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MALI-FOLKECENTER

BONNE GOUVERNANCE - DÉVELOPPEMENT ÉCONOMIQUE LOCAL - ENVIRONNEMENT

Towards sustainable development in Mali

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Presentation Germany, June 2011

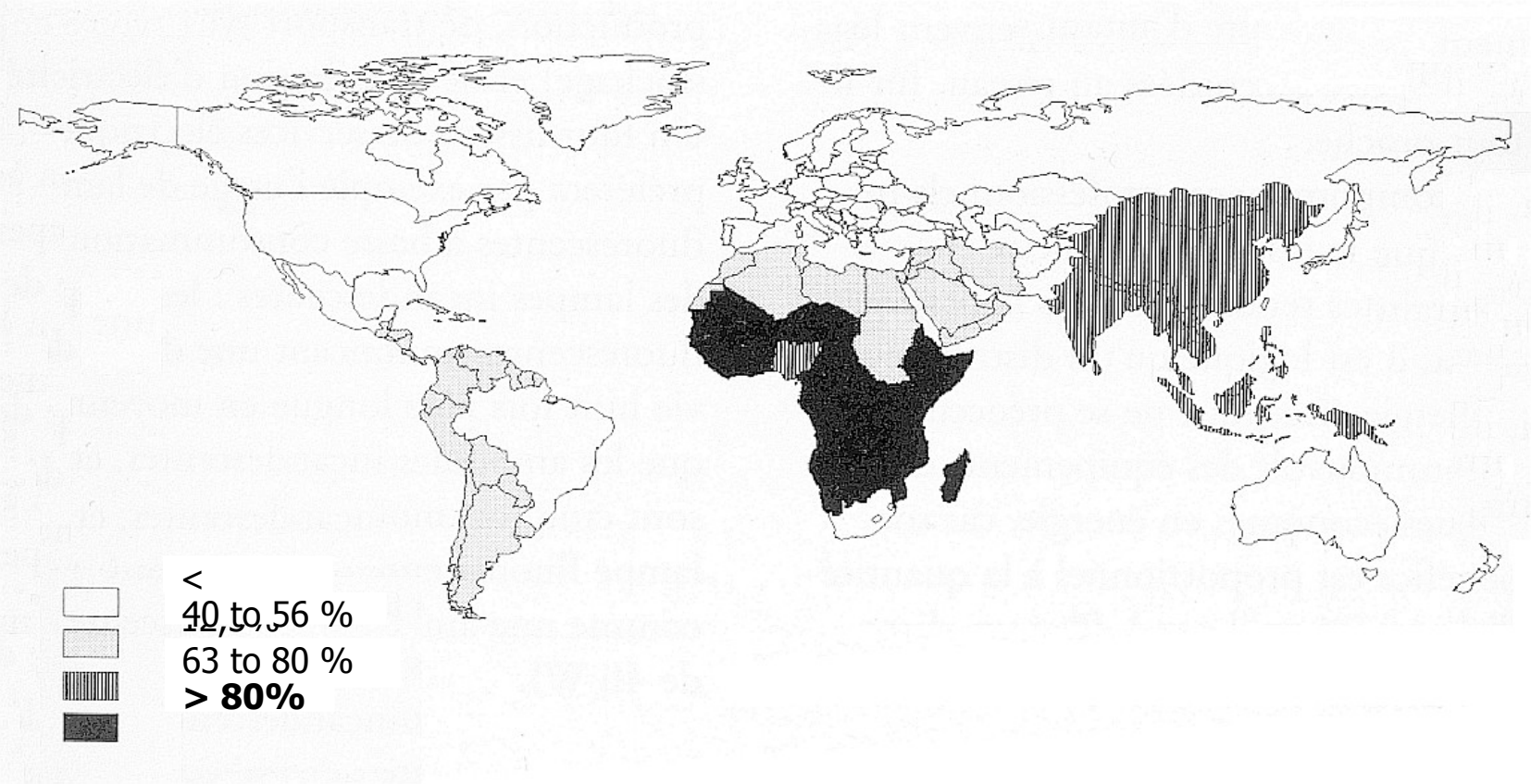
The African context:

- Population > 800 million, 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 live in poverty
- Lack of economic activities in rural area is increasing the poverty especially for youth

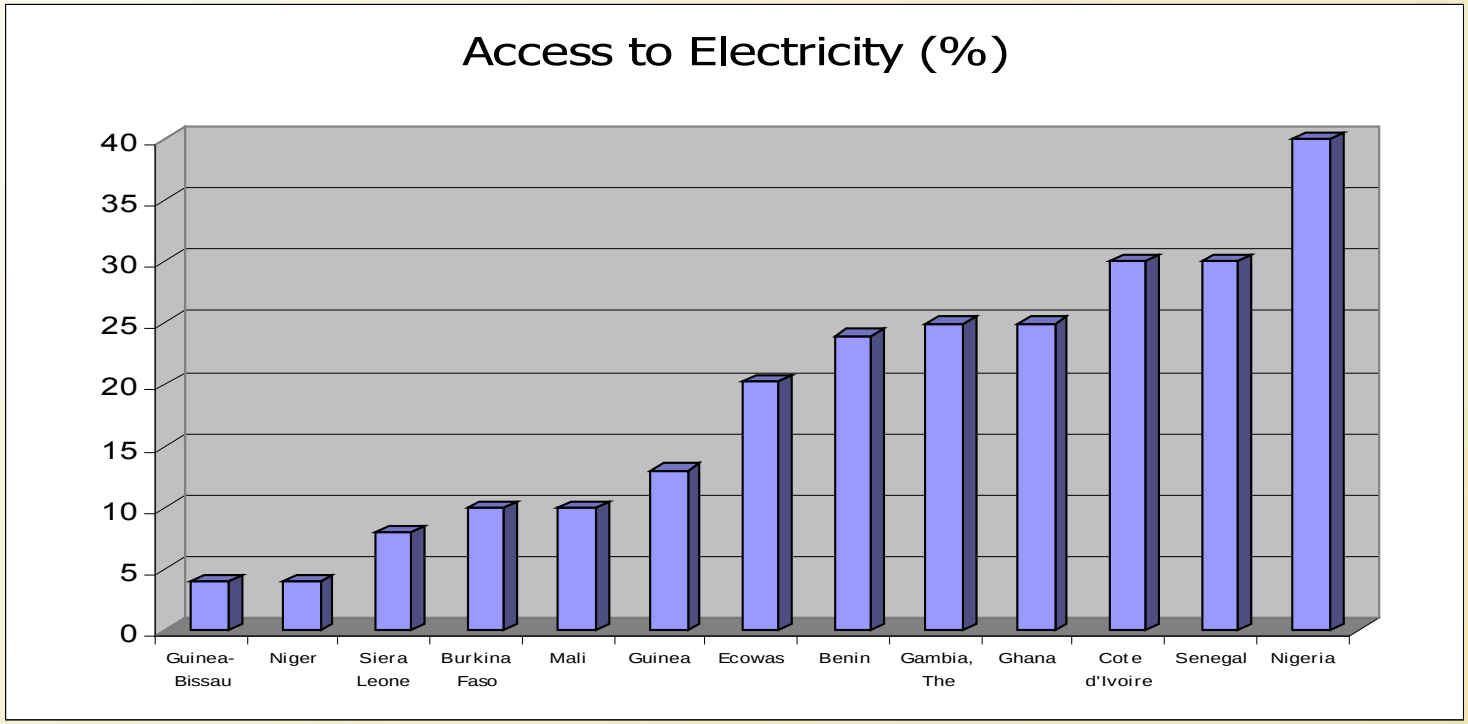
Mali's environmental situation

- Mali in the centre of West Africa
- Area of
  1 241 000 km2
- Rainfall varies from 1500mm per year in the south to almost none in the north
- Two thirds of the country is covered by desert
- Population: approx 12 million
- 7% of population has access to electricity
- 80% of the population use firewood and charcoal as primary source of energy
- Limited income generating activities due to the lack of modern energy sources for added value to local production

