Intended for OLOUNOU – OVENG ROAD PROJECT

Document type **NTS**

Date December 2023

Olounou – Oveng Road Project, Cameroon Non-Technical Summary

Contents

1.	Introduction	3
2.	Project Description	5
3.	Project Alternatives	5
3.1	Alternative Locations	5
3.2	The "No Project" Alternative	6
3.3	Design Alternatives	6
4.	How are changes from the Project assessed?	6
5.	What is life like in the area now? (Baseline Conditions)	7
5.1.1	Physical Environment	7
5.1.2	Biological Environment	7
5.1.3	Social	7
6.	What changes might happen because of the Project? (Impacts)	8
7.	What actions will be taken by the Project?	8
8.	Cumulative Impacts	9
9.	Feedback	10

1. Introduction

The Olounou-Oveng Road Project (the 'Project') involves upgrade and widening of a 70km stretch of road between Olounou and Oveng which connects the three subdivision of Meyomessi, Oveng and Mvagan, located in Dja et Lobo and Mvila Divisions in the South region of Cameroon.

The Project is being undertaken by the Ministry of Public Works (MINTP) for the Government of the Republic of Cameroon as part of a three-year Emergency Plan for Accelerating Economic Growth. The Project will improve the road conditions which will in turn support growth and improve the living conditions of the population.

Project management of the construction works, including undertaking an Environmental and Social Impact Assessment (ESIA), was assigned to Louis Berger Technical Design Office. A joint venture comprised of SEAS and COSEDIL will act as the Engineering, Procurement and Construction (EPC) Contractor for the Project. Construction works are expected to last around three years with construction fronts moving along the route.

An ESIA considers how a proposed project, such as road construction, might cause changes affecting the local environment and communities. The ESIA also sets out how these issues can be managed to avoid harming the environment or lives of people nearby. It looks at all areas where people, plants, animals or the environment might be affected.

To fund the Olounou-Oveng Road Project, the Government is seeking a loan from international Lenders. To secure this loan, an ESIA Report which looks at the Project to makes sure it meets national laws and international environmental and social standards is required.

This document is a non-technical summary of the ESIA Report (dated June 2018). It aims to help explain how the Project may affect people and the project area. Where potentially large negative issues have been identified, this document provides examples of actions that will be followed to reduce any harmful effects or to try to increase any positive benefits the Project may have. The full ESIA Report provides a more detailed description of the Project and findings of the assessment.



Figure 1-1 Project Route

Confidential

2. Project Description

The Project (Figure 1-1) involves upgrade of 70km of road between Olounou and Oveng. The road includes both semi-urban and more rural sections. The Project includes:

- Road widening and asphalting;
- Installation of concrete gutters;
- Construction of 72 small bridges ('dalots');
- Construction of 13 bridges; and
- Installation of signage.

The road is being designed with a life span of 15 years. The road will be comprised of compacted subgrade course (300mm), subbase course (250mm), basecourse (200mm) and bitumen surface course (600mm). The Project includes construction of a weighing station, tollbooths and a rest area.

In semi-urban areas the road will have two lanes of 3.5m width (in each direction), 2m sidewalks and 1m wide aisles on each side (both embankment and cuttings).

In more rural areas the road will be slightly narrower, with two lanes of 3.5m width (in each direction), 1.5m wide paved shoulders and 1m wide unpaved aisles on each side (both embankment and cuttings).

During construction, mixing and batching plants will be installed, and a construction camp will be built. These will be removed once these activities are completed.

Machines and vehicles will be used to build the road including bulldozers, loaders, compactors, graders, mixers, and machines for earthworks. Fuel will be needed to run machinery and generators. The main materials and supplies used to build the road will include fill materials (e.g. laterite or gravel), cement, bitumen for road surfaces, and steel for concrete-reinforced concrete structures (e.g. as part of bridges). Water will be needed to produce concrete at the concrete batching plant as well as to help manage dust, for cleaning and by workers.

The Project will need new quarries to provide gravel and laterite and a construction camp however the location of the quarries have yet to be confirmed.

The exact number of people that will be needed to carry out the work is uncertain. A large proportion of the workforce will be lower skilled roles, which will be recruited for locally. For higher skilled and more technical roles, it will be necessary to hire people from further away, which may include international workers brought in by the EPC contractor.

3. Project Alternatives

Different options for the project design and delivery have been considered. The different options have been looked at to make sure that the Project will bring the most benefit to people, balancing this against any environmental issues, how much it will cost and what is technically possible.

3.1 Alternative Locations

The Olounou-Oveng road is an existing road. The upgrade of the road is proposed to follow the existing layout of the road, reducing the amount of additional lad that may be needed if other routes were considered. This was to serve as many villages as possible, improve living conditions,

reduce cost, reduce the land needed and need for people to move, and maintain existing infrastructure.

