- Deployment of adequate numbers of flag persons and close supervision of their activities
- Provision of adequate and appropriate safety wear to the workers

The number of female staff was low. On average, women were 11.8% of the entire project workforce.

### Challenges

- Rainy weather conditions that disrupted works.
- Delays in project implementation due to;
  - i. Late approval of Variation No.1 (due to increased scope of works) by UNRA.
  - ii. Unanticipated quantities of relocation of utilities to be relocated.
  - iii. Late inclusion of Variation of Price (VoP) clause in the contract.
- No payments to the consultant since April 2014.
- The geotechnical investigation aspect was not given priority under periodic maintenance and hence, the road project was underdesigned. This led to a cost variation of about 68%.

### Analysis

- *Link between financial and physical performance*

The overall financial progress of 95% was approximately commensurate to the physical progress of 98.50%. The payments to contractor were timely and therefore, no interest charges.

- *Achievement of set targets*

The targets were achieved. The progress of works was 11% against annual target of 13% by the end of December 2014. Similarly, a cumulative progress of 98.50% was achieved against 100%.

### Recommendations

- The Contractor in future needs to revise the works program to suit the prevailing weather conditions.
- The UNRA and government should provide ample time and resources during the survey to save more costs due to design related errors at construction stage.
- The solicitor general should expedite clearance such that the consultant receives the outstanding payments as per submitted invoices.
- The UNRA should incorporate a component of geotechnical investigation in the bidding documents for periodic maintenance works.

### 12.3.3 Reconstruction of the Mbarara - Ntungamo - Kabale – Katuna Section Lot 3 –Km 95 to 160 (65km)

#### Background

The Government of Uganda (GoU) obtained grants from the European Development Fund towards the cost of the design and reconstruction of the priority section of the Northern Corridor Route (NCR) from Mbarara through Ntungamo and Kabale to Katuna.

The Northern Corridor Route forms part of the main international route connecting Kenya, Uganda, Rwanda, and the Democratic Republic of Congo and runs from the Kenyan border via Kampala to the Rwandan border with an approximate length of 650 km. The road is the country's most important road link, both nationally and internationally.

The reconstruction of the Mbarara to Katuna section of the NCR was tendered as two Contracts, namely Lot 2 from km 36 to km 95 and Lot 3 from km 95 to km 160 at Katuna. Lot 3 with a total length of 65 km starts about 32 km south of Ntungamo (km 95) and ends at Katuna on the Rwanda border (km 160).

The contract for the reconstruction-Lot 3 was awarded to Reynolds Construction Company (Nig) Ltd on 7 December 2010 (contract 2010/259-788) and the contractor was given "access to site" from 3<sup>rd</sup> August 2011 along with a notification to commence the works from the same date.

The project expected to cost Euro 74,655,308.12 is jointly funded by European Union (92%) and GoU (8%). The Ministry of Finance, National Authorizing Officer for European Development is the Contracting Authority for the Project. The Executive Director of UNRA is the Contract Supervisor and COWI A/S was appointed as the Supervisor's Representative. COWI A/S was issued with a notification to commence their supervision contract from 22 August 2011.

### **Scope of works**

The reconstruction project involves upgrading the road to a Class 1b paved road with 7 m carriageway width and 1.5 m paved shoulders. As a result of pavement lift and the general need for minor adjustments to the horizontal curvatures, the existing total width of the existing road is generally not sufficient to reconstruct the new road to the above specifications, without widening of the existing embankments.

The necessary widening is minor and as the construction cost of widening on both sides of the existing embankments is significantly higher than on a single side, the new road centerline has therefore where possible been shifted to one side only. This has had the added advantage that some of the existing lined side drains can be preserved and has minimized expensive rock cuts. However, through villages and trading centers the road has generally been kept at the centre of the existing road to avoid unnecessary demolition of structures and buildings.

The carriageway will have a 90 mm thick asphalt concrete binder course constructed on top of the crushed stone base and will be surfaced with a 60mm asphalt concrete wearing course. On the new road shoulders the crushed stone base thickness will be increased and the asphalt concrete binder course is omitted, but the asphalt wearing course is to be constructed flush with the carriageway. The asphalt mix design shall be based on Superpave procedures and specifications.

The pavement along the Kisoro link between Katuna road Junction and the start of the new Kabale-Kisoro-Bunagana road (2.35 km long), which runs through Kabale Town, is to be repaired and a new bituminous surface dressing is to be constructed.

Only two rivers are crossed by existing bridges along the project road. The bridge over the Nyakizumba River at Km 135.1 on the approach to Kabale Town is a composite bridge with steel girders and a reinforced concrete deck. The Muzhogo bridge at Km 139.5 near the beginning of the Kabale to Katuna Road section is constructed of reinforced concrete and its condition is very poor and so it will be replaced by a triple 3×3m box culvert. The Nyakizumba

bridge is to be rehabilitated and steel pedestrian walkways are to be constructed on each side. There are however no major swamp crossings along the project road with big catchment areas.

Two hundred and twenty (220) existing cross culverts are to be replaced or upgraded due to their poor condition, insufficient discharge capacity or length. Almost all existing cross culverts comprise of Corrugated Metal Pipes (CMP). Most of them were being replaced with larger diameter CMP, but twenty nine (29) new concrete box culverts will be constructed. It was originally planned that thirty six (36) existing cross culverts would be retained and extended. Side drains will be provided in cuts along the entire road length.

Sixty eight (68) bus bays and three (3) viewing points are to be constructed as well as safety measures such as gateway signs, rumble strips, speed humps, speed limits, road signs, road markings, improvement of junctions, etc. Junctions are to be improved and a new roundabout will be constructed in Kabale at the turn off to Kisoro.

Appropriate traffic signs and road marking have been included into the design in accordance with MoWT's Traffic Signs Manual, Draft 30 May 2004. To secure traffic safety for pedestrians and bicycle users the design has included the provision of sufficiently safe shoulders, i.e. 2m wide shoulders outside settlements and 3m wide shoulders in trading centres.

Table 12.35 shows a summary of the project data and progress of the construction works as at the end of December 2014.

**Table 12.35: Summary of Contract Data for the Reconstruction of the Mbarara - Ntungamo - Kabale – Katuna section: Lot 3; Kabale-Katuna by 31<sup>st</sup> December 2014**

|   |   |
|---|---|
| <b>Project Title</b>                                    | <b>Reconstruction of the Mbarara - Ntungamo - Kabale – Katuna Section: Lot 3; Kabale-Katuna section (65 km)</b>   |
| Source of Funding                                       | 92% European Union (10 <sup>th</sup> EDF Programme) and 8% GoU  |
| Contract No.  | 2010/259-788  |
| Implementing Agency                                     | Uganda National Roads Authority (UNRA)  |
| Supervision consultant                                  | COWI A/S, 2 Parallelvej, DK-2800 Kongens Lyngby, Denmark  |
| Contractor  | Reynolds Construction Company (Nig) Ltd (RCC)   |
| Project length  | 65km  |
| Supervision Commencement Date                           | 22 <sup>nd</sup> August 2011  |
| Construction Commencement Date                          | 3 <sup>rd</sup> August 2011   |
| Contract Duration                                       | 36 Months (exclusive of 12 months DLP)  |
| Construction completion date (initial)                  | 3 <sup>rd</sup> August 2014   |
| Construction completion date (revised)                  | 3 <sup>rd</sup> February 2015 (6 months extension of time) and 3 <sup>rd</sup> December 2015 for the Kisoro link. |
| Original Contract Price (Tender sum less 2.5% discount) | Euro 65,808,558.08 ( including 10% contingencies & excluding RoP)   |

|  |   |
|--|---|
| Estimated Final Contract Price (including RoP) | Euro 74,655,308.12 (13.44% increase in contract value)  |
| Supervision Contract                           | Euro 3,861,600.00   |
| Contract Time Elapsed                          | 113.87% of Original Contract Period (up to 3 August 2014) and 97.5% of extended contract period (up to 3 Feb 2015). |
| Advance Payment to contractor                  | Euro 14,731,922 (10% unsupported, up to 20% against receipts)   |
| Works Payments Certified                       | Euro 55,622,707.82 ( Up to IPC 31)  |
| Payments to the contractor                     | Euro 48,737,671.19 ( Up to IPC 27) fully paid   |
| Annual physical progress                       | 13.4% Vs planned 25%  |
| Cumulative Physical Progress                   | 79.45% (excluding general items) Vs planned 82.15% as of the revised contract period.                               |
| Financial Progress                             | 65%   |
| Exchange rate (Euro: Ug Shs)                   | 1 Euro = Ug shs 2,837.351   |

*Source: COWI A/S*

### ***Field findings***

The project was monitored on 15<sup>th</sup> January 2015 and the findings were as follows;

### **Financial Performance**

In FY2014/15, the project has been allocated a total budget of Ug shs 90.195 billion. This comprises of Ug shs 70.195 billion (77.8% of budget) from the donor funding component for 25% physical works and 22.2% from GoU mainly earmarked for roads, bridges and land acquisition. This information is presented in Table 12.36.

**Table 12.36: Financial Performance of the Project for Reconstruction of Mbarara - Ntungamo - Kabale – Katuna Section; Kabale-Katuna (65 km)**

| Financial Year | Source of funding | Approved Estimates (Ug shs Billions) | Expenditure (Ug shs Billions) | % of Budget Spent |
|----------------|-------------------|--------------------------------------|-------------------------------|-------------------|
| 2014/15        | GoU               | 20.000                               | 2.0123                        | 10.06             |
|                | Donor             | 70.195                               | 22.706                        | 32.35             |
| Total          |                   | 90.195                               | 24.718                        | 27.41             |

*Source: MPS June 2013 and COWI A/S*

The contract sum was revised from Euro 65,808,558.08 to Euro 74,655,308.12 (13.44% increment in contract value) to cater for variations in price and relocations to the weigh bridge.

**Payments:** The contractor had submitted 31 IPCs with a certified value of Euro 55,622,707.82. Twenty Seven IPCs have been fully paid. The total amount received by the contractor is Euro 48,737,671.19(65% of the revised sum). Interim Payment Certificates 14, 24, 28 and 30 were partially paid. The consultant's payments are a lumpsum of lot 1, 2 and 3. Therefore, the payments for Lot 3 could not be aggregated.

### Physical Performance

The cumulative roads works completed were 79.45% by 31<sup>st</sup> December 2014 out of the targeted output of 82.15% basing on the revised contract period.

The physical performance of the project by 31<sup>st</sup> December 2014 is summarised in Table 12.37.

**Table 12.37: Physical Progress on Key Activities of Reconstruction of Mbarara - Ntungamo - Kabale – Katuna road: Lot 3; Kabale-Katuna section (65 km) by 31st December 2014**

| S. No. | Description of work                  | Percentage (%) compared to the revised quantity |
|--------|--------------------------------------|---|
| 1      | Corrugated Metal Pipe (CMP) culverts | 96.10   |
| 2      | Box Culverts (Concrete)              | 98.40   |
| 3      | Concrete Line Drains                 | 70.60   |
| 4      | Sub-base (G7 and G15 material)       | 94.50   |
| 5      | Sub-base (G45 material)              | 85.50   |
| 6      | Crushed Aggregate Road Base          | 81.90   |
| 7      | Prime Coat and Blinding              | 75.10   |
| 8      | 90mm thick Asphalt Binder course     | 79.40   |
| 9      | 60mm thick Asphalt Wearing course    | 68.80   |
| 10     | Tack Coat                            | 68.60   |

**Source:** COWI A/S

The project was slightly behind schedule lagging by 2.7%. The slack in progress was attributed to;

- ✓ Heavy rainfall leading to loss of time of 51.6 days; and
- ✓ Work stoppage (between 15<sup>th</sup> and 12<sup>th</sup> June 2012) resulting from a court order concerning verification of compensation payments. In addition, various extension of time claims were reviewed at the end of 2013 resulting in an agreement to award a six month extension of time (i.e. changing the completion date to 3 February 2015).



**Left:**A completed improved sub-base at km 152+312; **Centre:** A completed box culvert at 4km from Katuna; **Right:** A completed section of the road at km 100+300



**Left:** Armco culverts yet to be constructed at km 155+628; **Right:** A box culvert under construction at 1.4km from Katuna

### **Challenge**

Delay in acquisition of the Right of Way (ROW) from km 155 to 159 and km 159 to 160. Compensation within these sections had not been finalized hence, delaying progress of works.

### **Analysis**

- ***Link between physical and financial performance***

The overall financial progress was 65% by 31<sup>st</sup> December 2014 while the physical progress of works was at 79.45%. Hence, the financial progress was not commensurate to the physical progress and this was attributed to partial payment of IPCs No.14, 24, 28 and 30.

- ***Achievement of set targets***

The project had achieved its half year target of 13.4% against an annual target of 25% by 31<sup>st</sup> December 2014. However, the physical cumulative progress was 79.45% against a planned 82.15%. The project was slightly behind schedule.

### **Conclusion**

The progress can be rated as very good although the project was lagging behind by 2.7%.

### **Recommendation**

The UNRA should expedite the process of land compensation with the ROW.

### 12.3.4 Rehabilitation of Kiryandongo-Gulu Road: Lot2; Kamdini-Gulu (62km)

#### Project Background

The GoU is committed to fund UNRA to execute a sizeable programme of road works since 2008. In pursuance of its obligations, UNRA engaged M/s Kagga and Partners Consulting Engineers to provide consultancy services for the supervision of the Rehabilitation of Kiryandongo-Gulu road; Lot 2: Kamdini-Gulu (62 km).

This project road is part of the Uganda national road network. It forms an important link in the national road network hence; contributing significantly to the economic prosperity of Northern Uganda. It also serves as an international link between Uganda and South Sudan. The project road is part of the Kampala-Gulu road which connects the capital of Uganda with the border of South Sudan.

It commences at Kamdini, passes through Oyam district and ends at Gulu municipality. The existing road is a class II bitumen road with a carriage way of 6.0m, 1.5m gravel shoulders and earthen ditches. The roads pavement structure comprises a double bituminous surface treatment (DBST) on a stabilized gravel base. However; the existing wearing course is highly deteriorated.

In pursuance of its mission, UNRA has engaged M/s Kagga and Partners Consulting Engineers to provide consultancy services for supervision of the road construction works. The works contract was awarded to China Communications Construction Company (CCCC) Ltd at a sum of Ug shs 62.18 billion.

#### Scope of works

The proposed key works to be carried out involve; scarification of 150mm of the existing base, addition of 50mm of G30 gravel material followed with mechanical modification to construct to form uniform 200mm thick sub base layer, addition of 200mm crushed stone and a DBST wearing course for both the carriageway and the shoulders.

The existing road dimensions of the road are to be maintained except for busy urban areas where an additional 3.0m lane for parking is to be provided. Except where widening may be required to reinstate the road width, no geometric improvements to the existing vertical and horizontal road geometry was proposed.

Table 12.38 shows a summary of the contract data and progress of the construction works on the project road as at the end of December 2014.

**Table 12.38: Summary of contract data for Kamdini-Gulu road (62km) by 31<sup>st</sup> December 2014**

| Project Title          | Rehabilitation of Kiryandongo-Gulu Road, Lot2: Kamdini-Gulu (62km) |
|------------------------|--|
| Source of Funding      | GoU  |
| Contract No.           | UNRA/WORKS/2012-13/00007/01/02                                     |
| Implementing Agency    | UNRA   |
| Supervision consultant | M/s Kagga and Partners Consulting Engineers                        |
| Contractor             | China Communications Construction Company (CCCC)                   |

|                                    |  |
|------------------------------------|--|
| Road length                        | 62 km  |
| Supervision Commencement Date      | 6 <sup>th</sup> May 2014                                 |
| Construction Commencement Date     | 6 <sup>th</sup> May 2014                                 |
| Construction completion date       | 6 <sup>th</sup> May 2016                                 |
| Contract Price                     | Ug shs 62,187,657,525.84 (70% in US\$ and 30% in Ug shs) |
| Contract Duration                  | 24 months (730 days)                                     |
| Contract Time Elapsed              | 239 days (32.74%)  |
| Advance Payment                    | Ug shs 8,043,011,694 out of Ug shs 12,437,531,505 (20%)  |
| Works Payments Certified           | Ug shs 16,845,067,312 (2 IPCS and advance payment)       |
| Payments to the contractor         | Ug shs 8,043,011,694                                     |
| Consultant Invoices Submitted      | Four Invoices- Ug shs 315,024,500                        |
| Payments to the Consultant         | Nil  |
| Physical Progress                  | 0.4% Achieved against Planned of 9.5%                    |
| Financial Progress                 | 8.5% Achieved against 19.4 %                             |
| Exchange rate used in the contract | 1US\$= Ug shs 2585.05                                    |

*Source: M/s Kagga and Partners Consulting Engineers*

## Financial Performance

The cumulative financial progress of this project was estimated at 8.5%. The contractor has so far submitted two payment certificates and a request for advance payment of which 50% of foreign component was paid. The local currency was paid in full (See Table 12.39). Price adjustment was applied to IPC No.2.

**Table 12.39: Summary of the contractor's payments**

| Description                                     | Certificate value (Ug shs) | Date of Submission             | Date approved                  | Due date to be paid            | Amount paid (Ug shs) |
|---|----------------------------|--------------------------------|--------------------------------|--------------------------------|----------------------|
| Advance Payment                                 | 12,437,531,505             | 13 <sup>th</sup> May 2014      | 26 <sup>th</sup> May 2014      | 26 <sup>th</sup> June 2014     | 8,043,011,694        |
| IPC No.1  | 3,179,947,617              | 29 <sup>th</sup> July 2014     | 7 <sup>th</sup> August 2014    | 7 <sup>th</sup> September 2014 | Nil                  |
| IPC No.2  | 3,179,947,617              | 22 <sup>nd</sup> November 2014 | 27 <sup>th</sup> November 2014 | 27 <sup>th</sup> December 2014 | Nil                  |
| Cumulative certified payments to the contractor |                            |                                |                                | Ug shs 16,845,067,312          |                      |
| Cumulative payments received by the contractor  |                            |                                |                                | Ug shs 8,043,011,694           |                      |

*Source: Monthly Progress Report, December 2014*



The consultant had also submitted four invoices amounting to Ug shs 315.02 million of which none had been paid by 31<sup>st</sup> December 2014 (See Table 12.40).

**Table 12.40: Summary of the consultant's payments**

| Invoice No.                                     | Invoice value (Ug shs) | Date of Submission            | Amount paid (Ug shs) |
|---|------------------------|-------------------------------|----------------------|
| 1   | 107,184,500            | 21 <sup>st</sup> July 2014    | Nil                  |
| 2   | 75,055,000             | 22 <sup>nd</sup> August 2014  | Nil                  |
| 3   | 60,880,000             | 2 <sup>nd</sup> October 2014  | Nil                  |
| 4   | 71,905,000             | 20 <sup>th</sup> October 2014 | Nil                  |
| Cumulative invoices submitted by the consultant |                        |                               | Ug shs 315,024,500   |

*Source: Monthly Progress Report, December 2014*

### Physical Performance

The overall physical progress of works was 0.4 % by 31<sup>st</sup> December 2014 against the planned 9.5%. This was a 9.1% slippage which was attributed to poor planning by the contractor. This was orchestrated by delays in mobilization of key construction equipment and acquisition of borrow pits for gravel. The contractor seemed to have no financial capacity to undertake this work without being paid the full amount of advance payment.

**Mobilization:** The contractor set up two camps; one for administrative staff at km 57+600 and the other at km 36+140 at Bobi to service field operations. He had mobilized 44 out of 55 units of various key road equipment of construction.

Completed works were:

- Clearing and grubbing (km 0+000-12+000 and 12+520-19+000)
- Removal of top soil (km 0+000-12+000) from edge of existing gravel shoulder up to edge of lower sub base only.
- Scarification and compaction of existing pavement material(km 0+000-12+500 and 59+020-60+250)
- Forward maintenance (km 0+000-62+500): These were mainly pothole filling using gravel.

Ongoing works were; drainage, benching and identification of material sources.



**Left: culvert under construction at km 1+518; Centre: four lines of culvert at km 2+944; Right: A milled section at Km 19+545**

## **Project challenge**

Delayed payments for over five months especially partial receipt of advance payment has constrained full mobilization by the contractor who has limited financial capacity.

## **Analysis**

- ***Link between financial and physical performance***

The physical progress was 0.4% against the financial progress of 8.5%. The physical progress was lagging behind the financial progress hence, no linkage.

- ***Achievement of targets***

The half year target was not met as only 0.4% was achieved against the planned 9.5%. This is also a discrepancy from the UNRA Q2 progress report which highlighted the achieved progress as 11%.

## **Conclusion**

The delay in both the contractor's and consultant's payments is likely to attract claims for interest. Hence, UNRA and MFPED should expedite the payment process.

## **Recommendation**

The UNRA and MFPED should expedite the payment process to both the consultant and the contractor.

## **12.3.5 Rehabilitation of Kiryandongo -Karuma-Kamdini road (59km)**

### **Background**

The GoU through recognises that it is through optimally maintaining the national road network that a reasonable level of service needed to sustain development can be achieved. Through UNRA, the GoU manages, maintains and develops the national road network across Uganda.

In pursuance of the above, UNRA contracted M/s China Communications Construction Company Limited (CCCC) to execute works for the rehabilitation of Kiryandongo-Karuma-Kamdini road (59km) at a contract sum of Ug shs 56.705 billion. The contract period is 36 months. UNRA also engaged the services of M/s ILISO Consulting (Pty) Ltd to carryout supervision for the rehabilitation works at a contract sum of Ug shs 2.173 billion.

The 59 km road is located in mid-western Uganda thus, serving as an international link between Uganda and South Sudan. It is a class II bitumen road with a 6.0m carriageway and 1.5m wide gravel shoulders. It connects important towns and centres of population and production such as Kiryandongo, Bweyale, Karuma and Kamdini.

It passes along Karuma forest (km 24+500-51+000) reserve which is part of the Murchison Falls National Park. Therefore, environmental considerations had to be highly considered for this section to conserve the ecosystem.

### **Project Scope**

This involves scarifying 150mm of existing base, blending with CRR to construct a uniform 200mm thick sub-base, adding a fresh 200mm crushed stone base and double bituminous surface

treatment for both the carriageway and the shoulders. Drainage improvement, road furniture installation and protection works are to be executed.

Table 12.41 summarises the data of Kiryandongo-Karuma-Kamdini road by 31<sup>st</sup> December 2014.

**Table 12.41: Summary of Kiryandongo -Kamdini road (59km) by 31<sup>st</sup> December 2014**

|  |   |
|--|---|
| <b>Project Name</b>                    | <b>Rehabilitation of Kiryandongo-Gulu road; Lot 1: Kiryandongo-Karuma-Kamdini road (59km)</b> |
| Source of Funding                      | GoU   |
| Contract No.                           | UNRA/WORKS/2012-13/00007/01/01  |
| Implementing Agency                    | UNRA  |
| Supervision consultant                 | ILISO Consulting (Pty) Ltd  |
| Contractor                             | China Communications Construction Company Limited   |
| Possession of Site                     | 5 <sup>th</sup> May 2014  |
| Project length                         | 59 km   |
| Supervision Commencement Date          | 5 <sup>th</sup> May 2014  |
| Construction Commencement Date         | 25 <sup>th</sup> April 2014   |
| Construction completion Date (initial) | 5 <sup>th</sup> May 2016  |
| Construction Contract Price            | Ug shs 56,705,761,711.36  |
| Supervision Contract Price             | Ug shs 2,173,088,000  |
| Contract Duration                      | 36 months, inclusive of 12 months DLP   |
| Contract Time Elapsed                  | 240 days (33.29%)   |
| Advance Payment                        | Ug shs 11,337,193,443   |
| Works Payments Certified               | Ug shs 5,821,358,952.73 (one IPC )  |
| Payments to the contractor             | Ug shs 11,337,193,443(only advance payment)   |
| Consultant Invoices Submitted          | Ug shs 384,056,000 (6 Invoices)   |
| Payments to the Consultant             | Ug shs 221,838,700  |
| Physical Progress                      | 11.86% achieved against planned 21.76%  |
| Financial Progress                     | 10.26% achieved against planned 18.83%  |

|                                    |                      |
|------------------------------------|----------------------|
| Exchange rate used in the contract | US\$1=Ug shs 2585.05 |
|------------------------------------|----------------------|

*Source: ILISO Consulting (Pty) Ltd and Quarterly Progress report No.3 (October-December 2014)*

## Financial Performance

The cumulative project financial progress was at 10.26% against a planned progress of 18.83% by the end of December 2014.

**Payments:** The contractor received part of an advance payment of Ug shs 11.33 billion. He had further submitted one IPCs amounting to Ug shs 3,338,526,485 on 12<sup>th</sup> December 2014 but was not yet been paid.

The consultant had submitted 6 invoices amounting to Ug shs 384,056,000 which Ug shs 221,838,700 (57.76%) was paid under four invoices. Outstanding payments to the consultant amounted to Ug shs 162,217,300 (42.24 %).

A variation order was submitted by the consultant for baseline traffic study proposal but was awaiting comments from the client (UNRA).

## Physical Performance

The road works executed were 11% out of the annual target of 20% by 31<sup>st</sup> December 2014. This brought the overall physical progress to 11.86% against the planned 21.75% hence, a slippage of 9.89%.

The contractor was still mobilising major equipment, man power and material for major works for instance, there has been a delay in installation of a crusher which is core on the project.

The key activities that were ongoing were; maintenance of existing road, removal of top soil and trees, excavation of material from existing pavement, and scarification and compaction of existing pavement layers.



**Left; Milled section at km 0+000; Centre: Equipment at camp site at 30+500; Right: A crusher at km 38+000**



**Left; excavation works for a culvert at km 2+370; Centre: rehabilitation of road shoulders at km 40+419; Right: Bush clearing with an excavator at km 59+000**

### **Box 3: Environmental and HIV/AIDS mitigation issues**

Other project related activities generally consisted of Environmental monitoring, HIV/AIDS mitigation.

- The contractor submitted and implemented the Environmental Monitoring plan and Workplan for Q2.
- Occupational Health and Safety (OHS), HIV/AIDS and gender intervention: the program for issues relating to the above is included in the construction period and was considered in the contractor's program of works.

The main contractor subcontracted all OHS, HIV/AIDS and gender issues to M/s Support for Integrated Health Care Initiative (SIHCI). SIHCI continued to perform its obligations throughout the half year.

### **Challenge**

Poor mobilisation of the contractor has lead to delayed implementation for instance;

- Lack of major construction equipment; the number of equipment available on site was less that the planned to match the pending workload by 31<sup>st</sup> December 2014.
- There was a gap in meeting the requirements of traffic management, environmental and safety management. Safety procedures and precautions during blasting were not adequate for proper operation at the quarry.
- The contractor's staff on site lacked enough technical skills, command of contractual language (English) and non compliance to the consultant's representative on site.

### **Analysis**

- ***Link between financial and physical performance***

The overall financial progress was 10.26% while the physical progress was 11.86 % by the end of December 2014. Therefore, financial progress was commensurate to the physical progress.

- ***Achievement of set targets***

All half year targets were achieved (100.6%) hence, an excellent physical performance.

## **Conclusion**

The contract time that had elapsed was 33.29% by 31<sup>st</sup> December 2014. On the other hand, the overall physical progress was 11.86% hence, a slippage of 9.89% from the schedule.

## **Recommendation**

- The contractor should expedite mobilisation to ensure timely execution of planned works.
- MFPED should ensure timely payments to the contractor and consultant.

### **12.3.6 Upgrading of Gulu-Atiak-Nimule road (104km)**

#### **Project Background**

The Government of Uganda applied for financing from the International Development Association (IDA) and Japan International Cooperation Agency (JICA) towards the cost of the Transport Sector Development Project (TSDP) and is applying a portion of the proceeds of the credit towards the upgrading to paved (bitumen) standard of Gulu-Atiak and Atiak-Nimule roads respectively.

The Gulu-Atiak-Nimule road (109Km) is part of the national roads network and is currently a gravel road. It traverses the districts of Amuru and Gulu, located in Northern Uganda. The road forms an important link in the national roads network and contributes significantly to the economic prosperity of northern Uganda. It forms an important international link with Sudan, being the most direct route between Uganda's capital city, Kampala and Juba, the principal town of Southern Sudan. The upgrading of this road will assist the administrative and social coverage in the region and reduce vehicle operating costs.

The works have been packaged into two contracts for two road sections, namely Gulu-Atiak road (74 Km), and Atiak – Nimule road (35 Km) which commenced on 27<sup>th</sup> February, 2012 and 17<sup>th</sup> July, 2013 respectively.

The Gulu-Atiak road (74 Km) lies within Amuru and Gulu districts in Northern Uganda and is about 350 Km due north of the capital, Kampala. The Atiak-Nimule roads (35 Km) traverses Amuru district approximately 420Km due north of the capital, Kampala. This section of the project road starts at Atiak town, 67.2 Km from Gulu town along the road and traverses Bibia trading centre up to at Unyama River which is the international border of Uganda and Southern Sudan.

The topography of the road section classifies as flat to rolling terrain. The road follows a water shed alignment between the Ayugi River to the West and Unyama River to the east for most of its length. The geology comprises of granite and gneisses, giving rise to relatively flat and planar topography. The rock types present are generally deeply weathered and ferruginous. The latter has resulted in the development of laterite, which comprises of the main construction material for the road pavement layer works. Where unweathered rock is exposed, the granitic or gneissose rock is generally hard and durable.

The land use adjacent to the road is predominantly peasantry agricultural/residential with numerous small farms throughout the length of the road. The project road experiences two rainy seasons from March to May and September to November. The average annual rainfall ranges from 1200 to 1300mm, the average minimum and maximum annual temperatures are approximately 210C and 300C.

## Project Scope

### *i. Gulu-Atiak road (74 km)*

The road is to be upgraded to a Class II bituminous paved road standard with a design speed of 110km/h for the section from Custom Corner round-about to Atiak, 90Km/hr for Layibi to Custom corner round-about, 60 km/hr for Christ church-Custom corner round-about and Airfield Road-Kaunda square.

The 74.44 km road has four sections and these are; Custom Corner-Christ church (2.3 km), Airfield - Kaunda grounds (0.93 km), Layibi Junction - Custom corner (3.86 km) and Custom corner – Atiak (67.35 km). The project horizontal alignment literally follows the existing road, with no major re-alignment.

The cross-section adopted for rural/urban areas is 10.5m and in the trading centres where there are no obstructions, the road width is 14.60m. In the trading zones there is a 2.0m concrete footpath on one or both sides.

The pavement structure adopted is in Table 12.42.

**Table 12.42 shows the pavement structure adopted for the road**

| Pavement layer     | Original Design   | Approved Design   |
|--------------------|---|---|
| DBST               | Double seal surface dressing on carriageway and shoulders | Double seal surface dressing on carriageway and shoulders                                 |
| Base course        | 200mm crushed stone                                       | 225mm crushed aggregate class CRR compacted to 100% of MDD, constructed in two layers     |
| Sub base           | 250mm natural gravel (murrum) mechanically stabilized     | 275mm Mechanically stabilized sub-base with soaked CBR > 30% when compacted to 95% of MDD |
| Improved Sub grade | 150mm G15 natural gravel (murrum) of CBR 15% or greater   | 150mm natural gravel of CBR >15% compacted to 95% MDD                                     |
| Optional Layer     | 150mm optional Layer of G7 Material                       | 150mm optional Layer of G7 Material   |

*Source: Monthly Progress report No.35, January 2015*

The road furniture includes guardrails, road signs, bus-bays, speed humps and rumble strips; these will be provided to improve safety of road users and pedestrians. High embankment slopes will be top-soiled and grassed. The total length of the project road is 74 Km.

### *ii. Atiak-Nimule road (35 km)*

The works to be carried out comprise the upgrading to a Class II Bitumen standard of approximately 35km of existing gravel road between the northern boundary of the town of Atiak north of Gulu and a point just to the south of Nimule at the Sudanese border. The completed road was to have two lanes each 3.25m wide flanked by two 2.0m wide surfaced shoulders, giving an

overall roadway width of 10.5m. The road reserve (Right Of Way) for both road sections is generally 30m in width, except in towns where the road is being widened.

The final kilometre of the project road, including a large box culvert and a new bridge over the Unyama River, which forms the international boundary with Sudan, will be constructed under a separate concurrent contract. The scope of road works on the Atiak-Nimule road is summarised in the Table 12.43.

**Table 12.43: Scope of road works for Atiak –Nimule road (35 km) Project**

| Section            | Carriageway                            | Original Crust  | Revised Crust  |
|--------------------|--|---|--|
| Urban / Rural      | 6.5 m with 2.0 m surfaced shoulders    | Pavement composition Double Surface dressing, 200 mm CA Base (class CRR), 250mm Mechanically stabilized sub base (G45), 150mm improved subgrade (G30) | Pavement composition Double Surface dressing, 225 mm CA Base (class CRR), 275mm Mechanically modified sub base (G45), 150 mm Subgrade (G15) and 150mm Subgrade (G7). |
| Urban Trading Zone | 6.5m Carriage way                      | Same as Rural / Urban   | Same as Rural / Urban  |
|                    | 3.25m Parking and Lay bye lane         | Same as Rural / Urban   | 150mm Reinforced Concrete, 100mm Granular Base, 275 mm Mechanically modified sub base (G45), 150 mm Subgrade (G15) and 150mm Subgrade (G7).                          |
|                    | 2.00m concrete foot path on both sides | 100mm Thickness   | 100mm Thickness  |

*Source: UNRA Brief Project Report for BMAU Field Visit, February 2014*

The works also involved reconstruction or new construction of drainage pipe culverts of as follows;

| Reconstruction or new construction of; | Original Quantities | Revised Quantities |
|--|---------------------|--------------------|
| One barrel pipe culvert                | 24 (No)             | 40 (No)            |
| Two barrel pipe culvert                | 8 (No)              | 10 (No)            |
| Three barrel pipe culvert              | 2 (No)              | 10(No)             |
| <b>Total</b>                           | <b>32 (No)</b>      | <b>60 (No)</b>     |

#### **Total**

Table 12.44 shows a summary of the contract data and progress of the construction works on the road by the end of January 2015.