Percentage of population without access to electricity



- 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 20%

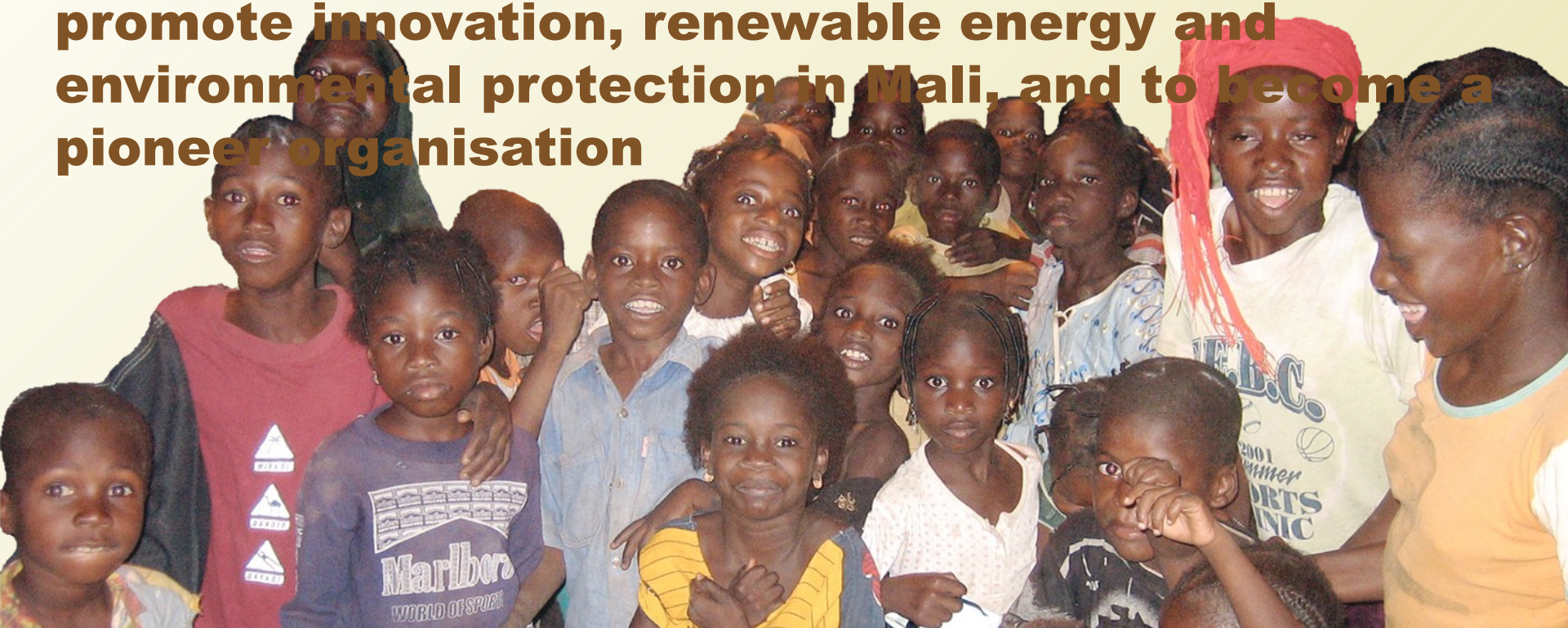


Africa (and Mali) are running behind…

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

MFC Nyetaa was established in 1999:

It was to be an energy and environmental NGO, to promote innovation, renewable energy and environmental protection in Mali, and to become a pioneer organisation



MFC Nyetaa carried out a wide rage of projects:

Solar water pumping & lighting, solar refrigeration, wind solar hybrid pumping

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Some great technical solutions were provided:

www.AREED.org

A UNEP INITIATIVE SUPPORTED BY THE UN FOUNDATION
AFRICAN RURAL ENERGY ENTERPRISE DEVELOPMENT (AREED)

Enterprise Development Services

AREED African Renewable Energy Enterprise Developm

- to create rural energy enterprises
- to work with NGOs and financial institutions in facilitating their development
- to support viable energy enterprises that deliver reliable, affordable clean energy
- to bring together people, technology and funding

MFC Nyetaa worked closely with municipalities

In order to achieve long lasting sustainable results

Also policy and lobbying projects & activities:

PPP – Establishing a framework for dialogue to promote Public Private Partnerships in the Energy Sector. This project included creation of a multi-sectoral committee on energy in Mali, for the first time bringing together different ministries to discuss energy issues. It was a major achievement.

Elaboration of a document describing all energy sector actors in Mali

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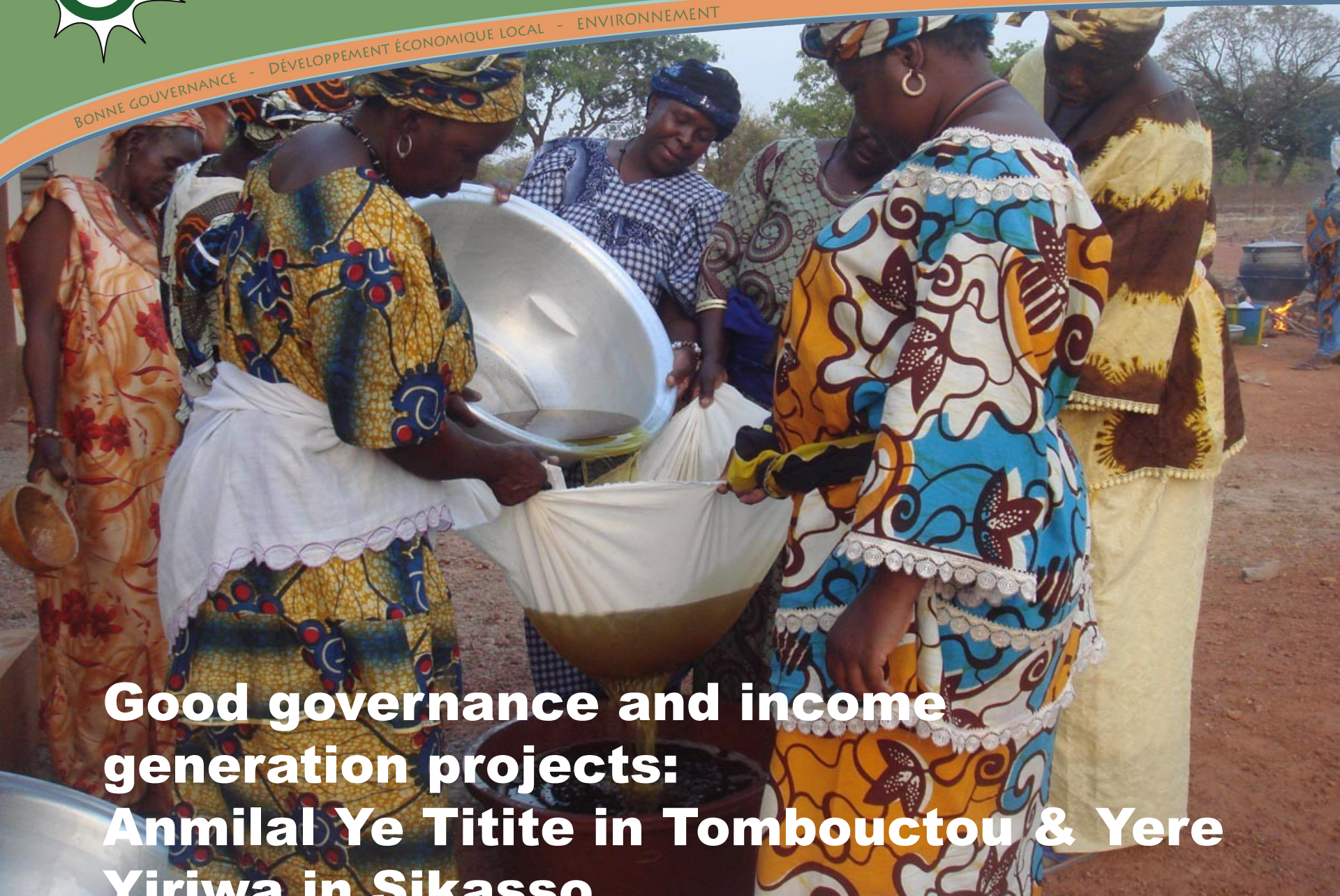


