IRRIGATION DEVELOPMENT COMPONENT OF THE PWALUGU MULTIPURPOSE DAM PROJECT

By:
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OUTLINE OF PRESENTATION

• Background
• Project Area /Location
  • Field Visit
  • Proposal by POWERCHINA/SINOHYDRO
• Current Status of project
• Proposed Project Development Schedule
• The Way forward
First study was carried out in the 1960’s (Pwalugu: 110,000ha) The studies was updated in 1993 at the prefeasibility level along with two other schemes on the White Volta (Kulpawn & Daboya). It was recommended as priority project to foster economic development in Northern Ghana.

The project is expected to:

- Increase agricultural output to meet domestic food demand and also for export,
- Stem rural-urban migration by providing jobs for the teeming youth,
- Contribute to the springing up of agro-processing industries,
- Reduce poverty and mal-nutrition and eliminate the perennial flooding that is occasioned by the spillage from the Bagre Dam.
- Attract private sector participation etc.
In February 2013, VRA signed a contract with Tractable Engineering for the feasibility study and detailed designs studies for the Pwalugu Multipurpose dam. These studies along with the ESIA was funded by AFD. Prefeasibility and feasibility was completed in May 2014 and January 2016 respectively. Feasibility Study through its financial and economic analysis revealed that most of the benefits of the project was driven by irrigation development (20,000ha). Stakeholders agreed there was the need to assess the Institutional and Social Feasibility of such a large irrigation Scheme.
Background -3

• Societe de Canal de Provience (SCP) was contracted to undertake the task

• The Consultant has completed the Phase one of the feasibility studies which involved the following tasks:
  ➢ Task 1: assessment of the current situation
  ➢ Task 2: analysis of the current situation
  ➢ Task 3: analysis of options for future development
  ➢ Task 4: scenario proposals

• The outcome of this work is in a report named “Book 1”

• This was discussed in the last workshop in January 2019 where stakeholders made inputs to enrich the document
AGREEMENT

• Government in an effort to fast-track the project development signed an exclusive MOU with POWER CHINA/SINOHYDRO for the development of the project.

• POWERCHINA/SINOHYDRO was therefore tasked with the development Project by the President of the Republic of Ghana at the Sino-African Summit in September, 2018 in Beijing.

• In connection with the bi-lateral agreement, a team from POWER CHINA/SINOHYDRO were in the country on a fact-finding mission.
FIELD VISIT

❖ Subsequently, a team from POWERCHINA/SINOHYDRO and GIDA paid a working visit to the Upper East and Northern Regions in January 2019

❖ To gather first hand information about the proposed Project

❖ The team also interacted with some of the key stakeholders (District Assemblies and community members) of the project area.
The Project is located in the Northern Region of Ghana, At the left bank of White Volta River, occupies 24,439ha, 35.3km long and 15.5km wide.
FIELD VISIT-2

Grassland

Mushy Area

Wier site
1. Build weir 40km downstream of the Pwalugu Multipurpose Dam on the White Volta River to raise water level to achieve gravity irrigation, as well as ensure flow discharge and the downstream irrigation area.

2. Construction of main and branch canal system, as well as water diversion system in the irrigation area, to ensure the water demand for the irrigation area.

3. Build automatic control system.
# CURRENT STATUS

<table>
<thead>
<tr>
<th>Activities</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Framework agreement</td>
<td>Dec. 2018</td>
</tr>
<tr>
<td>2 Preparatory Meeting with SINO HYDRO/POWER CHINA</td>
<td>Jan. 7, 2019</td>
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<tr>
<td>3 Field Visit January</td>
<td>Jan. 9-12, 2019</td>
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<tr>
<td>4 Back to Office Meeting</td>
<td>Jan. 16, 2019</td>
</tr>
<tr>
<td>5 Submission of EPC and Technical Proposal by SINOHYDRO/POWER CHINA to GIDA</td>
<td>March 20, 2019</td>
</tr>
<tr>
<td>6 Review of EPC proposal by GIDA</td>
<td>March 25, 2019</td>
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</tbody>
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CURRENT STATUS – KEY ENGINEERING PROCUREMENT CONTRACT (EPC) COMMENTS BY GIDA

• The Original EPC Conditions of contract including all prescribed insurance Policies should be adopted and any proposed amendment of specific Clauses should be discussed at the negotiation stage.

• In the Particular Conditions of the Contract the following conditions precedent must apply to Clause 1.6 “Contract Agreement“
  • Approval for single procurement by Public Procurement Authority (PPA)
  • Parliament of Ghana approving the Chinese/ External Loan Agreement
  • Commencement of disbursement of the approved loan marks the commencement contract
CURRENT STATUS – KEY EPC COMMENTS BY GIDA

• The agricultural Development Plan which is to start and move parallel with Physical construction should clearly recommend:
  – Scheme Management Structure
  – Farm Blocks layout Structure
  – Best approach to attract both Large-scale commercial and medium scale commercial and small holder farmers to the scheme

• The contract as part of the project cost should conduct an Agricultural Development Plan

• ESIA studies approved by EPA before the commencement of the project.

• Government should direct Lands Commission to carry out land Tenure assessment and recommend the best way to have access to land before the implementation begins
1. Total construction period is 36 months, including the Preparation Period and investigation design, weir construction, main and branch irrigation and drainage canal, acceptance.

A. Construction preparation period and investigate design for 6 months.
B. Construction of Weir for 24 months.
C. Construction of Main and branch irrigation and drainage canal for 24 months.
D. Acceptance for 4 month.
# PROJECT DEVELOPMENT SCHEDULE OF IRRIGATION -2

<table>
<thead>
<tr>
<th>Year</th>
<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
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<tbody>
<tr>
<td>Month</td>
<td>1 2 3 4  5 6 7 8 9 10 11 12</td>
<td>1 2 3 4 5 6 7 8 9 10 11 12</td>
<td>1 2 3 4 5 6 7 8 9 10 11 12</td>
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<tr>
<td>Prepare Technical proposal and draft EPC contract</td>
<td>2 Months</td>
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<tr>
<td>Preparation Period, Investigation and Design, including the weir, main and branch canal for the whole 24439 ha.</td>
<td>6 Months</td>
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<tr>
<td>Weir</td>
<td></td>
<td></td>
<td>24 Months</td>
</tr>
<tr>
<td>Main &amp; Branch Canal and Irrigation &amp; Drainage canal</td>
<td></td>
<td></td>
<td>24 Months</td>
</tr>
<tr>
<td>Acceptance of the Project</td>
<td></td>
<td></td>
<td>4 Months</td>
</tr>
</tbody>
</table>
THE WAY FORWARD

✓ Attorney Generals Department to fast track the review of the EPC contract and provide comments to update the contract
✓ Sign the EPC contract
✓ Get Ministry of Finance to Launch the Financing process
✓ Access the Chinese loan
✓ Launch Project
✓ Start Project Design Review and Construction
THANK YOU !!!!!