3.2 The "No Project" Alternative

The 'no Project' option would be to make no improvements and keep the current road as it is. This would lead to continuing transport problems and risk of accidents from poor road conditions, more air pollution and damage to the environment around the road, and other negative impacts on people's lives and the economy. The 'no Project' option would also mean that the improvements that the Project would bring to the area would not happen, so there would be no economic improvement or quality of life from the improved road conditions.

3.3 Design Alternatives

The specific dimensions and details for road construction, safety equipment, pavement design, and geometrical characteristics have been considered, and layouts 'optimised' to try and improve the road conditions without taking too much additional land around the existing road width. The traffic forecast for the road is strong in the dry season. Several recommendations and measures have been included in the Project design to help improve road safety, including road markings and safety signage to minimise the hazards in different areas.

4. How are changes from the Project assessed?

Information on current conditions, or baseline, is used to show what an area is like before a project. Existing information available online, in books and from the government (e.g. census data) has been used. Further studies to gather information in the project area were completed between December 2016 and November 2017. Information was gathered which looks at air quality, noise levels, soil conditions, what the area looks like, what plants and animals are present, who lives there, what jobs they do and how people currently travel around.

Discussions with local people, local government and traditional authorities were also used to gather information. Some initial meetings were held in April 2017, with further meetings in July 2017 (summarised in Table 4-1). Additional meetings with communities were undertaken in 2023, which will be used to develop plans related to resettlement.

Consultation Type	Areas covered
Meetings with local administrative and traditional authorities	Meyomessi, Mvagan, Oveng and Villages located along the route
Community meeting	Meyomessi Sub-district
Community meeting	Mvagan Sub-district
Community meeting	Oveng Sub-district

Table 4-1 EIA/ESIA Consultations Summary

The information on what life is currently like in the area is used to help identify who or what might be affected by a project, for example people or animals. These are known as receptors. The ESIA looks at the changes (or 'impacts') that the Project might cause. The impact assessment rates these changes based on how big a change the receptors (e.g. people) might feel. Where a large negative change might occur actions to reduce the negative effects are identified. For positive changes, actions might be possible to increase the benefits .

5. What is current situation in the area? (Baseline Conditions)

5.1.1 Physical Environment

The Project is located in Cameroon, which experiences a subequatorial climate, which has a long rainy season from August to November, a long dry season from November to February, and a short rainy season from March to June, and short dry in July, with high temperatures year round. The study area is part of the Southern Cameroonian plateau, and is described by domes and hills crossed by slow-flowing rivers. The area is mainly characterised by the presence of ferralitic soils and hydromorphic soils which are usually present in marshy areas and river basins. The region is located within the Nyong river catchment area and it hosts several smaller rivers and brooks such as the Afamba, Libi, Ndu, Mboua, and Kom many of which might not be suitable for drinking . The air quality in the area is currently affected by small amounts of fumes from bush fires and greenhouse gas emissions from vehicles, however, in the rural surroundings, these have very little impact. Noise in the area is currently generated from human activities, including sawing of trees and traffic, as well as some industrial activities.

5.1.2 Biological Environment

Many different types of plants and animals live in the project area. This includes several type of forest, such as Dja sempervirent forest, marshy forests, and riparian forests (on riverbanks). Over 305 types of trees from 51 different families were identified. A broad range of animals including elephants, gorillas, chimpanzees, and small deer-like animals called chevrotains live in the area with many kinds of birds, fish, and reptiles also found there. However, illegal logging poses a major risk to the plants and animals present.

5.1.3 Social

The Project zone is located in the South Region of Cameroon, within the Divisions of Dja-et-Lobo and Mvila, within the districts of Meyomessi, Mvangan, and Oveng. As of 2015, there were a total of 98 villages across the districts of the Project, with a total population of 37,022 people. The area is populated by various ethnic groups including Fang, Bulu, and Baka.

The administration is carried out at multiple levels, with mayors and town councils acting as the governing authorities at the local level, alongside the presence of traditional chiefdoms.

The local economy is mainly based around agriculture, hunting, small-scale trade and small-scale industry including casava, palm wine and small-scale pisciculture. The area harbours numerous natural resources, including gravel and sand which is exploited at a small scale, and trees used for logging. Poverty is an issue, and there are a number of governmental and non-governmental organisations (NGOs) in the area working to combat this.

The primary causes of poverty are cited as insufficient income, lack of employment, and corruption. The lack of modernisation in agriculture and lack of collective investments further increases poverty in the region.

Utility services, schools, medical centres, electricity, and fuel supply are available, however they are unevenly distributed across the area. Sporting and telecommunications infrastructures is limited.

The land in the area is mostly acquired through inheritance guided by traditional tribal rights and laws inherited from the colonial era..