**Table 12.44: Gulu-Atiak-Nimule Project Summary by the end of January 2015**

| Details           | Gulu-Atiak Road                        | Atiak-Nimule Road   |
|-------------------|--|---|
| Source of Funding | International Development Agency (IDA) | Japan International Cooperation Agency (JICA) and Government of |
| Contract No.      | UNRA/Works/2009-10/0001/08/01          | UNRA/PL 254   |



|  |   |   |
|--|---|---|
| Implementing Agency                    | Uganda National Roads Authority   | Uganda National Roads Authority   |
| Supervision consultant                 | Bonifica S.p.A in joint venture with SABA Engineering Plc                           | LEA Associates South Asia Pvt. Ltd, India in a joint venture with KOM Consult Ltd, Uganda |
| Contractor                             | China Henan International Cooperation Group Co. Ltd                                 | China Railway Wuju (Group) Corporation  |
| Possession of Site                     | 14 <sup>th</sup> February 2012  | 15 <sup>th</sup> February, 2013   |
| Project length                         | 74 km   | 35 km   |
| Supervision Commencement Date          | 22 <sup>nd</sup> February 2012  | 2 <sup>nd</sup> May, 2013   |
| Construction Commencement Date         | 27 <sup>th</sup> February 2012  | 17 <sup>th</sup> July, 2013   |
| Construction completion Date (initial) | 27 <sup>th</sup> August, 2014 revised to 22 <sup>nd</sup> February 2015 (36 Months) | 16 <sup>th</sup> July, 2015 (Revision pending approval addendum)                          |
| Original Contract Price                | Ug shs 89,667,759,288.00  | Ug shs 37,143,737,673.47 and US \$ 5,391,226.45   |
| Revised Contract Price                 | Ug shs 96,326,976,658, (70%-USD & 30%-Ug shs)                                       | Revision pending approval addendum  |
| Supervision Contract Price             | Euro 928,027 and Ug shs. 1,483,403,000  | Ug shs 106,065,180.00 and USD 1,404,750.00  |
| Contract Duration                      | 30 months or 913 Calendar days  | 730 days (24 months)  |
| Contract Time Elapsed                  | 35 months (1070 days), that is 97.44 %  | 567 days i.e. 77.56%  |
| Advance Payment                        | Ug shs 13,309,163,927 (15% of original contract price)                              | Ug shs 5,571,560,651.02 and US \$808,683.97 (15% of original                              |
| Works Payments Certified               | Ug shs 91,632,994,533.75 (20 IPCS and Price adjustment)                             | Ug shs 28,504,093,508.61 (up to IPC-12) inclusive of advance payment                      |
| Payments to the contractor             | Ug shs 69,265,087,702.67 –Up to IPC 20  | Ug shs 21,040,449,674.98  |
| Consultant Invoices Submitted          | Ug shs 1,775,892,419 and Euros 761,727 -.33 Invoices                                | 21 Invoices- Ug shs 2,527,238,461   |
| Payments to the Consultant             | Ug shs 1,294,273,088 and Euros 545,219  | Ug shs 2,340,326,916; *Ug shs 30,000 less received against invoice 14 & 15.               |

|                                    |  |  |
|------------------------------------|--|--|
| Physical Progress (Achieved Vs     | Achieved is 96.02% against planned of 100% | Achieved is 53.26%, Planned is 83.86%  |
| Financial Progress (Achieved Vs    | 102% Achieved against 100% Planned         | Achieved is 49.55% , Planned is 83.87% |
| Exchange rate used in the contract | US \$ 1= Ug shs 2380.56                    | 1 USD = Ug shs 2506.89                 |

*Source: LEA Associates South Asia Pvt. Ltd, Bonifica S.p.A in joint venture with SABA Engineering Plc and monthly progress reports for January 2015*

The project was monitored on 3<sup>rd</sup> February 2015 and the findings are presented below:

## **Financial Performance**

### *i. Gulu-Atiak road (74 km)*

The cumulative project financial progress based on the revised programme was estimated at 102% against a planned progress of 100% by the end of January 2015.

**Payments:** The contractor had submitted 20 IPCs between February 2012 and February 2015 totalling to Ug shs 78.954 billion (81.6 % of revised contract value) out of which Ug shs 69.265 billion (87.72%) has been paid. The total value of certified works at the time was Ug shs 91.632 inclusive of price adjustment.

The consultant had submitted 33 invoices between April 2012 and January 2015 totalling to Euro 761,727(82.02 % of original amount) out of which Euros 545,219 (71.58%) was paid and Ug shs 1.776 billion (119%) out of which Ug shs 1.294 billion (72.86 %) was paid. Outstanding payments to the consultant amounted to Euro 85,732 (17.98 %) and Ug shs 179.898 million (27.14 %).

### *ii. Atiak-Nimule road (35 km)*

The cumulative financial progress of Gulu-Atiak road project was estimated at 49.55% against a planned progress of 83.86% by the end of January 2014 hence, a significant lag of 34.32%. This was attributed to failure to achieve the planned physical progress. by the end of January 2015, the cumulative financial progress was at 56.27%.

**Payments:** The contractor had submitted 12 IPCs between July, 2013 and February 2015 amounting to Ug shs 28.504 billion out of which Ug shs 21.040 billion (73.81%) was paid.

The consultant had submitted 21 invoices between July 2013 and February 2015 totaling to Ug shs 2.527 billion out of which Ug shs 2.341 billion (92.65 %) was paid. However, IPC 14 and 15 was paid less by Ug shs 30,000.

**Cost projections:** There were financial projections carried out as presented in Table 12.45

**Table 12.45 shows the financial projections of Atiak-Nimule section**

| Currency | Original Contract | Projected Contract Price | % variation |
|----------|-------------------|--------------------------|-------------|
| Ug shs   | 37,143,737,673    | 53,189,965,610           | 43.20%      |
| USD      | 5,391,226.45      | 7,901,518                | 46.56%      |

*Source: Status Report for BMAU field visit, February 2015 by LEA Associates South Asia Pvt. Ltd*

There variations in the price were due to the increase in the scope of works as per the design review and additional findings on site conditions.

## Physical Performance

### a) Past performance

The Gulu-Atiak-Nimule road project was last monitored in February 2014 at which time the physical progress of works of;

- i. **Gulu-Atiak road** was estimated at a physical progress of 48.74 % against a planned progress of 47.77 % and a financial progress of 50.61 against a planned progress of 48.64% as at the end of January 2014.
- ii. **Atiak-Nimule road** was estimated at a physical progress of 5.51% against a planned progress of 9.7 % and a financial progress of 5.50% against a planned progress of 11.02% as at the end of January 2014. This indicated a slippage of about 4.19 % in the contract works that was attributed to the delayed mobilisation of the contractor.

### b) Present performance

#### i. Gulu-Atiak road (74 km)

The road works executed were 19.4% out of the annual target of 30% by 31<sup>st</sup> December 2014 which brought the cumulative progress to 94.98%. However, the cumulative physical progress had risen to 96.02% against the target of 100% at the time of monitoring.

Completed works were; establishment of both the contractor and consultants camps as well as equipping them with the necessary facilities. Relocation of utilities was complete and cost Ug shs 2.868 billion.



Left; Concrete lining along the road edge at km 0+800; (Centre): Rumble strips;(Right):A completed section at km 35+174

Most of the major road works were ongoing but nearing completion as summarised in Table 12.46.

**Table 12.46: Progress of Key Activities on Gulu-Atiak road by the end of January 2015**

| Activity                                       | Total (km) | Stretch worked on (km) | % PROGRESS |
|--|------------|------------------------|------------|
| Double Bituminous Surface Treatment – 2nd Seal | 74         | 70.03                  | 94.63      |

|  |    |       |       |
|--|----|-------|-------|
| Double Bituminous Surface Treatment – 1st Seal | 74 | 70.04 | 94.65 |
| Prime Coat                                     | 74 | 70.19 | 94.85 |
| Base Course Upper                              | 74 | 70.35 | 95.07 |
| Base Course Lower                              | 74 | 70.98 | 95.92 |
| Sub base Upper                                 | 74 | 70.98 | 95.92 |
| sub base Lower                                 | 74 | 70.98 | 95.92 |
| G15 Top  | 74 | 71.64 | 96.82 |
| G7/G15 Layer                                   | 74 | 70.89 | 95.80 |
| G3 Layer                                       | 74 | 69.05 | 93.31 |

*Source: Project Monthly Progress Report No.35, January 2015*

The Contractor's work progress is out of phase, due to delays accumulated in drainage; improved sub grade layer of G7 or G15, sub-base, base, prime and curing membranes and laying of surface treatment (1<sup>st</sup> and 2<sup>nd</sup> seal).

Installation of 600mm diameter access junction CMP culverts was ongoing with 86% works accomplished on culverts installation. Construction of the culvert head structures is also on-going with three new sub-contractors appointed by the main contractor.



**Left; Stone pitching works at km 35+580; Centre: spreading of road base material at km 1+200; Right: compacting of road base at km 1+100**

Other project related activities generally consisted of Environmental monitoring, HIV/AIDS mitigation and Gender mainstreaming at the workplace plus Occupation Health and Safety.

- Environmental monitoring team had routine activities which were; continuous inspection of quarry sites, borrow pits restoration, monitoring of waste management and disposal, general hygiene at the main workers' camp Lacor
- HIV/AIDS & STDs awareness and gender intervention: This was carried out to stop new infections amongst the road construction workers and immediate community members whilst, giving social support counselling to person living with HIV/ AIDS. In support of the above objectives, the following activities were carried out during the project implementation; HIV/AIDS Sensitization to both the project staff and community

members traversing the project road; HIV Counselling and Testing to project staff and community members; Routine clinic activities-treatment of medical illnesses among project staff; Distribution of male and female protection plus posters and brochures to the project staff and community members.

- The Occupational Health and Safety department monitored, implemented and recorded a number of OHS related issues. Traffic management was observed to ensure safety of road users and safety for road construction teams where; temporary road signs on active road work sections; humps were installed at trading zones and active work sections; traffic flaggers were stationed at high accident risk locations to warn and guide road users; and project workers and community members were sensitized on proper road use and safety, accident risks and control measures.

## **Contractual issues**

### **a) Compensation**

Compensation payment for the Gulu municipality roads is on-going with the release of Shs 1.5billion made by the Ministry of Finance to enable UNRA clear the remaining PAPs between customs corner and Atiak have already received payments, and compensation re-evaluation is on-going for the 400m to Moyo at the junction at Km 66+400 LHS.

### **b) Variations**

Two variation order proposals from UNRA are in due process; one for the quantity of crushed aggregate CRR material arising from the extension of base and sub-base layers to full width up to the embankment and mechanical stabilization of sub-base layer. The other is for the change in aggregates for the second seal for the DBST of entire road section, to be changed from 10mm to 14mm.

### **c) Claims**

The Contractor has on 14th January 2013 issued a notice of claim for delay to access the site in Atiak trading centre on grounds of delayed compensation in certain sections of the trading centre.

### **d) Extension of time**

The original contract completion date for the project civil works was 26th August 2014 but as a result of delays, the Engineer expressed an aim to reach an agreement between the parties on providing a provisional time extension before the final one is determined.

As a result UNRA gave partial approval of extension of time of 3months (26th/Nov/2014) to enable the contractor proceed with the works as they review the Engineers time extension evaluation report. UNRA further granted extension of time of 90 days was given thus revising the completion date to 22nd February 2015.

## ***ii. Atiak-Nimule road section (35 km)***

By the end of Q2, 18.42% of physical progress was achieved against the annual target of 25%. However, the weighted overall physical progress as at 31<sup>st</sup> January 2015 rose to 53.26% against

the planned 83.86%.The percentage progress of key activities as at the end of January 2015 is indicated in Table 12.47.

**Table 12.47: Percentage progress of Key Activities by the end of January 2015**

| Activity   | Total(km) | Cumulative progress to date (km) | Progress |
|--|-----------|----------------------------------|----------|
| Clearance and removal                            | 35.221    | 35.050                           | 99.51 %  |
| Excavation(Topsoil removal)                      | 35.221    | 35.050                           | 99.51 %  |
| Roadbed preparation                              | 35.221    | 35.050                           | 99.51 %  |
| Embankment                                       | 35.221    | 27.52                            | 78.14 %  |
| Selected Sub Grade(G7)                           | 35.221    | 27.03                            | 76.04 %  |
| Selected Sub Base (G15)                          | 35.221    | 26.35                            | 74.81 %  |
| Granular Sub Base 1 <sup>st</sup> Layer          | 35.221    | 22.85                            | 64.88 %  |
| Granular Sub Base 2 <sup>nd</sup> Layer          | 35.221    | 18.85                            | 53.52 %  |
| Base Course 1 <sup>st</sup> Layer                | 35.221    | 2.78                             | 7.89 %   |
| Base Course 2 <sup>nd</sup> Layer                | 35.221    | 0.30                             | 0.85 %   |
| Prime Coat                                       | 35.221    | 0.10                             | 0.28 %   |
| Surfacing (1 <sup>st</sup> and 2 <sup>nd</sup> ) | 35.221    | 0                                | 0.00 %   |
| Pipe culverts                                    | 61(No.)   | 18                               | 29.15 %  |

*Source: Status Report for BMAU field visit, February 2015 by LEA Associates South Asia Pvt. Ltd*

#### **Box 4: Health, Gender and Safety issues**

Health, safety and gender issues were also observed in the following ways;

- **Health:** the nominated sub-contractor, NGEN+ continuously undertakes HIV programmes like awareness workshops, mobilisation, counselling, testing to mention but a few.
- **Gender:** the contractor continues to undertake gender programmes such as sensitisation and awareness meetings, ensuring gender sensitive working conditions and facilities, preparatory gender monitoring and addressing gender based issues.
- **Safety:** It was ensured that the contractor undertook routine distribution of protective gear for workers. Safety precaution and road signage were also given due attention to ensure safety of both workers on site and road users. Road awareness and sensitisation meetings were also held regularly.



**Left: excavation for pipe culvert at Km 96+430; Centre: Dumping of sub base at km 82+300 ; Right: milled section at Km 70+000**

## **Challenges of Gulu-Atiak-Nimule Project**

### ***i. Gulu-Atiak road***

- Remedial Compensation claims in certain sections along the project road continued to frustrate works, especially the 400m on the Moyo Junction in Atiak.
- Unsettled money claims between the Contractor and the quarry/borrow pit land owners caused obstructions to works with the community on several occasions blocking off access to the quarries. For instance, in January alone, this cost over four working days after the quarry at Km 12+200 was sealed off.
- Electricity supply was also continuously disrupted yet it is mainly important for security of the site compounds and power for the drying ovens in the laboratories.
- Whereas the Contractor increased his crew for laying the pavement layers, the crew deployed for Base course and sub-base was not effective. Therefore; production in this regard was very low.
- The Contractor had failed to submit a comprehensive revised work program that was consistent with the permanent civil works being executed.
- The rate of mixing at the pug mill was very slow and it did not cater for the work program. Sometimes, only one wheel loader was available for sub-base stockpiling and loading the pug mill.
- High turnover of the general labourers such as machine operators, majority of who are leaving for other projects.
- Poor technical knowledge by some of the Contractor's staff on site especially maintaining and operating equipment which has led to constant breakdowns.

### ***ii. Atiak-Nimule road***

- The contractor's work was characterised by lack of proper planning which was attributed to absence of a planning engineer on site
- Difficulties in communication with the contractor's key staff at site hugely impacted on the project progress. The staff were largely expatriate and unable to communicate in English.

## Analysis

- *Link between financial and physical performance*

**Gulu-Atiak road:** the cumulative financial progress was at 102% while the physical progress of works was at 96.02% by the end of January 2015. The financial progress exceeded the physical progress because there was a price adjustment paid on the project.

**Atiak-Nimule road:** the cumulative financial progress was 49.55% while the cumulative progress was 53.26% by the end of January 2015.

Therefore, the overall financial progress lagged behind the physical progress by 3.71%.

- *Achievement of set targets*

The half year targets on Gulu-Atiak road and Atiak-Nimule were achieved at 129% and 147% respectively. This was an excellent physical performance. However, the cumulative progress of Atiak-Nimule section was far behind schedule.

## Recommendations

### A) Gulu-Atiak section

The Contractor should;

- Improve on his planning so as to effectively and efficiently utilize his resources. This will yield results leading to increased output per month
- Ensure regular maintenance of his equipment to avoid constant breakdowns
- Hire and maintain adequate number of workers and give them enough motivation to reduce issues related to poor staff turnover
- Employ more technical people on site to provide technical advice to the team
- Avoid idling equipment and deploy all of them to reduce on work backlog for example at the Pug mill.
- Submit a progress bar chart; indicate the personnel and appropriate equipment for monitoring purposes.

The Consultant should;

- Shove the contractor to increase the progress rate for works.
- Provide the contractor with any outstanding designs and specifications whatsoever on the project details

From the Client (UNRA) should;

- Timely respond on issues concerning the project in order to avoid delays. These issues include: compensation affected sections of the Layibi by-pass, Atwal road, and Custom Corner to Lacor; water mains in town roads; road junctions for 37+040 and 66+408; and issuance of instructions on rock fill area and geotextile application at 57+725 to 58+850.

### B) Atiak-Nimule section

- The contractor should ensure fulltime presence of key personnel at site and their presence should be monitored by the engineer and necessary measures forged in case of their absence to avoid any interruptions



- Where the contract language is unfamiliar to the contractor, a good blending of key staff by both the expatriate and local personnel should be ensured. Due to the nature of work, it ceases to be practical to provide interpreters at all time as may be needed

### 12.3.7 Upgrading of Mpigi-Kanoni road (64.45km) form gravel to paved (Bitumen Standard)

#### Project Background

The government of Uganda (GOU) under its National Road Development and Maintenance Programme (NRDMP) earmarked funds, and intends to apply part of the funds towards payments under the contract for the upgrading from gravel to paved standard of Mpigi-Kanoni (65.45km) road. The road forms an important link in the national road network and contributes significantly to the economic prosperity of the central region. The upgrading would reduce vehicle operating costs and enhance administrative and social services coverage in the region.

Mpigi-Kanoni road (64.45km including the tarmac Mpigi Loop) is located in the central region of Uganda, to the South West of the capital city, Kampala. The road commences at 39km from Kampala to Kalangala/Mpigi along the Kampala-Masaka road. It traverses the three districts of Mpigi, Butambala and Gomba and end 1.8km beyond Gomba district headquarters.

Uganda National Roads Authority acting on behalf of the GoU awarded the contract for upgrading the Mpigi-Kanoni road to Energoprojekt Niskogagnja Ltd. The contract commencement date was 11 December 2013.

M/s AECOM RoA (pty) Ltd in association with International Development Consultants (IDC) has been assigned the task of providing consultancy services for the Design Review and Construction Supervision of the works. The Consultants commenced their services on 1<sup>st</sup> April 2014.

#### Scope of works

The scope of works is as summarized in Table 12.48.

**Table 12.48: A summary of the scope of works for upgrading of Mpigi-Kanoni road**

| Activity                        | Quantity  |
|---------------------------------|---|
| Bush clearing and road widening | 64km  |
| Excavation to spoil/fill        | 95,000m <sup>3</sup>  |
| Fill                            | Rock-87,000m <sup>3</sup> and common fill-835,000m <sup>3</sup>   |
| Subgrade                        | 150mm thick improved/modified gravel material   |
| Subbase                         | 175mm graded stone CRR fine   |
| Surfacing                       | Stone aggregate of 20mm size for the first seal and 10mm size for the second seal   |
| Road width                      | 7m of carriageway,<br>1.5m wide shoulders on either side in rural areas,<br>2.5-3m extra lanes in some built up areas,<br>1.5m walk ways in uilt up areas |

|  |
|--|
| Installation of 6.3km of pipe culverts   |
| Road marking and installation of road signs  |
| Relocation of utilities (water and electricity)  |
| Improvement of five roundabouts with two in Mpigi town, one in Kabasanda settlement, Kibibi trading centre and Kanoni trading centre. The major junctions for improvements are at Mirembe (km 20.5) and Kayenje (km 35.5) villages |
| Implementation of HIV/AIDS awareness programme and Environment Mitigation measures.  |

*Source: AECOM in association with IDC*

Table 12.49 shows a summary of the contract data and progress of the construction works on the project road.

**Table 12.49: Summary of contract data for upgrading of Mpigi-Kanoni road (64.45km) as at end of January 2015**

| <b>Project Title</b>           | <b>Civil works for upgrading of Mpigi-Kanoni road (64km) from gravel to paved (Bitumen Standard)</b>    |
|--------------------------------|---|
| Implementing Agency            | Uganda National Roads Authority (UNRA)  |
| Source of Funding              | Government of the Republic of Uganda (GoU)  |
| Contract No.                   | UNRA/Works/2009-10/00001/18/04  |
| Supervision consultant         | Uganda National Roads Authority (to be replaced by AECOM in association with IDC)                       |
| Contractor                     | Energoprojekt   |
| Project length                 | 64km  |
| Supervision Commencement Date  | 1st April 2014  |
| Construction Commencement Date | 11 December 2013  |
| Contract Duration              | 36 Months   |
| Construction completion date   | 10 December 2016  |
| Construction completion date   | NIL   |
| Contract Price                 | Ug shs 123,770,604,739  |
| Revised Contract Price         | NIL   |
| Supervision Contract Price     | USD 2,803,092.09 & Ug shs 401,366,400   |
| Contract Time Elapsed          | 36% (13 months)   |
| Advance Payment to contractor  | Ug shs 18,655,590,000   |
| Works Payments Certified       | Ug shs 10,290,073,694 (IPC 1 =Ug shs 5,289,827,873 & IPC 2 =Ug shs 5,000,245,820.65)                    |
| Payments to the contractor     | Ug shs 23,945,417,873 (IPC 1 = Ug shs 5,289,827,873 and advance payment (15%) of Ug shs 18,655,590,000) |
| Consultant Invoices Submitted  | 8 invoices submitted (Ug shs 43,959,800.00 + USD  |

|                             |   |
|-----------------------------|---|
|                             | 430,854.08)   |
| Payments to the Consultant  | USD 179,020.00  |
| Physical Progress           | 14.49% Vs planned 23.25% as at January 2015. (delay of 8.76% weeks) |
| Financial Progress          | 23.42% as at time of monitoring                                     |
| Exchange rate (USD: Ug Shs) | 1 USD = Ug Shs 2,837.351  |

*Source: AECOM in association with IDC*

## Financial Performance

In FY2014/15, the project has been allocated a total budget of Ug. Shs. 41.267 billion and is funded by GoU. By 31<sup>st</sup> December, the financial expenditure on the project amounted to Ug shs 10.420 billion (25.25% of the approved budget). This information is summarised in Table 12.50.

**Table 12.50: Financial Performance of the Project for Civil works for upgrading of Mpigi-Kanoni road (64.45km) at end of January 2015**

| Financial year      | Source of funding | Approved Expenditure (Ug. Shs. *1000) | Actual Expenditure (Ug. Shs. *1000) | % of Budget Spent | comment                             |
|---------------------|-------------------|---------------------------------------|-------------------------------------|-------------------|-------------------------------------|
| 2014/15             | GoU               | 41,266,610.33                         | 10,420,713.37                       | 25.25%            | inclusive of general items          |
| Cumulative progress |                   |                                       |                                     |                   |                                     |
| Overall             | GoU               | 123,770,604.74                        | 28,986,303.37                       | 23.42%            | Exclusive of advanced payment 8.42% |

*Source: AECOM in association with IDC January 2015 project Progress Report*

**Payments:** The contractor received advance of Ug shs 18,655,590,000. He had submitted two IPCs amounting to Ug shs 10,290,073,694 (8.3% of the contract sum) but one had been paid. Cumulatively, the financial progress of the project was 23.42% against a planned 21.14%.

The supervision consultant had submitted eight invoices by 31<sup>st</sup> December 2014 as shown in Table 12.51. However, foreign currency payments had been received for only three invoices totaling to USD 17, 9020.

**Table 12.51: Status of Consultant's invoices on Mpigi-Kanoni road by the 31<sup>st</sup> December 2014**

| s/no | Components                   | Amount this invoice     |          |                        |        |
|------|------------------------------|-------------------------|----------|------------------------|--------|
|      |                              | Local currency (Ug shs) | Status   | Foreign currency (USD) | Status |
| 1    | Monthly invoice – April 2014 | 5,027,000.00            | Not paid | 63,907.50              | Paid   |

|   |   |              |          |           |          |
|---|---|--------------|----------|-----------|----------|
| 2 | Monthly invoice – may 2014                      | 5,027,000.00 | Not paid | 56,744.00 | Paid     |
| 3 | Monthly invoice – june 2014                     | 5,027,000.00 | Not paid | 58,368.50 | Paid     |
| 4 | Monthly invoice – july 2014                     | 5,027,000.00 | Not paid | 34,341.00 | Not paid |
| 5 | Monthly invoice – August 2014                   | 5,027,000.00 | Not paid | 55,238.50 | Not paid |
| 6 | Monthly invoice – September 2014                | 5,027,000.00 | Not paid | 55,238.50 | Not paid |
| 7 | Monthly invoice – October 2014                  | 5,027,000.00 | Not paid | 61,943.50 | Not paid |
| 8 | Inception Report Invoice – April 14 August 2014 | 8,770,800.00 | Not paid | 45,072.58 | Not paid |

*Source: AECOM in association with IDC*

### Physical Performance

The cumulative physical performance by end of January 2015 was at 14.49% against planned of 23.25% and hence a delay of 8.76%. The progress of the major activities is presented in Table 12.52.

**Table 12.52: Summary of the status of works at the end of January 2015**

| Description   | Planned quantity     | % Achievement |
|---|----------------------|---------------|
| Prefabricated culverts  | 169 pcs              | 35%           |
| Clearing, grubbing and removal of top soil  | 6,000m <sup>3</sup>  | 107%          |
| Removal and grubbing of large trees and tree stumps                                   |                      |               |
| Common excavations to spoil   | 15,000m <sup>3</sup> | 133%          |
| Fill as specified in clause 3605-the top 450mm depth of fill material required CBR>8% | 10,000m <sup>3</sup> | 70%           |
| Fill as specified in the drawings to require minimum G3 Q quality material            | 20,000m <sup>3</sup> | 75%           |
| Compaction to 95% of BS heavy density   | 15,000m <sup>3</sup> | 60%           |
| Natural gravel class G30  | 5,000 m <sup>3</sup> | –             |

*Source: AECOM in association with IDC*

In addition development of the quarry site at Mbanda located at km24 in preparation for setting up the crusher plant was ongoing. The communities within the quarry site however, expressed the following issues;

- The blasting of rocks for the road works had damaged some of the buildings within the project vicinity including the roof of the nearby primary school.

- The communities and the primary school administrators reported that there is a big time lag between when they are notified to vacate their homes in preparation for blasting and when the actual blasting of the rock takes place.

The project was behind schedule with a lag 8.76% with all the key activities still incomplete.

The delays were majorly because of the following reasons;

- Delay in compensation for properties especially from km 000 to km 23+000. The other sections where the contractor has got consent of the land owners works are ongoing even before settlement of the compensation claims.
- Failure by the contractor to submit compression strength test results of precast concrete culverts for a conclusive evaluation of the quality and approval of the pipes. At the time of monitoring in February, this issue was still pending.
- Delays in finalization of relocation of electric poles and water pipes within roadway. Relocation was ongoing.

Due to the above issues, at the time of monitoring in February 2015, the contractor had already expressed an intention to claim for an extension of time.



**Left: completed subgrade section; Centre: ongoing earthworks; Right: Swamp section on km 12+600 awaiting rock fill**



**Left: Houses along the road still awaiting compensation; Centre: A quarry site at km24; right: crusher plant to be assembled**

## Challenges

- The project has experienced a delay in payment to both the consultant and contractor. These will most likely affect the cash flow of the contractor as well as that of the consultant.

- Compensation delay along the right of way affected the contractor's programme of works because he kept on skipping sections which have not yet been acquired. The contractor has access to only 50% of the site.
- In addition delay in paying the PAPs will cause further loss of time since the PAPs have to be given a three months notification period from the time they receive payments.
- The contractor delayed to set up a quarry and crushing plant. He had not yet commenced by 18th February 2015. This delayed commencement of rock fills which directly depended on the quarry operations.
- Delay in relocation of public utilities affected the contractors work programme.

## **Analysis**

- *Link between physical and financial performance*

The cumulative physical progress of works was 14.49% against a financial progress of 23.42%. The project exhibited a good absorption of funds since the planned 21.14% was surpassed. However, these expenditures did not enhance the achievement of the physical targets of the project.

- *Achievement of set targets*

The project did not achieve the set targets. The physical progress of the project was estimated at 14.49% against the planned 23.25% with most of the key activities still ongoing. In addition preliminary activities such as land compensation for the right of way and relocation of public utilities which would have been finalized were still pending.

## **Recommendations**

- The UNRA and MFPED should expediate the payments to both the contractor and consultant to avoid losses due to payment of interests on delayed payments.
- The UNRA could explore the option of incorporating the issue of land compensation as a provisional sum in the main contract.
- The MFPED and UNRA should consider compensating the PAPs before commencement of the project to avoid delays of works.
- The UNRA should ensure that contractors always provide a plan on how they are going to manage the quarry before project kick off to avoid the effects to communities.

### **12.3.8 Upgrading of Vurra-Arua-Koboko-Oraba (92km)**

#### **Project Background**

The GoU received credit from the International Development Association (IDA) towards the cost of the Transport Sector Development Project (TSDP) to finance the Upgrading of Vurra-Arua-Koboko-Oraba road (92Km) to paved bituminous standard. The road is located in the West Nile region in north western Uganda. The road project commences at Vurra, passes through three (3) districts (Arua, Maracha and Koboko) and ends at Oraba.

Vurra is the border between Democratic Republic of Congo (DRC) and Oraba is the border between Uganda and South Sudan. The road thus, links Uganda to two neighbouring countries (DRC and South Sudan) and is part of the UNRA network. The topography is generally flat from Vurra to Manibe (22 km) and changes to rolling terrain from Manibe to Oraba.

UNRA on behalf of GoU awarded the contract of upgrading this road to Chongqing International Construction Corporation (CICO), of China. M/s Comptran Engineering and Planning Associates was contracted to design and later, supervise the works.

The project is expected to cost Ug shs 132.12 billion is entirely funded by the World Bank through the International Development Association (IDA) and is implemented by UNRA. The GoU is handling the component of land acquisition for the project area. Construction works officially commenced on 6<sup>th</sup> January 2012 and are expected to be complete by the 5<sup>th</sup> July, 2014.

### **Project objective**

To facilitate trade between DRC, South Sudan and Uganda through upgrading the road from gravel to bitumen standard.

### **Scope of works**

The road is to be upgraded to a class II bituminous paved road standard with a design speed of 90 km per hour. The cross section adopted for rural areas was 6.5m carriageway paved with a double seal bituminous surface dressing. Through the more densely populated market area in Arua where there is no obstruction, the road shoulders will be increased from 2m to 3.0m wide to cater for on-street parking of vehicles.

The project horizontal alignment is to literally follow the existing road, with no major realignment. Eight existing composite steel girder bridges would be replaced with new concrete girder bridges of spans between 12m and 20m. Drainage structures include; 5 box culverts; 144 pipe culverts (141 existing pipe culverts to be replaced and 3 new pipe culverts to be constructed); 600mm diameter access culverts will be provided at 120 locations.

Road furniture includes guardrails and road signs. Busbays, speed humps and rumble strips will be provided to improve safety of road users and pedestrians. High embankment slopes will be top-soiled and grassed. The total length of the project road is 92km.

Table 12.53 shows a summary of the contract data and progress of the construction works on the project road by the end of January 2015.

**Table 12.53: Summary of contract data for Vurra-Arua-Koboko-Oraba road (92km) by the end of January 2015**

| <b>Project Title</b>              | <b>Upgrading of Vurra – Arua – Koboko – Oraba Road (92km) to Paved (Bitumen) Standard</b> |
|-----------------------------------|---|
| Source of Funding                 | The World Bank  |
| Contract No.                      | TSDP/HW/C02   |
| Implementing Agency               | Uganda National Roads Authority (UNRA)  |
| Design and Supervision consultant | Comptran Engineering and Planning Associates  |
| Contractor                        | Chongqing International Construction Corporation (CICC)                                   |

|   |  |
|---|--|
| Project length                          | 92 km  |
| Supervision Commencement Date           | 14th November 2011   |
| Construction Commencement Date          | 6th January 2012   |
| Construction completion date (Original) | 5 <sup>th</sup> July, 2014   |
| Construction completion date (Revised)  | 31 <sup>st</sup> January, 2015   |
| Original Contract Price                 | Ug shs 132,123,510,816   |
| Revised Contract Price                  | Ug shs 138,861,458,345   |
| Supervision Contract Price              | US \$ 1,863,525 (Initial), US \$ 2,185,775 (Revised)   |
| Contract Duration                       | 30 months (Initial), 37 Months (Revised)   |
| Contract Time Elapsed                   | 37 months (100% based revised period)  |
| Advance Payment                         | Ug shs 19,818,526,622 (Advance payment fully recovered)  |
| Works Payments Certified                | 31 IPCs<br>Ug shs 127,607,972,995 (91.9% of works)<br>Ug shs 12,472,393,451-(Price adjustment) |
| Payments to the contractor              | Not available  |
| Consultant Invoices Submitted           | 38 Invoices (up to 31 <sup>st</sup> January 2015), US \$ 2,185,775                             |
| Payments to the Consultant              | Not available  |
| Physical Progress                       | 95.12% Achieved against Planned of 97.94%  |
| Financial Progress                      | 95.97% Achieved against Planned of 98.91%  |
| Exchange rate used in the contract      | 1 US \$ = Ug shs 2,380.56  |

*Source: Comptran Engineering and Planning Associates*

## Financial Performance

The budget of the road project was Ug shs 30.42 billion in FY 2014/15 of which Ug shs 16.10 billion (53.67%) was released and expended (See Table 12.54). Hence, the project had an excellent release and absorption performance.

