Africa LEDS Project

July 25, 2018, Bonn

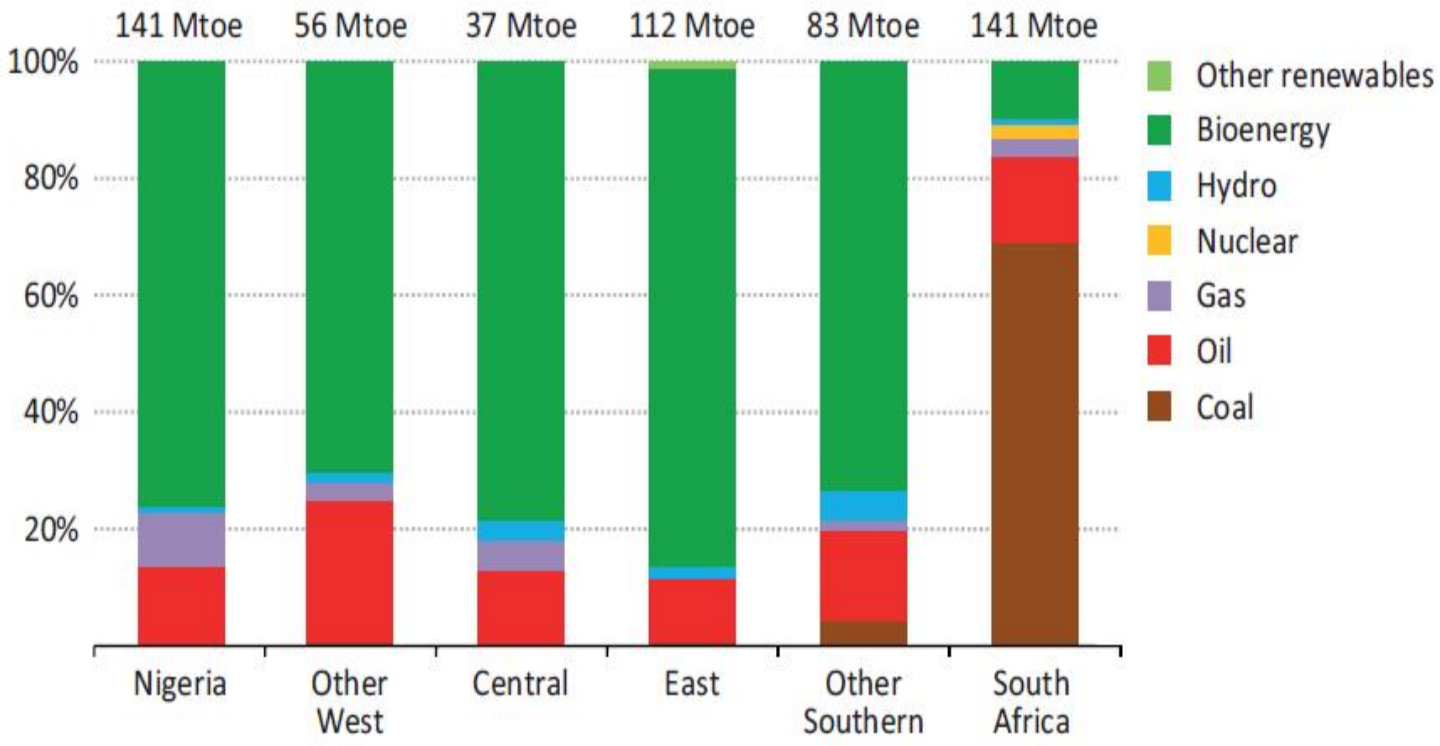
Rice husk briquettes for cooking fuel
Cote d'Ivoire

AGENDA

1. General context of cooking energy in Côte d'Ivoire and its impact on climate change
2. Brief presentation of the Africa LEDS project in Ivory Coast
3. Activities to recover rice residues in combustible briquettes
4. Challenges and Key Elements of Success

Biomass is the main source of energy in sub-Saharan Africa and accounts for 60% to 80% of energy balances in most countries.

More than 500 million Africans depend on it daily.



