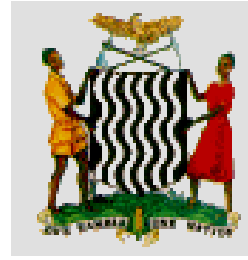




AFRICAN DEVELOPMENT BANK GROUP
GROUPE DE LA BANQUE AFRICAINE
DE DEVELOPPEMENT



**PROJECT: NACALA ROAD CORRIDOR DEVELOPMENT PROJECT – PHASE IV
SUPPLEMENTARY FINANCING - P-Z1-DB0-232**

COUNTRY: MULTINATIONAL – MALAWI/ZAMBIA

**SUMMARY OF THE ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR
THE CONSTRUCTION OF THE MWAMI AND THE KATETE ELECTRONIC
WEIGHBRIDGES ALONG THE GREAT EAST ROAD**

October 2019

1. Introduction

The Government of the Republic of Zambia has embarked upon a programme of rehabilitating the road infrastructure in the country. In 1997 the Government through the Zambia Road Development Agency (RDA) launched the Road Sector Investment Programme (ROADSIP) whose main objective was to bring all proposed roads under its mandate to maintainable and manageable levels to speed up socio-economic development at all levels in the country. Consequently, Government has upgraded and maintained a number of trunk, main and district roads in the country. Within the auspices of the ROADSIP, Government through RDA in 2012 launched the Link Zambia 8000 project meant to transform Zambia from being a landlocked country into a land-linked country.

The focus of all these programmes is on improving the Core Road Network (CRN) which has been identified considering such aspects as connectivity (international or provincial linkages), poverty alleviation and agricultural/marketing activities. One of the objectives of the ROADSIP was to improve and maintain the condition of the core road network from its 1995 state of 20% good, 40% fair and 40% poor to at least 50% good, 30% fair and 20% poor. Vehicle overloading has been identified as one of the major causes for road deterioration. An Axle Load Control Program was therefore commissioned in July 2004 to reduce vehicle overloading from 30 % on Axles to 5% and Gross vehicle mass (GVM) from 40% to less than 5%.

About 360Km of the Great East road from the Luangwa bridge to the Mwami border which is an important part of the Nacala transport corridor and is a vital trade route serving major trade-dependent economies within the Southern Africa Development Community (SADC), underwent rehabilitation between 2014 to 2018 with financial support from the African Development Bank (AfDB), the European Union (EU), the European Investment Bank (EIB) and the French Development Agency.

2. Background to the Project

On 2nd December 2013 the Board of the African Development Bank (AfDB) approved the Multinational Zambia/Malawi, Nacala Road Corridor Development Project phase IV amounting to a total of UA 50.89 million, of which UA 5.50 million was to be utilized by Zambia and UA 45.390 million was to be utilized by Malawi. The main component of the project on the Zambian side is the construction of a One Stop Border Post (OSBP) at Mwami. The construction of the OSBP commenced on 5th December 2018 and works are expected to be completed by June 2020. In order to comply with the Zambian legislative and Bank's Integrated Safeguard System requirements, Environmental and Social Management Plan (ESMP) and Abbreviated Resettlement Action Plan (ARAP) reports were prepared by the Zambian Government in May 2018 for the OSBP. The reports were later reviewed by the Bank and publicly disclosed on the Bank's website.

It has however been noted that there is significant budget shortfall to cover all the activities to construct the OSBP mainly arising from a design review that resulted in a higher cost than was originally anticipated. Further, the Road Development Agency has proposed to the AfDB the need to incorporate the construction of two permanent weighbridges to be located at Mwami and Katete in order to ensure sustainability of the investment on the Great East road. In order to cover the funding shortfall and other related service activities, GRZ submitted a supplementary funding request to the AfDB in 2019 for the utilization of loan savings from the Nacala Road Corridor Development Project Phase II. Arising from this request the AfDB conducted an appraisal of the Supplementary Loan from 21 to 30 July 2019. The ESMP for the construction of the Mwami and Katete weighbridges has therefore been prepared as part of the supporting documents to facilitate the acquisition of the supplementary financing.

3. Objectives of the Environmental and Social Management Plan

The Environmental and Social Management Plan (ESMP) for Mawmi and Katete has been prepared to comply with Zambia's Environmental Management Act No. 12 of 2011 and the African Development Bank's Integrated Safeguard System requirements. The ESMP aims:

- i. To describe key project activities (aspects) that shall interact with the environment;
- ii. To describe the existing immediate environment in terms of ecological characteristics, physical environment and socio-economic activities;
- iii. To identify major environmental impacts and suggest measures to prevent, minimize, mitigate or compensate for adverse environmental and social impacts;
- iv. To highlight key environmental management costs expected throughout the project life cycle.

4. Context

Location

The Mwami weighbridge will be located about 7Km before the Zambia/Malawi border at the Sanjika Roads Camp while the Katete weighbridge will be located about 7Km south of Katete boma in Chietainess Kawaza's along the Great East road.