**Table 12.54: Budget performance of Vurra-Arua-Koboko-Oraba road (92km) by the end of Q2, FY 2014/15**

| Source of financing | Budget (Ug shs) | Release (Ug shs) | Expenditure (Ug shs) | % release | % Expenditure |
|---------------------|-----------------|------------------|----------------------|-----------|---------------|
| GoU                 | 5               | 2.37             | 2.37                 | 47.47     | 100           |
| External financing  | 25.42           | 13.73            | 13.73                | 54.01     | 100           |



|              |              |              |              |              |            |
|--------------|--------------|--------------|--------------|--------------|------------|
| <b>Total</b> | <b>30.42</b> | <b>16.10</b> | <b>16.10</b> | <b>52.93</b> | <b>100</b> |
|--------------|--------------|--------------|--------------|--------------|------------|

*Source: UNRA Q2 progress report*

The cumulative financial progress of this project was estimated at 95.97% against a planned progress of 98.91%.

There are no issues likely to cause cost overruns however; three claims have been brought forward by the contractor as presented in Table 12.55.

**Table 12.55: Summary of claims and their status on Vurra-Arua-Koboko-Oraba road**

| No. And DATE                         | DESCRIPTION  | CONTRACTOR'S CLAIM  |                       | ENGINEER'S DETERMINATION                                |  |
|--------------------------------------|--|---|-----------------------|---|--|
|                                      |  | Duration and type of cost   | Amount                | Time  | Cost   |
| (1)<br>30 <sup>th</sup> July 2013    | Delay by NEMA in granting approval for ROKOZE Quarry   | Prolongation cost for 4 months  | Ug shs 8,649,478,368  | 4 months EoT with cost awarded                          | Ug shs 1,840,314,546   |
|                                      | Disruption of progress due to excessive haulage of rock from Bondo (31km from Arua) for seal because rock at Rokoze did not meet contract ACV requirement of 21.       | 9 months of: Prolongation cost  | Ug shs 19,461,326,328 | Time extension not granted; extra haulage cost granted. | Prolongation cost denied   |
|                                      |  | Acceleration cost   | USD 1,623,809         |   | Acceleration cost denied   |
|                                      |  | Haulage cost of double seal   | Ug shs 4,355,750,674  |   | UGX 2,445,401,334  |
| (2)<br>17 <sup>th</sup> July 2014    | Contractor claimed for time extension with cost due to additional works in Addendum No.1.  | Prolongation cost for 3 months  | Ug shs 5,796,990,820  | 3 months EoT without cost granted                       | Prolongation cost rejected   |
|                                      | Reimbursement of additional compensation to PAP's at Maracha Quarry following Chief Government Valuer's Determination  | No time extension requested for Reimbursement of additional amount paid to PAPs | Ug shs 1,079,908,427  |   | Ug shs 1,049,976,396<br><b>(pending instruction from UNRA)</b>             |
| (3)<br>5 <sup>th</sup> February 2015 | The Employer has not given possession of Site from km26+850 – km27+300, km0+000 to km0+100 (Arua Relief Road), Hospital Roundabout and Gaagaa Roundabout in Arua Town. | 2 months for: Equipment Owning and Idle cost                                    | US\$ 1,812,238.82     | Request for EoT with cost rejected                      | Equipment owning, staff prolongation, head office and legal costs rejected |
|                                      |  | Staff Prolongation cost   | US\$ 534,153.85       |   |  |
|                                      |  | Head office overheads   | UGX 1,856,400,591     |   |  |

|              |  |                  |  |                 |                                 |
|--------------|--|------------------|--|-----------------|---------------------------------|
|              |  | Legal Cost       | UGX<br>52,000,000  |                 |                                 |
| <b>Total</b> |  | <b>18 Months</b> | <b>Ug shs<br/>41,251,855,208<br/>&amp; USD<br/>3,970,202</b> | <b>7 months</b> | <b>Ug shs<br/>5,335,692,276</b> |

*Source: Comptran Engineering and Planning Associates*

From Table 12.55, three claims summing to Ug shs 50.70 billion (36.5%) have been submitted so far, out of which Ug shs 4.286 billion has been approved for payment. Another claim for loss of profit is projected due to reduction in the scope of works in the contract by the end of the project. The financial projection of the project is summarized in Table 12.56.

**Table 12.56: Financial projection of the Vurra-Arua-Koboko-Oraba road (92km) project**

| Description   | Amount (Ug shs)        | % of revised Contract price |
|---|------------------------|-----------------------------|
| Completed Works to Date                             | 132,259,900,363        | 95.97%                      |
| Instructed Works in progress                        | 2,123,633,314          | 1.53%                       |
| 1No. roundabout and 1No. T-Junction in Arua Town    | 734,141,836            | 0.53%                       |
| Replacing 350m DBST with concrete at Eruba Junction | 873,339,679            | 0.63%                       |
| <b>TOTAL</b>  | <b>135,991,015,192</b> | <b>98.66%</b>               |

*Source: Comptran Engineering and Planning Associates*

## Physical Performance

### a. Past performance

The physical performance was over the previous year was excellent as 72.25% was achieved against 75.85%.

### b. Present performance

By the end of Q2, 17.4% of the physical works were completed against the annual target of 25%. The cumulative progress since the project start was 91.65% against the programmed 96.79% hence, the slippage in work progress to date is 4.15%. This rose to 97.94% against a planned progress of 98.91% by 18<sup>th</sup> February 2015 (the time of monitoring). Hence, the project was almost on schedule and was substantially completed (already under DLP).

All major road works (earthworks, subgrade, subbase, base, priming and first seal) including 8 bridges and five box culverts were complete by 18<sup>th</sup> February 2015. All the constructed bridges have a single span. The status of the constructed bridges and box culverts is highlighted in Table 12.57 and Table 12.58 respectively.

**Table 12.57: The status of the bridges along the Vurra-Arua-Koboko-Oraba road (92km)**

| No | Location | Name         | Span | Remarks  |
|----|----------|--------------|------|--|
| 1  | Km       | Enyau Bridge | 20m  | Span changed from 18 to 20m. Bridge position changed to RHS to avoid |

|   |          |               |     |   |
|---|----------|---------------|-----|---|
|   | 26+845   |               |     | demolition of existing bridge                                   |
| 2 | Km34+340 | Enve Bridge   | 20m | Position changed to RHS to avoid demolition of existing bridge. |
| 3 | Km40+650 | Oluffe Bridge | 20m | No change in span and position                                  |
| 4 | Km51+180 | Ayi Bridge    | 18m | Position changed to RHS to avoid demolition of existing bridge. |
| 5 | Km61+665 | Yoyo Bridge   | 15m | Position changed to RHS to avoid demolition of existing bridge. |
| 6 | Km62+700 | Olu Bridge    | 20m | Position changed to RHS to avoid demolition of existing bridge  |
| 7 | Km69+934 | Apa Bridge    | 15m | No change in span and position                                  |
| 8 | Km75+120 | Kochi         | 12m | No change in span and position                                  |

*Source: Progress monthly progress report No.36*

**Table 12.58: Status of the box culverts along the Vurra-Arua-Koboko-Oraba road (92km)**

| No. | Location                 | Name   | Remarks  |
|-----|--------------------------|--|--|
| 1   | Km52+989                 | One cell: 2.5m x 2.0m x 19m with 3.3mx2 end structures | Changed from 2.0x1.5m to 2.5x2.0m  |
| 2   | Km64+36                  | Two cells: 2.0mx1.5m x 37m with 3.3mx2 end structures  | Changed from 2.0mx1.5m to 2.0mx2.0m  |
| 3   | Km67+170<br>River Ore    | Two cells: 3.0mx3.0m x 24m with 3.4mx2 end structures  | No change in size  |
| 4   | Km73+365                 | One cell: 2.5m x 1.5m x 29m with 3.3mx2 end structures | Changed from two 1200mm dia. pipe culvert to one cell 2.5x2.0m box culvert |
| 5   | Km89+406<br>River Debera | Two cells: 3.0mx3.0m x 23m with 3.4x2 end structures   | No change in size  |

*Source: Project monthly progress report No.36*



**Left: Sign post at Km 35+500; Centre: A concrete pavement on a roundabout at Koboko; Right: A bridge at River Oru**

Ongoing activities were:

- 2<sup>nd</sup> seal and line marking from km26+850 to km27+300;
- Embankment protection works on Enyau Bridge (km26+850);
- Off-street parking lane on Arua Relief Road;
- Off Street parking at Oraba Border Post instructed by UNRA during Substantial Completion Taking Over Inspection;
- Drainage works including concrete drains, stone pitched drains, pedestrian and vehicular accesses in Arua Town.

There are some activities not started and their status is summarised in Table 12.59.

**Table 12.59: Summary of pending activities on Vurra-Arua-Koboko-Oraba road by the end of January 2015**

| SN | Activities   | Reasons for non-commencement   |
|----|--|--|
| 1  | Construction of proposed Gaagaa roundabout in Arua Town      | -Contractor not given possession of site.<br>-Compensation for affected properties not paid.   |
| 2  | Construction of T-junction at Hospital Junction in Arua Town | -Contractor not given possession of site.<br>-Changed from roundabout to T-junction by the Employer during taking over. UNRA will instruct the Contractor. |
| 3  | Replacing 350m DBST at Eruba Junction with Concrete pavement | -Instructed during Substantial Completion Taking Over by UNRA.<br>-Awaiting official instructions from UNRA  |

*Source: Comptran Engineering and Planning Associates*

Activities 1 and 2 in the Table 3.40 are anticipated to be executed under the town roads since the contractor will be maintained.



**Left: Stone pitching works at Km 69+000; Centre: A section where the 1<sup>st</sup> seal had been done; Right: One of the building in Arua town junction which has obstructed round about construction**

### Box 5: HIV/AIDS AND Gender issues

Other factors like HIV and gender issues were also enhanced on the project as follows:

- HIV/AIDS awareness for Vurra-Arua-Koboko-Oraba road project staff was implanted in the following ways:

| <i>Program</i>   | <i>Remarks</i>   |
|--|--|
| HIV/AIDS counseling and testing for Project staff at the Project Clinic located in Ovujo health Centre III | <ul style="list-style-type: none"> <li>• A total of 1,623 project staff and immediate community have been counseled and tested for HIV at the Clinic to date</li> <li>• The Project clinic also attends to other illness. 14,806 of various illness and infections were treated by the clinic</li> </ul> |
| HIV/AIDS sensitization and gender workshop for Project Staff   | 17 sensitization workshops were conducted between January 2012 and January 2015. 2,760 people attended   |
| Distribution of protection against HIV/AIDS to Project Staff   | Total of 169,277 pieces  |
| Distribution of IEC material to project Staff  | Total of 3,411 IEC materials distributed   |

*Source: Comptran Engineering and Planning Associates*

- Gender issues were also observed for instance a total of 681 staff was employed on the project of which 52 (7.6 %) were female in various fields.

### Project challenges

- Late submission of the Environmental Impact Assessement (EIA) report to NEMA by the contractor for approval affected progress of works.
- Underachievement of the planned works by the contractor.
- Delay in payment of compensation for project affected persons
- Delays in providing feedback concerning information on payment by the Resettlement Action Plan (RAP) consultant

- Delay in relocation of services like power and telecommunication lines affected the progress of the project.
- Realignment was not attainable as some sections of the road were at the country border.
- The contingency item was omitted in the contract which created a gap in re-allocations of minor items on the project.

## Analysis

### • *Link between physical and financial performance*

Both semi-annual physical and financial performance was excellent at 139% and 105.86% respectively. There was also a good link between the overall physical and financial progress by the end of January 2015 (See Table 12.60).

**Table 12.60: Cumulative financial and physical progress of the Vurra-Arua-Koboko-Oraba road (92km) project by the end of January 2015**

| Progress           | Planned         |        | Accomplished    |        |
|--------------------|-----------------|--------|-----------------|--------|
|                    | Amount          | %      | Amount          | %      |
| Physical Progress  | 128,257,061,574 | 97.94% | 124,562,709,913 | 95.12% |
| Financial Progress | 137,340,963,708 | 98.91% | 132,259,900,363 | 95.97% |

*Source: Comptran Engineering and Planning Associates*

### • *Achievement of set targets*

The set targets were achieved above the half year target by the end of Q2 (17.4% out of 12.5%).

## Recommendations

- The contractor is encouraged to submit the (Environmental Impact Assessment)EIA report early (within the first 6 months of project commencement) to NEMA since it takes a considerable time for it to be approved.
- An engineer with considerable experience in road construction should be included in the contractor's personnel for monitoring and evaluation of works to improve his productivity.
- The MFPED should ensure timely payment of compensation and handover of Right of Way to the contractor.
- The UNRA or RAP consultant should promptly release information of compensation payments to the supervision consultant.
- The government should set aside money for compensation across borders.

## Comparative Analysis

Table 12.61: Summary of the target and achieved cumulative financial and physical progress of the projects that were monitored for the half-year performance in FY 2014/15

**Table 12.61: Summary of the cumulative financial and physical progress of the projects that were monitored for the half-year performance in FY 2014/15**

| S/N | Project | Cumulative financial Progress | Cumulative physical Progress |
|-----|---------|-------------------------------|------------------------------|
|-----|---------|-------------------------------|------------------------------|

|   |   | Target  | Achieved | Target  | Achieved |
|---|---|---------|----------|---------|----------|
| 1 | Kampala Entebbe Expressway (51 km)  | 35%     | 54.6%    | 36.11%  | 34.82%   |
| 2 | Periodic maintenance of Jinja-Kamuli (58 km)                                  | 98 %    | 95.43 %  | 100 %   | 98.50 %  |
| 3 | Reconstruction of Kiryandongo-Kamdini (58 km)                                 | 18.83%  | 10.26%   | 21.76%  | 11.86%   |
| 4 | Reconstruction of Kamdini-Gulu (62 km)  | 32%     | 8.5%     | 20%     | 0.4%     |
| 5 | Reconstruction of Mbarara-Katuna road (155 km) - lot 3: Kabale-Katuna (65 km) | 75%     | 65%      | 82.15 % | 79.45 %  |
| 6 | Upgrade Gulu - Atiak - (74 km)  | 100.00% | 102.00%  | 100 %   | 96.02%   |
|   | Atiak- Bibia/ Nimule (35 km)  | 83.87 % | 49.55%   | 83.86%  | 53.26%   |
| 7 | Upgrading of Mpigi- Kanoni (65 Km)  | 21.14%  | 23.42 %  | 23.25 % | 14.49 %  |
| 8 | Upgrade Vurra - Arua - Koboko - Oraba (92 km)                                 | 98.91 % | 95.97 %  | 97.94 % | 95.12 %  |

*Source: Author's Compilation*

#### ***i. Financial performance***

The average cumulative financial performance of the monitored projects was 56% against the target of 63%. Hence, the financial performance was excellent (88.9%). Five out of nine roads had good financial progress. These were Gulu-Atiak (74km), Jinja-Kamuli (58km), Kampala-Entebbe Expressway (51km), Mpigi- Kanoni road (65 km), and Vurra-Arua-Koboko-Oraba (92km).

While the cumulative financial progress was behind schedule for Atiak-Nimule (35km), Kamdini-Gulu (62km), Kiryandongo-Kamdini (59km) and Reconstruction of Mbarara-Ntungamo-Kabale-Katuna; lot 3: Katuna-Kabale section (65km). This was attributed to underperformance by contractors for the Atiak-Nimule, Kamdini-Gulu and Kiryandongo kamdini roads. While for Katuna-Kabale section, there were delays in payments.

#### ***ii. Physical performance***

The average cumulative physical performance of the monitored projects was 54% against the target of 63%. Hence, the physical performance was excellent (85.7%). Five out of the nine roads monitored exhibited very good cumulative physical performance with a less than 4% lag. These were; Gulu-Atiak (74km), Reconstruction of Mbarara-Ntungamo-Kabale-Katuna; lot 3: Katuna-Kabale section (65km), Jinja-Kamuli (58km), Kampala-Entebbe Expressway (51km) and Vurra-Arua-Koboko-Oraba (92km).

While Mpigi-Kanoni(65km), Atiak-Nimule (35km), Kamdini-Gulu (62km)and Kiryandongo-Kamdini (59km) were far behind schedule. This was because for:

- *Atiak- Nimule road (35 km)*: there was an increment in scope of works and additional works during excavation as well as difficulties in communication with the contractor's key staff at site who are unable to communicate in English.
- *Kamdini-Gulu road (62 km)*; there was poor planning, delayed mobilisation of key equipment and delayed acquisition of gravel by the contractor. He also had limited financial capacity to undertake works without an enhancement of advance payment.
- *Kiryandongo-Kamdini road (59 km)*; the contractor's mobilisation of man power and equipment was poor.
- *Mpigi- Kanoni road (65 km)*; there were delays in compensation of Project Affected Persons (PAPs) for over 23 km and finalization of relocation of electric poles and water pipes. To this matter, the contract has expressed an intention to claim for an extension of time.

### **General Challenges**

- ❖ Delayed possession of site still affects the implementation of the projects to realise smooth running of the programme.
- ❖ Relocation of services like electricity, power is also a problem. However, the water sector was appreciated for the much faster response.
- ❖ In some instances, the contractor reports to site before the supervision consultant which causes disruptions and delayed design reviews.
- ❖ Delayed approval of contractual changes as well as feedback by the client (UNRA) has continued to take a considerable time which causes delayed implementation.

### **Conclusion**

Six out of the eight monitored projects achieved their half-year target for the FY 2014/15. Although some of the projects monitored were at substantial completion, they were faced with issues of time overruns. Therefore, the cumulative physical progress of the all projects monitored was behind schedule.

Payments to consultants and contractors are almost timely; however, there is still more room for improvement for instance the consultant for Jinja-Kamuli road had not been paid for almost a year, a case UNRA needs to handle before it attracts more costs.

Vurra-Arua-Koboko-Oraba was designed and supervised by the same consultant. This could be a reason as to it had a minimal increment in cost of 5% at its near completion.

### **General recommendations**

- ❖ The UNRA and MFPED should ensure that compensation of project affected persons is done before project commencement. Also, for roads along the border, multinational compensation should be put into consideration.
- ❖ The UNRA should implement the relocation plan for services early enough such the project delays are minimised.
- ❖ The UNRA should consider employing the same consultant for both design and supervision.
- ❖ The UNRA should expedite decision making and ensure timely feedback to avoid delays or disruption in execution of works.



## 12.4 Uganda Road Fund (URF – Vote 118)

The fund was set up to enable steady and reliable funding for routine and periodic maintenance of public roads mainly from road user charges. The fund derives its mandate from section 6 of the URF Act 2008. It is mandated to collect road user charges (RUCs) and manage the funds collected to finance road maintenance programmes.

The public roads network is managed by 135 Designated Agencies (DAs), comprising of 111 districts, two authorities (KCCA and UNRA) and 22 municipalities. The DAs and sub-agencies collectively look after a total of 78,000 km of public roads, made up of 21,000 km of national roads under UNRA management; 1,100 kms of KCCA roads; 22,500 kms of district roads; 4,000 kms of urban roads under town councils; 3,400 km of urban roads under municipal councils; and 30,000 km of Community Access Roads (CARs) managed by sub-counties.

The Designated Agencies employed a mix of force account and contracting to deliver planned works. There was a shift of policy emphasis towards use of force account by MoWT on the District, Urban and Community Access Road (DUCAR) network with effect from the FY2012/13. This was buttressed by the distribution of a fleet of road equipment from China, mainly comprising of pickups, a grader and a tipper for each local government or DA.

This vote has two programmes namely: the District Roads Maintenance Programme (DRMP) and National Roads Maintenance Programme (NRMP).

### Findings

#### Financial performance

The approved budget for FY2014/15 under road maintenance is Ug shs 428.1bn. The cumulative release to URF by 31<sup>st</sup> December 2014 was Ug shs 214.05 (52.13% of the budget). The Fund disbursed Ug shs 209.08bn (97.7%) to the DAs to finance their respective maintenance programmes. A total of Ug shs 3.63bn (1.7%) was utilized for operational costs of the secretariat to the Fund.<sup>8</sup> Table 12.62 shows the performance of the receipts for the FY 2014/15 by the end of December 2014.

**Table 12.62: Financial Performance of URF in FY2014/15 by 31<sup>st</sup> December 2015 (Ug shs billions)**

| Description                      | Budget for FY 2014/15 | Release by end of Q2 FY 2014/15 | Spent by end of Q2 FY 2014/15 | % Budget Release | % Budget Spent | % Release Spent |
|----------------------------------|-----------------------|---------------------------------|-------------------------------|------------------|----------------|-----------------|
| National Road Maintenance - UNRA | 274.44                | 136.98                          | 136.98                        | 49.91%           | 49.91%         | 100.00 %        |
| DUCAR                            | 146.44                | 72.98                           | 72.1                          | 49.84%           | 49.24%         | 98.79%          |
| URF Secretariat                  | 7.22                  | 4.09                            | 3.63                          | 56.65%           | 50.28%         | 88.75%          |

<sup>8</sup> Vote118, URF Q2 FY2014/2015 Performance Report

|       |       |        |        |        |        |        |
|-------|-------|--------|--------|--------|--------|--------|
| Total | 428.1 | 214.05 | 212.71 | 52.13% | 49.81% | 95.85% |
|-------|-------|--------|--------|--------|--------|--------|

*Source: URF Q2 FY2014/2015 Performance Report*

## 12.4.1 District Roads Maintenance Programme

### Programme Background

District roads, which are all unpaved, make up 22, 500 km representing 22.7% of the entire public road network in Uganda. They are maintained by the respective local governments using central government funds under the DUCAR vote and to a limited extent using locally generated revenue. The districts, to a limited extent, also utilise the non-conditional grants from the central government under the Local Government Management and Service Delivery (LGMSD), Peace Recovery and Development Programme (PRDP), Northern Uganda Social Action Fund (NUSAF) and U-Growth programmes. MoWT provides the collective technical support and supervision to the local governments under DUCAR.

For the FY 2014/15, planned outputs on district roads are: routine maintenance carried out for 25,528 km; routine mechanised maintenance of 5,000 km done; periodic maintenance of 1,000 km; routine maintenance of 10No bridges carried out; and 5,500No culverts installed.

For FY 2014/15, 19 Districts (Budaka, Bushenyi, Gulu, Ibanda, Isingiro, Jinja, Kabarole, Kiboga, Luwero, Lyantonde, Mayuge, Mityana, Moroto, Mubende, Mukono, Rakai, Sironko, Soroti and Zombo) were monitored with a total road network of 7,679.5 km (34.1% of District road network). The findings are presented below.

#### (i) Budaka district

The district road network is comprised of 244km, all of which are unpaved. The approved budget for road maintenance activities for the FY 2014/15 is Ug shs 525.3 million, of which Ug shs 409.61 million (78%) is under URF and Ug shs 115.68 million (22%) is under PRDP. The district planned maintenance activities for the FY 2014/15 are: routine manual maintenance of 244km, routine mechanised maintenance of 29km, periodic maintenance of 12.5km, equipment repairs under URF component; and rehabilitation of Nalera-Kiryolo road (7.2km) in Kaderuma Sub County under PRDP.

### Findings

#### Financial Performance

By 31<sup>st</sup> December 2014, the district received Ug shs 262.42 million (50% of IPF) which was an excellent release performance. The release comprised of Ug shs 204.58 million (78%) from URF and Ug 57.84 million (22%) from PRDP. By the end of Q2, 36% of the total release had been absorbed; this was below average performance. This low absorption of the PRDP funds was attributed to the insufficient release for the rehabilitation of Nalera-Kiryolo (7.2km) to take off in Q1 as planned. Table 12.63 shows the financial performance of Budaka District by the end of December 2014.

**Table 12.63: Financial Performance of Budaka District Roads Maintenance Programme by 31<sup>st</sup> December 2014**

| Source       | Budget<br>(Ug shs)<br>millions | Release<br>(Ug shs)<br>millions | Expenditure<br>(Ug shs)<br>millions | % Budget<br>Released | % Release<br>Spent |
|--------------|--------------------------------|---------------------------------|-------------------------------------|----------------------|--------------------|
| URF          | 409.621                        | 204.583                         | 94.506                              | 50.0%                | 46.2%              |
| PRDP         | 115.681                        | 57.84                           | 0                                   | 50.0%                | 0.0%               |
| <b>Total</b> | <b>525.302</b>                 | <b>262.423</b>                  | <b>94.506</b>                       | <b>50.0%</b>         | <b>36.0%</b>       |

*Source: Budaka District Engineer*

### **Physical performance**

All planned half year routine manual maintenance outputs on the district road network had been achieved. The activities involved: grass cutting by the road side; opening of offshoots; desilting and cleaning of road side drains and culvert lines. Out of the annual planned 29km under routine mechanised maintenance, only two roads totalling to 8.5km (29.3% of planned); i.e. Kakule-Kasuleta (3.5km) and Kabuna-Nansana-Kebula (5km) were worked on in Q1 and Q2 respectively.

The periodic maintenance of Iki-iki - Budaka (7.2km) and the rehabilitation of Nalera-Kiryolo (12.5km) started in December 2014 but works had stalled due to the breakdown of the grader. Manual methods were being applied for the improvement of critical spots on Iki-iki - Budaka and swamp raising on Nalera-Kiryolo as the grader was being worked on.

The Budaka district roads maintenance programme was monitored on 20<sup>th</sup> January 2015, focusing on Kabuna-Nansana-Kebula (5km) and Iki-iki – Budaka (12.5km) roads under the URF; and Nalera-Kiryolo road (7.2km) under the PRDP. Findings are given below.

**Kabuna-Nansana-Kebula (5km):** This road with an average width of 5m is found in Kaderuna Sub County. Routine mechanised maintenance works of grading, shaping, drainage and spot graveling were planned to take place in Q2.

Grading and shaping of the entire road had been done in November 2014 at a cost of Ug shs 5.08 million. Pending works at the time of monitoring included spot gravelling and drainage improvements of culvert installation. The road was generally motorable with a good riding surface except for a few sections where potholes had started cropping up. It was observed that grass by the roadside was not cut. The physical progress of works was estimated at 76%.

**Iki-iki – Budaka (12.5km):** The budget for the periodic maintenance of this road in the FY 2014/15 is Ug shs 175.598 million (43% of URF budget). The planned works include: grading and gravelling the entire road to a width of 6m; and installation of 36 lines of culverts at various sections of the road. The periodic maintenance works on this project had not commenced because it required more funds than released. The procurement of road construction materials for the works had delayed.

During the Q2, improvement of a critical section at km 2.4 by regravelling had been undertaken as an intervention on this road which had deteriorated, as it awaited periodic maintenance works. These works were done at a cost of Ug shs 3.96 million of the URF release.

**Nalera-Kiryolo (7.2km):** The road is located in Kaderuma Sub County. In the FY 2014/15, the road has a budget of Ug shs 115.681 million (22% of the district roads maintenance budget) to be funded by the PRDP. The planned works include: bush clearing, grading and shaping of the entire road length, gravelling and drainage improvements of culvert installation. Works on this road started in December 2014 after the release of Ug shs 57.84 million (50% of budget). Works could not commence in Q1 because the mobilisation for the works required more than Ug shs 28.92 million (25%) released.

Works commenced with bush clearing on the first 2km of the road in January 2015 but came to a standstill as the grader broke down and was yet to resume after the repairs had been done. Swamp raising using manual labour had also been done on an annex road for a length of 0.85km and a width of 8m. The culverts to be donated by MoWT had not yet been delivered. The works done had cost Ug shs 7.2 million (6.2% of budget and 12.5% of release). The physical progress of works was estimated at 6.2% in January 2015.



**Budaka District: Left: A section of Kabuna-Nansana-Kebula road; Centre: A graded section of Nalera-Kiryolo road; Right: The swamp raising done using manual labour on Nalera-Kiryola road**

### Challenges

- Very lengthy drought season which made road construction very expensive in terms of achieving appropriate moisture content for compaction.
- High maintenance costs for road equipment especially the grader which requires routine replacement of blades.
- Lack of critical road equipment like the roller (compactor), water bowser and truck excavator

### Analysis

#### • Link between financial and physical performance

The district roads maintenance program had expended 36% of the release by the end of December 2014 against an annual physical progress of 35%. However, by the end of Q2, 70% of the semi-annual work plan had been implemented. Therefore, there was a match between the physical and financial performance.

#### • Achievement of set targets

The district did not achieve its set targets. The district spent 36% of the releases against 100% target by the end of Q2 FY 2014/15, and achieved a physical progress of about 70% against 100% target of the semi-annual workplan. This indicated a slow progress in the implementation of the workplan. This was attributed to the fact that the periodic maintenance and rehabilitation projects were taking up the biggest percentage of the district annual workplan and funding for

the FY 2014/15. Therefore the non-performance on these projects negatively impacted the overall performance of the districts road maintenance programme.

## **Conclusions**

By the end of Q2, the financial performance and physical performance of the roads maintenance program were estimated at 72% and 70% respectively for the half-year which was a very good performance. Lack of critical road equipment such as a roller, a water bowser and a truck excavator greatly affected implementation of the planned outputs. There is need to increase the equipment base for easy processing of road construction materials.

## **Recommendation**

The GoU should provide the district with a complete unit of road maintenance equipment since the roads maintenance program was shifted from contracting to force account. The missing equipment are; a vibrat roller (compactor), water bowser and an excavator.

### **(ii) Bushenyi District**

Bushenyi district road network is comprised of 305km all of which are unpaved. For the FY2014/15, the district has planned to carry out routine manual maintenance on 305km, routine mechanised maintenance on 118km and periodic maintenance on Kirama Bridge and concrete drift at Akajani crossing. The approved budget for FY2014/15 is Ug shs 519.841 million under URF. The district has not planned for any other source of funding to the roads sector.

The targeted outputs for Q1 and Q2 were routine mechanised maintenance of 79.9km, guard rails at Kirama Bridge and a concrete drift at Akajani crossing repaired. Monitoring was done for the three roads that is; Rwentuha – Kabuba (9.0km), Kaziho – Nyamirima – Nyakabanga – Kyabugimbi (7.5km) and Kyabugimbi – Rutooma – Kacwamba (2.0km).

## **Findings**

### **Financial Performance**

The district received Ug shs 287.280 million (55.3% of the budget). The district however received the Q1 and Q2 funds late - 30<sup>th</sup> September 2014 and 29<sup>th</sup> October 2014 respectively. The delay in receipt of funds in Q1 was attributed to a change in account from Stanbic bank to DFCU bank and TIN related issues. The account detail on the IFMS was different from that which was submitted to MFPED. By the end of the Q2, the district had expended Ug shs 132.919 million (46.3% of the release and 25.6% of the budget). Overall the absorption of the district was below average.

### **Physical Performance**

The overall physical performance at the end of Q2 was at 23.2%. The district did not carry out any maintenance activity in Q1 and so all the planned activities for Q1 spilled over to Q2. The non-performance in Q1 was attributed to delayed receipt of funds on to the district's general fund account. For Q1 and Q2, the district achieved 101.7km of routine manual maintenance (33.3% of the annual target of 305km) and 18.5km of routine mechanised maintenance (23.2% of the targeted 79.9km for Q1 and Q2). The district only completed activities on Rwentuha – Kabuba (9.0km), Kaziho – Nyamirima – Nyakabanga – Kyabugimbi (7.5km) and Kyabugimbi –

Rutooma – Kacwamba (2.0km) roads. All the planned activities for Q2 spilled to Q3 but these were not progressing because the grader had broken down and was under repair.

The completed roads were monitored and the findings are presented below.

**Rwentuha – Kabuba road (9.0km):** The district planned to carry out routine mechanised maintenance on this road for an estimated budget of Ug shs 9.9 million. The scope of work was grading of the entire road length. The works had been completed and a total of Ug shs 9.893 million (99.9% of the budget) had been expended. The monitoring team observed that there will be need to raise the swamp at km 5+200 in the near future to enhance the functionality of the road.

**Kaziho – Nyakabanga – Kyabugimbi road (7.5km):** The estimated budget for the works was Ug shs 8.25 million. The planned scope of works was to grading and spot gravelling. The road works were completed at a total of Ug shs 8.238 million (99.9% of the budget).

**Kazinda – Nyabubare – Nwera (2.0km):** The planned scope of works was swamp filling and gravelling at an estimated budget of Ug shs 16 million. The works were completed at a cost of Ug shs 15.441 million (96.5% of the budget).



**Bushenyi District: Left: Completed section along Kaziho – Nyakabanga – Kyabugimbi road; Right: Completed cross culvert line at km 7+300 along Rwentuha – Kabuba road**

### Challenges

- The persistent breakdown of road equipment has slowed the pace of implementation of works;
- Inadequate staff in the works department. The district does not have a fully filled staff structure making it difficult to supervise works; and
- The procedure for accessing road equipment from the Mbarara Regional Mechanical Workshop is lengthy making it difficult for the district to borrow equipment. Currently, local governments have to write to the Permanent Secretary MoWT requesting to borrow equipment.

### Analysis

- **Link between financial and physical performance**

The district's financial absorption was 46.3% of the release and physical performance was 23.2% for routine mechanised and 33.3% for routine manual maintenance. The funds were expended on

routine mechanised maintenance (23.2% of semi-annual target), routine manual maintenance (33.3% of annual target) and administrative costs. Generally there is a mismatch between the financial and physical performance because most of the funds went in equipment repair.

- **Achievement of set targets**

The semi-annual targets were not achieved. The district only achieved about 46.3% of their financial target and about 23.2% of the targeted output for Q1 and Q2. Much of the planned outputs were not achieved and were carried forward to Q3. The failure to meet the semi-annual targets was majorly due to delay in receipt of funds in Q1 and persistent breakdown of equipment.

