# Report of mission to Kakira Sugar Limited on 4th & 5th November 2010
Prepared by AFREPREN/FWD

## Commissioning Ceremony of the new 3MW turbine
3rd November 2010 at Kakira Sugar Works premises in Jinja, Uganda

### Attendance

**AFREPREN/FWD:**
1. Mr. Stephen Karekezi (Director)
2. Mr. David Muange (Internal Auditor)
3. Ms. Esther Wamuyu (Project Officer/Administrator)

**Kakira Sugar Limited:**
Mr. Farhan Nakhooda (Projects Director) accompanied by other staff members

### Ribbon Cutting Ceremony

Mr. Stephen Karekezi (Director, AFREPREN/FWD) and Mr. Farhan Nakhooda (Projects Manager, Kakira Sugar Works), led their respective teams in a ribbon-cutting ceremony as part of the commissioning of the new 3MW turbine.

The 3MW turbine has been installed to provide the additional electricity required for the plant, while the ongoing investment in a new 30MW cogeneration plant is expected to be complete for commissioning in June 2012. The turbine was ordered from Triveni Engineering of India in early 2009 while Kakira used the still functional alternator that was used by a decommissioned cogen plant. The newly assembled cogen plant is now housed in a small building adjacent to the existing power house. The civil design was prepared by ECONS of India.

According to Kakira Sugar Ltd, the total estimated cost for this project component, including civil works, piping, electrical is USD 800,000. AFREPREN/FWD partly financed the studies that led to the implementation of the 3MW turbine installation.

After Mr. Stephen Karekezi and Mr. Farhan Nakhooda finished their comments, a red ribbon, stretched across the entrance to the building housing the 3MW turbine was cut, to mark the official commissioning of the turbine.

They then took a guided tour of the installation, with the various Kakira Sugar Ltd engineers explaining the functions of the machinery.

## Follow up meeting on 5th November 2010
Venue – Kakira Sugar Limited Offices, Kampala
Time: 8.30am

### In attendance:
1. Mr. Stephen Karekezi, AFREPREN/FWD
2. Mr. David Muange, AFREPREN/FWD
3. Ms. Esther Wamuyu, AFREPREN/FWD  
4. Mr. Youssef Arfaoui, AfDB  
5. Mr. Farhan Nakhooda, Kakira Sugar Ltd  
6. Mr. John Mukasa, Kakira Sugar Ltd

The meetings main objectives were to follow up on:
- previous discussions on AfDB’s potential participation in the Kakira Sugar Ltd Cogen project  
- the ethanol policy with the Ministry of Energy  
- next advance from AFREPREN/FWD

1. **AfDB’s participation in the Cogen Project**
   On the project status, Mr. Farhan advised on the following timeline:
   - They were in the process of issuing tenders for bids in 3 parts.
   - turbine – to request by 15th of Nov  
   - 67bar, 510C Boiler – 1st Nov (takes 60days)
   - To meet suppliers in early January 2010
   - Place order by end of December 2010 or early January 2011
   - Delivery and installation expected to take 18 months to be able to meet deadline for end June 2012

   **Rationale for considering only one turbine (30MW):**
   Kakira currently has 4 turbines: 122MW turbine, 2 small 3MW turbines and 1 1.5MW turbine. 3 weeks are needed to maintain the turbine. The Boiler shuts down for 1 month (approximately 45 days) once a year (a legal requirement). The factory stops for 1.5 days every month, and in the year they have 60 days allowed shut downs. During this time the factory stops exports but the boilers are still working.

   **Financing of the Project:**
   Mr. Farhan advised that funding is not a problem and the cash flow from the project can be used as seed capital to other projects. Kakira Sugar Ltd is still in the process of negotiating with banks the two main ones being Stanbic and Standard Chartered and they should be having some response in the month of November 2010 where one of them should be the lead arranger. They also have offers from City Bank and Barclays Bank. The development banks under consideration are AfDB, IFC, DEG, and Proparco. There is a need for a lead arranger so that a letter of credit (LC) can be opened by January 2011 as well as for sourcing quotations from suppliers. Potential suppliers to companies in Uganda require the LC as commitment however this does not indicate funds flow. Terms of payment from suppliers generally are 10% advance, 70% shipping, 10% when delivered, 10% when commissioned. Mr. Arfaoui stressed the need for having an LC that did not have conditions as these might be barriers to the bank’s (AfDB) involvement in financing the project.

2. **Ethanol Plant**
   Mr. Farhan advised on the various markets they were looking into:
   - The oil sector where the pipeline expansion project is ongoing; however there is not enough information as to whether there is an adequate market. They have approached various companies including Tamoil Uganda without much success.
   - Under a worst case scenario (failure in the Uganda market) possible alternative markets include:  
     - The Alcohols sector where NCP Alcohols has been approached  
     - Fuel ethanol for gas turbine engines to generate electricity  
     - Using Vinasse (a by-product of sugar cane) as a source of methane to generate electricity
Feasibility Studies conducted on the same  
Technical study – submitted to AFREPREN/FWD  
Financial study – in progress  
Environmental – to forward to AFREPREN/FWD and AfDB  
Commercial Study – Kakira Sugar Ltd were interested in being directed to a consultant who can carry out a commercial study

The dates of starting the project will be confirmed by Kakira Sugar Ltd however they would have preferred and it runs in parallel with the Cogen project

**Ethanol policy**

AfDB’s motivation for a national ethanol policy is to provide a basis for an ethanol plant that would use the existing storage facilities and planned pipeline – Mr. Farhan advised that their appeal to the Ministry of Energy is that the system be in-built. However with the delay in the construction of the pipeline, they recommend that the government introduces a blending policy where oil marketers blend as per their market share. He advised that currently 4 major companies import 75% of the fuel and this is the quantity that they recommend be blended. The blending can be done at the government depots in Jinja before the pipeline is completed.

**3. Next advance from AFREPREN/FWD**

Mr. Farhan advised that John Mukasa would put in the reimbursement claim during the week on 8th – 12th November 2010

The meeting was adjourned at 9.45am.
Photo Gallery

Stephen Karekezi, Director, AFREPREN/FWD (left) with Farhan Nakhooda, Projects Director, Kakira Sugar Limited (left)

Sections on the installed 3MW turbine

Sections of the installed 3MW turbine

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