Good governance and income generation projects: Anmilal Ye Titite in Tombouctou & Yere Yiriwa in Sikasso

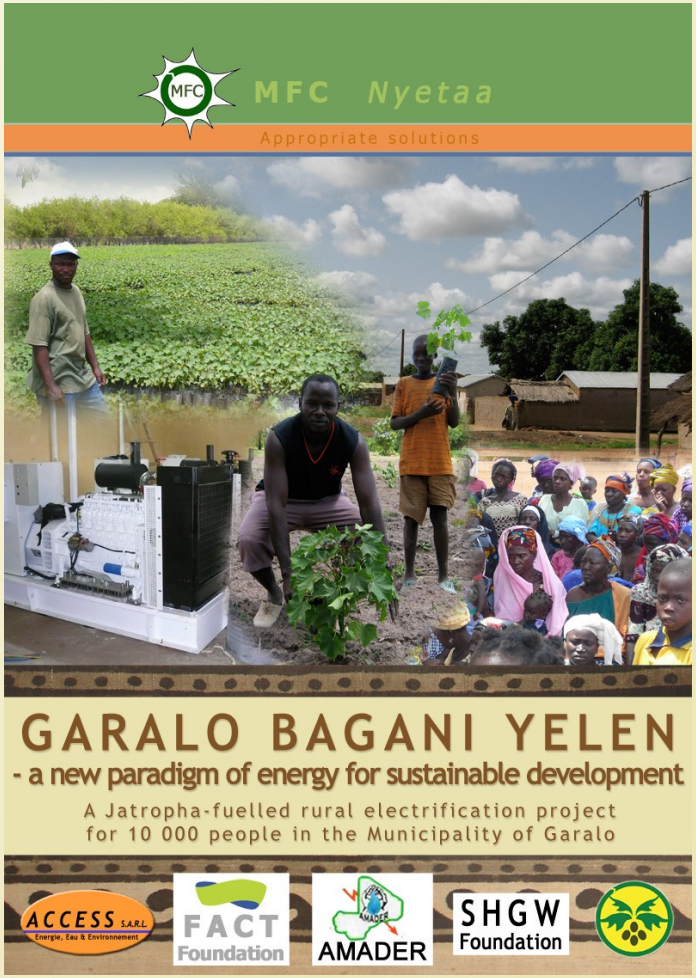
Rural electrification using Jatropha

- Gensets, to run on locally & sustainably produced Jatropha bio-oil using intercropping techniques
- 15 years of clean electricity production will transform the local economy. African villages need power – (biofuel or it can be diesel)
- Electricity will be a catalyst for local SME/SMI development and job creation
- Use of intercropping for Jatropha production

Garalo Bagani Yelen -

a new paradigm of energy for sustainable development

- 300 kW of gensets, to run on locally & sustainably produced Jatropha bio-oil using intercropping techniques
- Village population of 10 000 people
- 15 years of clean electricity production will transform the local economy. African villages need power – (biofuel or it can be diesel)
- It ***WAS*** the largest project of its type in Mali (in terms of plantation size and power output), possibly in West Africa.
- Electricity will be a catalyst for local SME/SMI development and job creation



Project partners:

- **Municipality of Garalo**
- **MFC Nyetaa** developed and now coordinates the project in Mali
- **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 provides WB/GoM/GEF subsidy to finance electric part

MFC has developed the 3 pillars of sustainable biofuels:

sustainable biofuels

1. Local production

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

2. Local Transformation

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

3. Local USE

- ü Meet local energy needs instead of exporting to North
- ü Stimulates concrete local economic development

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Sustainable Jatropha production using intercropping

Provides electricity using local materials

And now using the same sustainable approach & intercropping methods…

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 NLAgency (Netherlands), DOEN Foundation (Netherlands), & Christian Aid

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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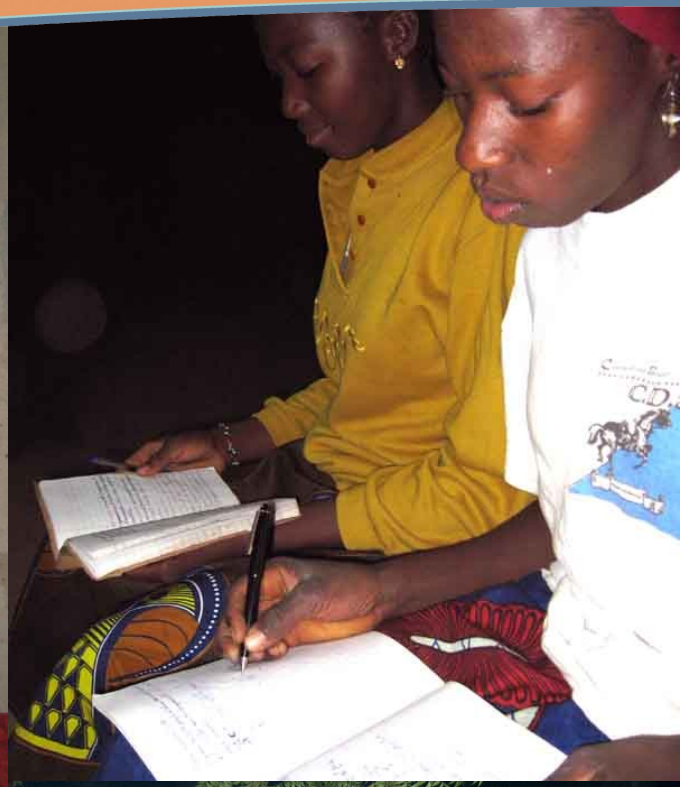
Many satisfied users!



Garalo Bagani Biogazi

- Integrated biogas system will reduce diesel/Jatropha consumption by 40-60%
- Organic matter still returned to soil – more ecological than gasification and some other technologies…
- New income for farmers from sale of biogas inputs

MFC Nyetaa and ACCESS-SARL

- 24 villages to electrify with jatropha for more than 25,000 people for 3 Millions Euro (power range between 10 and 300 KW and 85 Km of electric grid), 4 completed the remaining under construction
- 12 solar power plants with capacity

Micro-Finances for provision of Renewable Energy services for local economic development in rural Mali: case of Nyetaa Finances

Lighting 1000 socials points by solar system

MFC established it microfinances institution to support renewable energy entrepreneurs and end-users:

NYETAA FINANCES SA

Facility the credit access to the rural entrepreneur and promote the credit for ends users

RURAL ENERGY ENTREPRENEURS

Owner of the energy shop, provide energy service to the communities, and repairs and installed the solar energy

MUNICIPALITIES

The municipality is the representative of the beneficiaries (the population) and work with the NF-SA, and the Rural entrepreneur

The mechanism between the project actors

Financial institution, social investors

Providing grant for solar ligthing of schools, maternities and public squares and micro loan to Nyetaa Finance for rural entrepreneurs

NYETAA FINANCES

Facility the credit access and post investment and advices to RE, and Ends users

Possibilities to have access by credit or cash

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REPRENEUR

(energy shop, charge batteries, installation, maintenance and

Training, techni support to BDS

ENDS USERS OF ENERGY PRODUCTS

Encourage the job creation, and tax exemption and identification of the social electrification point