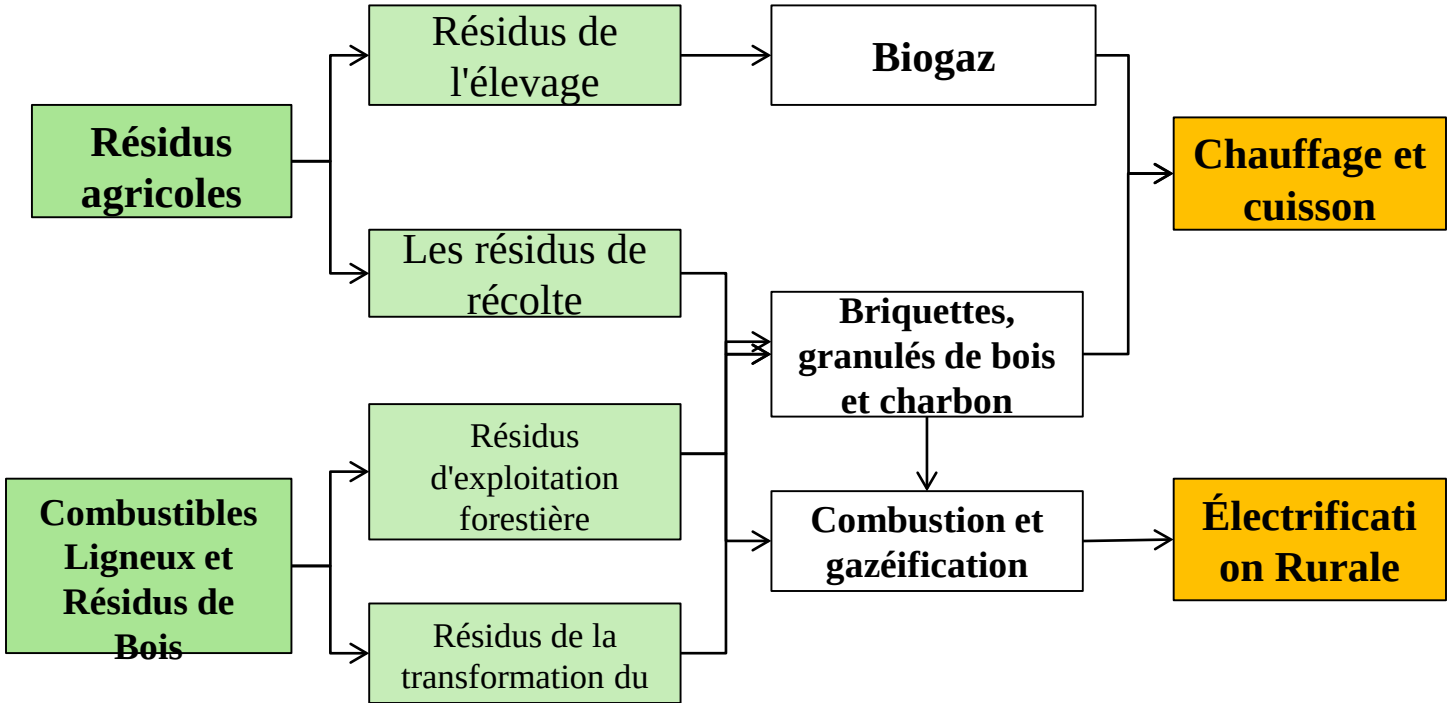
- In Côte d'Ivoire, biomass is the most strategic source of renewable energy
- Côte d'Ivoire has one of the largest biomass deposits in Africa. The biomass potential is estimated at 12 million tons per year.
- Biomass is more accessible and more easily exploitable for energy purposes
- 73% of domestic energy consumption comes from fuelwood and charcoal after petroleum products (21%), electricity (5.3%) and 1.7% for gas,
- In rural areas, the rate of bioenergy consumption rises to 95%for firewood
- However, this form of exploitation is the second cause of deforestation in Côte d'Ivoire

- Agricultural residues and by-products are a safe and sustainable alternative for the energy security of rural and urban populations
- They constitute an important energy deposit still largely undervalued and neglected in nature as rice balls

Les briquettes peuvent être de différents formats. Elles servent surtout à la cuisson des repas sur de petits poêles à charbon traditionnels.

From 2015-2016, FAO supported Côte d'Ivoire to:

- Mapping and assessing the potential of agricultural residues and by-products from agricultural and livestock sectors over the entire territory
- Identify relevant technological options for energy recovery of mapped residues and by-products



Project Supporting the Planning, Implementation and Modeling of LEDS in Africa

« LEDS AFRIQUE »
Côte d'Ivoire

this project has the following components:

- demonstration project including develop a Climate Smart Agriculture (rice) and the production of briquettes from rice residues (bales)
- Establishment and capacity building of the National LEDS Modeling Team
- Develop an integrated model to propose low carbon development scenarios for the agriculture, waste and energy sectors highlighting co-benefits

Ground demonstration

- **selection of sites and farmers**
  - ✓ Two villages : Tipadipa and Tietiekou
  - ✓ 50 ha irrigated rice plantation and 100 farmers

- **training and capacity building of farmers**
  - ✓ workshops
  - ✓ visit of experimental site of smart agriculture

For the waste to energy element, a local enterprise, the Africa Business Group, who make fuel briquettes are partnering with project to convert rice husks from identified farmers to briquettes.

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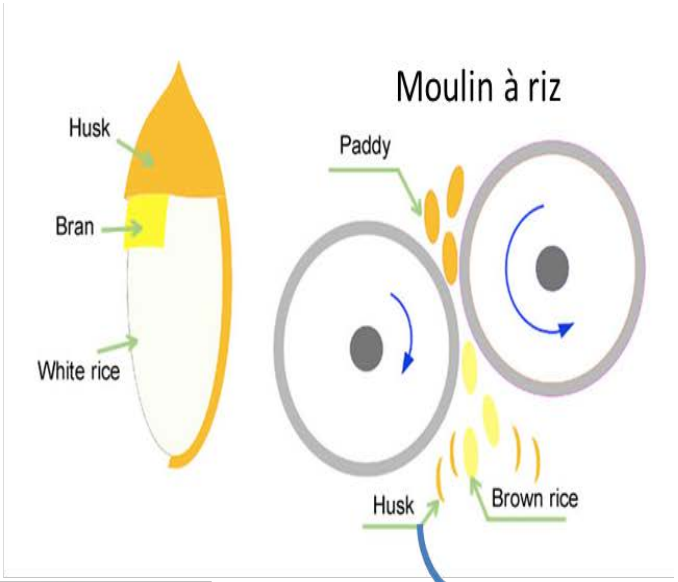
Moulin à riz
Husk
Bran
White rice
Paddy
Husk
Brown rice

Installing a carbonizer

granulated from carbonization

Challenges and Key Elements of Success (planned in the project)

1. Test the energy efficiency of briquettes produced
2. Ensure that the production process does not lead to an impact transfer (calculates the level of GHG mitigation in terms of saved forests and GHG emitted by the process) Cultural acceptance of the population (resistance to change)
3. Business plan and market study
4. Determine the conditions for Duplicating the Briquette Production Model Nationally

THANK YOU FOR YOUR ATTENTION