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MALI-FOLKECENTER

BONNE GOUVERNANCE - DÉVELOPPEMENT ÉCONOMIQUE LOCAL - ENVIRONNEMENT

The Garalo Bagani Yelen Jatropha-fuelled rural electrification project - a successful African bioenergy project

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COMPETE International Conference:
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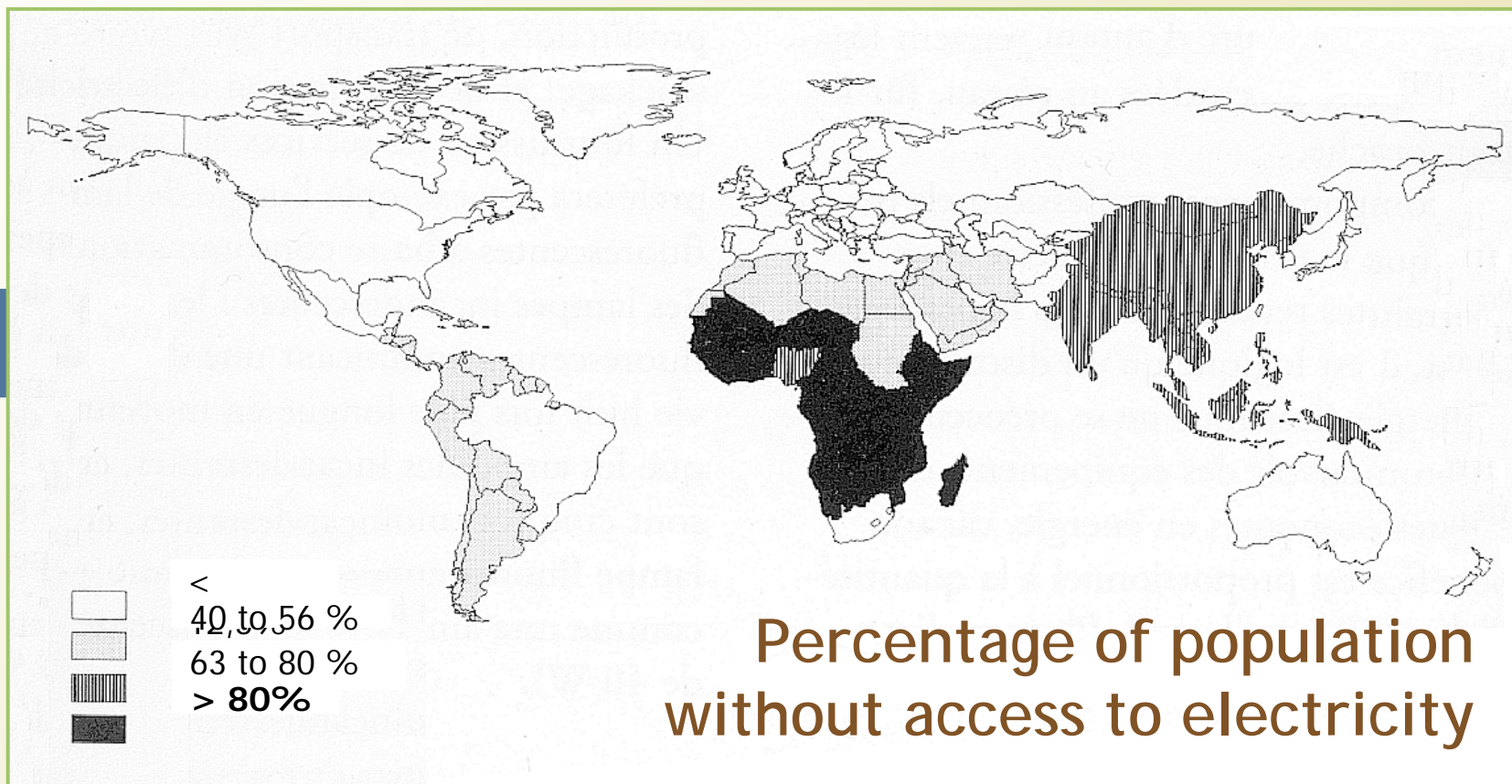
The African context:



- ▶ Population > 1 Billion people, 80% live in Sub-Saharan Africa
- ▶ 50% African people live in rural area
- ▶ 500 millions African people don't have Access to electricity representing 64% of the population
- ▶ 340 million African live with less than \$1 per day
- ▶ Lack of economic activities in rural area is increasing the poverty especially for youth