MUNICIPALITIES

SOCIAL ELECTRIFICATION POINTS

NYETAA FINANCES SA

BONNE GOUVERNANCE - DÉVELOPPEM

GOALS :

Access rural entrepreneur, and women to credit (short, medium and long term) which allow them to promote the transformation and valorisation of local resource thank to the modern energy service

PRODUCTS AND SERVICES :

- Save money: deposit, guarantee,
- Loans: short term (3 months) medium term (1,5 year) long term (3 to 4 years)
- Technical assistance, assurance, advice,

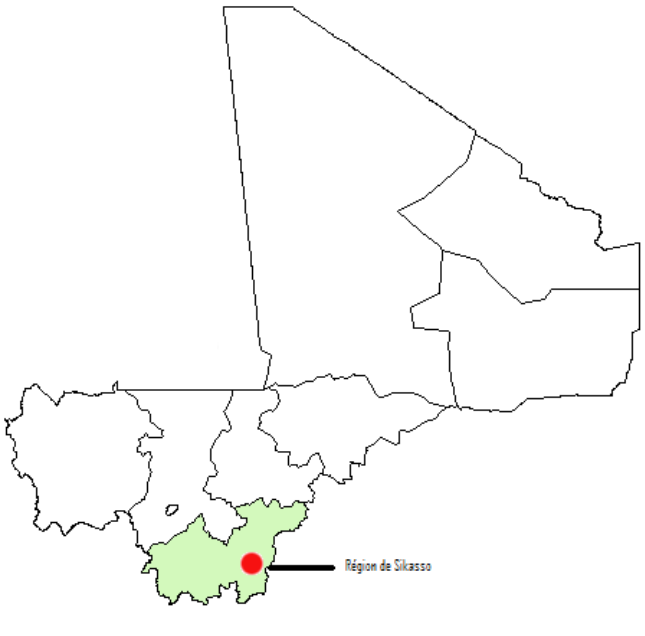
NYETAA FINANCES SA

TARGETS GROUPS :

·The women group (operators et cooperatives)

·The informal operators, entrepreneurs, farmers (person in activity like agriculture, fishing, honey .

·Clean Energy enterprise (rural electrification, and energy service promotion)



INTERVENTION AREA:

·The district of Bougouni (situated 160 Km from Bamako)

·The common of Garalo (Near Bougouni 55 Km)

·The district of Yanfolila,(Near Bougouni 80 Km)

·Nyetaa finances have today more than 2000 clients and more than EURO 300,000 capital from Malian banks, deposit of clients, AMADER and UNEP, in 2 years period.

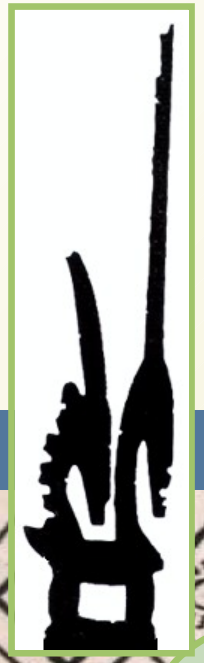
Energy Business Incubator Center of Garalo

- Based on it rural electrification program, MFC established a business incubator center for renewable energy end users in Garalo;
- More than 10 businesses have been supported through Nyetaa Finances and ACCESS and more than 50 are in the pipeline for development and future

