Pamoja

Energy for Sustainable Development

95%





9 800

in EAST AFRICA

Image © 2010 GeoEye
© 2010 Europa Technologies
© 2010 Google
©2010

Our Mission

Pamoja is an ESCO which:

- Empower local entrepreneurship in rural communities
- Own, Operate and maintain small decentralised energy units





Pamoja CLEANTECH AB

Towards Proof of Concept

1. **World Bank Millennium Science Initiative**
   - Contracted by **UNCST** for supply of **2 x 10KW** biomass gasification
   - Contracted by **UNCST** for 1 hybrid **biomass + solar** PV 11 kW

2. **Nordic Climate Fund**
   - Contracted for operation & maintenance of **32 kW biomass** gasification system in Mpigi District
   - Currently the only Biomass gasification **system running** in Uganda



Biomass Power Plant, Mpigi District

Building an ESCO in Uganda

3. SIDA Innovations Against Poverty

- Facilitation of Energy Service Company (ESCO)
- Management and Technical Capacity building
- Sustainable Biomass Supply Chain Strategy
- Promotion of small enterprises at local trading centre



Technical Training facilitated by Pamoja Cleantech

A 40 kW gasifier system





Pamoja
CLEANTECH AB

pamoja CLEANTECH

The green plant

Telecom
Base station

Agricultural residues

Agroforestry

Biochar

Farmers

Entrepreneurial hub

Community

Solution #1
Value Addition - Maize Milling

Ugx 100-250/kg **Ugx 300-500/kg** **Ugx 800-1,000/kg** **Ugx 1,500-2,000/kg**



Maize

Trasher



Corn Grain

De-hulling & Milling



Corn Flour

Packagin g



Packaged Flour

Power Power Power



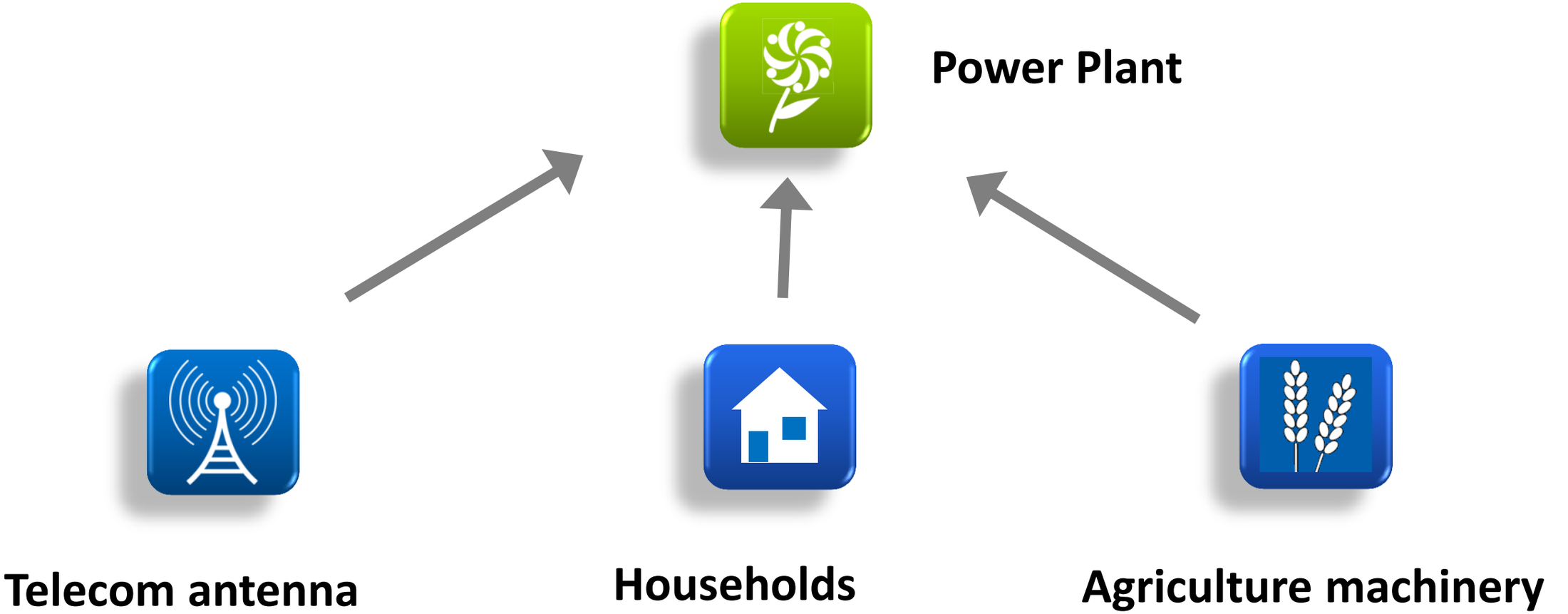
Biomass



Pamoja

Business Model

Pamoja CLEANTECH



Rural income generation



Farmers

Operators



$

$

$

Power Plant

Telecom antenna

Households

Agriculture machinery

Learnings

1. Setting up of the micro-grid is **Expensive** and is operationally challenging.

2. Decentralized Power generation for productive use is **More Profitable**

3. **Shortage of** technical manpower to keep the gasifiers running

4. To **scale up**, we need passionate entrepreneurs to own & run the integrated systems



Pamoja





Community savings

Education benefits

Environmental benefits

SROI 1,91

Agriculture development

Local business development

Health benefits





MEASURABLE OUTCOMES

kWh of electricity

job opportunities

additional income

145 tons CO_2



Pamoja CLEANTECH

www.pamoja.se

info@pamojacleantech.com

Follow us on Facebook and Twitter