6. What changes might happen because of the Project? (Impacts)

Impacts are the changes that may occur in communities and / or to the local environment that because of the project, and these could be positive or negative. Actions have been identified to try and reduce negative impacts as much as possible, however it is not possible to avoid all changes or impacts. Where negative impacts are identified, these will be reduced to small impacts by applying agreed management actions.

The potential large impacts from the Project's construction and operation without these actions include:

- Soil pollution;
- Spread of infections and diseases as a result of people moving in and out of the area; and
- Fire hazard/explosion.

Other potential negative impacts from the Project's construction and operation without these actions include:

- Contribution of greenhouse gases and degradation of the ozone layer;
- Degradation of air quality;
- Pollution of surface water and/or groundwater;
- Modification of soil structure, erosion and risk of road flooding;
- Loss of biodiversity and tree cover, and increased pressure on forest resources and wildlife;
- Accidental introduction of new species and/or spread of invasive species;
- Social conflicts and unrest;
- Road accidents after the commissioning of the road;
- Noise pollution;
- Health and safety risks at work;
- Damage to potential archaeological sites or sites of worship; and
- Moving of graves, destruction of houses and other properties.

This Project will also have significant positive impacts such as the development of the local economy and direct and indirect job opportunities.

Some additional studies are planned to look in more detail at potential impacts to plants and animals (biodiversity) that may occur due to the Project. Additional studies are also planned to check what the changes to air quality and noise levels might be as a result of the Project. If the changes are larger than previously thought, additional actions to reduce these will be identified.

7. What actions will be taken by the Project?

Two types of actions have been identified in the ESIA: **mitigation** measures (actions to reduce or avoid negative changes) and **improvement** or enhancement measures (to increase positive changes).

Key actions to reduce or avoid negative changes to environment and communities include:

- Limiting additional land required for the road;
- Payment of compensation for loss of land required for the Project (this includes physical property but also land being used for economic activities like growing crops);

- Improvements to road safety (road safety measures e.g. speed bumps, and signage);
- Developing a traffic management plan to make sure vehicle movements for the project don't cause accidents;
- Actions to fix or restore areas used to extract gravel or laterite once they are no longer needed;
- Sharing information about road safety with local people and drivers in the area;
- Education of employees and local people about sexually transmitted diseases and infections;
- Planting of trees to replace those to be felled in the project area; and
- Capacity building / training of members people as part of committee for monitoring progress in completing the actions set out in the ESIA.

To increase the positive impacts, the following actions have been identified:

- Buying goods and services locally where possible;
- Recycling or reusing plant waste from the clearing of road right-of-way by making it available to local people (sawmill, wood depots, etc.);
- Use of local workers where possible (depending on skills required) with a target of at least 60% Cameroonian workforce, in line with legal requirements; and
- At the end of construction where things such as desks from offices are no longer needed by the project (and will not be transferred to another project) providing these to local communities.

The actions set out in the ESIA have been used to develop an Environmental and Social Management Plan (ESMP). This sets out what actions the Project must take. In addition, further more detailed plans might be developed for specific issues such as managing health and safety at work, communicating with local people, and plans for monitoring or measuring to make sure that the planned actions are being effective in reducing and avoiding impacts.

8. Cumulative Impacts

An additional study has been undertaken by Ramboll in 2023, which looks at changes from the Project alongside other planned or proposed projects or activities in the area and how these could combine to cause bigger changes. These are known as `cumulative effects'.

The cumulative assessment looked at several projects which might cause impacts in the same area and over the same time period as the Olounou-Oveng Road Project. Limited information was available on these projects, so the general impacts of these projects were considered. The projects include:

- Possible construction of a new road from Mintom to Ntam;
- Possible construction of a road from Oveng to the Gabon border;
- Logging activities; and
- New quarries.

Some change to land use and livelihoods may occur, especially near Oveng, due to both the Olounou-Oveng Project and the Oveng-Gabon border road. However, the amount of the change or impact that may be caused by the Olounou-Oveng Project is not certain at this time.

During operation of the Olounou-Oveng road, cumulative impacts relating to habitats, plants and animals may occur. These may result from habitat loss or reduced habitat quality, changes in noise and air quality, spread of invasive species and possible increases in animals being killed by traffic. Further baseline biodiversity data is needed to confirm Project impacts, which will help determine the extent or importance of the cumulative impacts. While new road development may cause more habitat loss and increase pressures on plants, animals and habitats, the Olounou-Oveng Road Project's contribution to this would be limited as it is only an upgrade not a whole new road.

The Government of the Republic of Cameroon plans to complete the Olounou-Oveng Road Project as part of wider road improvements and development of the road network. It is expected to have a positive cumulative impact on the local area's road transport network.

9. Feedback

If you have any questions or comments about the Project, of if you have any complaints you wish to raise, we would be happy to hear from you. Feedback on the Project may be submitted to:

Tel. +39 075 9414677

Fax +39 075 9414648

Email: info@seas.it