## **Conclusion**

The district underperformed during the period under review because 76.8% of the targeted outputs were not achieved. The low performance was majorly due to delay in receipt of funds and persistent breakdown of equipment. With the required equipment in place and adequate staffing, the performance can be enhanced.

## **Recommendations**

- The district service commission is urged to fill up the vacant positions in the works department.
- The MoWT should delegate the authority to release equipment to local governments to the regional managers of the mechanical workshops. This will save the time lost in the lengthy bureaucracy.

### **(iii) Gulu District**

The Gulu district road network is comprised of 557km of which 380km (66%) are gravel and 177km (34%) earth roads. In the FY 2014/15, the district road maintenance program has an approved budget of Ug shs 1.927 billion comprising of: Ug shs 754.826 million (39.2%) under the URF; Ug shs 389.828 million (20.2%) under the PRDP; Ug shs 741.943 million (20.2%) under the Rural Transport Infrastructure (RTI); and Ug shs 40.687 million (2.1%) under the locally generated revenue.

The URF budget of Ug shs 754.826 million was earmarked for: routine manual maintenance of 557km at Ug shs 219.608 million (29%); routine mechanised maintenance of 52.2km at Ug shs 412.939 million (54.7%); mechanical imprest at Ug shs 98.364 million (12.3%); and operational expenses at Ug shs 28.915 million (3.8%).

The PRDP budget of Ug shs 389.828 million was earmarked for the construction of Odek Bridge (11m span) at Ug shs 362.631 million (93%); while the RTI budget of Ug shs 741.943 million was earmarked for the rehabilitation of Lalogi-Bario road (7km) at Ug shs 251.817 (34%) and low cost sealing of Laroo-Pageya (2.7km) at Ug shs 441.625 (60%).

The district also submitted a request of Ug shs 57.847 million to URF under the Special Interventions on DUCAR Networks for emergency works on Abera-1 and Oitino-1 bridges. These bridges had been destroyed by heavy traffic reroute to Kitgum that had been diverted from



UNRA roads. This was after the district road maintenance budget for the FY 2014/15 had been approved and submitted. The Gulu district roads maintenance program was monitored on 4<sup>th</sup> February 2015 and the findings are presented hereafter.

## Findings

### Financial performance

By the end of December 2014, the district roads maintenance program had received a total of Ug shs 806.68 million (41.8% of the IPF) comprising of: 43% from URF; 23.6% from PRDP; 31.7% from RTI; and 1.7% from Local Revenue. Expenditure amounted to Ug shs 394.802 million (48.94% of releases). This was indicative of an excellent release performance and an under performance for the fund absorption. The financial performance of the district is summarised in Table 12.64.

**Table 12.64: Financial Performance of Gulu District Roads Maintenance Programme by the end of December 2014**

| Source        | Budget<br>(Ug shs)<br>millions | Release<br>(Ug shs)<br>millions | Expenditure<br>(Ug shs)<br>millions | % Budget<br>Released | % Release<br>Spent |
|---------------|--------------------------------|---------------------------------|-------------------------------------|----------------------|--------------------|
| URF           | 754.826                        | 347.254                         | 228.465                             | 46.00%               | 65.79%             |
| PRDP          | 389.828                        | 190.024                         | 6.00                                | 48.75%               | 3.16%              |
| RTI           | 741.943                        | 256.002                         | 146.937                             | 34.50%               | 57.40%             |
| Local Revenue | 40.687                         | 13.400                          | 13.400                              | 32.93%               | 100.00%            |
| Total         | 1,927.284                      | 806.680                         | 394.802                             | 41.86%               | 48.94%             |

*Source: Gulu District Engineer*

In addition to the above, the URF released Ug shs 40 million (69% of funds requested) in Q2, FY 2014/15 to the district as emergency funds, which had not yet been expended as at the time of monitoring in February 2015.

### Physical performance

The overall physical performance of the district roads maintenance program as at the end of December 2014 was estimated at 46% of the annual work plan. This was an excellent performance. Table 12.65 summarises the progress achieved on the various activities in the Gulu district roads maintenance works plan.

**Table 12.65: Physical progress of the FY 2014/15 Planned Activities as at the end of December 2014**

| S/No. | Description of the projects                                       | Annual<br>Target (km) | Source<br>of Fund | Achievement<br>(%) |
|-------|---|-----------------------|-------------------|--------------------|
|       | Regular/Routine Maintenance of District Roads                     | 557                   | URF               | 85%                |
|       | Mechanized Routine Maintenance of Pageya-Omel-Acet Road Section A | 17.3                  | URF               | 45%                |
|       | Mechanized Routine Maintenance of Opit-Awoo                       | 14.3                  | URF               | 60%                |



|  |   |      |      |     |
|--|---|------|------|-----|
|  | Road  |      |      |     |
|  | Mechanized Routine Maintenance of Unyama-Pageya Road          | 4.2  | URF  | 15% |
|  | Mechanized Routine Maintenance of Labora-Loyoajonga-Acet Road | 17.3 | URF  | 80% |
|  | Drainage Works on 19.6 Km of Abera-Awach Road                 | N/A  | URF  | 75% |
|  | Rehabilitation of Lalugi-Bario                                | 7.0  | RTI  | 30% |
|  | Low Cost Sealing of Laroo-Pageya                              | 2.7  | RTI  | 25% |
|  | Construction of Odek Bridge (11 M Span)                       | N/A  | PRDP | 0%  |

*Source: Gulu District Engineer/Field findings*

Despite the excellent performance, the program had been affected by the lengthy procurement processes which brought about the commencing of contracts under the RTI and PRDP in Q3.

Some roads where works had been carried out were inspected and the findings are discussed below;

**a) URF**

**Opit-Awoo road (14.3km):** Routine mechanized maintenance activities were planned for at a budget of Ug shs 163.763 million (21.7% of URF budget). This road located in Lalugi and Lakwana sub counties had not received any intervention ever since it was opened about 10 years ago. The scope of works involved; grading and reshaping of the entire road length, spot gravelling and drainage improvement works.

The activities of bush clearing, grading and shaping of the entire road length to an average width of 8m had been completed in December 2014. The dumping of gravel for the re-gravelling activity had been done in January 2014 and the gravel heaps at Km 0.9 and 2.3 had not yet been spread. The sections which had been reshaped were motorable with a good riding surface. No offshoots to take the surface runoff from the road were observed.

The road works by the end of December 2014 had cost Ug shs 13.510 million (8.25% of its budget) which was used for the fuel, lubricants and hiring of road equipment. The financial progress of the road was thus at 8% against a physical progress of 60%.The pending activities were spot gravelling and drainage improvement works which would be completed in the Quarters Three and Four.

**b) PRDP**

**Construction of 11m span Odek Brige:** This Bridge is along Acet-Jingkomi road in Odek sub-county and was the only activity planned for in the FY 2014/15 under the PRDP funding. It had a works budget of Ug shs 362.631 million (93% of district PRDP budget). The contract for the bridge construction works was awarded to Rapona Agencies Ltd at the contract price of Ug shs 315.457 million (87% of works budget) with a 6 month duration (November 2014 – May 2015). The works were to be supervised by the Gulu district engineer.

The scope of works for the Odek bridge construction was: site preparation; setting out and site clearance; earthworks; drainage works of bridge construction (concrete abutments and decking); and gravelling and completion works of the approaches.

The construction works for the bridge were taking place at Km 5+800 on Acet-Jingkumi road. The works commenced in January 2015 due to the late mobilisation of the contractor. The excavation for the abutment wall bases was ongoing at the time of monitoring in February 2015. The physical progress of the works was estimated at 10%. The bridge works had suffered a setback due to the lengthy procurement process and late mobilisation of the contractor.



**Gulu District: Left: Opit-Awoo road - A graded section at Km 11+100; Centre and Right: Odek Bridge – Construction materials on site and Excavation for the abutments**

### **c) RTI**

#### **Rehabilitation of Lalogi-Bario (7km) and Low Cost Sealing of Laroo-Pageya (2.7km):**

These were the only planned activities under the RTI programme which is funded by Danish International Development Agency (DANIDA). The works for these two roads had a total budget of Ug shs 693.443 million (93.4% of district RTI IPF) in the FY 2014/15.

**The Rehabilitation of Lalogi-Bario (7.2 km)** had a budget of Ug shs 251.817 million (36.3% of works budget) in the FY 2014/15. The works were to be implemented by contracting. The road is located in Lalogi Sub County. The scope of works involved: site preparation, setting out and site clearance, earth works, drainage works (32m of diameter 600mm and 6m of diameter 900mm), gravelling and completion works.

The contract for the rehabilitation works was awarded to KIU (U) Ltd at a contract sum of Ug shs 240.315 million (95% of budget) for a period of four months (November 2014 – March 2015). The works were to be supervised by the Gulu district engineer.

The road works started in November 2015 and the gravelling activity (spreading, watering and compacting) was ongoing at the time of monitoring on 4<sup>th</sup> February 2015. The entire road had been opened up to an average width of 8m. The physical progress of works was estimated at 75%. The contractor had so far been paid Ug shs 126.432 million which put the financial progress of the contract at 53%.

The works were within schedule and the general workmanship was satisfactory. However, the contractor should speed up the drainage works (supply and install the culverts; and constrict the head and wing walls) before the rains set in.

**The Low Cost Sealing of Laroo-Pageya (2.7km)** had a budget of Ug shs 441.625 million (63.7% of works budget) in the FY 2014/15. The works were to be implemented using the force account intervention. The road is located in Laroo Sub County and starts at Gulu University and

ends at Gulu-Moroto road. Bush clearing of the entire road section had taken place in January 2015. There were no activities ongoing at the time of monitoring on the 4<sup>th</sup> of February 2015.

The physical progress of works was estimated at 25% as at the end of January 2015. Only Ug shs 8.505 million (2% of budget) had been expended on the project. This was used to buy fuel for the grader used in the bush clearing activity.



**Gulu District: Left and Centre, Lalogi – Bario road - Gravelling activities of watering and spreading; Right: Laroo-Pageya road- Bush cleared section**

### **Challenges**

- Slow and late procurement of goods, supplies and works.
- The district does not have all the necessary equipment to expedite the implementation of force on account. The equipment in question are; supervision vehicles, a roller, excavator, wheel loader, water bowser and a low loader.
- It is almost impossible to access the zonal equipment due to its high demand in the region and the bureaucracy involved in accessing them.
- The frequent breakdown of the road equipment provided by the Government and high cost of maintenance have in most cases left machines grounded which slows down works.
- Low rates for the road gangs resulting to poor maintenance of the roads

### **Analysis**

#### ***Link between financial and physical performance***

The overall physical progress of the district roads maintenance program as at the end of December 2014 was estimated at 46% of the annual workplan against a financial progress of 49% of the releases. There was a mismatch between the physical output and the financial progress. This was because most of the completed activities had not yet been paid for.

#### ***Achievement of set targets***

The district did not achieve its targets. Financial progress was at 49% of the releases against expected 100% and physical output was at 92% against expected 100% at the end of Q2. Failure to meet the targets was majorly attributed to the lengthy procurement processes which brought about the commencing of contracts under the RTI and PRDP in Q3.

### **Recommendations**

- The district should speed up the procurement process for effective service delivery.

- The MoWT should provide the Local Governments more equipment so that they can constitute a full road maintenance unit which comprised of a grader, compactor (roller), wheel loader, excavator and a water browser.
- Procurement of vehicle to support supervision, establishment of sub counties roads committees,
- The URF and the MoWT should review the entire Road Maintenance Policy for Force Account to deal with issues of: procurement of force account inputs; routine maintenance of roads by road gangs; wages and allowance of road plant operators and road gangs.

#### **(iv)Ibanda District**

Ibanda district road network is comprised of 362km all of which are unpaved. The budget for maintenance activities for FY2014/15 is Ug shs 969.503 million, of which Ug shs 434.830 million (44.9%) is for district roads while the balance is to fund maintenance works in sub-counties and town councils.

The targeted outputs for Q1 and Q2 for Ibanda district were: routine manual maintenance of 362km (181km in Q1 and 181km in Q2), routine mechanised maintenance of 16.2km and installation of 28m of culvert structures. The funds were planned to be expended on Nyahoora – Bwahwa, Birongo – Kinagamukono – Kyekanga and Kashasha – Nyakahama roads under mechanised maintenance and culvert structures and on the entire road network under routine manual maintenance.

### **Findings**

#### **Financial performance**

The district received Ug shs 212.559 million (48.8% of the annual budget) and expended Ug shs 118.309 million (55.7%). This was an excellent release performance and fair expenditure performance. This was attributed to delayed release of funds. The district received the Q1 release on 6<sup>th</sup> August 2014 while Q2 release was received on 29<sup>th</sup> October 2014.

#### **Physical performance**

The physical performance of the road maintenance activities at the district was estimated to be at 70% of the semi-annual workplan at the end of Q2 FY 2014/15. Cumulatively, the district achieved 305km (84.3%) of routine manual maintenance for Q1 and Q2 against the planned 362km, completed a total of 21km (131.3%) against the planned 16km under routine mechanised maintenance, and installation of culvert structures was the only activity which spilled over to Q3. Maintenance works on Nyahoora – Bwahwa road were deferred to Q4.

Roads implemented under routine mechanisation maintenance were monitored and the findings are presented below:

**Birongo – Kinagamukono – Kyekanga (8km):** The district planned to carry out mechanised maintenance activities at a budget of Ug shs 17.012 million. The scope of works was grading of the entire road length, spot gravelling and installation of 19m of drainage works. The works were implemented in Q2 at Ug shs 13.966 million (82% of the budget estimate). Only installation of culverts was pending. The quality of works was satisfactory.

**Kashasha – Nyakahama (13km):** the planned activities were: full grading, spot gravelling and installation of 29m of culverts at a budget of Ug shs 20 million. The works were completed in

Q2 at Ug shs 50.354 million. The overrun was attributed to the fact that all the works which had been planned for Q3 and Q4 on this road were lapsed and done once. Therefore no maintenance activities will be carried out in Q3 and Q4 on this road.



**Ibanda District: Left: Graded section of Birongo – Kinagamukono – Kyekanga road at km 5+600; Right: Gravelled section of Kashasha – Nyakahama road at km 4+000**

## **Challenges**

- Frequent breakdown of road equipment.
- The district has failed to attract a mechanical engineer to take up the responsibility of road equipment condition assessment and maintenance.
- District roads do not have gazetted road reserves making maintenance of drainage hard
- The district has experienced a low turn up of road gangs because of the meagre pay attached to it. The district recruited 99 Road Gangs at the beginning of the FY2014/15 but by end of Q2, only 60 were remaining.

## **Analysis**

### **Link between physical and financial performance**

The district expended about 55.7% of the released funds against a physical progress of 70% of the semi-annual targets. The funds were expended on road maintenance activities.

### **Achievement of set targets**

The semi-annual targets were not achieved. The district expended 55.7% of the funds for 84% of the routine manual maintenance and 131% under routine mechanised maintenance. Installation of culverts was still pending. The underperformance was attributed to failure by the district to maintain the recruited road gangs and a delay to conclude the procurement for culverts.

## **Conclusions**

Overall the performance of the district was good with the 70% of physical targets of the review period being achieved. Only installation of culverts spilled to Q3. The district is capable of achieving all the planned annual outputs before the end of the FY2014/15. However, routine manual maintenance targets will not be achieved in future if the district continues to suffer the

high turnover of road. There is need to increase the remuneration to road gangs to counter the high turnover.

### **Recommendations**

- The district should utilise the grader only for light grading and resort to hiring or borrowing equipment from the Mbarara regional mechanical workshops in case of heavy grading works.
- Ibanda district local should sensitize communities regarding construction within the road reserves.
- The GoU/MoWT should revise the remuneration to road gangs upwards so as to make the job attractive.

### **(v) Isingiro District**

Isingiro district road network is comprised of 526km all of which are unpaved. Maintenance activities for the FY2014/15 on district roads were planned on a total of 344km (65.5% of total network) for an approved budget of Ug shs 755.608 million comprising of 677.704 million (89.7%) under URF and 77.904 million (10.3%) under LGMSD. The planned annual maintenance outputs for FY2014/15 under URF were: routine manual maintenance of 344km, routine mechanised maintenance of 154km, periodic maintenance of one (1No) bridge and installation of 20No culverts. The district planned for periodic maintenance of 8km under the LGMSD. The district was monitored on 16<sup>th</sup> January 2015 and the findings are presented below.

### **Financial performance**

The district received Ug shs 338.85 million from URF (50% of IPF) indicative of an excellent release performance since all the expected funds were released by 31<sup>st</sup> December 2014. Absorption of funds under URF amounted to Ug shs 150.060 million (44.3%), hence the expenditure performance was below average. The district did not receive any funds from LGMSD.

### **Physical performance**

Physical progress by 31<sup>st</sup> December was estimated at 40%. The district achieved 342km of routine manual maintenance (99.4% of planned) out of the planned 344km, 24.5km of routine mechanised maintenance out of the planned 154km, 100% bridge maintenance works under periodic maintenance and six culverts (30%) were installed out of the planned 20.

Monitoring was done for two roads implemented under routine mechanised maintenance and the findings are presented below;

**Kyanyanda-Kihanda-Rwenshekye (14km):** This road was planned under routine mechanised maintenance on a total of 9km with a total budget of Ug shs 15.585 million. The scope of works was grading and spot gravelling. By 31<sup>st</sup> December 2014 medium grading and reshaping to camber had been done. At the time of monitoring in January 2015, dumping of gravel in preparation for spot gravelling was ongoing

**Ngarama-Kakamba-Omukatogo (12.3km):** This road was planned under routine mechanised maintenance on a total of 10km with a total budget of Ug shs 15.585 million. The scope of works was grading and reshaping. By 16<sup>th</sup> January 2015, had been completed for 8km and works were



ongoing for the remaining length. The expenditure was Ug shs18.282 million (117.3% of the total budget). The over expenditure was due hire of equipment.



**Isingiro District: Left: Dumped gravel at km 7+300 along Kyanyanda-Kihanda-Rwenshekye; Right: Grading works along Ngarama-Kakamba-Omukatogo road**

## **Challenges**

- Frequent breakdown of equipment
- Incomplete road unit
- High rates of equipment hire which take up most of the maintenance funds.
- Inadequate staff in the works department. The department has only one engineer making supervision of works hard.
- Lengthy procedures for acquiring equipment from the MoWT zonal equipment pool. Currently districts seek authority to acquire equipment from the regional workshop from the Permanent Secretary MoWT.

## **Analysis**

### **Link between financial and physical performance**

By 31<sup>st</sup> December 2014, 44.3 % of the budget had been expended on 40% of the physical works. The funds were expended on implementation of the planned works. There was a link between the expenditures and the progress of works.

### **Achievement of targets**

The district received 50% of the budget and expended 44.3% while 40% of the semi-annual targets were achieved. Therefore the district did not achieve the set targets. The failure to achieve the targets was majorly attributed to lack of sound equipment to do the works.

## **Conclusion**

The performance of the district was below average and this was majorly attributed to frequent breakdown of road equipment. The district therefore resorts to hiring or borrowing equipment from the Mbarara Regional Mechanical Workshop. The process of borrowing equipment is lengthy and most times delays. If road equipment were available, achievement of planned targets would be a given. In addition without the required staff in place, supervision of works is difficult

because implementation under force account requires that the engineer or his representative have to be on the road while works are ongoing. There is therefore need for urgent recruitment of staff.

### **Recommendation**

- The MoWT should procure new equipment to the district for effective force account implementation.
- The District Service Commission (DSC) should fill up all positions in the staff structure of the district
- The Permanent Secretary MoWT should delegate the authority to release equipment to the Mbarara regional workshop manager.

### **(vi) Jinja District**

The district road network is comprised of 204 km of which 56.8 km (27.8%) are unpaved, 57.7 km (28.2%) are unpaved and 89.5 km (44%) are earth. The budget for maintenance activities for the FY 2014/15 is Ug shs 586.121 million under URF.

The annual planned maintenance outputs are; routine manual maintenance (147km), Periodic maintenance carried out (37.6km) on; Wakitaka-Kabembe (3.2km), Namulesa-Ivunamba (5.6km), Mutuumu-buwenge (11.2km), Mafubira-Butiki village (4.4km), namasiga-Itakaibolu (4.3km), Lumuli-river bank (2km) and Namagere-Bubugo(6.9 km), and equipment repairs.

### **Financial performance**

The district received Ug shs 293.061 million (50% of the annual budget) and expended Ug shs 120.415 million (41.1%). This was an excellent release performance and an expenditure performance of below average.

### **Physical performance**

By the end of Q2, the district had achieved 22% of its annual work plan. Routine manual maintenance of 147km (100% of planned) of district roads was carried out for two months (November and December 2014). Under periodic maintenance, 8.8km (46.4% of annual workplan) of roads were worked on by 31<sup>st</sup> December 2014 and these included: Wakitaka-Kabembe (3.2km), Namulesa-Ivunamba (5.6km) and all were done by force account.

The district was monitored on 29<sup>th</sup> January 2015 and the following activities were inspected: Wakitaka-Kabembe and Namulesa-Ivunamba. The details of the roads monitored are as follows;

**Namulesa-Ivunamba (5.6km)- Mafubira and Budonde sub-counties:** The scope of the works involved bush clearing, shaping, spot gravelling and drainage (installation of 3 lines of culverts). The bush had been cleared and the road shaped to an average width of 6m. It was fairly motorable at 50km per hour. Pending works were culvert installation.

**Wakitaka-Kabembe (3.2km) - Mafubira sub-county:** The scope of the works involved grading, shaping and drainage (installation of 3 lines of culverts-18m). The road had been graded and shaped to an average width of 5.6m and was in a fairly good condition. Pending works were culvert installation.





**Jinja District: Left: Complete section of Namulesa-Ivunamba at Km 1+500; Right: Completed section of Wakitaka –Kabemba at 0+000**

### **Challenges**

- Very lengthy drought season which makes road construction very expensive in terms of achieving appropriate moisture content for compaction.
- Lack of full set of road equipment

### **Analysis**

#### **Link between physical and financial performance**

The district expended about 41.1% of the released funds and achieved 44 % of their outputs. Overall there is a linkage between the absorbed funds and physical output. The funds were expended on 8.8km of periodic maintenance and routine manual maintenance of 147km using road gangs for two months

#### **Achievement of set targets**

Overall the district did not achieve the planned targets. The district absorbed 41.1% of their half year releases and achieved 44% of their outputs.

### **Conclusion**

The districts performance was below average. The low performance was because of lack of complete road unit equipment. The ability of the district to implement force account activities will greatly depend on the availability of road equipment.

### **Recommendation**

The GoU/MoWT should provide the district with a complete unit of road maintenance equipment especially since the roads maintenance program was shifted from contracting to force on account.

**(vii) Kabarole District**

Kabarole district road network is comprised of 252km all of which are unpaved. The budget for maintenance activities for the FY2014/15 is Ug shs 652.517 million under URF, Ug shs 65 million under LGMSDP, Ug shs 40 million under LRDP, Ug shs 85 million under CAIP 3 and Ug shs 22 million under local revenue funding. These funds are intended to cover the entire road network in the district.

The targeted maintenance outputs for Q1 and Q2 FY2014/15 under URF were: routine manual maintenance of 252km and routine mechanised maintenance of 38.3km; and re-decking of Rwakaberege Bridge in Busoro carried out. The CAIP 3 funds were planned to be expended on maintenance of Kiburara – Kichwamba and Harugungo – Nyabukara roads.

**Findings**

**Financial Performance**

For Q1 and Q2 of the FY2014/15, the district received Ug shs 353.059 million, of which Ug shs 326.259 million (92.4%) was from URF (50% of IPF), Ug shs 24.8 million (7%) from CAIP 3 and Ug shs 2 million (0.6%) from local revenue funding. Absorption of funds under URF amounted to Ug shs 229 million (64.9% of the total release and 70% of the URF release) for URF, while 100% was absorbed under CAIP and local revenue. Overall the absorption of the district was about 72.5%. This was a very good financial performance.

**Physical performance**

The overall physical progress was at 59.3% of the semi-annual workplan. By 31<sup>st</sup> December, 2014 the district had completed 16km (about 42%) out of the planned 38.2km under routine mechanised maintenance. These were Butebe – Mugusu (8km), Buhesi – Mitandi (4km) and Katoma – Bwabya (4km) roads. The physical progress on the other roads planned under routine mechanised maintenance was 20% for Kahangi – Mbagani road and 95% for Kichwamba – Kiburura road. The district also achieved 80% of re-decking of Rwakaberege Bridge.

The physical progress for the routine manual maintenance activities was estimated to be at 60%. The incomplete activities spilled over to Q3 and were expected to be completed by the end of February 2015. The district underperformed because of a delay in receiving funds on the general account due to errors on the account details. Therefore much of the Q1 activities did not commence as planned.

The procurement for a contractor for maintenance of Kiburara – Kichwamba and Harugungo - Nyabukara road under CAIP 3 was not finalised because the ADB rejected the contractor who had been nominated by the district. The contractor had quoted a financial sum far below the reserve price. Following the failure of the projects to take off, the district was prompted to intervene to maintain these roads because of their impassable state.

Some of the roads maintenance activities carried out in Q1 and Q2 were inspected on 30<sup>th</sup> January 2015 and the findings are below.

**Buhesi – Mitanda road (5km):** Routine mechanised maintenance was planned at an estimated cost of Ug shs 15 million. The scope of works was grading and shaping of existing road, installation of two lines of culverts and opening up of drainage channels. The major works on the road had been completed save for the single line of culverts at km 4+400 which was incomplete. The district expended Ug shs 15 million.

**Katoma – Bwabya road (6km):** The scope of works was grading and shaping of 4km; spot gravelling of 0.3km and opening up of drainage channels. The estimated budget and expenditure on this road was Ug shs 10 million. All the works had been completed. The monitoring team observed that this road will deteriorate very fast because of existence of rock outcrops along the road alignment. These rocks will need to be uprooted using a bulldozer and the road reworked.

**Mbagani – Kahuge road (4km):** The scope of works was grading and shaping of 7km, spot gravelling of 0.7km and opening of drainage at an estimated cost of Ug shs 20 million. In January 2015, only 1.5km (about 20% physical progress) had been achieved and the financial expenditure on this road was Ug shs 5 million (25% of budget). The road was expected to be complete by end of February 2015.

**Kiburara – Kichwamba road (20km):** This is one of the roads which were planned for maintenance under CAIP 3. The district carried out emergency activities on about 10km following the delayed procurement of the contractor. The estimated budget of works was Ug shs 20 million. The road has 15km of the road with surface rock outcrops whose cost to work on exceeds the district's budget and so the district could not maintain the entire road section. The scope of works was grading and shaping of 10km, spot gravelling of 0.6km and opening up the drains.

By 30<sup>th</sup> January 2015, the physical progress was 95% while the financial expenditure was Ug shs 18 million (90%). The pending activities included installation of cross culverts and opening of the drainage channels.

The team observed that covering the rocks with gravel will not be a standing solution to the maintenance challenge on this road. The design should cater for either full excavation of the rocks or provision of a protective lining of stone masonry to protect the gravel from being washed away during the rainy season.

**Nyabukara – Harugongo road (7.1km):** This road was also planned to be maintained using funding from CAIP 3. Maintenance did not commence for the same reasons as Kiburara – Kichwamba road. The district intervened with emergency repairs to make the road usable. The road majorly facilitates transportation of limestone rocks to Hima Cement Factory. The scope of works involved grading and shaping of 7.1km, spot gravelling of 0.6km and opening up of drainage channels.

By 30<sup>th</sup> January 2015, the physical progress was estimated at 60% while the financial expenditure was Ug shs 12 million against the planned Ug shs 20 million. Spot gravelling had not been done yet. This was attributed to lack of a functional water bowser and roller to enable watering and compaction of the gravel. Because of inadequate equipment, the district resorts to waiting for the rains before spreading the gravel.

**Kicucu – Lyamabwa – Kasura road (7.3km):** The scope of works was grading and shaping of 7.3km, installation of one line of cross culverts and opening up of drainage channels. The estimated budget for these works was Ug shs 20 million. The physical progress was estimated at 75% against a financial progress of 89%. Works were on going and were expected to be completed in February 2015.

**Re-decking of Rwakaberege Bridge:** These works were estimated to cost Ug shs 24 million. The work was contracted to M/s K. David & Friends Ltd at a contract fee of Ug shs 33.528 million. The scope of works was replacing the broken down timber deck with a concrete one,

painting of the bridge parapets and road works on the approaches. By 30<sup>th</sup> January 2015 construction of the bridge had been completed; only painting and road works for the approaches were pending. Physical progress was estimated at 80% against a financial expenditure of Ug shs 24.772 million (73.9%).



**Kabarole District: Left: Graded section at km 2+000 along Kiburara – Kichwamba; Centre: incomplete culvert at km 4+400 along Buhesi – Mitanda road; Right: Rocky section along Katoma – Bwabya road**

### **Challenges**

- The district lacks skilled personnel in the mechanical section to handle emergency or minor repairs on the road equipment unit.
- Most of the existing district road equipment is either old or in poor condition thus affecting implementation of the force account works. For instance, the district has 2 serviceable dumpy trucks which could ease dumping of gravel if they were repaired.
- The district does not have a complete road equipment unit. It lacks a roller and excavator which are for compacting and excavation of gravel respectively.
- Scarcity of gravel in most parts of the district, forcing the district to compromise on the quality of materials used for gravelling. In addition the haulage distance for relatively good gravel is long for most roads.
- Road gangs are unable to provide their own tools in accordance with the guidelines issued by the Ministry of Works and Transport.

### **Analysis**

- **Link between physical and financial performance**

The district expended 72.5% of the funds for 59.3% of physical works. The physical performance is not commensurate to the financial expenditure.

- **Achievement of set targets**

The district did not achieve the semi-annual targets. By the end of Q2, the district had absorbed 72.5% of the released funds. Only 42% of the planned 38.2km of roads had been fully completed, 80% on bridge works while maintenance activities on the other planned roads were still on going with physical progress estimated between 20 – 95%. Failure to achieve targets was

attributed to a delay in receiving funds on the general account due to errors on the account details. Therefore much of the Q1 activities did not commence as planned.

## **Conclusion**

The district did not achieve the targets although it exhibited a fair performance. The low performance was attributed to lack of a complete set of road equipment. The existing equipment are old and so frequently breakdown. Depletion of good quality gravel will further increase the haulage distance. The result will be increased unit cost for road maintenance. Provision of road equipment will partly solve the problems in the district but there is need for research in appropriate road construction materials to replace the depleting gravel quantities.

## **Recommendations**

- The district should recruit skilled personnel in the mechanical section to handle technical assessments as well as minor repairs on all district equipment.
- The MoWT should expedite the procurement of essential road equipment to all local governments.
- Research on alternative road construction materials needs to be intensified to replace the depleting gravel. The URF/MoWT should institute research on use of insitu road materials.
- The URF should review the guideline governing routine manual activities to allow local governments procure hand tools for the gangs.

### **(viii) Kiboga District**

Kiboga district road network is comprised of 640km of which all are unpaved. Maintenance activities for the FY2014/15 on district roads were planned on a total of 316.3km (49.4% of total network) for an approved budget of Ug shs 554.975 million under URF. The targeted maintenance outputs for FY2014/15 under URF were: routine manual maintenance of 250.2km, and routine mechanised maintenance of 130km. The district was monitored on 22<sup>nd</sup> January 2015 and the findings are presented below.

## **Findings**

### **Financial performance**

The district received Ug shs 277.487 million (50% of the annual budget) indicative of an excellent release performance as all the expected funds were released. The district expended of Ug shs 154.447 million (55.6% of the received funds) by the end of Q2. The low absorption was attributed to inadequate equipment base at the district. The district shares one grader with the town councils and sub-counties. As a result the district hired a grader to execute works.

### **Physical performance**

Overall physical performance was rated at 46% of the annual target at the end of Q2. The district reported 115km (46% of annual target) of routine manual maintenance and 59.5km (45.8% of annual target) under routine mechanised maintenance were achieved by 31<sup>st</sup> December

2014. The procurement of 50 culverts of size 600mm diameter for installation was ongoing. The culverts were expected to be delivered before the end of January 2015.

Field monitoring was done for four out of the eight roads completed by 31<sup>st</sup> December 2014 and the findings are presented below;

**Kajjere - Nakasagazi – Mulagi (7km):** Planned scope of works was grading of 2.0km and drainage improvement works at a budget of Ug shs 5.406 million. Grading of 3km was completed while drainage works were not done. The district expended Ug shs 253,000 (4.6% of the budget).

**Kirinda - Budimbo – Kindeke (22.5km):** The planned scope involved grading, gravelling and culvert installation. The budget for works was Ug shs 43.246 million. By the end of Q2, Ug shs 37.486 million (86.6%) had been expended.

**Bulyankuyege - Kibisi – Kigwanya (10km):** The budget for the works was Ug shs 42.589 million. By 22<sup>nd</sup> January 2015, the district had graded 5km and works were ongoing. The expenditure by the end of December 2014 was Ug shs 253,000.

**Jokero - Nakasozi – Kibulala (21.7km):** The planned scope of works involved grading, spot gravelling and culvert installation at a budget of Ug shs 24.458 million. By 22<sup>nd</sup> January 2015, only grading had been completed. Gravelling and drainage works were pending. The district had expended Ug shs 21.780 million (89%).

Overall the works were observed to be satisfactory. However, it was evident that the entire scope of works could not be executed within budget for Jokero - Nakasozi – Kibulala road because 89% of the budget had been expended yet gravelling and drainage works were pending.



**Kiboga District: Left: Grading using a hired grade along Bulyankuyege - Kibisi – Kigwanya road; Centre: Graded section awaiting graveling along Jokero - Nakasozi – Kibulala road; Right: Completed section of Kajjere - Nakasagazi – Mulagi road**

## Challenges

- Inadequate equipment at the district. The district has one grader, no roller and no water bowser.
- Inadequate budget which cannot adequately cater for the massive road maintenance needs. Most of the roads necessitate rehabilitation instead of routine maintenance.
- Understaffing in the works department. The district has one Engineer with no additional staff to supervise road works.

