Environmental and Social Impact Assessment for Raxio Data Center, ICT Park, Addis Ababa, Ethiopia



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EXECUTIVE SUMMARY

Project Background

This is the ESIA document for Raxio Data Center that will be established in the Information and Communication Technology (ICT) Park located on the outskirt of Addis Ababa. It is prepared by AEDC plc, a CEFCC certified company, as part of contractual agreement with Yema Architecture plc.

First Brick Holdings ("FBH") is a Roha Group Company that intends to build the foundation of the digital economy across Eastern and Southern Africa. FBH intends to develop 10 to 12 carrierneutral, co-location data centers of international (Tier III) standard, operating under the 'Raxio" brand in East and Southern Africa ("the Project"). The project will have a phased approach where the general approach is for the first phase to be 500kW, followed by phases 2 and 3 which will each add an additional 500 kW of IT load (with localized variations where required).

Objective of the ESIA

The objective of preparing this ESIA is to review the legal framework and policy issues, provide details about the baseline environment, activities of the project and their potential impacts on the receiving environment. Moreover, the document helps to address and minimize the potential environmental and social impacts and enhance the positive ones through the implementation of environmental and social mitigation measures.

ESIA Methodology

The document is prepared by collecting and reviewing relevant documents including policy, previous study documents, use of Google Earth, site reconnaissance, consultation, transect walk and checklist were used.

Legal and Policy Framework

Ethiopia has a well-organized and structures environmental management legal system that is supported all the way from the Federal constitution through the proclamations, policies and guidelines. In addition to this, the recent investment proclamation encourages the investment that boost digitization of Ethiopian economy. Details on each of these legal and policy framework are described in chapter 3 of the document.

Description of the Project

The telecom sector in Ethiopia has shown significant growth over the past decade as continued investment in ICT infrastructure, availability of services and increasing purchasing power have contributed to expanding the customer base.

The proposed Raxio Data Center is essential to assist the ever increasing strong and broad-based economic development in Ethiopia. In addition to this, at present, the government of Ethiopia is engaged in aggressive infrastructure development projects such as roads, railways, power production and distribution, airports and industrial parks.

Baseline of the Impact Receiving Environment

The government of Ethiopia has already allocated 200 ha of land and established ICT Park on the outskirt of Addis Ababa. The selected site is ideal for the establishment of data center as it is approximately 10 to 15 km away from the center of the city. It is located on a relatively flat topographic formation.

The climate of the town of Addis Ababa has a subtropical highland climatic condition with precipitation varying considerably by the month. The city has a complex mix of alpine climate zones, with temperature differences of up to 10 °C, depending on elevation and prevailing wind patterns. The high elevation moderates temperatures year-round, and the city's position near the equator means that temperatures are very constant from month to month. As such the climate would be maritime if its elevation was not taken into account, as no month is above 22 °C in mean temperatures.

The site does not contain any form visible biological resources above the ground other that few shrubs and grasses. During the site visit the team witnessed the site consists of few stockpiles of spoil material dumped on the site. Moreover, the site is possessed by ICT Park after compensating the previous land users. At present, no agricultural activity take place on the site other animals grazing on the site. Thus, the land use change took place before couple of years when the park possessed the site and converted it as part of the park as can be witnessed from the attached letter of possession.

The park provides two kinds of services for its clients. The first service is building rental services, where there are fourteen companies receiving this service at present and the second service is sub-lease land service where companies build their own infrastructures depending on their interest. At present, there are twelve companies engaged in the second service line. Most of the service recipients are engaged in manufacturing of ICT equipment, software developers, consultancy service providers, and few are data centers.

Public Consultation

The proposed project site is located within the boundary of the previously delineated ICT Park. Based on the preliminary site investigation and information obtained from the park administration and local residents, the government had already provided compensation for the project affected people 15 years ago. Consultation with the park administration revealed that the park doesn't have the exact number of previous land users who received the monetary compensation. Recently, the government attempted to distribute tractors for the youth of the project affected people that was still contested for lack of clarity on the criteria used to include the youth.

On the other hand the previous land users confirmed that consultation was conducted following the Expropriation of Land Holding for Public Purposes and Compensation Payment (Proclamation No. 455/2005), although the monetary compensation was 3 Birr pre meter square.

In addition to this, no grievance redress mechanism was in place to address issues related to the process and outcomes of the compensation for the project affected people. According to these project affected people, the land acquisition and compensation process destroyed their livelihoods once and for all.

At present, none of the promises made for the project affected people during consultation session did materialized. Furthermore, the team noticed encroachment into the park compensated areas by the previous land users. Hence, the assessment team have deep concern about reemerging complaints and friction with the project affected people cognizant of the current political condition of Ethiopia unless immediate intervention are made via a well-organized and critically prepared plan to restore and sustain the livelihood of the project affected people.

Impacts of the Project on the Environment

The construction and management of the data center is an important and critical infrastructure that boosts data management facility that supports the digitalization of Ethiopian economy, create job for the local skilled and unskilled labor, and create income generating activities. On the other hand, the adverse impacts of the project on the receiving environment includes: soil compaction, pollution and management of spoil material, air pollution by dust and emission from construction machineries, water pollution from release of hazardous substances, health hazard from communicable diseases such as HIV/AIDS and expansion of crime, accident on the workforce during construction period, competition for local resources (such as water, electricity, etc. services) during operation phase, solid waste and domestic wastewater during operation phase during operation phase and the spread of COVID 19 virus. Finally, it brings about change in the land use and land cover in the area from the current vegetative cover that insulates the land and deprive its capacity from permeable to water to sealed land cover.

Impacts Mitigation and Management

The mitigation measures for the impacts associated with soil compaction, pollution and management of spoil material; the assessment included preserving top soil for later rehabilitation purposes, loosen the compacted soil after completion of the site activities, provide adequate drainage structures so as to maintain the normal flow direction and attempt to maintain uniform water distribution over surfaces; and avoid dumping spoil material near rivers or wetlands as much as possible. Include vegetative cover areas such as grassing and tree planting in the design of the project.

For the impacts associated with air pollution by dust and emission from construction machineries, mobilize machineries that are efficient and release small amount of emission and low fuel consumption; establish low dust policy with the construction premise such as speed limit for vehicles, speed breaks along vehicular routes, give orientation to drives to respect traffic signals within the construction area; and ensure regular and periodic maintenance of vehicles and machineries so as to reduce pollution related to motor exhausts.

For the impacts associated with communicable diseases such as HIV/AIDS and expansion of crime, create awareness raising sessions, provide condoms, VCT and periodically conduct general

capacity building trainings. In order to tackle the problems associated with accidents conduct awareness, based on job safety analysis provide PPE and monitor proper use. For competition for resources establish own sources of water and establish rainwater harvesting structures and domestic wastewater treatment setups. Implement all protocols for COVID prevention and control.

Last but not least, this ESIA must be updated thought the course of construction and implementation time to accommodate unexpected environmental and social issues that might happen to appear along with the construction activities. In case no new circumstances appear, the ESIA will be updated annually.