



**The Local Materials
Promotion Authority**

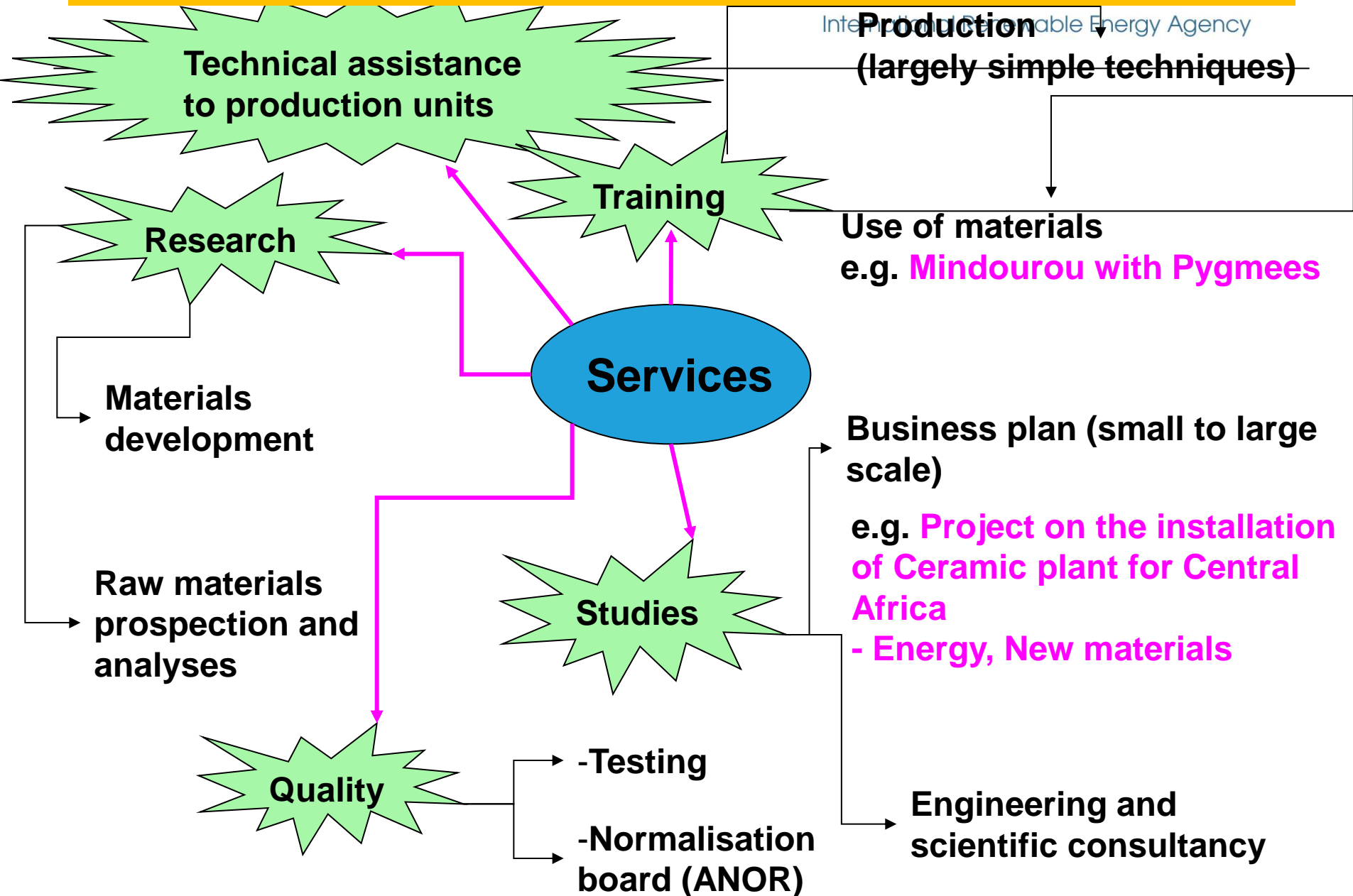


Valorization of Biomass Residues as an Energy Source(Valo-BRES)

Prof. Uphie Chinje Melo, Dr. Ndigui Billong

- Pilot studies in Cameroon, Ghana, Nigeria, Senegal and Uganda
- MIPROMALO, as a promoter of the valorization of local materials, is pleased to be working with IRENA to promote the valorization of biomass residues as energy source in Cameroon.
- Material (ash) recovery in this process is another valorization pathway

ACTIVITIES AT MIPROMALO





Money up in smoke and limited power for small scale and cooperative agro-processors in Cameroon like palm oil, coffee.



Neglected investment opportunities in biomass wastes at the small scale !



Wasted feedstock at SME scale...