- The district failed to attract road gangs making routine manual maintenance a difficult. In cases where recruitment is done, the turnover is high.

### **Analysis**

- **Link between physical and financial performance**

The district expended 55.6% of the received funds for 46% of the annual output. The funds were expended on road maintenance activities, procurement of culverts and office operations.

- **Achievement of set targets**

The semi-annual targets were not achieved. The physical performance of the district was estimated at 46% of the annual targets. The district therefore missed the semi-annual target by 4%.

### **Conclusion**

The semi-annual performance of the district was excellent with 92% of the half year targets achieved. The district however has one grader to be shared with the sub-counties. The single grader is not adequate to handle the entire road network and therefore is associated with frequent breakdown because of the overload. There is need for additional equipment.

### **Recommendations**

- The MoWT should fast track the procurement of additional equipment to the district.
- The district council should allocate additional resources from other sources of funding such as local revenue towards road maintenance.
- The District Service Commission should fill up the staff structure in the works department.
- The URF/MoWT should review the remuneration to the road gangs so as to retain them in the sector.

#### **(ix) Luwero District**

Luwero district road network is comprised of 415km of which all are unpaved. Maintenance activities for the FY2014/15 on district roads were planned on a total of 223.3km (53.8% of total network) for an approved budget of Ug shs 674.54 million under URF. The targeted annual outputs for FY2014/15 under URF were: routine mechanised maintenance of 108km, periodic maintenance of 115km.

### **Findings**

#### **Financial progress**

The district received a total of 337.27 million (50% of the IPF) under URF and all had been expended. This was an excellent release and expenditure performance. The received funds were expended on periodic maintenance activities.

#### **Physical performance**

The overall physical progress was estimated at 27% of the annual target by 31<sup>st</sup> December 2014; hence the physical performance was below average. The district achieved 62km (53.9% of the



annual target) of periodic maintenance. Routine mechanised maintenance was not done and all planned activities spilled to Q3.

The district did not budget for any routine manual maintenance because of a failure to recruit road gangs. This is because the available budget is not adequate to pay the road gangs.

Four roads totalling to 31km were monitored on 15<sup>th</sup> February 2015 and the findings are presented below:

**Buzibwera-Makangonyigo (14 km):** Shaping and grading of the whole section had been planned at a budget of Ug shs 55.16 million. Works were completed in Q2. However, the monitoring team observed that there is need for spot gravelling of some sections especially at km 1.1, km 1.8 and km 2.3. Record showed no expenditure had been effected yet.

**Kalagala-Namawojja (8.1km):** spot graveling and grading had been planned on this road at a budget of 36.45 million and all the funds had been expended. Works were completed and the quality of works was observed to be good. The road is however used by heavy trucks which transport sand for construction purposes within the periphery of Luweero and so its deterioration rate is high. The culvert structure had been broken as a result of heavy truck loads. This road is not suitable for these kind of loads and as such will require urgent attention.

**Bukembya-Nakusubyaki (5.7km):** this road had a budget of Ug shs 21.17 million and all the funds had been expended. Grading and reshaping had been carried out and the road was good except for a single culvert line at km 5+000 whose construction of end structures had no wing walls.

**Bumunanika-Kikyusa:** Shaping and spot graveling had been planned at a budget of Ug shs 12.16 million and all the funds had been expended. The planned activities had been done. Three spot gravelled sections totalling to 3.9km were observed.



**Luwero District: Left: Graded section of Buzibwera-Makangonyigo road; Centre: Gravelled section along Bukembya-Nakusubyaki road; Right: Culvert structure without wing walls at km 5+00 along Bukembya-Nakusubyaki road**

### Challenges

- The district does not have adequate equipment. The single grader is not enough to serve the district with 10 sub-counties and three town councils.
- Inadequate finances. The funds received from URF are inadequate to finance road maintenance on the entire road network.



## **Analysis**

- **Link between physical and financial performance**

The district expended all the funds and achieved 53.9% of periodic maintenance activities. The expenditure was commensurate to the physical outputs.

- **Achievement of set targets**

The district did not achieve the semi-annual targets. By the end of Q2, 53.7% of the annual outputs under periodic maintenance had been achieved. There were no achievements under routine mechanized maintenance. Overall, the district underperformed because it has a single grader and prioritized periodic maintenance during the semi-annual period

## **Conclusion**

The district exhibited an under performance. Only works under periodic maintenance were executed. The district had a single grader which is not adequate to serve the district with 10 sub-counties and three town councils. However, it should also be noted that the district did not budget for any routine manual maintenance activities during the FY 2014/15 due to failure to recruit road gangs. The available budget was not adequate to pay the road gangs.

## **Recommendation**

- The MoWT should provide additional equipment to the district
- The district council of Luwero should allocate additional resources from other sources of funding to the roads sector.

### **(x) Lyantonde District**

Lyantonde district road network is comprised of 755km of which 4km are paved (town council roads), 311km are unpaved and 440km are earth/CARs. Maintenance activities for the FY2014/15 on district roads were planned on a total of 295km for an approved budget of Ug shs 329.74 million under URF. The targeted maintenance outputs for the semi-annual period under URF were: routine manual maintenance of 295km and routine mechanised maintenance of 18.8km; and periodic maintenance of 37.8km. The district was monitored on 12<sup>th</sup> February 2015 and the findings are presented below

## **Findings**

### **Financial Performance**

By 31<sup>st</sup> December 2014, Ug shs 164.87 million (50% of IPF) was received of which Ug shs 106.178 million (64.9%) was expended. This was an excellent release performance and good absorption capacity. The district experienced a delayed release of funds in Q1 and as a result most of the planned activities delayed to commence.

### **Physical performance**

The physical progress for the routine manual maintenance activities was estimated to be at 47.5% and it was noted that Q1 had no routine manual activities due to late release of funds. Under routine mechanised maintenance, the district completed grading and drainage works on

the planned 18.8km (about 80% of the planned works) and was left with mainly spot gravelling. The works were achieved on Kasambya – Kitazigolokwa (12km) and Karagala-Kitovu (6.8km).

The physical progress under periodic maintenance was 12km (31.7%) out of the planned 37.8km were completed. All the uncompleted activities spilled over to Q3 and were expected to be completed by the end of Q3. The overall physical progress was estimated at 53% of the planned semi-annual targets.

Two roads under routine mechanised maintenance and one under periodic maintenance were monitored in February 2015 and the findings are presented below;

**Kasambya – Kitazigolokwa road (12km):** This road was planned for routine mechanised maintenance at an estimated cost of Ug shs 30 million. The scope of works was drainage works, grading and spot gravelling. Works on the road were near completion (about 80%). Only spot gravelling around Kitazigolokwa trading centre was pending. The quality of works was satisfactory.

**Kiyinda – Kitesa - Twafanda road (12km):** periodic maintenance was planned at an estimated cost of Ug shs 50 million. The scope of works was grading, regravelling and drainage works. All the works had been completed. The monitoring team observed that this road was covered by over grown grass since it is mainly busy during harvesting seasons only. Road gangs had not yet been recruited to carry out routine manual maintenance activities along this road

**Karagala-Kitovu road (6.8km);** routine mechanised maintenance was planned at an estimated cost of Ug shs 18 million. The scope of works was drainage works, grading and spot gravelling. At the time of monitoring in February 2015, works on the road were near completion (about 80%) save for spot gravelling and the financial expenditure on this road amounted to Ug shs 5 million (25% of budget). The road was expected to be complete by end of Q3.



Lyantonde District: Left: A Graveled section at km 11+300 along Kasambya – Kitazigolokwa road; Centre: Graded section at km 7+300 along Kiyinda – Kitesa - Twafanda road; Right: A graded section along Karagala-Kitovu road

## Challenges

- Low pay of the road gangs has left routine manual maintenance ineffective. Communities have not embraced routine the programme.

- Inadequate fund to cover maintenance works on 755km. For FY2014/15, the district's budget is Ug shs 329.74 million against a road network of 755km.

### **Analysis**

- **Link between physical and financial performance**

The financial performance was 64.9% against a physical performance of 53%. The funds were expended on routine manual, periodic and routine mechanized maintenance road works. Overall there was a link between expenditures made and the physical works implemented.

- **Achievement of set targets**

By 31<sup>st</sup> December 2014, the district had achieved about 53% of the planned semi-annual targets. The set targets were not achieved and all the unfinished outputs spilled to Q3. The district did not achieve the set targets

### **Conclusion**

The overall performance of the district was rated as average and this was attributed to late receipt of funds. Implementation of the annual targets was ongoing however maintenance works by routine manual labour has been challenged by the high turnover of the road gangs. The communities have not embraced routine manual maintenance jobs because of the low remuneration. Currently road gangs receive a pay of Ug shs 100,000 for every kilometer of road length maintained. This pay is low and as a result they resort to better paying activities such as agriculture. There is need to raise their pay if they are to.

### **Recommendation**

- The MoWT/URF should review upwards the remuneration to the road gangs.
- The district should prioritize road maintenance based on technical assessment of the need for maintenance.
- The district council should allocate additional resources to the road sector from other sources of revenue.

### **(xi)Mayuge District**

Mayuge district road network is comprised of 505km, of which 423.5km (84%) is paved and 81.5km (16%) are classified as earth roads. The FY 2014/15 budget for the district road maintenance program is Ug shs 769.06 million under the URF earmarked only for: routine manual maintenance of 98.6km at Ug shs 79.53 million (10.3%); routine mechanised maintenance of 40km at Ug shs 524.23 million (68.2%); emergency road repairs at Ug shs 25.73 million (3.3%); equipment repairs at Ug shs 109.36 million (14.2%); and supervision and operations at Ug shs 30.19 million (3.9%).

On 22<sup>nd</sup> September 2014, the district submitted a request to URF for an emergency release under the special intervention on DUCAR networks for works on Kaluuba-Luuba road (10km). The funds requested for were Ug shs 118.26 million. All road maintenance activities in the district were to be implemented through force account intervention.

## Findings

### Financial Performance

By the end of Q2, the district road maintenance programme had received Ug shs 460.53 million from URF comprising of Ug shs 380.53 million against the approved budget and Ug shs 80 million (67.6%) for emergency works on Kaluuba-Luubu road (10km). The release was 49.5% of the budget. By 31st December 2014, Ug shs 331.79 million (87.2%) had been expended. This was an excellent release and absorption performance.

### Physical performance

All planned routine manual maintenance activities by the end of Q2 on 99km of the district road network had been carried out using road gangs. Twenty four (24) kilometres of the district road network under the routine mechanised maintenance were worked upon out of the 40km planned in the FY, representing a 60% progress. The implementation of the annual work plan was estimated at 50% by 31st December 2014. Works on the emergency road commenced in Q2 and were still ongoing.

Bugadde-Bukoba (5km) and Kaluuba-Luuba (10km) were monitored on 22<sup>nd</sup> January 2015 and details are provided below;

**Kaluuba-Luuba Road (10km):** This 10km road found in Bukatube and Busakira sub counties was damaged by the rains in Q1, FY2014/15 and became impassable after the workplan was approved and submitted. In order to work on the road, the district requested for funding for emergency works from URF on 22<sup>nd</sup> September 2014 under the Special Interventions on DUCAR Networks programme. The scope of works involved: grading and shaping of the entire road; spot gravelling; and drainage improvements. On 4<sup>th</sup> November 2014, Ug shs 80 million (67.6% of funds requested) was received.

Works on the road commenced on 29<sup>th</sup> October 2014 and by the end of November 2014, grading, shaping and spot gravelling had been completed. The release was exhausted and thus works were halted pending further funding. Pending activities at the time of monitoring were drainage works which included installation of 600mm culverts with headwall construction and opening up of offshoots or mitre drains.

The entire road had been graded to an average width of 7m. The gravelled sections were visible especially in the low lying or swampy sections of the road. The road was motorable with a good riding surface except for the dust which was as a result of poor compaction of the road surface and the prolonged season without rains. The physical progress of works was estimated at 80%.

**Bugade –Bukoba road (5km):** This road in Kityerera sub-county connects to a major landing site on the shores of Lake Victoria. Planned routine mechanised activities of grading, spot gravelling and drainage improvements works on this road were planned to be carried out in Q3 at Ug shs 71.755 million. However, the road surface deteriorated faster than anticipated and thus the entire road was graded to an average width of 7m in Q2 in November 2014. To protect the road from being damaged by rains, drainage improvements of opening up offshoots were also done. The road was still motorable at the time of monitoring though some sections were bumpy which could have been as a result of non-compaction of the surface during the grading works.

Spot gravelling and installation of 10 lines of 600mm diameter pipe culverts were to be done in Q3. The works cost Ug shs 32.47 million (45% of budget) and the physical progress of the works was estimated at 60%.



**Mayuge District: Left: A graded and shaped section of Kaluuba-Luuba road; Centre: A regravelled section in a swamp at Km 2+900 on Kaluuba-Luuba road; Right: A graded section at Km 2+400 on Bugade-Bukoba road**

### **Challenges**

- Incomplete roads maintenance equipment unit which affects the quality of works and thus making the roads deteriorate faster. This sometimes forces the district to hire equipment which is costly. The district does not have a roller and water bowser.
- Partial release of funds does not enable immediate completion of road works.
- Procurement of spare parts and servicing for the equipment takes time and thus causes delays during break downs

### **Analysis**

#### **• Link between financial and physical performance**

By the end of Q2 FY2014/15, the district had expended 87.2% of the releases. Implementation of the annual work plan was estimated at 50%. For the emergency works on Kaluuba-Luuba road, 67.6% of the funds requested for were released and expenditure was at 100% against a physical progress of 80% by 31st December 2015. The expenditures were commensurate to the physical works achieved.

#### **• Achievement of set targets**

With 24km of road worked upon under routine mechanised maintenance out of the annual target of 40km by the end of December 2014, the implementation of the annual work plan was estimated to be over 50%. This implies that the district road maintenance program was achieving its targets. This was attributed to the dry season and the two district graders which were all operational. Therefore there were no interruptions during implementation of works.

### **Conclusion**

The district achieved 50% of the annual targets under URF. This was an excellent performance. Emergency works on Kaluba – Luuba road were ongoing with 80% achieved. The delay in procurement spares and servicing of equipment has in most cases forced the district to hire equipment to carry out the planned works. There is need for the authorized supplier of spares to reduce on the delivery time.

## Recommendations

- The GoU/MoWT should expedite the procurement road maintenance equipment to enable the district have a complete set of road maintenance
- The URF should release funds as projected in the work plans to enable full implementation of works.

### (xii) Mityana District

Mityana district road network is comprised of 335km all of which are unpaved. Maintenance activities for the FY2014/15 were planned on a total of 315km for an approved budget of Ug shs 548.33 million comprising of Ug shs 519.33 million under URF, and Ug shs 29 million under LGMSDP. The semi-annual targets were: routine manual maintenance of 210km, routine mechanised maintenance of 27.8km, installation of 108m of culvert lines; and spot gravelling works (5.94km) on Kikunyu-Kitotolo-Namudaali Wabiyinja-Mpenja Ttanda-Zira-Nakwangu and Nsozibirye-Kiwawu and tree planting activities. The LGMSDP funds were planned to be expended on routine mechanised maintenance of Banda-Lusaalira road (10.2km).

## Findings

### Financial Performance

By 31st December 2014, a total Ug shs 259.66 million from URF (50% of IPF) was released of which Ug shs 130.29 million (50.2 %) was expended. This was an excellent release and fair expenditure performance. In addition a total of 42 million emergency release was received in Q2 for maintenance works on Mwera and Kitenga swamps.

### Physical performance

The semi-annual physical performance was estimated at about 48.3%.The district had 100% of the routine manual maintenance targets, 12km (43.2%) of routine mechanised maintenance on Mwera – Kyalwa (2km out of 4.4km) and Naama – Buswabulongo (10km out of 12km), and 82% of periodic maintenance on Kikunyu-Kitotolo-Namudaali Wabiyinja-Mpenja road and 50% of culvert installation achieved.

Requisition of funds for implementation of Banda-Lusaalira road (10.2km) under LGMSDP had been submitted at the time of monitoring 24th February 2015.

Monitoring was done for all the completed roads and the findings are presented below.

### Field findings

**Naama – Buswabulongo road (12km):** Routine mechanised maintenance was planned at an estimated cost of Ug shs 44.74 million. The scope of works was bush clearing, reshaping, spot gravelling and installation of 13 pieces of culverts. A total of 10km had been completed. There was also a single line of culverts at km 4+400 which was incomplete. The district had so far expended Ug shs 34.60 million (77.3% of planned expenditure).The quality of works done was observed to be good.

**Mpiringwa - Kasenya road (11.4km):** Routine mechanised maintenance was planned at an estimated cost of Ug shs 52.00 million. The scope of works was grading, spot gravelling and drainage works. Grading and spreading of gravel had been completed while the culvert end structures were incomplete. It was observed that the spread gravel was not compacted.

**Spot gravelling works (5.94km) on Kikunyu-Kitotolo-Namudaali Wabiyinja-Mpenja Ttanda-Zira-Nakwangu and Nsozibirye-Kiwawu and tree planting activities:** These roads had a budget of Ug shs 38.054 million. By 24<sup>th</sup> February 2015, progress of works was estimated at 82% with only 1.1km along Wabiyinja-Mpenja road pending. A total of 22.06 million (58% of budget) had been expended.



**Mityana District: Left Gravelled section along Naama – Buswabulongo road; Centre: Loose gravel at km 3+000 along Mpiringwa - Kasenyi road; Right: incomplete culvert end structure at km 2+800 along Mpiringwa - Kasenyi road**

### **Challenges**

- The low remuneration to the road gangs has led to a high turnover in the district. The gangs are demoralised and would prefer to work in their gardens than on the road.
- The unit rate (Ug shs 1to Ug shs 2.282 million) per kilometre provided by URF is low compared the volume of work involved in road maintenance. The URF guidelines require the DLGs to plan for at least 50km per year of routine mechanised. This unit rate provided is not realistic as most of the roads are in very poor condition.
- The job specifications for machine operators are high. The specifications require that a machine operator should have at least an Advanced Level certificate and relevant training. Such people are not available on the market.
- Inadequate training offered by MoWT to the machine operators. The one month training given to the operators is short to impart the necessary skill for better equipment management.
- The low remuneration offered to the machine operators compared to rates in the private sector. This has led to a high turnover in the district.

### **Analysis**

- **Link between physical and financial performance**

The district expended 50.2% of the release to achieve 48.3% of physical works. The expenditure was commensurate to the physical works.

- **Achievement of set targets**

Overall the district did not achieve the set targets. By 31<sup>st</sup> December 2014, only 48.3% of the planned outputs were achieved for the period under review.

## **Conclusion**

The district did not achieve all the set targets for the review period. This was mainly attributed to frequent breakdown of the road equipment. The district was forced to hire equipment to carry out road maintenance activities. Hiring of road equipment raises further the unit cost per kilometer of road maintained.

## **Recommendations**

- The MoWT and URF should review the remuneration to the road gangs and machine operators so as to motivate them to work.
- The URF should revise the unit rate of road maintenance to take into consideration the rehabilitation demands in the district.
- The MoWT should start a training school for road equipment operators. This will enable a constant supply to meet both the public and private sector demands. In addition, the training period should be reviewed to enable the operators receive adequate training.

### **(xiii) Moroto District**

Moroto district road network is comprised of 175km of which 42km (24%) are unpaved and 133km (76%) are earth roads. The budget for roads maintenance activities for the FY 2014/15 was Ug shs 664.89 million, of which Ug shs 427.89 million (64.4%) is under URF and Ug shs 237 million (35.6%) under PRDP.

Planned activities for the FY involved: routine manual maintenance using road gangs on 129km, routine mechanized maintenance using light equipment on 42km and periodic maintenance of Nakiloro-Kakingol road (5km), all under the URF; and rehabilitation of Nakabaat-Narenganya (15km) under PRDP.

## **Findings**

### **Financial Performance**

By the end of Q2, the district road maintenance programme had received a total of Ug shs 355.93 million (53.5%) for its semi-annual activities, of which Ug shs 237.1 million (66.6%) was from URF and Ug shs 118.82 million (33.4%) from PRDP. The release comprised of 55% of the URF budget and 50.1% of the PRDP budget.

The expenditure by 31<sup>st</sup> December 2014 was Ug shs 292.44 (82.2%) comprising of Ug shs 223.42 million (76.4%) under URF and Ug shs 69 million (23.6%) from PRDP. Expenditure under the URF and PRDP was at 94.2% and 58% respectively.

### **Physical Performance**

All planned routine manual maintenance activities using road gangs up to the end of Q2 on the district road network had been carried out. The activities under the routine mechanised maintenance had suffered a setback due to the breakdown of the district grader in August 2014. Only one road, Kodonyo-Lorengedwat (10km) had been partially graded out of the 42km planned for the year. The periodic maintenance of Nakiloro-Kakingol road (5km) had not commenced by the end of Q2. Mobilization of labour for the project was done in January 2015.



Works of opening up the Nakabaat-Narengenyia (15km) under PRDP were underway with the bush clearing ongoing.

Kodonyo-Lorengedwat road (10km) under the URF, and Nakabaat-Narengenyia (15km) under the PRDP were monitored on 22<sup>nd</sup> January 2015. Details of these roads are given below;

**Kodonyo-Lorengedwat road (10km):** Routine mechanised maintenance works on this road in Tapecc and Nadunget sub-counties was planned for under the URF at a budget of Ug shs 28 million. Works on the road started in Q1 with bush clearing and road reshaping. However, the grader broke down in August 2014 after bush clearing was completed and only 4km reshaped. The reshaping works had not resumed as the grader was yet to be repaired. The reshaped section was still in good shape with a good riding surface. The expenditure on the road works done was Ug shs 28.31 million (101% of budget) and the physical progress of works was estimated at 40% in January 2015. The 101% expenditure was because some funds had been committed for fuel.

**Nakabaat-Narengenyia road (15km):** The rehabilitation of this road in Katekille sub-county was planned for under the PRDP with a budget of Ug shs 237 million. The road, along the Uganda-Kenya border had last been maintained in the 1960s. It had to be opened up to curb cattle rustling across the border. Bush clearing using a bulldozer started in December 2014 and was still ongoing in January 2015 with about 7km of the bush cleared. Expenditure by 31st December 2014 was at Ug shs 69 million (29.1%).



**Moroto District: Left: A bush cleared section of Kodonyo-Lorengedwat road at Km 2+300; Centre: A Bush cleared section of Nakabaat-Narengenyia road; Right: A bulldozer clearing the bush on Nakabaat-Narengenyia road**

### Challenges

- The district road network is increasing but the funding from the URF is based on the initial mileage which was captured when the URF was founded
- The district needs funds for rehabilitation since more communities/settlements are cropping up and also the pressure from the disarmament program to ensure security.
- The hiring of equipment and personnel for specialized road works is expensive since it is obtained from outside the Karamoja region. In addition to this, the regional equipment at the MoWT Gulu Mechanical Regional is very far to be accessed.
- The nature of terrain, soft soils in the region and the very high fuel prices do not favour the road maintenance rates. For example, the pump price for diesel was at Ug shs 3,700 in January 2015 while in Kampala it was at Ug shs 3,000.

- In some areas where there are no settlements, road gangs have to be transported for over 30km.
- Insecurity within the district forces the works department to hire soldiers. This increases the operational costs.
- Frequent breakdown of the grader leading to delay of works. The new grader broke down as it was only meant for light grading.
- Inadequate equipment unit to undertake wholesome maintenance such as spot gravelling.
- The releases are not made in line with the approved district annual workplans.

## **Analysis**

### **• Links between financial and physical performance**

The district roads maintenance program had received 53.5% of its budget and expended 82.2% of the release by 31st December 2014, against a physical progress of 30%. There was a mismatch between the physical and financial progress. This was because some funds were committed for materials (fuel and gravel) instead of planned works

### **• Achievements in terms of set targets**

By the end of Q2, all the planned routine manual maintenance activities on the district road network had been carried out and the progress of this activity was estimated at 50% of the annual workplan. However, under the routine mechanised maintenance only one road of 10km (Kodonyo-Lorengedwat) had been partially worked on in Q1. The routine mechanised maintenance works in the district have been on a stand still since August 2014 due to the breakdown of the district grader. Works on the periodic maintenance project had not yet started, while the rehabilitation project had a physical progress of 29%.

## **Conclusions**

By the end of Q2, the financial performance and physical performance of the roads maintenance program were estimated at 82% and 60% respectively for the half-year. This was an excellent financial performance and good physical performance. The district has an insecurity challenge which increases the operation costs because of hire of soldiers while working on the roads. In addition the scattered settlements within the region make routine manual maintenance costly because road gangs have to be transported from over 30km.

## **Recommendations**

- The URF should increase funding for the district road maintenance to match the big road network.
- The district should liaise with MoWT to comprehensively repair the old district Komatsu grader to facilitate the heavy grading.
- The URF should disburse funds according to quarterly work plans submitted by the districts.
- The URF should allow the district to budget for hiring of security guards.

### **(xiv) Mubende District**

Mubende district road network is comprised of 667km all of which are unpaved. The budget for maintenance activities for FY2014/15 covering 548.7km was Ug shs 915.543 million under URF

and Ug shs 32 million under PRDP funding. The target maintenance outputs for Q1 and Q2 under were: routine manual maintenance of 485km and routine mechanised maintenance of 89km; and periodic maintenance of 32km of roads.

## **Findings**

### **Financial Performance**

For Q1 and Q2, the district received Ug shs 489.772 million, of which Ug shs 457.772million (93.5%) was from URF (50%), Ug shs 32 million (6.5%) from PRDP. Absorption of funds in the district was 100% for both URF and PRDP releases. This was an excellent financial performance.

### **Physical Performance**

For Q1 and Q2, the district completed 89 km (100%) of routine mechanized maintenance, 32.2km (101%) of periodic maintenance while 315.8km were maintained in Q1, and 484.6km in Q2 under routine manual maintenance. The district has so far implemented 50% of the annual planned out puts (100% of the Q1 and Q2 plan). This was an excellent physical performance.

Some of the roads maintenance activities carried out in Q1 and Q2 were inspected on 27<sup>th</sup> January 2015 and the findings are below:

**Kikuya – Kammondo (24km):** The district planned to grade 12km and install drainage structures. All the planned works had been achieved at a cost of Ug shs 5,030,000. The works were of good quality except at km 13+700 where the drainage structure had been damaged by heavily loaded trucks. It was observed that there was need for additional culvert lines at km7+400 and km 8+300.

**Nsozinga – Kitovu – Kachwi (10km):** The district planned to grade 5km at Ug shs 2,096,000. This activity was achieved in Q1 with 100% of the funds expended. It was observed that there is need for urgent routine manual maintenance to prevent the growing bushes from covering the carriageway.

**Kitovu – Lwabusana (12km):** The planned scope of works was grading of 5km at Ug shs 2,096,000. The works had been achieved in Q1 and 100% of the budget expended.

**Musozi – kalamba (16.2km):** The planned scope of works was grading of entire road, regravelling and installation of drainage structures. The budget for the works was Ug shs 112,751,000. Works were completed in Q2 and 100% of the budget expended. The quality of works was satisfactory save for a cross culvert line at km 5+300 which was incomplete. The team also observed that the road did not have enough offshoots to carry the water off the road. This is likely to damage the edges of the road especially in the rainy season.



**Mubende District: Left: Section at km 13+700 in need of replacement of drainage structures; Centre: Graded section of Kitovu – Lwabusana at km 2+100; Right: Graded section of Musozi – Kalamba road at km 9+600**

## Challenges

- The district does not have a complete road equipment unit. It lacks a wheel loader, bull dozer, roller and a dump truck which are essential for excavation, transportation and compaction of gravel material.
- Frequent break down of the grader imported from China. The district has to hire equipment which is expensive.
- The spare parts for the Chinese equipment are expensive at FAW (the authorized distributor) compared to the market rates.

## Analysis

- **Link between physical and financial performance**

The district received all the funds budgeted for under Q1 and Q2, and were all expended on the planned activities. Both financial and physical progress was at 100%.

- **Achievement of set targets**

By the end of Q2, the district had successfully implemented 100% of the planned outputs for the period under review. This was an excellent performance for Mubende district. The success was attributed to hire of equipment.

## Conclusion

The district achieved all the set targets for the review period. There were fast growing bushes encountered on some roads and these will need urgent routine manual maintenance intervention to keep the roads functional.

## Recommendations

- The district should explore the option of accessing the road equipment from the Ministry of Works and Transport regional mechanical workshop.
- The GoU/MoWT should procure heavy duty graders to match the nature of maintenance works in LGs.

**(xv) Mukono District**

Mukono district road network is comprised of 514km all of which are unpaved. Maintenance activities for the FY2014/15 were planned on a total of 426.73km for an approved budget of Ug shs 802.55 million under URF. The planned outputs for FY2014/15 under URF are: routine manual maintenance of 426.73km, routine mechanised maintenance of 99.05km and installation of 323m of culvert of 600mm diameter. The district was monitored on 19<sup>th</sup> February 2015 and the findings are presented below.

**Financial performance**

The district had received a total of Ug shs 401.28 million from URF (50% of the IPF) by 31<sup>st</sup> December 2014 and all had been expended. This was an excellent release and absorption performance.

**Physical performance**

The physical performance of the district was excellent as the half year progress was estimated at 90.1%. The district achieved 100% of the planned routine manual maintenance, 56.85km (57.4% of annual target) of routine mechanised maintenance; 180No.culverts cast (55.7% of annual target) and 123 lines installed (57.5%). The district did not achieve maintenance of Maala-Muwoma road (20km) in Koome Islands. Mobilisation of equipment for this road requires a ferry and the district was into negotiations with MoWT to provide a ferry to transport equipment and materials. Works on this road were expected to commence in Q3.

Four roads totaling to 35.85km, all planned under routine mechanized intervention were sampled for monitoring and the field findings are presented below.

**Namataba – Kanyogoga (6.8km):** The planned scope was grading, spot gravelling and drainage works at a budget of Ug shs 18.190 million. All the planned activities were completed in Q1 at a cost of Ug shs 15.690 million (86.3% of the planned budget). The works were observed to be satisfactory and the road was in a good state.

**Bulanga – Kasokoso (14.4km):** The planned scope was grading, spot gravelling and culvert installation at a budget of Ug shs 38.520 million. All the planned activities were completed in Q2 at a cost of 34.615 million (89.9% of the planned budget). However, it was observed that the culvert end structures on this road were incomplete.

**Wagala – Wasswa (8.0km):** The planned scope of works was grading, spot gravelling and drainage works at a budget of Ug shs 21.400 million. The district expended Ug shs 17.9 million (83.6% of the planned budget) to grade the entire road and gravel spot sections. No culverts were installed on this road.

**Mbalala – Seeta (6.65km):** The scope involved: grading, spot gravelling and drainage works at a budget of Ug shs 17.789 million. By 31<sup>st</sup> December 2014, the road was complete and the expenditure was Ug shs 15.289 million (85.8% of the planned budget). All the planned works were done and the quality was observed to be good.



**Mukono District: Left: Graveled section at km 6+100 along Namataba – Kanyogoga road; Right: A well completed culvert end structure at km 0+300 along Namataba – Kanyogoga road**



**Mukono District: Left: A well gravelled Wagala – Wasswa road at km 6+400; Right: A well culvert completed end structure along Mbalala – Seeta road**

## Challenges

- Incomplete road unit. The district does not have a roller and excavator.
- Inadequate trained road equipment operators. The short trainings offered by MoWT at Luwero are inadequate to enable skills transfer to the operators.
- The remuneration offered to the equipment operators is low compared to what the private sector pays. Currently the operators are on U8 salary scale and receive a Safari Day Allowance (SDA) when in the field. This has led to a high turnover of the operators.
- Inadequate staff in the works department to oversee supervision works.
- The district has failed to attract road gangs on roads along the landing sites because of the low pay.

## Analysis

- **Link between physical and financial performance**

The district expended all the funds and achieved 90.1% of the planned outputs. This was an excellent performance and the financial performance was commensurate to the works done.

- **Achievement of set targets**

By the end of Q2, the district had achieved 90.1% of the planned outputs. This was an excellent performance. Only works along Maala-Muwoma road (20km) in Koome Islands had spilled to Q3.

### **Conclusion**

The district exhibited an excellent performance. Only works along Maala-Muwoma road (20km) in Koome Islands had spilled to Q3 and were attributed to lack of a ferry to transport the equipment and materials to the island. The good performance was attributed to availability of the basic road equipment (two working graders, one wheel loader, 2 tippers and a water bowser). In addition, the district pre-casts their own culverts and production per piece is much less than the market price. Time which would have been lost through lengthy procurements is saved. Maintenance of equipment by the district is another good lesson to learn from; the district engages the Bugembe Regional Mechanical Workshop (BRMW) of MoWT to inspect the equipment, spares are procured and fixing is by staff from BRMW.

### **Recommendations**

- The MoWT should provide additional equipment to the district
- The MoWT should set up a training institute for plant operators such that they receive adequate training with qualifications
- The Ministry of Public Service (MoPS) should review the salary of plant operators. The allowances offered per day should be raised.
- The District service Commission should ensure that the staffing structure is full.
- The MoPS should review district staffing structure to include road overseers and headmen.
- The URF should review the remuneration offered to road gangs to enable them get motivated

### **(xvi) Rakai District**

Rakai district road network is comprised of 554km all of which are unpaved. Maintenance activities for the FY2014/15 were planned on a total of 519.2km for an approved budget of Ug shs 1,048.54 million under URF. The targeted annual outputs for FY2014/15 were: routine manual maintenance of 519.2km, routine mechanised maintenance of 75.4km and periodic maintenance of 43km. The district was monitored on 13<sup>th</sup> February 2015 and the findings are presented below.

### **Financial performance**

The district had received of Ug shs 530.873 million (50.6%) from URF by 31<sup>st</sup> December 2014 of which Ug shs 338.358 million (63.7%) was expended. This was an excellent release and good absorption performance.