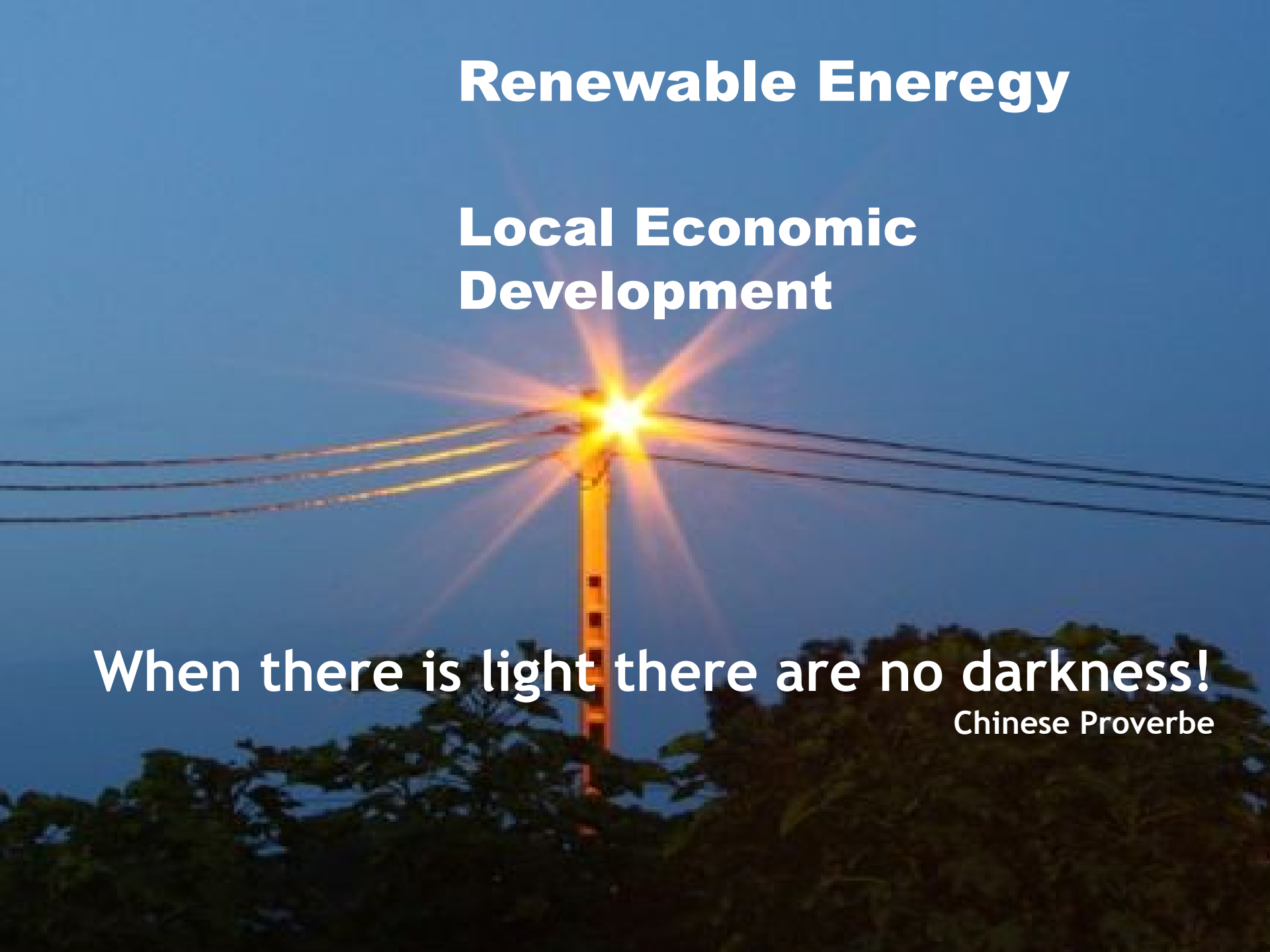
- Results:

- Multiplication of these kinds of integrated RE system can bring 100% renewable energy supply in Mali or any other African country
- Environmental benefits
- Foreign exchange savings
- Multiplication of income generating opportunities especially from agricultural sector
- Job creation
- Poverty reduction

MFC Nyetaa is continuing its work in the areas of: provision of renewable energy for local economic development



Anitié - Thank you!


Renewable Eneregy
Local Economic Development
When there is light there are no darkness!
Chinese Proverbe