The Valo-BRES Approach

1. Input

- Statistics data
- Local survey
- Technology data

2. Technology option

- Type of biomass
- Type of technology

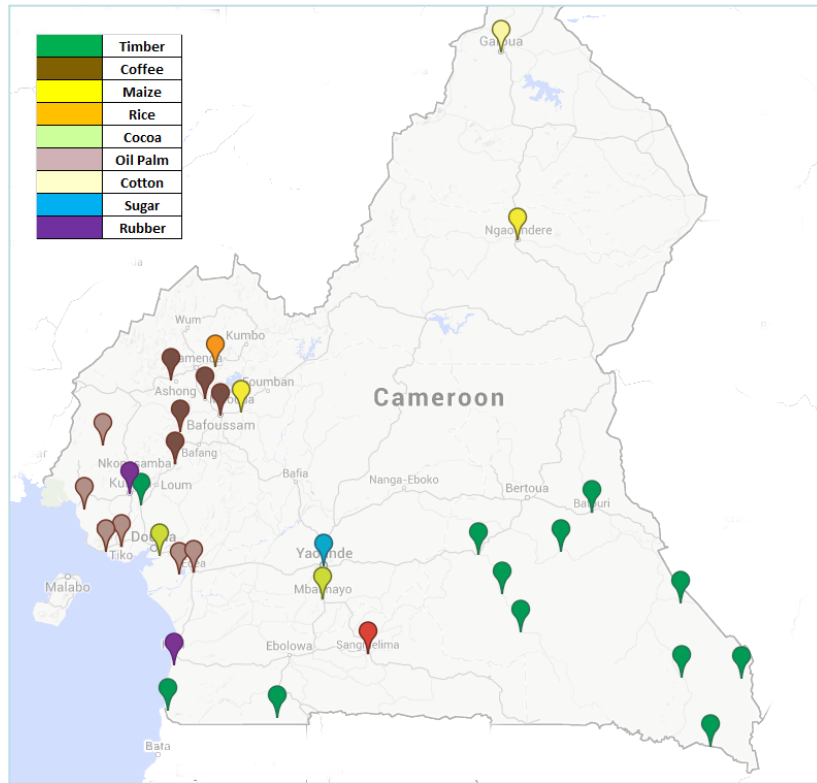
3. output

- Social, economic and environmental benefits

4. optimization

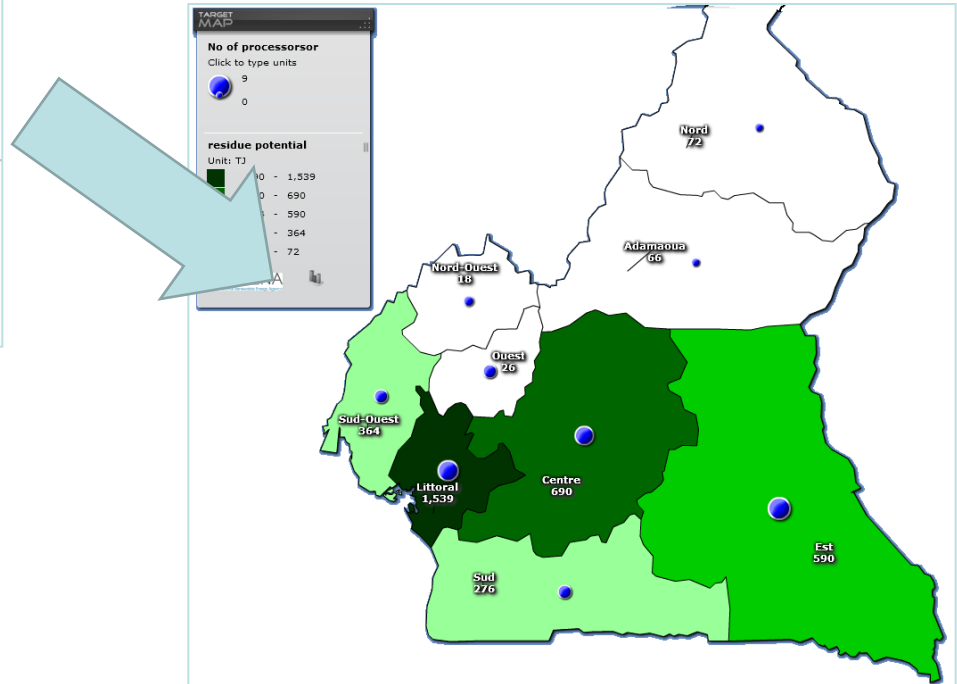
- Selection of optimal technology suitable for local condition