### **Physical performance**



Overall physical performance by 31<sup>st</sup> December 2014 was at 52.5% of the annual targets. This was an excellent performance since more than half of the annual outputs were achieved. The district achieved 100% of routine manual maintenance, 46km (61%) of routine mechanised maintenance and 20km (46.5% of the planned) of periodic maintenance.

Three roads were monitored and the findings are presented below;

**Kagamba-Baale (22km):** This road had been planned under routine mechanised maintenance. The scope of works involved grading, shaping, spot graveling and drainage works at an estimated budget of Ug shs 100.20 million. The works delayed to commence due to unfavourable weather conditions. At the time of monitoring in February 2015, physical progress was estimated at 70%. Shaping, grading and drainage were carried out and the road was visually in good condition while spot graveling was pending. The district had expended Ug shs 48.00 million (48% of the estimated budget).

**Kyotera-Betherem-Kalisizo (37.7km):** The planned scope of works was mainly grading, drainage improvement and shaping at a budget of Ug shs 75.00 million. Only drainage improvement works were pending. A total of Ug shs 74.918 million (99.9% of the budget) had been expended.

**Bikira-Nvubu-Nakatogo (8km):** The road was planned for periodic maintenance. The scope of works involved shaping, grading, spot gravelling and drainage improvement on a total of 6km at a budget of Ug shs 78.00 million. However, at the time of monitoring only shaping and grading had been carried and pending works were spot gravelling and drainage works. The road was visually in good condition. A total of Ug shs 65.615 million (84.1% of the budget) had been expended.



**Rakai District: Left: Graded section at km 4+900 along Kagamba-Baale road; Centre: Graveled section at km 3+800 along Kyotera-Betherem-Kalisizo; Right: Graded section at km 7+100 along Bikira-Nvubu-Nakatogo road; Graded section along**

### Challenges

- Incomplete road unit. The district does not have a roller, loader and tippers which are necessary for processing of gravel material during road construction.
- Frequent breakdown of equipment.

### Analysis

- **Link between physical and financial performance.**



The district expended 63.7% of the release funds to achieve 52.5% of physical annual outputs. The physical performance was commensurate to the financial expenditure.

- **Achievement of set targets**

The district achieved the semi-annual targets. Physical progress was at 52.5% well above the semi-annual targets.

### **Conclusion**

The district achieved the semi-annual targets. Performance was excellent at 52.5% with all the semi-annual targets being achieved. Frequent breakdown of road equipment has increased the operation costs of the works department. There is need for a new fleet of equipment to ensure smooth implementation of the district plans.

### **Recommendation**

The MoWT should expedite the procurement process of additional equipment for road maintenance.

### **(xvii) Sironko District**

The district road network is comprised of 220.3km all of which are unpaved. The budget for the district road maintenance program for FY2014/15 is Ug shs 586.7 million, comprising of Ug shs 468.66 million (79.9%) under the URF, and Ug shs 118.04 million (20.1%) under the PRDP.

The URF budget was earmarked for: routine manual maintenance of 220.3km at Ug shs 130 million (27.7%); routine mechanised maintenance of 87km at Ug shs 74.47 million (15.9%); periodic maintenance of 8.5km at Ug shs 144.25 million (30.8%); mechanical imprest at Ug shs 98.24 million (21%); installation of 42m of culverts at Ug shs 5 million (1.1%); and operational expenses at Ug shs 16.7 million (3.6%).

The PRDP budget was earmarked for the rehabilitation of: Sironko Town Council-Kumira-Kibembe Primary School road (2km) at Ug shs 27.04 million (22.9%); Sonooli bridge at Ug shs 42 million (35.6%); and Buhugu-Bugibugi-Mahapa road (4km) at Ug shs 49 million (41.5%).

The district also submitted a request of Ug shs 134.62 million to URF under the Special Interventions on DUCAR Networks for emergency works on Buweri-Bumumulo road (12.6km). This road had been severely damaged by heavy rains and landslides after the district road maintenance budget for the FY 2014/15 had been approved and submitted. The program was monitored on 10th February 2015 and the findings are presented hereafter

### **Findings**

#### **Financial performance**

By the end of December 2014, the district roads maintenance program had received a total of Ug shs 293.3 million (50%), comprising of Ug shs 234.31 million (80% from URF) and Ug 59 million (20% from PRDP). The financial performance of the district is summarised in Table 12.66.

**Table 12.66: Financial Performance of Sironko District Roads Maintenance Programme by 31<sup>st</sup> December 2014**

| Source | Budget<br>(Ug shs)<br>Millions | Release<br>(Ug shs)<br>millions | Expenditure<br>(Ug shs)<br>millions | % Budget<br>Released | % Release Spent |
|--------|--------------------------------|---------------------------------|-------------------------------------|----------------------|-----------------|
| URF    | 468.664                        | 234.316                         | 139.998                             | 50.0%                | 58.9%           |
| PRDP   | 118.041                        | 59.021                          | -                                   | 50.0%                | -               |
| Total  | 586.705                        | 293.337                         | -                                   | 50.0%                | -               |

*Source: Sironko District Engineer*

In addition to the above, the URF released Ug shs 40 million (29.7% of funds requested) in Q1, as emergency funds, of which Ug shs 13.03 million (32.6%) had been expended by the end of December 2014. Expenditure information on the PRDP was not available at the time of monitoring.

### **Physical performance**

Despite the release of 50% of the funds, road works could not start on time because the region received heavy rains from the start of the FY up to end of December 2014. In addition to this, procurement was done in Q1 and thus implementation started in Q2. By the end of December, 2014, the following activities had been done under the URF funding: routine manual maintenance activities of grass cutting and cleaning of drains for 220.2 km in Q2 (25% of planned); routine mechanised maintenance (grading and shaping) of 36.2km (41.5% of planned); and opening up of the section affected by landslides on Buweri-Bumumulo road under the emergency works.

Only one activity under PRDP - grading of the entire Sironko Town Council-Kumira-Kibembe Primary School road had been done by 31st December 2014. The implementation of the annual work plan for the district roads maintenance program was estimated at 40%.

#### **a) PRDP**

The projects visited under this program were Sironko Town Council – Kumira – Kilembe (2km) and the Soloni Bridge. The Sironko Town Council – Kumira – Kilembe road is found in Nalusala sub-county and starts at Kyomira River. Planned activities on this road were grading, spot gravelling and drainage improvements of four culverts lines, all at an estimated cost of Ug shs 27.041 million. The activities done were maintenance works of bush clearing, grading and shaping to an average width of 7.5m done in January 2015.

Works on the Soloni bridge in the same sub-county had not commenced. These works involved the construction of two abutments on to which two I-sections will be laid at Ug shs 42 million. The two steel I-sections had been temporarily put in place to allow traffic to cross that section of the road. The procurement of the bridge works had just been concluded in January 2015 and the supply of materials was yet to commence.



**Sironko District: Left and Centre: Graded and shaped sections of Sironko Town Council – Kumira – Kilembe road; Right: I-sections used for the temporary crossing at the Soloni bridge crossing**

## **b) URF**

The following projects whose maintenance is funded by URF were inspected under the different categories of maintenance works: Bukiyi-Kibembe road (5.1km) for routine manual maintenance; Bumundu-Namanyonyi (3.2km) and Nampanga-Buwalasi (3km) for routine mechanised maintenance; and Bweri-Bumunulo road (4km) for periodic maintenance.

Routine maintenance activities of road side slashing were done on Bukiyi-Kibembe road in Nalusala sub-county. Grading of the entire road on Bumundu-Namanyonyi (3.2km) in Buwala sub-county was done in September 2014 (Q1) at Ug 2.739 million (100% of planned expenditure). The entire Nampanga-Buwalasi (3km) in Buwalasi sub-county was graded in December 2014 (Q2) at Ug shs 2.568 million (100% of budget). The roads were still motorable with a few bumpy and corrugated sections on Bumundu-Namanyonyi.



**Sironko District: Left: A slashed section on Bukiyi-Kibembe road; Centre: A graded section on Bumundu-Namanyonyi road; Right: A graded section on Nampanga-Buwalasi road**

Maintenance works on Bweri-Bumunulo road (12.6km) in the FY 2014/15 were planned for under two phases. The first 4km section was to undergo routine mechanised maintenance under the normal URF release, while the rest of the road (8km) which was severely damaged by heavy rains and landslides was to undergo an emergency intervention funded by URF under the Special Interventions on DUCAR Networks at Ug shs 134.624 million. This road traverses three sub counties of Buyobo, Budhambi and Buteeza.

URF released Ug shs 40 million (30% of emergency budget) in Q1 for the emergency works on this road. The four kilometres were graded and the section at Km5+200 which had been affected by landslides had been opened up using an excavator and a grader as part of the emergency

works. A total of Ug shs 13 million (32.5% of emergency release) had so far been expended on this road by 31<sup>st</sup> December 2014.



**Sironko District: Bweri-Bumunulo road; Left: A graded section of the first 4kms; Centre and Right: A section at Km 5+200 which was affected by landslides**

### **Challenges**

- The road maintenance equipment unit at the district is not complete and thus they hire which is expensive.
- The district lacks an excavator and a roller which are key in roads maintenance works.
- There is scarcity of gravel in the mountainous areas of the district.
- Roads opened up under CAIIP3 are taken over by the district which increases the road networks but the maintenance budget provided by URF is fixed.

### **Analysis**

#### **Link between financial and physical performance**

The district roads maintenance program had received 50% of its budget by 31<sup>st</sup> December 2014. Cumulative expenditure under the URF release was at 59%. The implementation of the annual work plan (overall physical progress of works for both URF and PRDP) was estimated at 40% by the end of Q2.

#### **Achievement of set targets**

The district had not achieved the set target by 31<sup>st</sup> December 2014 despite the 50% budget release because there were no works done in Q1. This was attributed to the heavy rains in the region from the start of the FY up to December 2014 and the prolonged procurement process which took place in Q1.

### **Conclusion**

The district's performance was below average and this was attributed to late commencement of works due to heavy rains between July and December 2014 and a delay in the commencement of procurement. The roads opened up under CAIIP3 are exerting additional pressure on the districts road maintenance budget and so there will be need for additional resources.

### **Recommendations**

- The URF and MoWT should consider a special allocation for areas in mountainous regions because of lack of good gravel within close proximity of the roads. The haulage distance in most case is long.

- The MoWT should provide local governments with a full set of roads maintenance equipment unit

### (xviii) Soroti District

Soroti district road network is comprised of 168.2km, all of which are unpaved. The FY 2014/15 budget for the district road maintenance program is Ug shs 1,134.602 billion, comprising of: Ug shs 539.246 million (47.5%) under the URF; Ug shs 78.694 million (6.9%) under the PRDP; Ug shs 512 million (45.1%) under the **Rural Transport Infrastructure (RTI)**; and Ug 4.662 million (0.4%) under the Unconditional Grant (UCG).

**The Rural Transport Infrastructure (RTI)** is a component of the U-Growth programme funded by DANIDA to facilitate and improve access to markets, extension services, agricultural inputs and social services. It aims at the promotion of cheaper, more efficient and reliable transport services through the development and maintenance of district, urban and community access roads.

Under the URF budget, planned maintenance outputs for the FY are: routine manual maintenance of 168.2km at Ug shs 120 million (22.2%); routine mechanised maintenance of 49.8km at Ug shs 120 million (32.9%); periodic maintenance of 17km at Ug shs 88 million (16.3%); mechanical imprest at Ug shs 89.87 million (16.7%); and supervision, operations and administration at Ug shs 63.92 million (11.9%).

Planned activities for other funding agencies are; the rehabilitation of Opiya-Omulala road (7.2km) under the PRDP at Ug shs 78.69 million; the rehabilitation of Awonangu-Ongunai-Lira road (5.25km) and low cost sealing of Gweri-Awoja road (1.05km) at Ug shs 182 million (35.5%) and Ug shs 330 million (64.5%) under the RTI.

The semi-annual performance for the FY2014/15 for the Soroti roads maintenance program was monitored on 11th February 2014. The findings are presented hereafter

### Findings

#### Financial Performance

By the end of Q2, FY 2014/15, the district road maintenance programme releases amounted to Ug shs 565.472 million (49.8%) comprising of: Ug shs 269.623 million (47.7%) from URF; Ug shs 39.34 million (7%) from PRDP; Ug shs 256 million (45.3%) from RTI; and Ug shs 5 million from UCG. The financial performance of the Soroti district roads maintenance program by 31<sup>st</sup> December 2014 is summarised in Table 12.67.

**Table 12.67: Financial Performance of Soroti District Roads Maintenance Programme by 31<sup>st</sup> December 2014**

| Source | Budget<br>(Ug shs)<br>Millions | Release<br>(Ug shs)<br>millions | Expenditure<br>(Ug shs)<br>millions | % Budget<br>Released | % Release Spent |
|--------|--------------------------------|---------------------------------|-------------------------------------|----------------------|-----------------|
| URF    | 539.246                        | 269.623                         | 80.014                              | 50.0%                | 29.7%           |
| PRDP   | 78.694                         | 39.348                          | 0.000                               | 50.0%                | 0.0%            |
| RTI    | 512                            | 256.001                         | 47.339                              | 50.0%                | 18.5%           |

|       |           |         |         |       |        |
|-------|-----------|---------|---------|-------|--------|
| UCG   | 4.662     | 0.500   | 0.500   | 10.7% | 100.0% |
| Total | 1,134.602 | 565.472 | 127.853 | 49.8% | 22.6%  |

*Source: Soroti District Engineer*

The expenditure by 31<sup>st</sup> December 2014 was below average, at 22.6%. Activities under the PRDP had no expenditure. This low expenditure was attributed to: the late recruitment of road gangs for routine manual maintenance; equipment breakdown (wheel loader and bull dozer); and delays in processing of funds by the administration as a result of some technical problems in the bank.

### **Physical performance**

There were no road maintenance activities in Q1. The routine maintenance activities on the district roads started in Q2 because of late procurement of the road gangs. Only 15km (30.1%) from three roads out of the planned 48.9km had been graded in Q2 under the routine mechanised maintenance intervention and no works had started on the PRDP project. This was attributed to the breakdown of the district grader in Q1. Works under RTI component had not started due to delays in the procurement which had not been finalised by 11<sup>th</sup> February, 2015. The implementation of the annual work plan for the district roads maintenance program by the end of December 2014 was estimated at 25%.

The three roads graded under routine mechanized maintenance were monitored. The details of are presented below;

**Aponyi-Obito Road (6km):** The road is found in Katine sub-county at about Km 12 along Soroti-Lira road. The budget of the routine mechanised maintenance activities was Ug shs 7.341 million under the URF. Grading works on the road started in January 2015 from Aponyi off Soroti-Lira road up to Km 4+300 to an average width of 7m but came to a standstill due to shortage of fuel. The works were expected to resume in Q3 to complete the remaining section. The surface of the graded section was in good shape and motorable. Much as the physical progress was at 80%, no funds were reported to have been spent on any activities done on the road.

**Soroti-Lalle (16.8km):** This road starts in Soroti municipality off Soroti-Lira road and ends at the shores of Lake Kyoga in Kamuda sub-county. The budget for the routine mechanised maintenance activities of this road in the FY 2014/15 is Ug 38.1 million under URF. The entire road was graded to an average width of 7m in November 2014. The pending works were spot gravelling and drainage improvements of culvert installation. The opening up of offshoots in some sections of the road was also pending and this was will be done in the rainy season by the road gangs. The road was motorable with no major defects. By 31<sup>st</sup> December 2014, Ug shs 24.679 million (65%) had been expended on this road. The physical progress of works was estimated at 60%.

**Asuret-Amagoro (11.5km):** This road is found in Asuret sub-county off Soroti-Brooks Corner road. The budget for its routine mechanised maintenance activities for FY 2014/15 is Ug 35 million under the URF. The entire road was graded to an average width of 7m in December 2014. The pending works were spot gravelling and drainage improvements of culvert installation. It was observed that the road surface had deteriorated and had too many fine materials which caused a lot of dust. The loss of this dust will result into pot holes. This

deterioration was caused by the grading of the road with no compaction and watering. Cumulative expenditure by 31st December 2014 was at Ug shs 5.993 million (17.1% of road budget) while the physical progress was estimated at 50%.



**Soroti District: Left: A graded and shaped section of Aponyi-Obito Road (6km); Centre: An offshoot at Km 14+100 on Soroti-Lalle road; Right: A defective section with dust on Asuret-Amagoro road at Km 8+500**

### **Challenges**

- The district does not have adequate equipment for the road maintenance works. It lacks equipment like a water bowser, an excavator and a roller. They also have one supervision vehicle and a motorcycle shared between two roads over seers.
- The procurement processes at the beginning of the FY are lengthy leading to late implementation of works.
- Procurement of spare parts and servicing for the equipment takes time and thus causes delays especially during break downs. In addition to this, the spares parts from the some service providers like FAW are very expensive.
- The operation funding for URF activities of only 4.5% of the budget is not adequate. For the FY 2014/15 this is only Ug shs 24.2 million.
- The communities along the roads have continued to encroach on the road reserve affecting the opening up of roads. The district has no capacity to demarcate these areas along the road.

### **Analysis**

#### **Link between financial and physical performance**

By the end of Q2, the district had received 49.8% of its approved annual roads maintenance budget and expended 22.6%. Implementation of the annual work plan was estimated at 25% by 31st December 2015. The expenditure was commensurate to the physical works.

#### **Achievement of set targets**

The district did not achieve the semi-annual targets. The implementation of the annual work plan for the district roads maintenance program by 31st December 2014 was estimated at 25% and expenditure of releases was at 22.6%. The low performance was attributed to late commencement of works. Late implementation under the URF was attributed to a delay in processing of funds at the district in months of September and October 2014, and the breaking down of the district grader. Works under RTI component had not started due to delays in procurement.

## Recommendations

- The GoU should provide full sets of roads maintenance equipment to the Local Governments especially after changing the policy of implementing works by force on account.
- The GoU should provide Local Governments with a complete set of road maintenance equipment units in order to enhance the quality of works done. This in turn will improve on the life span of the road maintained.
- The district has now brought other suppliers on board for the equipment spare parts after the expiry of the warranty period given by FAW.
- The URF should increase the threshold of operational funding to 15% of the budget.
- The district should endeavour to sensitise the communities along the roads on the issue of the not occupy the road reserve.

### (xix) Zombo District

The district road network is comprised of 281km and all the roads are unpaved. Maintenance activities for the FY 2014/15 were planned for with a budget of Ug shs 673.640 million, the brake down is as shown in Table 12.67. The planned annual outputs are: routine manual maintenance of 281km; routine mechanised maintenance of 25km (Zombo-Atyak-warr (6km), Aligu-Alangi-Songoli (6km), Lorr-Lendu-Olu (10km), Omua-Alangi (5km), and Paidha-Otheko (6km)); Periodic maintenance of 9km (Omoyo-Gamba-Congo Border(3km), Lorr-Lendu-Olu (6km)); and installation of 9 lines of culverts at Omua-Alangi, Lorr-Lendu-Olu and Omoyo-Gamba-Congo Border.

### Financial performance

The budget allocation under different sources of financing is shown in Table 12.68

By the end of December 2014, the district had received Ug shs 374.934 million (55.66% of its annual budget) of which Ug shs 11.998 million (3.2% of receipts) was expended. This was a very poor absorption. The poor absorption was attributed to late approvals of payments by the Accounting Officer.

**Table 12.68: Annual budget, releases and expenditures for the different sources of funding for Zombo district**

| Source | Annual Budget | Total Release(Ug shs) | % of budget released | Total Expenditure | % of releases spent |
|--------|---------------|-----------------------|----------------------|-------------------|---------------------|
| URF    | 378,577,130   | 189,288,564           | 50.00%               | 11,998,146        | 6.34%               |
| LGMSDP | 10,450,000    | 5,021,000             | 48.05%               | 0                 | 0.00%               |
| PRDP   | 161,511,000   | 80,756,000            | 50.00%               | 0                 | 0.00%               |



| Source                         | Annual Budget | Total Release(Ug shs) | % of budget released | Total Expenditure | % of releases spent |
|--------------------------------|---------------|-----------------------|----------------------|-------------------|---------------------|
| PAF                            | 1,179,000     | 584,000               | 49.53%               | 0                 | 0.00%               |
| Local revenue                  | 5,386,336     | 5,386,336             | 100.00%              | 0                 | 0.00%               |
| Multi-sectoral Transfers LLGS  | 83,725,000    | 83,725,000            | 100.00%              | 0                 | 0.00%               |
| District Unconditional 1 Grant | 13,000,000    | 6,410,000             | 49.31%               | 0                 | 0.00%               |
| District UCG Wage              | 19,811,160    | 3,764,000             | 19.00%               | 0                 | 0.00%               |
| Total                          | 673,639,626   | 374,934,900           | 55.66%               | 11,998,146        | 3.2%                |

Source: Zombo District Engineer

### Physical performance

Physical performance by the end of Q2 FY 2014/15 was less than 10% indicating a very poor performance. The district had carried out less than 10% of its annual work plan. Progress was achieved on Ukemu-Pei-Zii and Nyadiel stream, which were spill overs from FY2013/14; and emergency works worth Ug shs 11,998,146 on Ayuda-Pakadha-Padea road.

The district was monitored on 16<sup>th</sup> February 2015 and all the roads that were worked on in FY 2014/15 were inspected: The details of the findings are as follows;

**Ayuda-Pakadha-Padea (14.2km):** The works on this road was carried out as an emergency intervention following damage of the road by heavy traffic loading. The scope of the work involved rock filling, gravelling, shaping and drainage works. The works started from Km 0+500 for a stretch of 200m. A total of Ug shs 11,998,146 was spent and all the works had been completed.

**Nyadiel stream:** This is 2.8km off Paidha-Otheko road. The project started on 26<sup>th</sup> May 2014 and was expected to end on 26<sup>th</sup> August 2014.

The scope of works involved installation of armco pipe culvert. At the time of monitoring, works were complete and quality of works was visually satisfactory.



**Zombo District: Left: Section of Ayuda-Pakadha-Padea road that was worked on; Centre: Side view of Nyadiel Bridge; Right: Top of Nyadiel bridge**

**Ukemu-pei-Zii (7.8 km)-PRDP:** Works on this road started on 21<sup>st</sup> May 2013 and was expected to end on 21<sup>st</sup> August 2013 at a contract sum of Ug shs 104.789 million. The scope of works was; bush clearing, earthworks, shaping and drainage works. However, the contractor did not complete the works within the stipulated period. The contractor came back this FY 2014/15 to install culverts as well as do bush clearing. No funds have been spent yet this FY 2014/15. Some sections of the road were observed to have been outgrown with grass.



**Zombo District: Left: Section at Km 0+000; Centre: A culvert installed at km 5+500; Right: Section at km 5+500 with outgrown grass along Ukemu-pei-Zii road**

### Challenges

- Lack of full road equipment unit. The district lacks a wheel loader, roller, low bed carriers and a grader for heavy works.
- Lack of trained and experienced operators for the equipment.
- Delay in approval of payments for road maintenance activities on time

### Analysis

#### Link between financial and physical performance

Both physical and financial performance was less than 10%. The physical performance was commensurate to the financial expenditure.

#### Achievement of targets

The district did not achieve the semi-annual targets. The financial performance was at 3.2% against a physical progress of less than 10%.

This low performance was mainly attributed to delays in signing of the contract for the roads under PRDP, late delivery of tools for routine manual maintenance activities and delays in approval of payments for force account works by the Accounting Officer.

### Conclusions

Zombo district had a very poor physical and financial performance at less than 10% at the end of Q2 FY 2014/15. Delay in approvals by the Accounting Officer was the main reason for the low performance. It is likely that the district will not achieve the annual targets.

### Recommendations

- The MoWT should procure additional equipment and also equip the zonal workshops. With these zones fully equipped the unit rate for hiring the equipment will go down.
- The MoWT should start Training Institute for equipment operators to enable a constant supply of operators to districts and the private sector.
- The Accounting Officer should promptly release payments to aid the smooth implementation of the road maintenance activities.

### Comparative analysis for DUCAR PROGRAMME

Table 12.69 show a summary of the semi-annual financial and physical performance of the districts monitored.

**Table 12.69: Comparative Analysis of the Performance of monitored districts**

| Local Government | ANNUAL BUDGET (URF + Other sources of fundings) (UGX Millions) | Receipts, as at end of Q2 FY 2014/15 (UGX Millions) | Expenditure (UGX Millions) | % Receipts Spent of | % of semi-annual physical targets achieved |
|------------------|--|---|----------------------------|---------------------|--|
| Budaka           | 525.30   | 262.40  | 94.51                      | 36.02               | 70.0                                       |
| Bushenyi         | 519.84   | 287.28  | 132.92                     | 46.27               | 23.2                                       |
| Gulu             | 1,927.28   | 806.68  | 394.80                     | 48.94               | 92   |
| Ibanda           | 434.83   | 212.56  | 118.31                     | 55.66               | 70.0                                       |
| Isingiro         | 755.61   | 338.85  | 150.06                     | 44.29%              | 80.0                                       |
| Jinja            | 586.12   | 293.06  | 120.42                     | 41.09               | 44.0                                       |
| Kabarole         | 652.52   | 353.06  | 255.80                     | 72.45               | 59.3                                       |

| Local Government | ANNUAL BUDGET (URF + Other sources of fundings) (UGX Millions) | Receipts, as at end of Q2 FY 2014/15 (UGX Millions) | Expenditure (UGX Millions) | % of Receipts Spent | % of semi-annual physical targets achieved |
|------------------|--|---|----------------------------|---------------------|--|
| Kiboga           | 554.98   | 277.49  | 154.45                     | 55.66               | 92   |
| Luweero          | 674.54   | 337.27  | 337.27                     | 100.00              | 53.9                                       |
| Lyantonde        | 329.74   | 164.87  | 106.18                     | 64.40               | 53.0                                       |
| Mayuge           | 769.06   | 460.53  | 380.53                     | 82.63               | 100.0                                      |
| Mityana          | 548.33   | 259.66  | 130.29                     | 50.18               | 48.3                                       |
| Moroto           | 664.89   | 355.93  | 292.44                     | 82.16               | 60.0                                       |
| Mubende          | 915.54   | 489.77  | 489.77                     | 100.00              | 100.0                                      |
| Mukono           | 802.55   | 401.28  | 401.28                     | 100.00              | 90.1                                       |
| Rakai            | 1,048.54   | 530.87  | 338.36                     | 63.74               | 52.5                                       |
| Sironko          | 586.70   | 293.30  | 140.00                     | 47.73               | 80.0                                       |
| Soroti           | 1,134.60   | 565.47  | 127.85                     | 22.61               | 50.0                                       |
| Zombo            | 673.64   | 374.93  | 12.00                      | 3.20                | 10   |
| TOTAL            | 14,104.61  | 7,065.27  | 4,177.22                   | 59.12               | 64.65                                      |

*Source: Authors compilation*

### Financial comparison

The average financial absorption of the monitored districts was 59.12% with Mubende, Luweero and Mukono having the highest absorption capacities (100%) while Budaka, Bushenyi, Gulu, Isingiro, Sironko, Soroti and Jinja had a below average financial absorption. Zombo had the lowest financial absorption at 3.2%. The reasons for high absorption in Mubende were because of hire of equipment instead of relying on the district graders which frequently breakdown; in Mukono- the performance is due to reallocation of activities within the budget beginning of

activities which require lower budgets while waiting those with high budgets such as maintenance of Maala-Muwoma road (20km) in Koome Islands which was rescheduled to Q3. The low absorption in the districts of Budaka, Bushenyi and Isingiro was due to insufficient release for the rehabilitation of Nalera-Kiryolo (7.2km) in Budaka and so the district waited for funds to accumulate before works could commence and breakdown of equipment in Bushenyi and Isingiro districts.

The very low performance in Zombo was attributed to delay in approval for payments by the Accounting Officer.

### **Physical comparison**

The average semi-annual performance for the districts monitored was estimated at 64.65% with Mubende and Mayuge achieving all their targets. The financial expenditures of these districts were 100% and 87.2% respectively. Mayuge district therefore had the highest performance since it achieved 100% of the semi-annual outputs using 87.2% of the funds.

### **General challenges faced by the DUCAR Programme**

- Lack of full sets of road equipment. All the districts monitored did not have complete road units. Some districts have one grader to serve maintenance works by the district and town councils.
- Dilapidated and expanded road network that requires rehabilitation instead of routine maintenance
- Inadequate trained road equipment operators. The short trainings offered by MoWT at Luwero are inadequate to enable skills transfer to the operators.
- The remuneration offered to the equipment operators is low compared to what the private sector pays. Currently the operators are on U8 salary scale and receive a Safari Day Allowance (SDA) when in the field. This has led to a high turnover of these cadres in local governments.
- Understaffing within the district works departments. These departments do not have support staff and in some local governments no supervisors of works.
- The low pay to road gangs has affected performance of the routine manual maintenance activities. There is a high turnover of the gangs.

### **Conclusion**

The District Road Maintenance Programme performance was good with districts receiving at least 50% of their annual budget and spending about 59.12% of their releases. There were cases of late receipt of funds in Bushenyi, Lyantonde and Ibanda districts which led to delay in commencement of works. The average physical performance of the districts monitored was at 64.45%; indicative of a good performance. Inadequate equipment associated with frequent breakdown greatly contributed to the low performance in all the districts. Local governments with higher performance hired equipment to carry out the work. The average expenditure in the monitored districts however had a positive link with the outputs achieved.

### **Recommendations**

- The GoU/MoWT should expedite the procurement process of road equipment for local governments. The MoWT should ensure that the equipment procured is suitable for heavy grading works in local governments. Local governments should be issued with full sets of equipment.
- The MoWT should start a specialised training center for machine operators to enable a constant supply to both local governments and the private sector. In the short term, the MoWT should increase of the duration of the short trainings to enable district equipment operators get adequate hands on training.
- The MoPS should review the salary scale of the machine operators to motivate them work.
- The District Service Commissions should ensure that the staffing structures are filled.
- The URF, MoWT should review the remuneration to the road gangs so as to motivate them work. A proposal of Ug shs 150,000 – 200,000 per km of road maintained would be adequate.

## 12.4.2 National Roads Maintenance Programme

### Project Background

The programme involves several activities of maintenance of 19,600 km on the national roads network, ferry services or inland water transport services and axle load control across the network. This programme is implemented by UNRA. It aims at improving and maintaining interconnectivity of the national road network across the country by reducing the rate of deterioration, lowering vehicle operating costs and travel time as well as ensuring safety of road users and ferry services.

### Financial Performance

For the FY 2014/15, the National Roads and Maintenance programme has an approved annual budget of Ug shs 274.44 billion under the Uganda Road Fund (URF). By the end of Q2 URF secretariat had released Ug shs 136.98 billion ( 49.9% of the annual budget) of which Ug shs 136.98 billion (100% of release) was expended. This was therefore an excellent release and absorption performance.

The financial performance of the stations monitored is indicated in Table 12.70.

**Table 12.70: Financial Performance of the National Roads Maintenance Programme for FY 2013/14 for the stations monitored.**

| Station | Implementation by Force account |   |                           | Implementation by Contract |  |         |
|---------|---------------------------------|---|---------------------------|----------------------------|--|---------|
|         | Receipts<br>(Ug Shs<br>million) | Expenditure<br>as at end of<br>June 2014<br>(Ug Shs<br>million) | % of<br>Receipts<br>Spent | Contract Name              | Financial<br>Progress<br>(Ug Shs<br>million) | Remarks |

| Station   | Implementation by Force account |   |                           | Implementation by Contract  |  |  |
|---|---------------------------------|---|---------------------------|---|--|--|
|   | Receipts<br>(Ug Shs<br>million) | Expenditure<br>as at end of<br>June 2014<br>(Ug Shs<br>million) | % of<br>Receipts<br>Spent | Contract Name   | Financial<br>Progress<br>(Ug Shs<br>million) | Remarks  |
| Masaka  | 1,527                           | 1,023   | 67.0%                     | Term maintenance of Rakai –Ntantumukye (50km), Villa-Maria-Sembabule (38km), and Sembabule- Nkonge (58km)                         | 99.6%  | Contract in the Defects Liability Period.                  |
| Fort portal   | 1,304.63                        | 1,202.234   | 63.0%                     | Periodic maintenance of Rwamwanja – Kihura road (34km)  | 29.6 %                                       | Works ongoing  |
|   |                                 |   |                           | Term maintenance contract of of Kyenjojo – Muzizi road (38km), Rugombe – Katooke road (37km) and Fort portal – Kijura road (41km) | 53%  | Contract in third cycle                                    |
| Kabale  | 1,997                           | 1,668   | 83.5%                     | Term maintenance of Hamurwa-Kerere-Kanungu-Ishasha jnt and Katojo-Kihihi (92.5km)   | 100% for cycle 1 & 2                         | Cycle 3 in progress  |
| Moroto  | 6,093.49                        | 5,482.16  | 100.0%                    | Periodic Maintenance of Luweero – Butalangu (30km) and Butalangu – Ngoma (54km)   | 96.2%  | Contract completed   |
|   |                                 |   |                           | Term Maintenance of Katikamu – bamugolodde – Nakasongola road ( 103km)  | 3.6%   | Contract in the first cycle with a physical progress of 9% |
| Approved Budget Estimates Ug shs 274.44 billion   |                                 |   |                           |   |  |  |
| Cumulative Release as at end of December 2014, Ug Shs 136.98 billion (49.9% of annual budget) |                                 |   |                           |   |  |  |
| Expenditure as at end of December 2014, ( 49.9% of the budget and 100% of release)            |                                 |   |                           |   |  |  |

**Source: UNRA Station Engineers; URF Q2 Report FY2014/15**

### **Physical performance**

For the FY2014/15, the planned outputs were: routine manual maintenance of 17,670km, routine mechanised maintenance of 8150km, term maintenance of 8500km, periodic maintenance of 365km, labor based rehabilitation of 132km, periodic maintenance of 10 bridges, 47km of street lighting on selected national roads and 4000 No. road signage on various roads, maintenance of 8 weigh bridges and 8 ferries; plant hire, road safety and emergency work.