Project Activities

The main project activities for the construction of the electronic weighbridges will be:

- i. Construction of concrete driveways and parking areas;
- ii. Construction of weighbridge houses and offices which will take up space of approximately 240 square meters at each site;
- iii. Construction of side and mitre drains;
- iv. Construction of passing lanes;
- v. Installation of road signs and road line markings;
- vi. Construction of a weighbridge pits and the
- vii. Installation of weighbridge platforms and other equipment.

Baseline Social and Environmental Components

The Mwami and Katete weighbridges will be located in the Eastern Province of Zambia. Eastern province is one of the ten provinces that make up Zambia. It had a population of 1,707,731 according to the 2010 census. Of this population, 49 percent were males while 50 percent were females. The population in Eastern province grew at an average annual growth rate of 2.7 percent in the period 2000 - 2010. The average annual population growth rates for all the districts in Eastern Province were above 2 percent. Chipata district which is the provincial district had the largest percentage share of the population in the province at 26.5 percent while Mambwe District had the least share at 4.2 percent. Katete district has a total of about 46,852 households giving a population of 243,849 persons of which 119,995 are males and 123,854 are females.

The large section of the proposed project sites lies in a predominantly rural setting with the exception of the area around the border post at Mwami, which can relatively be described as an urban setting. This therefore means that the project is predominantly rural and therefore economic activities are dominated by agricultural production, mostly small-scale subsistence farming of traditional crops. The border area is active in trading activities, mainly in agricultural products such as vegetables, potatoes, beans and other legumes.

The two sites fall within the tropical continental climate with an average rainfall of 800mm. The sites experience three distinct seasons namely:

- i. The cool-dry season from May to August,
- ii. The hot-dry season from September to October, and
- iii. The hot-rain season from November to April,

Mwami

The project site is devoid of any vegetation as the area had been cleared during the construction of the 14 Sanjika Roads Camp houses and the small-scale cultivation activities happening around the proposed site. The main soil group in the project area are Ferrosols. In terms of hydrology, the project area does not have any nearby water surface resource. Currently there are twelve (12) households that are renting houses owned by RDA at the project site. The other two houses are unoccupied due to their dilapidated status.

Katete

The project site is devoid of any vegetation as the area has been cleared for small-scale cultivation activities happening around the proposed site. The main soil group in the project area are Ferrosols. In terms of hydrology, the project area does not have any nearby water surface resource. There is no evidence of large animals in the project area. The Katete weighbridge will also be used to service vehicles using the Katete-Chanida road (T6) that head to and from Mozambique. There are currently no people that are settled at the proposed weighbridge site at Katete. The area is only being utilised for small scale cultivation by about 1-2 small scale farmers.

There is no evidence of large animals at both project sites apart from smaller wildlife such as the grass cutters and rodents. Both sites at Katete and Mwami have easy access to stable and reliable communication network, water supply, electricity and security.

Land Ownership

The land where the Mwami weighbridge will be located is owned by the Road Development Agency while the land where the Katete weighbridge will be located is owned by Chieftains Kawaza. RDA will engage the Chieftains to release this piece of land in Katete to the State as has been the case in many other similar developmental activities across the country.

5. Project Alternatives

The following project alternatives were considered:

No-Action Alternative

This alternative assumes that the status quo would continue as it was without the construction of electronic weighbridges at Mwami and Katete. This option would be a recipe for the quick deterioration of the recently rehabilitated Great East road arising from overloaded vehicles.

A No-action alternative is thus not a recommended option.

Construction Alternative

This alternative implies the need to have the weighbridges constructed at both Mwami and Katete.

The Construction Alternative is the recommended option as it would result in enhancing the lifespan of the road infrastructure and improved service delivery to the motorists.

6. Beneficial and Adverse Environmental and Social Impacts

The following are the major environmental and social positive and negative impacts that will arise as a result of the proposed construction of the weighbridges at both Mwami and Katete:

Positive impacts

- Enhancement of the lifespan of the Great East Road by allowing only permissible weights to ply on the road.
- An increase in commercial activities around the project sites that will improve the livelihood standards of the local people through positive multiplier effects. Major activities shall include the supply of foodstuffs and services to workers and the construction companies at both sites.
- Creation of jobs both directly and indirectly.

Negative Impacts

- Occupational health issues arising from the exposure of workers to heavy equipment, sharp tools and the storage and use of flammable materials;
- Air pollution;
- Waste generation;
- Surface and groundwater contamination through fuel spills and leakages;
- Human exposure to hazardous substances;
- Public health issues such as increase in the spread of HIV/AIDS as a result of increased interaction between workers with disposable income and the local communities from the surrounding areas;
- The relocation of the 12 families that are currently renting the RDA Sanjika Camp houses at the proposed Mwami weighbridge site;
- The relocation of the 1-2 families that are currently conducting small scale agriculture activities at proposed Katete weighbridge site.