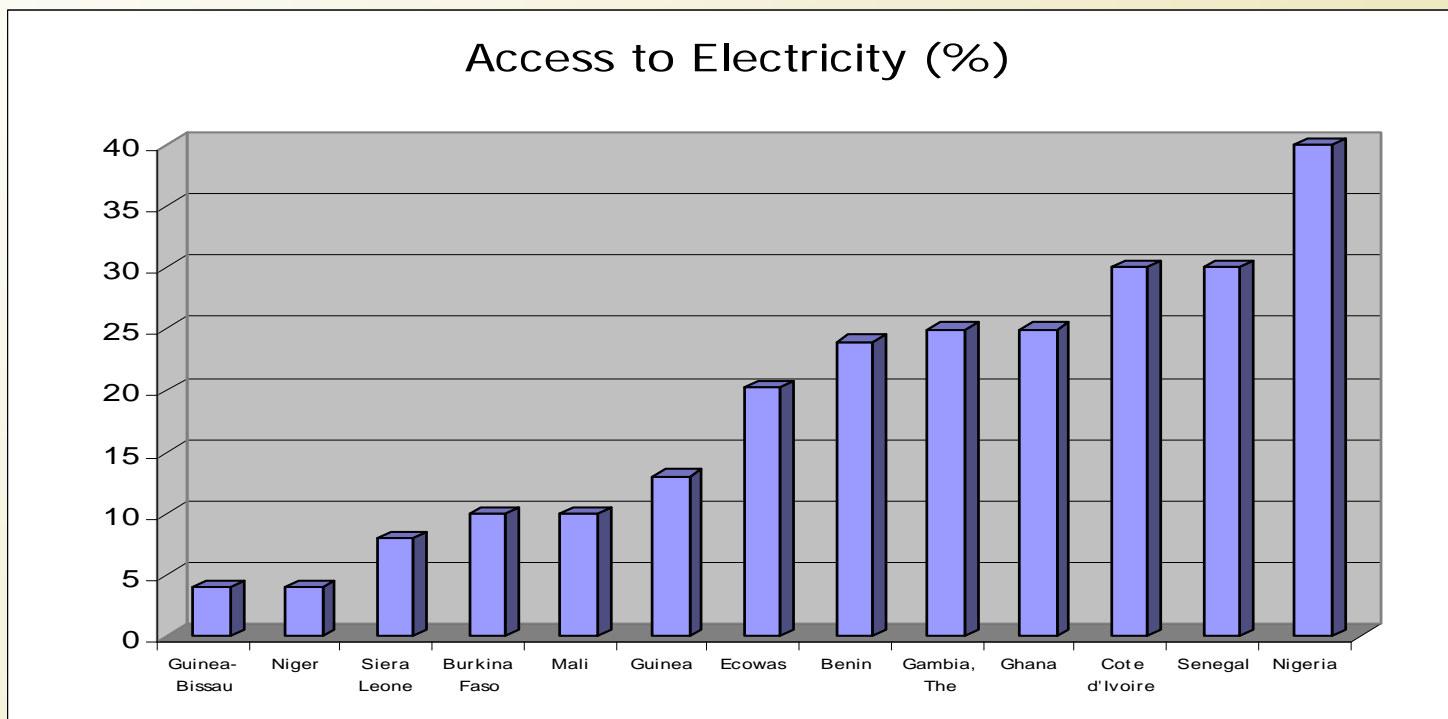


Africa needs modern energy services for its development - NOW!





- Very low access to modern energy services
- This situation makes efforts for development very difficult.
- ECOWAS policy: poverty reduction is a major concern.
- Electricity access in ECOWAS zone is around 30%





Africa is running behind...

- ▶ Low access to renewable energy sources
- ▶ Persistently high poverty levels
- ▶ Lack of diversification of economic activities, especially in rural areas
- ▶ Vulnerability to Climate Change





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Africa must develop
African energy solutions using its
natural wealth: vast biomass & agricultural
resources!





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But we must avoid the dangers of negative
social & environmental implications





MFC Nyetaa approach on the issue:

- ▶ Avoid competition with food production through small scale exploitation
- ▶ Many small scale projects can produce as much biofuel more sustainably than a few large scale monoculture projects
- ▶ Prioritise local use of biofuel to bring maximum benefits to local population
- ▶ Maintain existing land ownership and tenure patterns to avoid social unrest
- ▶ Do not seek first to satisfy international markets - they are insatiable
- ▶ Rather projects should be designed to benefit Malian communities first





With financing from the Global Sustainable Biomass Fund, MFC in collaboration with ANADEB is developing Sustainability criterias for biofuel for Mali:

3 Pillars for sustainable biofuels

1. Local production

- ◀ New source of income combats poverty
- ◀ Using intercropping & sustainable agriculture techniques
- ◀ No irrigation or chemical fertiliser
- ◀ No risk to food security

2. Local Transformation

- ◀ Local added value
- ◀ Local job creation
- ◀ Press cake used as organic fertiliser