Cumulatively by the end of Q2, URF reported the following physical achievements: routine manual maintenance of 17261km, routine mechanised maintenance of 3618km, term maintenance of 2362km, routine maintenance of 40 bridges, periodic maintenance of 453km,

periodic maintenance of two bridges, street lighting on 55km of selected national roads, operation and maintenance of eight ferries at 99% availability and operation and maintenance of 10 weighbridges. This represents an estimated physical progress of about 90%

For FY 2014/15 semi-annual performance of the programme, monitoring was done at six UNRA stations (Arua, Forportal, Jinja, Kabale, Masaka, and Moroto) were monitored with a total road network of 6,229.7 km (31.8% of national road network). Below are the findings.

#### **A) Arua Station**

Arua station maintains a total road network of 951 km of the national road network of which 222 km (23.3%) are paved and 729 km (76.7%) are gravel roads. The station road network covers six districts namely; Arua, Nebbi, Maracha, Koboko, Zombo and Yumbe. Maintenance activities during the FY2014/15 were planned to be intervened using contracts and Force account.

#### **Financial performance**

The station received Ug shs 2,990,908,527 of which Ug shs 2,922,734,592 (97.72%) was expended by the end of December 2014 as shown in Table 12.71. The expenditure performance was excellent.

**Table 12.71 shows the financial performance of Arua UNRA Station**

| Annual Budget | Release (Ug shs)   | Release Dates | Total Release(Ug shs) | Total Expenditure |
|---------------|--------------------|---------------|-----------------------|-------------------|
|               | 1,771,010,384 (Q1) | 25/08/2014    | 2,990,908,527         | 2,922,734,592     |
|               | 1,219,898,143 (Q2) | 28/11/2014    |                       |                   |

*Source: UNRA Station - Arua*

#### **Physical performance**

The annual work plan execution was at 45% against 50% by the end of December 2014 hence, an excellent performance. The station did not achieve 5% because;

- i. Failure to realise a full release of the budget for the construction of ferry landing site at Ikuriku.
- ii. Delay in commencement of other planned maintenance contract.

The findings are presented below;

##### **a) Labor Based Contracts**

Routine manual maintenance using labour based contracts was planned for, at Ug Shs 724.03 million (18.7% of the station annual budget) on 947km (99.6%) The works in these contracts involved mainly slashing of the grass by the road side and de-silting of drainages.

By the end of December 2014, 838 km (88.5%) were achieved at a cost of Ug shs 149,101,125.



#### **b) Term Maintenance contracts**

Mechanised maintenance works for the roads in FY 2014/15 that were planned under contracting were also planned for under force account intervention on 276 km (29.02 %) of the station network).

Term maintenance was planned on eight roads however seven were still under procurement. The term maintenance that was executed was of Wandi-Yumbe road (70 km) and was ongoing.

Wandi-Yumbe road is of gravel class B and it is located in North Western side of Arua town. It traverses through a rolling terrain and carries medium traffic. It provides a link between Arua and Yumbe districts.

The contract for maintenance of this road was awarded by UNRA to M/s Rukooge Enterprises (U) Ltd at a sum of Ug shs 3.306 billion for a period of 36 months. The contract is supervised by UNRA Station Engineer Arua. A summary of the project data is summarised in Table 12.72.

The scope of work is; Site clearance, drainage improvement (drainage opening and culvert installation), heavy grading and full gravelling. These works are to be done in six cycles.

**Table 12.72: A summary of contract details of Wandi -Yumbe road as at the end of January 2015**

| <b>Project Title</b>       | <b>Term maintenance of 23 selected national roads-lot9: Wandi-Yumbe road (70 km)</b> |
|----------------------------|--|
| Source of Funding          | Uganda Road Fund   |
| Contract No.               | UNRA/OP307   |
| Implementing Agency        | Uganda National Roads Authority (UNRA)   |
| Supervision consultant     | UNRA Station Engineer /Arua  |
| Contractor                 | M/s Rukooge Enterprises (U) Ltd  |
| Project length             | 70 km  |
| Start Date                 | 11 <sup>th</sup> July 2013   |
| Completion date            | 10 <sup>th</sup> July, 2016  |
| Contract Price             | Ug shs 3,306,660,000   |
| Contract Duration          | 36 months  |
| Contract Time Elapsed      | 18 months (50% of contract period) as at end of January                              |
| Advance Payment            | Ug shs 375,591,800 (not yet fully recovered)   |
| Works Payments Certified   | Ug shs 517,723,645( as per IPC 3)- 19.27%  |
| Payments to the contractor | -  |
| Physical Progress          | 50% -Cumulative Progress (Cycle Three stage)   |
| Financial Progress         | -  |

*Source: UNRA Station -Arua*

The budget for the road in FY 2014/15 was Ug shs 1,102,220,000 of which Ug shs 551,110,000 (50%) was released by the end of Q2. A total amount of Ug shs 456,474,000 (82.83%) was expended.

The works had been executed up to the third cycle (50% of cumulative progress). The fourth cycle was to commence on 6<sup>th</sup> February 2015 however, the contractor had not yet mobilised by 17<sup>th</sup> February 2015. The road was fairly motorable.



**Arua UNRA Station: Left; A concrete culvert installed at km 2+500: Centre; A stone pitched side drain at km27+500: Right; A Front view of the road at km 38+000**

### **Implementation Challenges**

- Limited financial capacity of by contractor has led to delay in mobilisation.
- There is lack of commitment by the contractor (contractor's laxity). The slow pace of work by the contractor is likely to affect increase costs and completion time.

#### **c) Maintenance using Force account**

Maintenance activities on roads by force account intervention were planned to be carried out on 223 km (53.68% of the station network) at Ug Shs 1.231 billion. The scope of works involved: medium grading, spot gravelling, patching (using gravel/ asphalt/surface dressing).

Five out of the twelve roads maintained were monitored namely: Manibe-Wandi (7km), Owaffa-Kubala-Omugo (22km), Arua-Bulialffe-Otrevu (36km), Arua- Girigiri- Ovision (15 km and Arua-Muni TC (6km). Below were the field findings:

**Arua- Bulialffe - Otrevu Road (36 km):** The scope of works was; medium grading, spot gravelling and drainage improvement. The project budget was Ug shs 182 million. The amount released was Ug shs 62.165 million (34.12%) of which Ug shs 54.099 million (87%) was expended by the end of Q2.

The works started at Km4+400km from Arua towards Ochodri. The road had been graded and shaped to an average width of 7m in December 2014. The works cost Ug shs 62,165,000 (34% of the budget) and was fairly motorable.

**Arua- Girigiri- Ovision Road (15 km):** The scope of works was; medium grading and spot gravelling, drainage works (opening of offshoots). The project budget was Ug shs 74 million.

The project works were carried out in August 2014. The road was graded and offshoots opened. The project cost was Ug shs 75.28million (101.7% of the budget). It was observed however that section (1+000-1+900) had been damaged by water and therefore will require urgent gravelling and drainage improvement.

**Manibe -Wandi Road (7 km):** The scope of works was; medium grading and spot gravelling. The project budget and cost was Ug shs 70.126 million. The project works were carried out in August 2014. The road was gravelled; spot gravelled to an average width of 9m and was in good condition.



**Arua UNRA Station: Left; Graded section at Km 4+400 along Arua-Biliaffe-Otrevu road: Centre; A damaged section at km 7+600 along arua-Girigiri-Ovision road: Right; Graveled section at Km 0+000 along Manibe-Wandi road**

**Arua-Muni NTC-Eruba (6 km):** The scope of works was; medium grading and spot graveling. The project budget was Ug shs 92 million. The amount released was Ug shs 40.580 million (44.1% of the budget) of which Ug shs 38.613 million (95.15%) was expended by the end of Q2, FY 2014/15. The road was graded and shaped; and the river trained in November 2014.

**Owaffa-Kubala-Omugo Road (22km):** The scope of works was; medium grading, spot grading and drainage works using labour based maintenance. The project budget was Ug shs 108million.

By the end of Q2 8km were graded, and a swamp of 600m was raised, 24m of 600mm diameter culverts installed (3 lines and 8 pieces each) and spot graveling carried out. The works were completed in August 2014 at a cost Ug shs 100,965,000 (93.49% of the budget).



**Arua UNRA Station: Left; Back view of the Arua-Muni NTC road at km 0+900: Centre; A River at km 2+100 where training was carried out: Right; A newly installed culvert along Owaffa-Kubala-Omugo at Km 12+300**

### Implementation challenges

- Late release of funds from the Uganda Road Fund. The funds were received in the last week of the 2<sup>nd</sup> month of Q1 and Q2.)
- Frequent machine breakdowns slowed the planned progress of works.
- Inadequate supervision vehicles
- Unreliable supply of fuel by the fuel dealers.

- Lengthy procurement process at the UNRA Headquarters which affects progress of works at the station given the fact that stations are allowed to handle simple procurements up to a maximum of 100 million; Works-45 million, Supplies-40 million and Services-35 million. These cause delays in delivery of works and material.
- Low rates for Labour Based Contractors (LBC) i.e. Ug shs 72,000 per month per km. Contractors pay more than this to LBC in the same region.

## **Analysis**

- ***Link between financial and physical performance***

By the end of December 2014, 90% of the semi-annual work plan had been implemented while 97.72 % of the release was expended. The financial expenditure was commensurate to the physical outputs achieved.

- ***Achievement of set targets***

The station achieved about 70% of its half year targets. The Labour base contracts achieved 100%, Term-maintenance contracts achieved 12.5% while force account achieved 90% of the semi-annual targets.

## **Conclusion**

The station's semi-annual performance was good despite receiving funds late. Performance will improve with adequate and reliable equipment in place. Term maintenance contract intervention is a big relief to the station since they address most of the force account challenges. However, the success of these contracts depends largely on the commitment exhibited by the contractor to work.

## **Recommendations**

- The Uganda Road Fund (URF) should timely release of funds to the station
- The MoWT should allow for hiring of equipment as a medium term intervention to inadequate and frequent breakdowns.
- The UNRA should procure a reliable fuel supplier next to the station.
- The PPDU should revise the delegated procurement values to cater for the lengthy process of procurement.
- The UNRA should procure at least two more supervision vehicles for the station.
- The UNRA should revise the rates for LBC to at least 150000 per month per km.

## **B) Fort Portal Station**

Fortportal station maintains a total road network of 1001.7km of which 263.5km (26.3%) are paved and 738.2km (73.7%). The station network is comprised of seven districts that include; Kabarole, Kyenjojo, Bundibugyo, Kamwenge, Ntororoko, Kyegegwa and Kibaale. For the FY2014/15, the station planned to maintain 199.8km under force account mechanized intervention, 192km under periodic maintenance using contracts and 543.9km under term maintenance contracts.

The annual budget for the station is Ug shs 18.448 billion. For Q1 and Q2 the total budget was Ug shs 3.180 billion for maintenance activities of which Ug shs 1.894 billion was for force account activities, Ug shs 894.742 million for term maintenance activities and Ug shs 391.392 was for labour based contracts. In addition the station had spilled over funds from Q4 FY2013/14 amounting to Ug shs 589.596 million which was expended for maintenance activities on 345.4km of the old road network and five bridges.

## Findings

### Financial performance

A summary of the financial performance of the station for the different implementation strategies is presented in Table 12.73.

**Table 12.73: Financial performance of Fort portal UNRA station for Q1 and Q2 FY2014/15**

| Implementation Strategy    | Total Budget Q1&Q2 ( Ug shs) | Cummlative release | Cummulative Expenditure | Absorption (%) |
|----------------------------|------------------------------|--------------------|-------------------------|----------------|
| Force account              | 1,894,230,404                | 1,304,634,000      | 1,202,234,240           | 63.0           |
| Term Maintenance Contracts | 894,742,000                  | 894,742,000        | 538,440,000             | 60.0           |
| Labor Based Contracts      | 391,392,000                  | 391,392,000        | 352,154,000             | 90.0           |
| Total                      | 3,180,364,404                | 2,590,768,000      | 2,092,828,240           | 66.0           |

*Source: UNRA Fort portal station (Annual work plan, Q1 and Q2 progress reports FY2014/15)*

By the end of Q2, the station had received Ug shs 2.591 billion (92.8% of semi-annual budget). Financial absorption was at 66%. This was an excellent release and a good expenditure performance.

### Physical performance

#### a) Maintenance using Term contracts

The station had, term maintenance of Kyenjojo – Muzizi road (38km), Rugombe – Katooke road (37km) and Fort portal – Kijura road (41km) managed under one term maintenance contract. The UNRA signed a contract with M/s Kato Investments Ltd for term maintenance of the three roads at a sum of Ug shs 3.641 billion for a period of three years. The contract commencement date was 23<sup>rd</sup> July 2013 while the expiry date is 22<sup>nd</sup> July 2016. Supervision is by the UNRA Fort portal station engineer.

Maintenance works were broken down into four cycles. At the time of monitoring in January 2015 the contractor had completed the first two cycles and cycle three was ongoing. The scope of works involved: grading of the entire 116km for each cycle, re-gravelling of 14km of road length, installation of 72m of culverts and 1250 m of river training.

**Financial performance;** the financial progress of the works done up to cycle three was measured at 53%.

**Physical performance;** the physical progress of the works done up to cycle three was estimated at 55% against a time progress of 67%. The project was behind schedule and this was attributed to heavy rains which interfered with the contractor's programme of works.

Two roads were monitored under this contract and the following were the field findings:

**Fort Portal –Kijura Road (41km);** the scope of works for this project involves heavy grading for the entire road length, spot re-gravelling, culvert installation and side drainage improvement. The works were completed and the quality was satisfactory.

**Rugombe – Katooke (37km);** the scope of works on this road involved full grading of the entire road, 3892m<sup>3</sup> spot re-gravelling, 32m of culvert installation, 3600m of off-shoots and 250m of river training. The contractor had completed 14km (37.8%) of grading, 3893m<sup>3</sup> (108%) of gravelling and 50m (20%) of river training. The quality of the works done was observed to be good.

#### **b) Maintenance using periodic maintenance contract**

The station had one contract for periodic maintenance of Rwamwanja – Kihura road (34km). The contract for this road was awarded to M/s Clido Company Ltd at a sum of Ug shs 1.648 billion for 6 months. The contract commencement date was 14<sup>th</sup> August 2014 while the end date was 13<sup>th</sup> February 2015. The scope of works involved full grading of 34km, re-gravelling of 34km, installation of 48m of culverts and 600m of river training. The following were the findings;

### **Financial Performance**

The contractor had submitted one IPC amounting to Ug shs 488.437 million (29.6% of the contract) and all had been paid.

### **Physical performance**

Overall the physical progress of the project was estimated at 40% against a time progress of 50%. The contractor had completed 34km (100%) of grading, 97m (202%) of culvert installation and 480m (80%) of river training. Dumping preparation for gravelling had commenced. The quality of the completed works was observed to be good. The project was however behind schedule and this was attributed to;

- Increase in the quantities of earthworks as a result of widening the road and number of cross culverts. The change in the scope of works will increase the total cost of the project.
- Heavy rains affected the programmed works in the first half of the project duration.

#### **c) Equipment Hire Facilitation Contract**

The UNRA is piloting a new implementation strategy called the Equipment Hire Facilitation Contract (EHFC); an arrangement through which the contractor provides equipment to carry out the works while UNRA provides construction materials. Therefore instead of UNRA using their own equipment to do the work, they hire the contractor's force. Under this arrangement the contractor is paid for work done using the equipment excluding the cost of materials.

This implementation strategy is being piloted at Fort portal UNRA station for the western region on the following roads; Karuguto – Ntoroko ( 51km), Kasisi – Kyanga ( 30km), Kakara – Rwebisengo (27km), Sogahe – Kyarusozi ( 20km), Mparara – Kazinga ( 39km), Kyegegwa – Hapuyo ( 37km), Kamwenge – Kabambiro – Biguhyo-Bihanga (23km). The physical progress was estimated at 45%.

One road was monitored out of the three roads which had commenced and the following were the findings.

**Sogahe – Kyarusozi (20km);** the scope of works for this road involved grading of the entire road, spot gravelling, 40m of culvert installation, construction of culvert end structures and drainage improvement. The major works had been completed and it was only installation of drainage structures pending. Physical progress on this road was estimated to be at 80%.

#### **d) Maintenance using Force Account**

The following roads under force account were monitored

**Kigarama – Harubaho – Kitumba – Virika road ( 13km);** the scope of works involved grading of the entire road, spot gravelling, installation of 28m of cross culverts and excavation of 98m of drains. The estimated budget for maintenance of the road was Ug shs 50.539 million. Implementation started in Q1 and major works were completed in Q2 with only drainage works pending. The total expenditure on this road was Ug shs 15.9 million. The pending works were estimated to cost a total of Ug shs 14.855 million. The monitoring team however observed failures along the Kitumba – Virika road section between km 2+500 and km 3+000. This section will need urgent reworking. It was also observed that there will be need for urgent manual maintenance to cut down the vegetation.

**Nyakigumba – Katebwa National Monument (7 km);** the road connects to the historical monument of the NRA war victims. The scope of works involved: grading of 7km, spot gravelling and culvert installation. The estimated budget was Ug shs 27.309 million. The road was completed in Q2 and a total of Ug shs 14.744 expended. This road goes through the hills to reach the monument site and so needs full gravelling to enhance on its functionality.

#### **Challenges**

- Inadequate equipment resource in the station. The station does not have a full set of road equipment. There is need for additional dump trucks, water bowser, graders and a bulldozer.
- Inadequate quantities of good gravel. The region does not have good gravel suitable for road construction. Even in situations where gravel exists the haulage distance is over 20km making the unit cost for road maintenance high.
- Late disbursement of funds affecting the commencement of most of the planned activities
- Delay in finalization of procurement of planned term maintenance and periodic contracts.

#### **Analysis**

##### ***Link between financial and physical performance***

The station received 92.7% semi-annual budget and the absorption was 66% of the received funds. These funds were expended on 78km of term maintenance contracts, 40% of maintenance

works for the periodic contracts, 227km under the pilot strategy of the equipment facilitation grant.

### ***Achievement of set targets***

The station did not achieve the semi-annual targets. Overall the physical performance was estimated at 49%. The progress on term maintenance contracts was estimated at 55% against the targeted 67%, 40% against the targeted 50% for the periodic maintenance contract and 45% for the pilot equipment hire facilitation contract. This shows that most of the planned outputs were not achieved. The low performance was attributed to delay in finalisation of procurement for the planned periodic and term contracts.

### **Conclusion**

The station did not achieve all the planned outputs. Delayed fund disbursement, inadequate equipment base and delay in procurement greatly contributed to the station's failure to achieve the set targets. In the absence of a full set of equipment, the station could enhance implementation of the planned outputs through hire of equipment.

### **Recommendations**

- The station should be allowed to implement some force account projects through hiring equipment under the equipment hire facilitation implementation strategy.
- The GoU/UNRA should expedite the procurement of equipment to the station.
- The URF/UNRA should ensure timely disbursement of funds to ensure timely implementation of the workplan.
- The UNRA should initiate the procurement of contractors early to avoid spill over funds.

### **C) Jinja Station**

The station maintains a total road network of 1158.6 kms of the national road network of which 271 kms (18.75%) are paved and 941.3 kms (81.25%) are gravel roads. The station road network covers nine districts namely; Jinja, Iganga, Kamuli, Buyende, Luuka, Namutumba, Kaliro, Bugiri and Mayuge. Maintenance activities during the FY2014/15 were planned to be intervened using contracts (812.5kms), Force account (249 kms) or both (97.9 kms).

### **Financial performance**

The station received a total of Ug shs 2,399,577,661 (54.67% of the annual budget) out of which Ug shs 1,875,765,516 (78.17%) was expended by the end of December 2014 (see Table 12.74).

**Table 12.74: The financial performance of Jinja UNRA Station**

| <b>Annual Budget<br/>(Ug shs)</b> | <b>Release (Ug shs)</b> | <b>Release Dates</b> | <b>Total Release(Ug<br/>shs)</b> | <b>Total<br/>Expenditure</b> |
|-----------------------------------|-------------------------|----------------------|----------------------------------|------------------------------|
| 4,389,300,000                     | 1,018,616,518<br>(Q1)   | 26/08/2014           | 2,399,577,661<br>(54.67%)        | 1,875,765,516<br>(78.17%)    |
|                                   | 1,380,961,143 (Q2)      | 01/12/2014           |                                  |                              |

*Source: Station Engineer*



Therefore, the release performance was excellent while absorption of funds was very good.

### **Physical performance**

The annual work plan execution was at 43% out of 50% by the end of December 2014 hence, an excellent physical performance. The works executed in Q1 and Q2 were planned and executed under:

#### **d) Maintenance using contracts**

The mechanised maintenance works were planned for using contracts on 812.5 kms (70.13% of station network) in the FY2014/15 at Ug shs 15.936 billion. A total of 1101.5 kms (95%) of the station network were planned for the manual maintenance using labour based contracts at Ug Shs 941.3 million (3.1% of the station annual budget). The works in these contracts involved mainly slashing of the grass by the road side, opening mitre drains and de-silting of drainage.

One road maintenance contract was executed in Q1 and Q2 of FY 2014/15 that is Iganga-Mayuge, Musita-Mayuge, Mayuge-Nankoma and Mayuge-Bugadde-Bwondha. This spilled from the FY 2012/13. The entire road project is a gravel road of a single carriageway whose width varies between 6 and 8m. It covers Jinja, Mayuge and Iganga districts. The contract details are summarised in Table 12.75

**Table 12.75: A summary of contract details of a contract road for Jinja UNRA station as at the end of November 2014**

| <b>Project Title</b>   | <b>Term maintenance of 29 selected national roads-lot 6; Iganga-Mayuge (20km), Musita-Mayuge(14km), Mayuge-Nankoma (23km),) and Mayuge-Bugadde-Bwondha (39.5km)</b> |
|------------------------|---|
| Source of Funding      | Uganda Road Fund  |
| Contract No.           | UNRA/OP191  |
| Implementing Agency    | Uganda National Roads Authority (UNRA)  |
| Supervision consultant | UNRA Station Engineer /Jinja  |
| Contractor             | M/s Tegeka Enterprises Ltd  |
| Project length         | 96.5 km   |
| Start Date             | 28 <sup>th</sup> December 2012  |
| Completion date        | 27 <sup>th</sup> December 2014  |
| Contract Price         | Ug shs 2,878,302,000  |
| Contract Duration      | 2 years   |
| Contract Time Elapsed  | 100% of contract period (in DLP)  |
| Advance Payment        | Ug shs 143,915,100-fully recovered  |

|                            |                                 |
|----------------------------|---------------------------------|
| Works Payments Certified   | 4 IPCs<br>Ug shs 1,956,006,817  |
| Payments to the contractor | Ug shs 1,956,006,817            |
| Physical Progress          | 93% -Cumulative Progress Vs 91% |
| Financial Progress         | 67.96% Achieved                 |

*Source: Station Engineer*

The scopes of work were;

- i. Clearing of shoulders and existing side drains of vegetation and debris
- ii. Reshaping of the existing mitre drains, excavation of new side drains, catch water drains and offshoots
- iii. Installation of cross pipe culverts, construction of headwalls, wing walls, aprons, toe walls and drop inlet chambers
- iv. Shaping to camber and cross fall of the road surface by medium grading
- v. Provision of natural base course material of 100mm thick to form the wearing course at spotted sections.

The above works were to be executed in four cycles and each would be after six months.

### **Financial progress**

The contractor had received a payment of Ug shs 1,956,006,817 (67.96% of the contract price) by November 2014.

### **Physical progress**

Cycle four works had been completed by the time of monitoring (January 2014). Stone pitching had also done in addition to the original scope. Some of the roads (Mayuge-Bugadde-Bwondha and Mayuge-Iganga) under the contract were monitored and the observations are highlighted below:

- i. **Mayuge-Bugadde-Bwondha (39.5 km)**; The major interventions carried out on this road were medium grading, spot re-gravelling, culvert installation and stone pitching; and were completed in December 2014. It was in a fairly good condition although it was dust due to the dry spell. Some sections had been also damaged by the surface run off.
- ii. **Mayuge-Iganga (20 km)**; the road crosses a swamp. The major interventions carried out on this road were medium grading, spot re-gravelling and stone pitching. It was also in a fairly good condition although some sections had been also damaged by inadequate or poor drainage.



**Jinja UNRA Station: Left; A section at km 5+200 along Mayuge-Bugadde-Bwondha: Centre; An installed culvert at km0+800 along Mayuge-Bugadde-Bwondha: Right; Mayuge-Iganga road at km 19+800**

### **Implementation challenges**

- The number of culvert lines and quantity of stone pitching provided under the contract were inadequate as the roads cross a number of swamps.

#### **e) Maintenance using Force account**

Maintenance activities on roads at different times of the FY 2014/2015 using force account intervention was planned to be carried out on 249 kms (21.5% of the station network) at Ug Shs 8.505 billion . The scope of works under force account involved: medium grading, spot gravelling, patching, repair of ferry landing site and limited drainage improvement. The monitoring team visited some roads worked on by the end of Q2, FY 2014/15 on 28<sup>th</sup> January 2015. There were; Access to Gadaffi barracks, Access to Kimaka Military Academy and Iganga-Busesa. Below were the details:

**Access to Gadaffi barracks (1.0km):** This road is paved however, it had deteriorated (both at the carriage way and shoulders) and needed intervention. The scopes of works were; patching and edge repairs. The works were executed in December 2014 and were noticeable at the time of monitoring. However, the project budget and cost was not established.

**Access to Kimaka Military Academy (5.3 km):** It is an old paved and was characterized by poor carriageway conditions, potholes, broken edges, eroded shoulders and poor drainage. Hence, a need to improve on the road surface by asphalt pothole patching and shoulder grading through Routine maintenance. The scope of works were: trimming and shaping potholes; Lime stabilization and asphalt pothole patching. The project budget was Ug shs 14,157,000 out of which Ug shs 13,842,500 (97.78% of the budget) was expended by the end of Q2. The works were carried from mid-September to 24<sup>th</sup> October 2014 and were completed on time. The road was found pothole free and fairly motorable at the time of monitoring.

**Iganga-Busesa – Buyanga-Nawangisa (39.5km):** The road traverses east of Jinja town, off Iganga - Mayuge road. The road had deteriorated and was characterized by gullies, potholes, ruts, corrugations drainage failures, thus necessitating routine mechanized Maintenance by force Account.

The works scope consists of: Clearing of shoulders and existing side drains of vegetation and debris; Reshaping of the existing mitre drains; Excavation of new side drains, catch water drains and offshoots; Installation of cross pipe culverts, construction of head walls, wing walls, aprons, toe walls and drop inlet chambers; Shaping to camber and cross fall of the road surface by medium grading; and Provision of natural base course material of 100mm thick to form the wearing course at spotted sections as detailed in the strip map.

The project budget was Ug shs 158,500,000 of which Ug shs 148,590,446 (93.75%) was expended by the end of Q2. The road was graded in form November and December 2014 was substantially completed on the 26<sup>th</sup> December 2014 representing overall time progress of 88.5% and overall physical achievement of 99.08%.



**Jinja UNRA Station: Left; Patch works along access to Kimaka Military Academy road: Centre; A recharged shoulder along Access to Kimaka Military Academy road: Right; A section of Iganga-Nawangisa road**

The road was fairly motorable at the time of monitoring.

### **Challenges faced by the station**

- Late release of funds from the road fund (in the last week of the 2<sup>nd</sup> month of Q1 and last month of Q2). This affected the performance of programmed activities.
- The station has old equipment that frequently breaks down which slowed the planned progress of works.
- The station has an incomplete set of the road equipment unit i.e. it lacks a bull dozer, excavator and a water bowser.
- Delays in procurement of contract works affects force account programmes as the station is often forced to divert resources from programmed force account works to emergency intervention on roads planned for contracts
- Encroachment of road reserves tends to affect routine manual maintenance activities especially drainage like creation of offshoots into the surrounding areas.
- Poor solid waste management in town or urban centres which affects the performance of Labour base contract works
- Land use systems in certain areas of the region is affecting drainage especially in swampy areas where rice growing activities take place hence, blocking culverts.
- Filling of low lying and road signage is not captured in the contract documents
- Concrete pipe culverts are proving to be weak on heavily trafficked roads

### **Analysis**

#### **Link between financial and physical performance**

By the end of December 2014, 43% (out of 50%) of the annual work plan had been implemented. On the other side, 54.67% of the annual budget was released of which 78.17% was expended. Hence, both the financial and physical performance was very good.

#### **Achievement of set targets**

Most of the set targets for the station were achieved. The release performance was over the expected 50% and also the execution of annual workplan was 43% out of 50%.

### **Conclusion**

The procurement of contractors for Routine and Periodic Mechanized maintenance tends to take long as the condition of the roads deteriorate thus the quantities at the time of execution of works usually override the planned quantities.

## Recommendations

- The URF should ensure timely release of funds to the station to ensure timely execution of the workplan
- The UNRA should gazette road reserves and enforce the laws regarding to them
- The MoWT should procure new and sound road equipment to replace the aged and fill that missing
- The UNRA should ensure timely procurement of contracts

### D) Kabale Station

Kabale station maintains a total road network of 1175 km of which 252km (21%) are paved and 923km (79%) are gravel roads as illustrated in Table 12.76. The station road network covers seven districts namely; Bushenyi, Kabale, Kisoro, Ntungamo, Kanungu, Rukungiri and Mitooma.

**Table 12.76: Kabale UNRA station road network in km**

| Network | Paved | Unpaved | Total |
|---------|-------|---------|-------|
| Old     | 252   | 153     | 405   |
| New     | 0     | 770     | 770   |
| Total   | 252   | 923     | 1,175 |

*Source: UNRA Station- Kabale*

The annual outputs for FY2014/15 are: 1029km of manual maintenance, 271.3km of routine mechanised, 493.9km of term contracts and 6 bridges maintained. The annual budget for FY2014/15 is Ug shs 12.773 billion. The station was monitored on 12<sup>th</sup> January 2015 and the findings are presented below.

## Findings

### Financial performance

By 31<sup>st</sup> December 2014, the station had received Ug shs 1.997 billion of which Ug shs 1.668 billion (83.5%) was expended. This was an excellent financial absorption by the station. The station however received the funds late – Q1 release was received on 26<sup>th</sup> August 2014 while Q2 was received on 26<sup>th</sup> November 2014.

### Physical performance

By 31<sup>st</sup> December 2014 the physical progress on the semi-annual targets was estimated at 87.3%. The station achieved 91% on manual maintenance 70.8% of routine mechanised maintenance and 100% of term maintenance contracts up to Cycle 2. Details of the physical performance are presented below.

#### a) Maintenance using Labour Based Contracts

Routine manual maintenance using Labour Based Contracts (LBCs) which was planned for 1029km (87.6% of station network) had its progress at 91% against planned 100% which was an excellent performance. The works in these contracts involved mainly slashing of the grass by the road side and desilting of drainages. These activities however face competition for labor from other economic activities in the region such as tea growing, iron ore extraction, timber production and food production which pay better than the LBCs.

#### **b) Maintenance using Term Contracts**

Planned term maintenance and contracts for paved roads and periodic maintenance did not take off due to delayed procurement as a result of a prolonged evaluation.

The station had ongoing term maintenance contracts which included: Term maintenance of Ntungamo-Kafunjo-Kakitumba Road (37km), Term maintenance of Kabale-L.Bunyonyi(8.4km), Ikumba-Nfasha-Butogota(64.5km), Kanyantorogo-Butogota-Buhoma(31.4km), Term maintenance of Kisoro-Nyabwishenya-Nteko (45km), Mgahinga-Ntebeko (6km), Kisoro-Nyarusiza-Muhabura (9km), Katojo-Rubuguri-Nyabwishenya (27.5km) and Term maintenance of Hamurwa-Kerere-Kanungu-Ishasha jnt and Katojo-Kihihi (92.5km).

Monitoring was done for one term maintenance contract; that is: Maintenance of Hamurwa-Kerere-Kanungu-Ishasha jnt and Katojo-Kihihi (92.5km) and the following were the findings;

The contract for these roads was awarded to M/s Heaat General Engineers & Contractors Ltd at a sum of Ug shs 6,216,384,350 for a period of 36 months. The contract commencement date was 8<sup>th</sup> January 2014 while the completion date is 7<sup>th</sup> January 2016. Supervision is carried out by UNRA Station Engineer – Kabale.

The scopes of work are; grading, drainage improvement (drainage opening, river training and culvert installation), and gravelling. These works are to be done in six cycles.

The contract details are summarised in Table 12.77.

**Table 12.77: A summary of contract details of Hamurwa-Kerere-Kanungu-Ishasha jnt and Katojo-Kihihi (92.5km) as at end of December 2014**

| <b>Project Title</b>   | <b>Term maintenance of Hamurwa-Kerere-Kanungu-Ishasha jnt and Katojo-Kihihi (92.5km)</b> |
|------------------------|--|
| Source of Funding      | Uganda Road Fund   |
| Contract No            | UNRA/Works/2012-2013/00002/04/04   |
| Implementing Agency    | Uganda National Roads Authority (UNRA)   |
| Supervision consultant | UNRA Station Engineer /Kabale  |
| Contractor             | M/s Heaat General Engineers & Contractors Ltd  |
| Project length         | 92.5 km  |
| Start Date             | 8 <sup>th</sup> January 2014   |
| Completion date        | 7 <sup>th</sup> January 2016   |
| Contract Price         | Ug shs 6,216,384,350   |
| Contract Duration      | 36 months  |

|                            |   |
|----------------------------|---|
| Contract Time Elapsed      | 12 months                                 |
| Advance Payment            | Ug shs 310,819,218                        |
| Works Payments Certified   | Ug shs 2,561,560,117                      |
| Payments to the contractor | Ug shs 2,363,817,629                      |
| Physical Progress          | 100% for cycle 1 & 2. Cycle 3 in progress |
| Financial Progress         | 41.2%                                     |

*Source: UNRA Station – Kabale*

The contractor had been paid Ug shs 2,363,817,629. Therefore the financial progress of the contract was at 42%.