7. Enhancement/Mitigation Measures and Complementary Initiatives

Appropriate mitigation measures have been proposed to mitigate against the negative impacts during the construction of the weighbridges at Mwami and Katete. These measures include the following :

- Giving the tenants occupying the RDA houses at the proposed Mwami weighbridge site three months' notice as well as transport assistance to shift to alternative accommodation ;
- Engagement of Chieftainess Kawaza to allocate alternative land to the 1-2 small scale farmers that shall be displaced at the proposed Katete weighbridge site as well as the provision of a disturbance allowance to assist the farmers to start afresh at their new farming sites ;
- Provision of Protective Personal Equipment (PPE) to the workers ;
- Conducting HIV/AIDS awareness activities to both workers and the surrounding communities;
- Erection of warning signs and a fences around the project sites ;
- Regular maintenance of vehicles and other project equipment ;
- Conducting dust suppression activities during the construction phase and
- Landscaping the project sites after the completion of the civil works.

The enhancement measure among others include the recruitment of non-skilled labour force from within the surrounding communities at Mwami and Katete weighbridge sites.

8. Environmental and Social Monitoring Programme

The Road Development Agency through its Environmental and Social Management Unit (ESMU) will conduct periodic social and environmental monitoring visits to the project sites to assess the levels of compliance by the Contractors to the provisions of the ESMP. Further the Zambia Environmental Management Agency (ZEMA) as part of its regulatory mandate will have an oversight /surveillance to the happenings at the sites during and after the construction phase. During the construction phase monthly site meetings will be held involving the Contractor, Consultant and the Road Development Agency to review progress and to address any challenges that are being experienced at the sites.

9. Consultations

The preparation of the ESMP was undertaken through a consultative approach that involved the Zambia Environmental Management Agency, the Traditional Authorities in Katete, the Eastern province and the Chipata district administration. Other officials that were consulted included staff currently working at the Mwami One Stop Border Post and some Technical officers based at the Road Development Agency head office in Lusaka.

10. Legal and Institutional Framework

In addition to the African Development Bank's Integrated Safeguard System requirements, the following are some of the Zambian pieces of legislation that are relevant and will be adhered to during project implementation at both Mwami and Katete:

- i. The Environmental Management Act (EMA), No. 12 of 2011
- ii. The Road Traffic Act of 2002
- iii. The Urban and Regional Planning Act No. 3 of 2015
- iv. The Land Act of 1995 and Land Acquisition Act of 1995
- v. The Public Health Act of 1930

- vi. The Factories Act, Chapter 441
- vii. The Local Government Act of 1991
- viii. The Workers Compensation Act No. 10 of 1999
- ix. The Occupational Health and Safety Act No. 36 of 2010
- x. The Employment Act No. 15 of 2015
- xi. The Minimum Wages and Conditions of Employment Act of 1965
- xii. The Public Roads Act No 12 of 2002
- xiii. The Petroleum Act, Chapter 439

11. Responsibilities and Institutional Arrangements

The national institutional arrangements that will play key roles during the implementation of the project are:

- i. The Ministry of Housing and Infrastructure Development
- ii. Ministry of Lands and Natural Resources
- iii. Water Resource Management Authority
- iv. The Zambia Environmental Management Agency
- v. Ministry of Local Government
- vi. Road Development Agency

12. Estimated cost

Costs associated with environmental management and monitoring will be an integral part of specific items incorporated in overall project budgets, and no separate budget is necessary to cover these aspects. Such items comprise;

- Marginal costs of the contractor to be incurred in complying with environmental protection clauses in the construction contract are incorporated in unit rates and bill items and will thus be included as construction costs. It should be noted that no significant increase in construction costs is expected in connection with requiring compliance with environmental protection clauses, since these merely require the contractor to behave in a responsible manner in relation to the environment, in accordance with good construction practice.
- Environmental monitoring carried out by the RDA staff is an integral part of RDA's general supervision duties/responsibilities and will be covered by normal supervision cost estimates.

13. Implementation Schedule

The implementation of the project is expected to commence towards the end of 2019 after obtaining the necessary approvals that include environmental approvals from all the relevant agencies and the required funding from the African Development Bank.

14. Conclusion

The construction of the weighbridges is an important component of road infrastructure as they play crucial roles in deterring the overloading of vehicles and thus will result in contributing to the increase in the lifespan of the rehabilitated part of the Great East road once they become operational. The implementation of the proposed mitigation measures will ensure that the identified negative impacts shall be minimized at both sites.

15. References

The following are the major documents that were consulted during the preparation of the ESMP:

- i. Occupational, Health and Safety in the Road Sector Report, 2003
- ii. ESMU-2003, Involuntary Resettlement Framework-Road Work
- iii. Environmental Management Act [No. 12 of 2011]
- iv. Government of Zambia Statutory Instrument No. 28 of 1997, The Environmental Protection and Pollution Control (Environmental Impact Assessment) Regulations, 1997
- v. Public Roads Act No 12 of 2002
- vi. The National Environmental Action Plan (NEAP) Report of 1994

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