3. Local USE

- ◀ Meet local energy needs first; export come only after
- ◀ Stimulates concrete local economic development



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And MFC has
developed
a pilot project to
demonstrate best
practice:

Garalo Bagani Yelen –
a new paradigm of energy
for sustainable development



GARALO BAGANI YELEN

- a new paradigm of energy for sustainable development

A Jatropha-fuelled rural electrification project
for 10 000 people in the Municipality of Garalo

ACCESS S.A.R.L.
Energie, Eau & Environnement

FACT
Foundation

AMADER

SHGW
Foundation





- ✦ The village of Garalo is in the south of Mali, 2 hours south of the regional town of Bougouni.
- ✦ The population is 10 000, and the principal economic activities are agriculture (both subsistence food crops and cash crops particularly cotton), raising cattle, and trade on the local market.





Project partners:



- ◀ Municipality of Garalo
- ◀ MFC Nyetaa
- ◀ ACCESS SARL an innovative Malian energy service company, is responsible for sale of electricity
- ◀ FACT Foundation International group of biofuel specialists based in Netherlands provides technical support
- ◀ SHGW Foundation (Netherlands)
- ◀ DOEN Foundation (Netherlands)
- ◀ AMADER Malian Agency for Rural Electrification & Domestic Energy



Garalo Bagani Yelen - results so far...

- 300 kW of specially converted gensets installed, currently being tested in Diesel but will eventually to run on locally produced Jatropha bio-oil
- 320 000 jatropha seedlings planted out
- > 600 hectares of Jatropha fields planted in small scale out grower approach
- Local jatropha cooperative created
- Powerhouse and offices built
- Village electricity committee created to represent the population in discussions around the electricity supply
- 275 clients so far



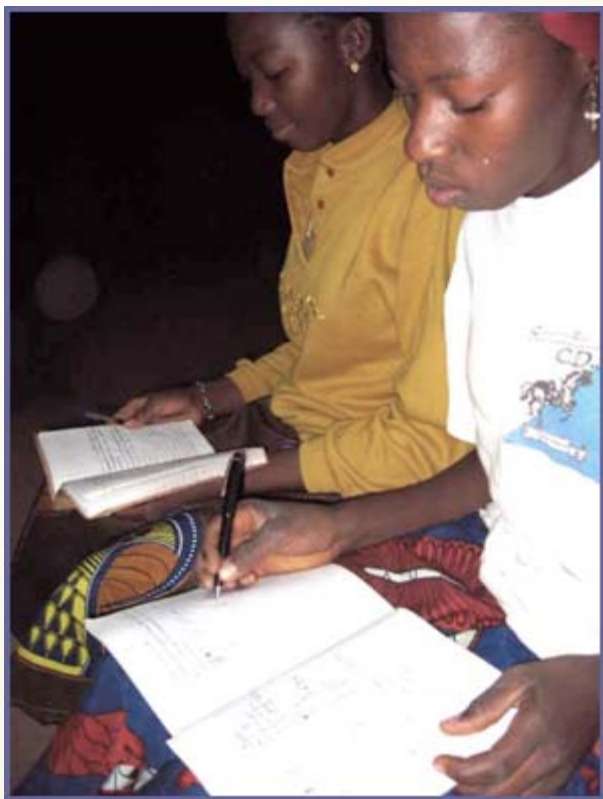


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Some of the many satisfied end users:





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And now Scaling up the sustainable approach & intercropping methods...



With Daey Ouwens
Fund, SenterNovem



Bagani Courant 10 - taking it to the next level



- ▶ MFC Nyetaa has secured funding for a 1.8 million multi-partner project which will upscale the Garalo model to 10 villages
- ▶ Partners include SenterNovem (Netherlands), DOEN Foundation (Netherlands), & Christian Aid and ADER



Bagani Courant 10 -



- ▶ The project will plant 1500 ha of Jatropha using intercropping techniques
- ▶ 2400 connections (domestic & for productive users of all kinds) will give access to 19 200 people + 6800 will be served by battery charging
- ▶ 500kW installed capacity
- ▶ It will provide support to cooperatives in the target villages which will be productive users – i.e. using clean electricity to transform local agricultural and other local produce and add value in the villages



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MFC is now developing with the Government of Mali and the World Bank, sustainable biomass-based electrification of more Malian villages

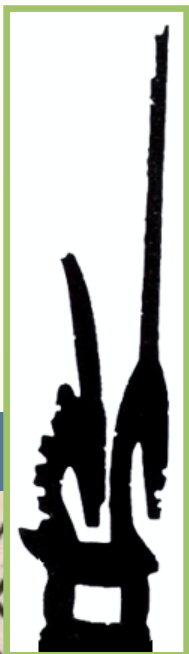




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Anicié - Merci -
Thank you!