The physical performance of the contract up to the 2<sup>nd</sup> cycle was at 100%. All the planned outputs were achieved. Cycle 3 had commenced and works were ongoing. The findings on the two roads monitored are below.

**Hamurwa-Kerere-Kanungu Road (47km):** The scope of works involved grading and spot - regravelling. These had been completed for cycle 2 while grading 21km had been completed under 3<sup>rd</sup> cycle. Works were ongoing.

The main challenge that was being experienced on this project was unavailability of gravel and long haulage distance.



**Kabale UNRA Station:** Left: Contractor's workers digging off shoots at km 30+300; Left: Grader on site at km 42+100 for Hamurwa-Kerere-Kanungu road

**Kanungu-Kihihi-Ishasha (31km):** The scope of works involved gravelling, grading and culvert installation. The 1<sup>st</sup> and 2<sup>nd</sup> set of grading had been completed at the time of monitoring.





**Kabale UNRA Station: Left: Incomplete culvert at km 20+600; Right: Completed section of the road for Kanungu-Kihihi-Ishasha road**

**Katojo - Kihhi (17km):** The 1<sup>st</sup> and 2<sup>nd</sup> set of grading had been completed and the quality of works was observed to be good. The road was in a good condition except drainage structures at various locations which needed reopening.



**Kabale UNRA Station: Left: Graded section at km 14+700; Right: Culvert needs to be opened at km 7+000 on Katojo Kihhihi road**

### **c) Maintenance using force account**

During the FY2014/15, the station has planned to carry out routine mechanized maintenance on 405km and 130m of river training. The scope of works involved grading, spot re-gravelling, filling of swamps where necessary, installation of drainage structures, and river training along stream sections. By 31<sup>st</sup> December, physical progress was estimated at 70.8%. One road was monitored and the findings are below.

**Rwerere-Bungona (11km):** scope of work involved grading, drainage improvements, culvert installation and gravelling. However, the monitoring team observed that grading, gabion works and compaction was being carried out. The quality of work done was not good because compaction was being carried out without watering due to lack of a water bowser at the station.





**Kabale UNRA Station: Left: Grading along Rwerere - Bungangare road at km 7+900; Centre: Guard rails at km 2+000 Rwerere - Bugangare road**

## Analysis

- *Link between physical and financial performance*

By 31st December 2014, the station had expended 83.5% and achieved about 87.3% of the semi-annual outputs. The funds were expended on road maintenance works, office and mechanical imprest. The expenditure was commensurate to the physical outputs.

- *Achievement of set targets*

Overall, the station did not meet its targets for the period under review. Average physical progress was about 87.3% vs. target of 100% and financial progress was at 83.5%. The target was not met due to failure to commence the planned periodic and term maintenance contracts.

## Challenges at Kabale station

- Landslides and washouts on several roads during rainy seasons are rampant;
- Economic activities within the road reserves e.g. digging, timber production, iron ore, sand tilling, stones/aggregate mining, bricks production, road side markets etc.; these have led to damage of the road edges.
- Silt deposited on road edges. The fact that Kabale is hilly, on some roads the Labour Based Contractors are unable to remove and transport debris from the drainage systems to the dumping areas as required of their contracts. The Station therefore has to provide tipper trucks for this activity which encroaches on the Force Account budget.
- Inadequate equipment resource in the station. Lack of a Water Bowser in the Station affects the quality of grading and gravelling activity especially during dry seasons. The station is forced to hire water bowzers during the dry season.
- The station lacks efficient fleet of tipper trucks to facilitate haulage of gravel to from borrow pits to the site.
- Lack of centrally procured stores e.g tyres, blades, bucket tips, etc for road equipment.
- Aged equipment resulting into frequent breakdown makes it hard to achieve the programmed work.

- Lack of large diameter Armco culverts suitable for swamps and low lying sections that require raising.
- Inadequate supervision vehicles. The roads traverse through hilly terrain, yet there is only one sound pickup. The station has three other pickups but these cannot be utilised in hilly terrain because they are weak.
- Delayed procurement for planned term and periodic maintenance contracts. The station is forced to carry out emergency interventions on road planned under these contracts to make them functional all the time.
- Understaffing. The station lacks drivers, operators, and road inspectors.

### Recommendations

- The UNRA should expedite the procurement of road equipment for the station. The station needs a low loader, tippers, and back hoe among others.
- The MoWT and district local governments should revitalize the Road Committees and carry out continuous sensitization of communities and road users to reduce on vandalism of road furniture and encroachment of road reserves.
- The UNRA should stock 1200mm, 1500mm and 1800mm diameter culverts in the central stores for emergency interventions.
- The UNRA should procure sound vehicles for the station.
- The UNRA should recruit additional staff to enable smooth functionality of the stations.

### E) Masaka Station

Masaka station maintains a total road network of 1093 km of which 238km (21.8%) are paved and 855km (78.2%) are gravel roads. A breakdown of the station's road network is presented in Table 12.78.

**Table 12.78: Masaka UNRA station road network in kms**

| Network      | Paved(km)  | Unpaved(km) | Total       |
|--------------|------------|-------------|-------------|
| Old          | 238        | 320         | 558         |
| New          | 0          | 535         | 535         |
| <b>Total</b> | <b>238</b> | <b>855</b>  | <b>1093</b> |

*Source: UNRA Masaka Station*

The station road network covers six districts namely; Masaka, Kalangala, Lyantonde, Rakai, Sembabule, Bukomasimbi, Gomba, Lwengo, Kalungu. The station's annual budget is Ug shs 13.637billion of which Ug shs 6.770 billion (49.6%) is for force account maintenance activities, Ug shs 952.1 million (7%) for labour based contracts and Ug shs 5.915 billion (43.4%) for both term maintenance and periodic contracts.

The planned outputs for FY2014/15 are: 592km maintained using force account, 1102km using labor based contracts, 846km using term contracts and 128km under periodic maintenance.

### **Financial performance**

By the end of Q2, the station had received Ug shs 4.453 billion (32.7%) of which Ug shs 2.624 billion (58.9%) was expended. The low financial performance was due to late transfer of funds to the station, delay in finalisation of procurement of contracts and transfer of the station engineer who was a key signatory to the account. The process of change of signatories to the station account delayed the implementation of the planned activities.

### **Physical performance**

The Q1 and Q2 work plan execution was estimated at 40% by the end of December 2014. This was a low physical performance by the station. The station did not do much in Q2 following transfer of key staff by UNRA. The transfer of staff meant that the signatories to the accounts had to be changed and this took some time greatly contributing to delays. Most of the Q2 planned activities spilled to Q3 and were yet to commence.

Monitoring was done for projects implemented using contracts and force account and the following were the findings.

#### **f) Maintenance using term maintenance contracts**

The station planned to carry out term maintenance using contracts on 146km in Q1 and Q2 with a budget of Ug shs 537.99 million. The projects earmarked for term maintenance were: Rakai – Ntantumukye (50km), Villa-Maria-Sembabule (38km), and Sembabule- Nkonge (58km) roads.

The contract for maintenance of these roads was awarded by UNRA to M/s Abubaker Technical Services and General Supplies Ltd at a sum of Ug shs 4,253,564,881 for a period of 24 months. The contract commencement date was 2<sup>nd</sup> January 2013 and completion date was 2<sup>nd</sup> January 2015. Supervision was by the Station Engineer Masaka. At the time of monitoring on 11th February 2015; the project was under Defects Liability Period ending in April 2015. A summary of the project data for this contract is indicated in Table 12.79.

**Table 12.79: A summary of contract details of the term maintenance contract in Masaka UNRA station**

| <b>Project Title</b>   | <b>Term maintenance of Rakai –Ntantumukye (50km), Villa-Maria-Sembabule (38km), and Sembabule- Nkonge (58km) roads</b> |
|------------------------|--|
| Source of Funding      | Uganda Road Fund   |
| Contract No.           | UNRA/WORKS/2011-12/00002/01/01   |
| Implementing Agency    | Uganda National Roads Authority (UNRA)   |
| Supervision consultant | UNRA Station Engineer /Masaka  |
| Contractor             | M/s Abubaker Technical Services and General Supplies Ltd   |
| Project length         | 146 km   |

|                            |  |
|----------------------------|--|
| Start Date                 | 2 <sup>nd</sup> January 2013           |
| Completion date            | 2 <sup>nd</sup> January 2015           |
| Contract Price             | Ug shs 4,253,564,881 (VAT exclusive)   |
| Contract Price             | Ug shs 4,348,259,881 (2.2% increement) |
| Contract Duration          | 24 months                              |
| Contract Time Elapsed      | 100% (under DLP)                       |
| Payments to the contractor | Ug shs 4,331,460,501 (99.6%)           |
| Physical Progress          | 100% under DLP                         |
| Financial Progress         | 99.6%                                  |

*Source: UNRA Station- Masaka*

The contract was broken down into four implementation cycles and the scope was as follows;

- Site clearance along the entire road.
- Heavy/medium grading (146km) to an average width of 7m for each cycle.
- Spot re-gravelling of 11,034m<sup>3</sup> to a total length of 11.5km, 6.4m wide and 150mm thick.
- Installation of 4No culvert lines of 600mm.
- Construction of culvert end structures (wing walls, headwalls and aprons).
- Reinstatement of side drains, mitre drains, offshoots and catch water drains
- River training of 300m at average depth of 1m.

### **Financial performance**

The contractor had submitted eight (8No) IPC totaling to Ug shs 4,331,460,501 (99.6% of contract value) and was fully paid. The contract was well executed and within budget.

In addition the station received a total of Ug shs 37.856 million for supervision of term maintenance contracts. By the end of Q2 Ug shs 26.641 million (70.4%) had been expended.

The overall financial performance of the contract was excellent at 85%.

### **Physical performance**

Maintenance works on these roads had been completed. The physical progress was 100% and the contract was still within the defects liability period. The monitoring team monitored some works implemented under this contract and the following were the findings;

**Sembabule-Villa Maria (38km):** This is a gravel class B road located in Masaka and Sembabule districts in central Uganda. The road traverses mainly through low lying areas characterised by swamps and sandy soils and carries heavy traffic from surrounding districts of Lyantonde, Mubende and Gomba in addition to Matete and Ntusi trading centres.

The UNRA expended Ug shs 1,153,917,500 (26.5% of the contract sum) on this road. The works involved four cycles of grading the entire road, spot gravelling, swamp raising between km 1+700 – 2+490, 7+460 – 8+260 and 20+900 – 11+250, river training along swampy sections and

installation of drainage structures. The quality of work on this road was observed to be good. However, there were minor defects (gullies and hence rough riding surface) that needed reshaping.



**Masaka UNRA Station: L-R: Graded section at km 37+500 along Villa-Maria Sembabule, well gravelled section of Villa-Maria Sembabule road at km 27+400**

### **Challenge experienced during implementation**

Existence of numerous swamps especially on the Villamaria-Sembabuleroad which required raising and river training to prevent water from crossing over the road. These had not been earlier anticipated at the planning stage.

#### **g) Maintenance using Force Account**

Maintenance activities using force account for Q1 and Q2 were planned on 478km (43.73% of total station network) with a total budget of Ug shs 1.987 billion. The scope of works under force account involved: grading, spot gravelling, patching asphalt and drainage improvement.

### **Financial performance**

The station received Ug shs 1.527 billion (inclusive of a spill over of Ug shs 420.9 million from Q4 FY 2013/14). By the end of Q2 FY2014/15, the station had expended Ug shs 1.023 billion (67%) on the planned maintenance activities.

### **Physical progress**

By 31<sup>st</sup> December 2014, 388km of routine mechanised maintenance had been completed. The station also achieved 100% of the planned targets under manual maintenance. Some of the roads maintained under routine mechanised were monitored and the findings are presented below.

**Ndegeya -PTC Access Road (4 km):** The station planned to carry out mechanised maintenance of this road for an estimated cost of Ug shs 18 million. The scope of works was; grading of the entire road, spot gravelling and culvert installation. Grading and installation of culverts had been completed in Q2 except spot gravelling. The station spent Ug shs 17.2 million (95.6% of the planned budget). The remaining works had been delayed due to inadequate equipment.

**Lukaya –Miwula-Kagorogoro (62 km):** The station planned to maintain this road by carrying out full grading, spot gravelling and installation of culverts and drainage improvement works for an estimated cost of Ug shs 103 million in Q1 FY2014/15. Commencement of works was in September 2014. By 31<sup>st</sup> December 2014, Ug shs 94.421 million (91.7%) had been expended.

The quality of works was satisfactory except at km 7+500 which has surface rocks. These rocks were covered with gravel but there is potential of the gravel being washed away in the rainy season.

The road has some pending activities which are yet to be completed; these were: dumped gravel between km 24+300 to km 25+000 not yet spread, stone pitching works at km 26+300 incomplete, culvert at km 31+00 yet to be completed and gabion works in the swamp at km 31+300.



**Masaka UNRA Station: Left: Completed section Ndegeya -PTC Access road; Center: Incomplete stone pitching works at km 26+300 along Lukaya-Miwula-Kagorogoro road in Mivula trading centre; Right: Graveled section at km 1+700 along Lukaya-Miwula-Kagorogoro road**

**Masaka-Bukakata Road (36 km):** The scope of works was; grading, spot gravelling, culvert installation and drainage improvement. Intervention had been planned for Q1 but works did not commence due to late release of funds. The station received Ug shs 52.8million for the maintenance works on this road plus Ug shs 7.39 million as spill over from Q4 FY 2013/14. Works were implemented in Q2 at a cost of Ug shs 60.06 million (99.8% of the available funds). The quality of works were satisfactory and road was in a good condition

This road is highly trafficked since it is the main road joining Masaka to the Islands of Kalangala. There is urgent need for upgrading this road to bituminous standard to cut down the maintenance costs.



**Masaka UNRA Station: Left: Gravelled section of Masaka-Bukakata road at km 0+100**

### **Challenges experienced by the station.**

- Inadequate financial and technical capacity of the contractors involved in road maintenance.

- The station experienced inadequate and late release of funds. This hampered the pace of implementation.
- Aged equipment associated with frequent breakdown and high operation and maintenance costs.
- The available equipment base is inadequate to match the volume of work by the station. For instance the station has two serviceable tippers and two graders against a road maintenance load of 1093km of network.

## **Analysis**

### ***Link between physical and financial performance***

By 31<sup>st</sup> December 2014, the station had expended 58.9% for about 40% of the targets. The funds were expended on road maintenance works, office and mechanical imprest. The expenditure was commensurate to the physical outputs.

### ***Achievement of set targets***

The station did not achieve the semi-annual targets. By 31<sup>st</sup> December 2014, physical progress was estimated at 40% against a financial expenditure of 58.9%. The failure to meet the targets was mainly attributed to a delay in commencement of Q2 plans due to transfer of key staff at the station.

## **Conclusion**

The overall performance of the station was below average with about 60% of the targets not met. The low performance was due to late receipt of funds and transfer of key staff at the station. The transfer of staff delayed commencement of Q2 planned outputs. In addition the station has aged road equipment which are associated with frequent breakdowns. These need urgent replacement to ensure smooth implementation of works.

## **Recommendations**

- The GoU/UNRA should build the capacity of contractors through contract management trainings.
- The UNRA should expedite the procurement of equipment to the station

## **F) Moroto Station**

Moroto UNRA station maintains a total road network of 850.4km of which 2.9km (0.3%) are paved and 847.5km (99.7%) are unpaved. The station network is comprised of four (4) districts namely; Amudat, Moroto, Nakapiripirit and Napak. The planned maintenance outputs for the FY 2014/15 comprised of: 244km under the force account intervention; 303km under term maintenance contracts; 124km under both the force account and contract intervention; 843km under labour based contracts; and construction and repairs of 6 drifts and 4 bridges. The station was monitored on 22<sup>nd</sup> and 23<sup>rd</sup> January 2015 and the findings are presented below.

## **Financial performance**

The FY 2014/15 budget is Ug shs 2.491 billion. For the first and second quarters, the station received Ug shs 1.844 billion (74% of budget) and by the end of the December 2014, Ug shs 985.38 million (53.4% of release) had been expended. The low expenditure was attributed to the late receipt of the second quarter release of Ug shs 1.022 billion (55.4% of total release) that got to the station account on 2<sup>nd</sup> December 2014, that is one month to the end of the second quarter.

## **Physical performance**

### **a) Maintenance using LBC contracts**

Every financial year, the station carries out routine manual maintenance activities of road side grass cutting, desilting and removal of debris from drains, and pothole filling on the station road network. This excludes the roads which are under upgrading. The routine manual maintenance activities are implemented by contracting with the use of Labour Based Contractors (LBCs). These activities are carried out throughout the FY. During the monitoring of the station road network, it was observed that these activities had been done or were ongoing in some road sections.

For this activity in the FY 2014/15, the station planned to carry out works on 843km of the station network with a budget of Ug shs 645.6million (25.9% of station budget). The LBC activity at the station in Q1 and Q2 received Ug shs 290 million (45% of activity budget and 15.7% of station release) and had expended Ug shs 260.75 million (90% of release) by the end of December 2014.

The labourers for this activity in Karamoja are got from outside the region since the locals prefer to engage in gold mining and cattle keeping. This makes the country's LBC UNRA rate of Ug shs 72,000 per kilometer per month low for Karamoja. In addition the workforce has to be transported to the areas of work and provided with security.

### **b) Maintenance using contracts**

The station had one term maintenance contract of 70km on ongoing although it had planned to have 303km maintained under this intervention. Implementation of the two contracts had not commenced because of delays in the procurement at the UNRA head offices. The term maintenance contract of Nadunget-Iriri road (70km) which was in the last (fourth) cycle was monitored on 21<sup>st</sup> January 2015 and below are the findings.

#### **Term maintenance of Nadunget-Iriri road (70km)**

Nadunget-Iriri road is a gravel road connecting Karamoja region to Teso region. The road traverses through the relatively flat terrain of Moroto and Napak district. The UNRA signed a contract with PNR Services Ltd for the term maintenance of this road for a sum of Ug shs 2.214 billion for a period of two (2) years starting on 14<sup>th</sup> August 2013. The contract is expected to end on 14<sup>th</sup> August 2015 and is supervised by the UNRA Moroto Station Engineer.

The scope of works for this project involves heavy grading for the entire road length, spot re-gravelling and drainage improvement. The scope is broken down into four cycles of six months.

#### **Financial progress**

The contractor had so far submitted four interim payment certificates amounting to Ug shs 1.817 billion (82% of contract amount) all of which had been paid. This brought the financial progress of the contract to 82%. There were no variations anticipated for this contract.



### ***Physical progress***

The project road was visited on 21<sup>st</sup> January 2015 when the overall time progress was 71%. The contract was in the fourth and last cycle. The contractor had completed all the instructed works in the previous cycles. These included: grading of the entire road in each of the previous cycles; spot gravelling and installing of culvert lines. The road was motorable but some sections had been affected by the rains and heavy traffic carrying limestone from the Karamoja region to Tororo Cement Factory. The contractor was not on site at the time of monitoring but was reported to be mobilizing since instructions to commence the fourth cycle works had been issued. The overall physical progress of contract was estimated at 82.5% as at the end of December 2014. Heavy grading, gravelling and drainage works had been done in the previous cycles. The fourth and last cycle has mainly the grading and shaping of the road surface activities.



**Moroto UNRA Station: Nadunget Iriri road (70km): Left: At Km 8+200; Centre: At Km 10+200; Right: At Km 22+500. A well graded and maintained road**

### **Implementation challenge**

The works of previous cycles had been affected by the flash floods and heavy traffic.

#### **Analysis**

- ***Link between financial and physical progress performance***

The contract financial progress was estimated at 82% against a physical progress of 82.5% and a contract time progress of 71%. The expenditures were commensurate to the physical progress of the works.

- ***Achievement in terms of set targets***

The contract had achieved the semi-annual target. The project was ahead of schedule with progress at 82.5% against a time progress of 71%. The major activities- heavy grading, graveling and drainage works were completed. The last cycle on this contract was commencing.

### **Conclusion**

The project was ahead of schedule with progress of 82% at 71% time elapsed. The project was however affected by flooding and heavy traffic which caused significant damages. This contract has succeeded in handling emergencies and therefore underscoring the role of term maintenance. Maintenance using Term Contracts for roads is aimed at making roads motorable throughout the

contract period of two or three years which is longer than the periodic maintenance contracts of six months. This helps to cut down on the cost and time spent on procuring a contract especially when emergencies occur. With the good road condition observed at the time of monitoring, the project or contract was meeting its targets or objectives.

### **Recommendation**

The UNRA should notify the contractor to remedy the sections severely hit by the floods.

#### **c) Maintenance using Force Account**

The following roads and activities implemented under the force account intervention were monitored on 21<sup>st</sup> January 2015;

**Moroto-Rupa-Nakiloro-Nakabat (28km):** This road starts from Moroto town and ends at the border of Uganda with Kenya. It goes through Rupa and Nakilolo sub counties and was in a fair condition. The planned scope of works on this road was to complete a concrete pavement measuring 120m by 6m on the escarpment at Km 21+400 as the this section had become impassable with gravel as the carriageway surfacing material. This pavement had been completed and half of the road in that section was open to traffic while the other half was undergoing curing as the concrete had not yet achieved the 21 day maturity period.

During the first and second quarters heavy rains eroded two sections of this road at Km 16+300 and 20+100 rendering them impassable. Works at these two sections were attended to as emergencies in Q2. At Km 16+300, the existing concrete drift which was eroded was constructed in December 2014 and January 2015. At Km 20+100, a deep ditch was created due to the change of course of the surface water thus necessitating a concrete drift which was constructed in Q2 in October/November 2014. The drift at Km 16+300 was still undergoing curing while that at Km 20+100 had been opened to traffic. The drift works cost Ug shs 81.425 million.



**Moroto UNRA Station: Moroto-Rupa-Nakiloro-Nakabat road (28km): Left: Drift at Km 16+300; Centre: Drift at Km 20+100; Right: The 120m by 60m concrete pavement at the escarpment at Km 21+400**

**Kokeris-Lopei (23km):** In the FY2014/15, the station planned to carry out grading, drainage works and bridge repairs on this road. The road is located in Matanyi sub county, Napak district. The estimated budget was Ug shs 155 million. This road connects the communities of Matany to the main road going to Kotido district. The Naoi drift at Km 10 + 700 was damaged by rains in the previous FY. Some emergency works were done then so that traffic can resume crossing the section. Under the emergency works, the design of an engineered crossing and site clearance were done. The implementation of design is what was planned for the FY 2014/15.

The scope of works involves the construction of a double cell box culvert, 2.5m by 1m, of grade C25 concrete and gabion protection works. The bridge works started in December 2014 and were still ongoing at the time of monitoring. The concrete works of the box culvert decking and construction of gabion protection works were ongoing at the time of monitoring. The grading works were going to be done in Q3. By the end of the Q2, Ug shs 115 million (74% of budget) had been released in the FY 2014/15 of which Ug shs 93.227 million (81% of release) had been expended. The physical progress of the works was estimated at 75% and the project was expected to be completed in two weeks time.



**Moroto UNRA Station: Left: The existing drift with culverts and the new construction box culvert works with scaffolding; Centre: Reinforcement for the decking; Right: Gabion protection works at Naoi Bridge on Kokeris-Lopei road**

### **Implementation challenges**

- The equipment at the station is not commensurate with the Karamoja terrain which in some areas is mountainous and rocky.
- The mechanical imprest budget is small compared to the rate of breakdown of the old equipment. This equipment has an idle time of about 3 – 4 days as spare parts are procured from Kampala.
- The rains in Karamoja come with calamities like flooding of rivers and destroying of roads which are unpredicted. This always causes emergency works.
- The bridges on the national roads in the station network are old and thus need to be rehabilitated to match up with the increasing heavy traffic in the region.
- Materials like gravel and water during the dry season are expensive to acquire. The cattle keeping communities do not allow sharing the scanty water sources in the region with the road contractors.
- Delays in the procurement of contractors for the term maintenance contracts disrupts the stations work plans since they have to attend to these roads to keep them functional.
- The Ug shs 72,000 per km per month rate for LBC activities in Uganda is not adequate for areas like Karamoja where there is gold mining and cattle keeping. The station imports the LBC labourers from outside the region and provides them with transport and security. In addition to this, they have to be paid on a daily basis and not monthly.
- The station lacks adequate supervision vehicles.
- There is no special allowance given to staff in Karamoja which is a hard to reach area

### **Analysis**

### ***Link between financial and physical progress performance***

The station expended 53% of the funds and achieved physical progress of 40% of the annual workplan which transforms into 80% of the semi-annual works. The low absorption of funds was attributed to: the late release of the fuel component in Q1 and Q2 in the months of November and December 2014 respectively; and the prioritizing of the emergency works in the sections damaged by the rains as works had to be carried out during the dry season.

### ***Achievement of set targets***

The semi-annual targets were not achieved. The station had mainly been attending to the emergency works during the Q1 and Q2 and thus deviated from the planned activities. However, 60% of the semi-annual work plan had been achieved by the end of December 2014. The station exhibited a good performance.

### **Conclusions**

The station's semi-annual performance was good. However due to heavy rains, there are so many emergencies that come and so need urgent attention. This forces the station to deviate from the annual workplan. Also, the station does not have adequate supervision vehicles making supervision a challenge. There is need to provide the station with additional vehicles to facilitate supervision of work.

### **Recommendations**

- The UNRA should procure additional equipment for the stations. The specifications for these equipment should be suitable for the terrains in Karamoja.
- The UNRA should rehabilitate the old bridges along heavily trafficked roads.
- The UNRA should engage the Local Governments and area politicians to sensitize the communities so that materials like gravel can be obtained cheaply.
- The UNRA should fast track the procurement of term and periodic maintenance contracts.
- The UNRA, URF and MoWT should make provisions for special allowances for all hard to reach areas.
- The UNRA should provide the station with sound supervision vehicles.

### **Comparative analysis for National Roads Maintenance PROGRAMME**

Table 12.80 shows a summary of the semi-annual financial and physical performance of the UNRA stations monitored

**Table 12.80: A summary of the semi-annual financial and physical performance of the UNRA stations monitored as at 31<sup>st</sup> December 2014**

| UNRA<br>STATION | ANNUAL<br>BUDGET | Receipts, as<br>at end of Q2<br>FY 2014/15<br>(UGX<br>Millions) | Expenditure<br>(UGX<br>Millions) | % of<br>Receipts<br>Spent | % of semi-annual<br>physical targets<br>achieved |
|-----------------|------------------|---|----------------------------------|---------------------------|--|
|-----------------|------------------|---|----------------------------------|---------------------------|--|

|            |           |           |           |       |      |
|------------|-----------|-----------|-----------|-------|------|
| Arua       | -         | 2,990.91  | 2,922.73  | 97.72 | 90   |
| Fortportal | 18,448.00 | 2,590.77  | 2,092.83  | 80.78 | 92.7 |
| Jinja      | 4,389.30  | 2,399.58  | 1,875.77  | 78.17 | 86   |
| Kabale     | 12,773.00 | 1,997.00  | 1,668.00  | 83.53 | 87.3 |
| Masaka     | 13,637.00 | 4,453.00  | 2,624.00  | 58.93 | 40   |
| Moroto     | 2,491.00  | 1,844.00  | 985.38    | 53.44 | 60   |
| TOTAL      | 51,738.30 | 16,275.26 | 12,168.71 | 75.43 | 76   |

*Source: Authors compilation*

### **Financial comparison**

The average financial absorption of the monitored UNRA stations was 75.43% with Arua, Fortportal and Kabale having excellent absorption capacities (above 80%) while Moroto, and Masaka had a fair financial absorption of between 50-59%. Moroto had the lowest financial absorption at 53.44%.

### **Physical comparison**

The average semi-annual performance for the UNRA stations monitored was estimated at 76% with Arua, Fortportal, Jinja and Kabale having excellent physical outputs (above 80%). The financial expenditures of these districts were 97.7%, 80.8%, 78.2% and 83.5% respectively. Fortportal UNRA station therefore had the highest performance since it achieved 92.7% of the semi-annual outputs using 80.8% of the funds. Masaka UNRA station had the lowest physical performance at less than 40%. This below average performance was mainly attributed to a delay in commencement of Q2 plans due to transfer of key staff at the station.

### **Overall Implementation challenges at the UNRA stations**

The challenges experienced at the stations are similar and are hereby presented below:

- Poor state of vehicles and equipment that intermittently break down during work execution affects the programme on force account activities.
- The mechanical imprest budget is small compared to the rate of breakdown of the old equipment. This equipment has an idle time of about 3 – 4 days as spare parts are procured from Kampala.
- Stations are experiencing scarcity of some road materials like gravel due to the land policies where the owners dictate exorbitant prices and terms for gravel purchase which

do not rhyme with the procurement procedures. This increases the cost of works on roads in certain areas where heavy costs are incurred in hauling the material for over 10 kms.

- Heavy rains have continued to affect the roads as most swamps flood, causing emergency works.
- Inadequate release of the monthly mechanical funds for preventive and minor repairs of serviceable vehicles and equipment for force account operations.
- Stations do not have key force account operations equipment for example, a low bed, water bowser, and compactors, etc.
- Inadequate and untimely release of funds for force account; most releases are received at stations at the mid or tail end of the quarter.
- Delays in the procurement of contractors for the term maintenance contracts disrupts the stations work plans since they have to attend to these roads to keep them functional.
- The mechanised contractor's management capacity (contract and business management) is generally very poor thus, affecting planned contract work programmes.
- Poor or low capacity of contractors for the term maintenance contracts.
- The mechanical workshops are dilapidated and poorly equipped. There is need for refurbishment of these workshops as they have leaking roof, no suitable door shutters and stores.
- Stagnant rates of Ug shs 72,000 per km for force account activities yet there has been considerable inflation.
- There is no special allowance given to staff in Karamoja which is a hard to reach area

### **Conclusion for the National Roads Maintenance Programme**

Overall the performance of the National Roads Maintenance Programme implemented by UNRA stations was very good. The average performance based on the monitored stations was estimated at 76%. The disbursed funds were expended on the planned activities and good quality was observed on the monitored projects. However, attractiveness of the labor based contracts and lack of adequate road equipment have greatly affected routine manual and mechanised maintenance respectively.

### **Recommendations:**

- The UNRA should procure new equipment; at least 2 full units, for the stations to reduce on cases of equipment break down.
- Funds should be released at the beginning of every quarter by MFPED so that they can be utilised within the programmed time.
- The rates of labour based contract maintenance works should be revised by UNRA to match the current economy trend. That is from Ug shs 72,000 per km to at least Ug shs 140,000 per km.
- The UNRA should consider deployment of frame work contractors to provide equipment and materials while carrying out force account activities.

## GENERAL CONCLUSIONS

The overall conclusions are derived from the field findings and analysis in the previous chapters.

Implementation of projects in the roads sub-sector, especially those under MoWT was hampered by prolonged procurement processes. Some procurement happened in Q1 while implementation started in Q2 thus making it difficult to achieve semi- annual targets. The progress of contracts under the Interconnectivity Project was affected by the late delivery of armco culverts and gabion meshes supplied by the MoWT.

The UNRA was able to upgrade to bitumen standards 120.6km (48.2%) of unpaved national roads out of the annual planned 250km; and 98.3km-equivalent (57.8%) that was rehabilitated out of the annual target of 170km. Although this was excellent performance, budget provisions are likely to be inadequate and a supplementary may be required during Quarter Four to maintain the same level of performance.

Land acquisition still hinders implementation of UNRA projects. The UNRA should also devise a strategy that expedites the valuation, verification and payment process for land acquisition whereby land and properties therein to be acquired are captured and valued, and MoUs signed with the owners as the valuation process is completed. The contractors are then allowed to work in these affected areas as the compensation process is finalised.

The National Roads Maintenance Program was affected by the late release of force account funds to the stations where part of the Q1 funds were received in November 2014 and the Q2 funds in December 2014; and the procurement of most of the periodic and term maintenance contracts which took long to conclude. The GoU should provide districts with a full set of road maintenance equipment (a heavy duty grader, vibrat roller (compactor), water bowser, an excavator, a wheel loader and tipper trucks) to ensure successful implementation of the force account policy.

Funding for Regional Mechanical Workshops under the MoWT needs to be revised to cater for the increasing prices of service part and consumables; and the newly procured district and zonal road equipment under their docket. These workshops should be fully equipped and more established countrywide.

Other causes of poor performance in the roads sub-sector include frequent breakdown of equipment in LGs, the mode of release of funds for the DUCAR designated agencies under URF which is done centrally to the work plans submitted and the reintroduction of VAT on new contracts.

## RECOMMENDATIONS

Implementation of programmes can be improved if corrective measures are taken by the various MDAs. The key recommendations are:

- The prolonged procurement process at MoWT needs to be addressed by top management in order to curb the implementation delays in the project undertaken.

- The MoWT should set up fully equipped mechanical workshops at Gulu and Mbarara Mechanical Regional Workshops and also consider setting up more workshops in the country.
- The MoWT should revise the funding for the Regional Mechanical Workshops to cater for the maintenance of the increasing fleet of road maintenance/construction equipment under its docket.
- The UNRA should devise a strategy that expedites the valuation, verification and payment process for land acquisition whereby land and properties therein to be acquired are captured and valued, and MoUs signed with the owners as the valuation process is completed. The contractors are then allowed to work in these affected areas as the compensation process is finalised.
- The Uganda Road Fund should release the funds to the District, Urban and Community Access Roads designated agencies in accordance with the approved work plans submitted and not in equal quarterly disbursements.
- For the successful implementation of the force account policy in the Local Governments, the GoU should provide districts with a full set of road maintenance equipment (a heavy duty grader, vibratory roller (compactor), water bowser, an excavator, a wheel loader and tipper trucks).
- The roads sub sector agencies should provide for the FY 2014/15 VAT arrears in the FY2015/16 budget.



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