Development of Resource Map



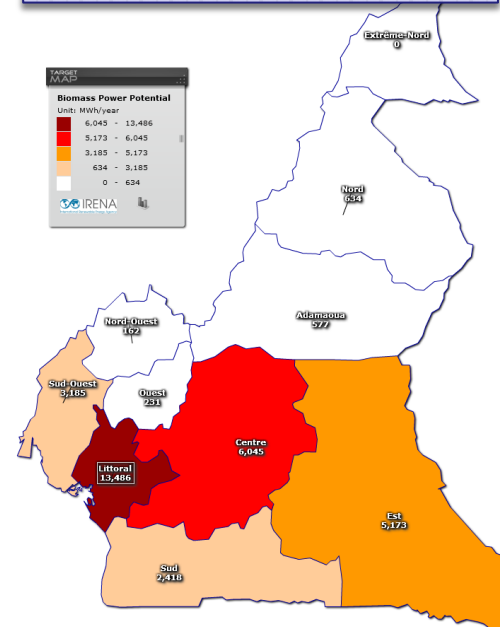
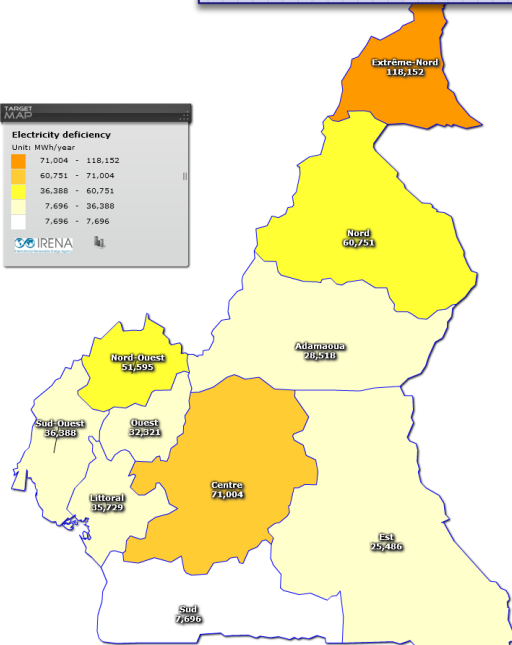
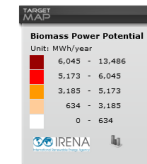
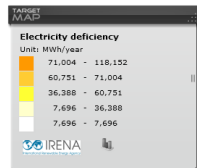
**Mapping
Agro-Processor**

**Identify Agro-Processing
Residue potential**

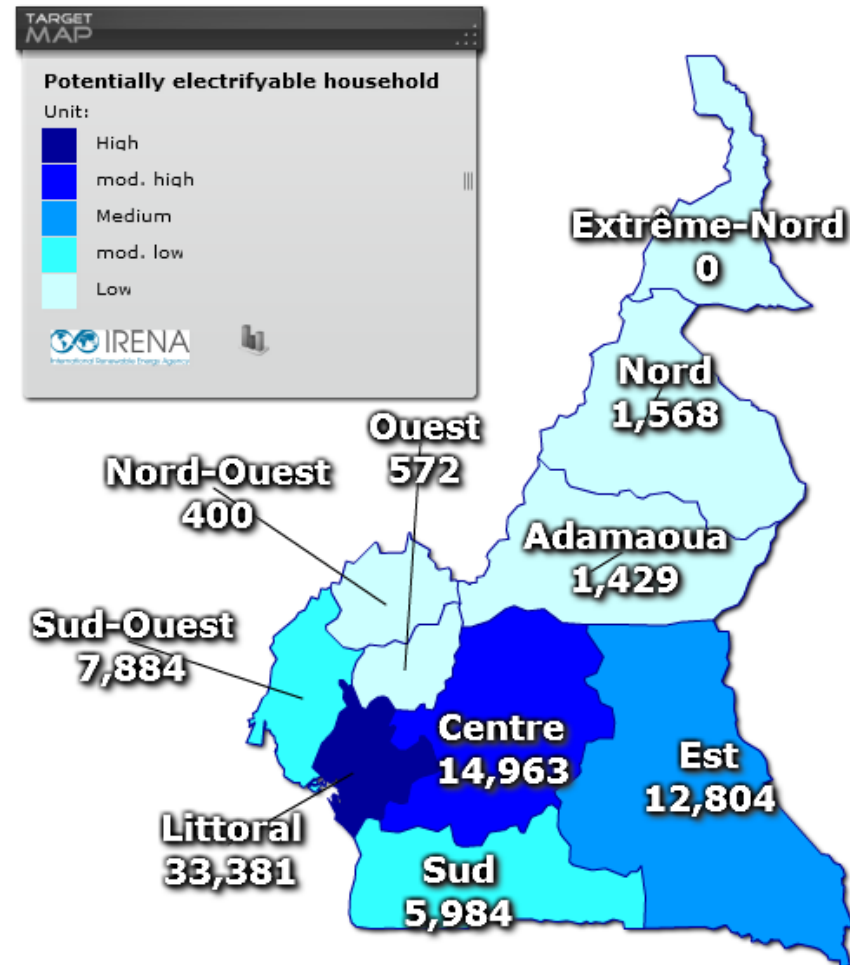


local power demand

Supply potential



Supply-Demand Matching



Number of potentially electrifiable households from residues



Initial findings

Initial findings

- Large agro-processing residue potential
3.6PJ (potentially electrify 80,000 off-grid household)
- Uneven distribution of agro-processing residues across the country Ranges between 0 - 1.5PJ by region

Further survey / assessment needed to improve study

- Limited locally specific data
- Comparison of different technology pathways from multiple aspects including economic, social and environmental is required