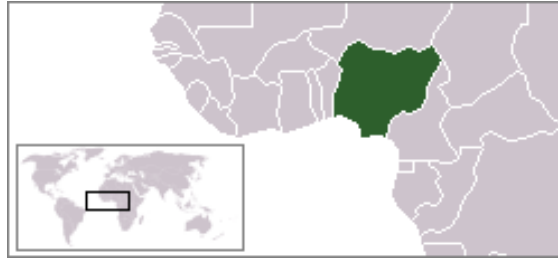


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**Threats on Nigerian Hydroelectric Power Supply Projects
by a new Niger Dam Project**

Threats arising from projects should be discovered during feasibility studies preceding the approval and implementation of projects. Such studies should provide the business and technical justification for projects and their impacts on existing industrial plants and economic installations.

In the past month, May 2009, there was some publication highlighting the anxiety among the management of the Nigerian electric power supply over the implementation of a project for the building of the Kandadji Dam by the Government of Niger, upstream of the River Niger. The Nigerians fear that the dam will reduce the water flow to the Kainji Dam and therefore the generating capacity of its hydro power station, and also affect the generating capacity of the downstream Jebba Hydro Power Station. Already, experts observe that there has been consistent reduction in water inflow into the river over the years because of climatic changes.

Therefore, it is feared that, with time, a combination of the continuing unfavourable climatic changes and water reduction caused by the implementation of the proposed dam will incapacitate the Kainji and Jebba Hydro Power Stations.

The Kainji Hydro Electric Power Station and Jebba Hydro Electric Power Station

Nigeria is downstream of River Niger, which flows from the Fouta Jallon Hills in the Republic of Guinea, through Mali and Niger into Nigeria. Niger Republic initiated the Kandadji Dam project, on the River Niger, in August 2008, and it is estimated to cost \$709 million. Experts say that the project could lead to a reduction of not less than 10 per cent inflow of water downstream to Nigeria.

A former Executive Director of Generation, of Power Holding of Company of Nigeria, says that the new dam will definitely affect water inflow into Kainji Dam and power generation at the hydro stations. He explains that water starts flowing into the Kainji Lake by June from Futa Djallon and it fills up by December. So, the operational plan is always to fill up the dam by December and start using the water between December and June. Therefore, he reasons that if the dam is built, it will seriously affect inflow of water into the Kainji Lake which will in turn affect Jebba, because Jebba is downstream of Kainji. As a consequence, the generating capacities of the two hydroelectric electric power stations in Nigeria, Kainji and Jebba, respectively, will be affected [1].

Kainji Power Station has a total installed capacity of about 760MW, with its first units commissioned in 1968. Jebba Hydroelectric Power Station is 100 kilometres downstream of Kainji, it has a generating capacity of about 600 MW and was commissioned in 1984. In spite of the poor electricity generating capacity and output of Nigeria, the country gives Niger about 65 MW daily to discourage them from damming the river.



Necessity for Kandadji Dam in the Niger Republic

It is claimed that the government of Niger Republic explains that their Kandadji Dam project will be more for agricultural purposes than for power generation. The World Bank is funding the rehabilitation of the Kainji Dam in Nigeria and also part funding the Kandadji Dam project in the Niger Republic. The Islamic Development Bank is involved in the funding of the Niger's Kandadji Dam which is planned to be completed in 2013. It will be used for irrigation and power generation. It is reported that the dam project was discussed for about 40 years prior to its launching in August 2008. The decision to launch became imperative and urgent to save the country. Drought and desertification are reportedly reducing the area of the country's usable farmland by 200,000 hectares every year[2].

Negotiations by the World Bank

The World Bank has been organising meetings between the two countries. An unnamed officer of the bank is credited with the following statements[3]:

"We have not been sitting down waiting for problems to hit Kainji and Jebba before we make moves; we have met with the Nigerien government (government of Niger) more than seven times over the issue. And we have told them that we should ensure that everybody's interest is protected."

"We have also been meeting with all the countries that the river passes through, Mali and Niger, at the level of the River Niger Commission. We can only persuade other countries to reason with us," the source added.

Concluding Remarks

From a study of relevant reports, it is clear that the Kandadji Dam project has been under discussion for many years, sources suggest forty year. On the face of it, the Nigerian government may feel that they have cause to worry over the long term impact of the dam on the sustainability of the Kainji Hydroelectric Power station and the Jebba Hydroelectric Power Station.

The other side of the coin is that the dam is being built to ensure the survival of the people of Niger Republic; to save them from non-negotiable desertification and drought with its attendant hunger, starvation and death. From a casual Internet research, it is clear that a number of studies have been made on this project. Such studies should have provided the economic justification for it, and its impacts on downstream existing dams.

Without dabbling into international politics, it is crystal clear that Nigeria is blessed with a lot of natural resources, in particular its abundant oil and gas wealth. If, with time, Kainji and Jebba Hydroelectric Power Stations become incapacitated after 2013 because of the commissioning and operation of the Kandadji Dam, Nigeria is wealthy enough to find other electric power generating sources. The same is not true for Niger, whose very survival may depend on the dam. In my view, what we should be doing now on this issue, as Nigerians, is to plan for the long term, in the realisation that the sustainability of our Kainji and Jebba Hydroelectric power stations may be hanging in the balance.

References

[1]. " FG moves to avert Nigerien threat to Kainji, Jebba hydro stations" By Martin Ayankola , Monday, May 11, 2009 The PUNCH

[2]. "Niger begins building dam for food, electricity", Reuters by Abdoulaye Massalatchi 04 August 2008

[3] Same as [1].

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