

Biomass Case Study in Africa: The ECOWAS Region

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- **CURRENT SCENARIO AND IMPACT**
- **RESPONSES: REGIONAL AND INTERNATIONAL: DEMAND SIDE**
- **SUPPLY SIDE: CASE STUDY**
- **RISKS AND OPPORTUNITIES**

- **widespread and unsustainable utilization of traditional biomass**
- **almost 80% of the total energy consumption comes from the traditional biomass.**
- **In addition, over 90% of the population uses wood and charcoal for domestic cooking.**

- **Forestry Policy frameworks - all countries**
- **No effective and sustainable Forest mgt:**
Forest is a 'Free for All': -No effective planning
tool for sustainable and efficient forest
management
- **Weak legislative enforcements of forest**
policies due to: -Limited national budgetary
allocations
- **Bushfires, logging and other human factors**

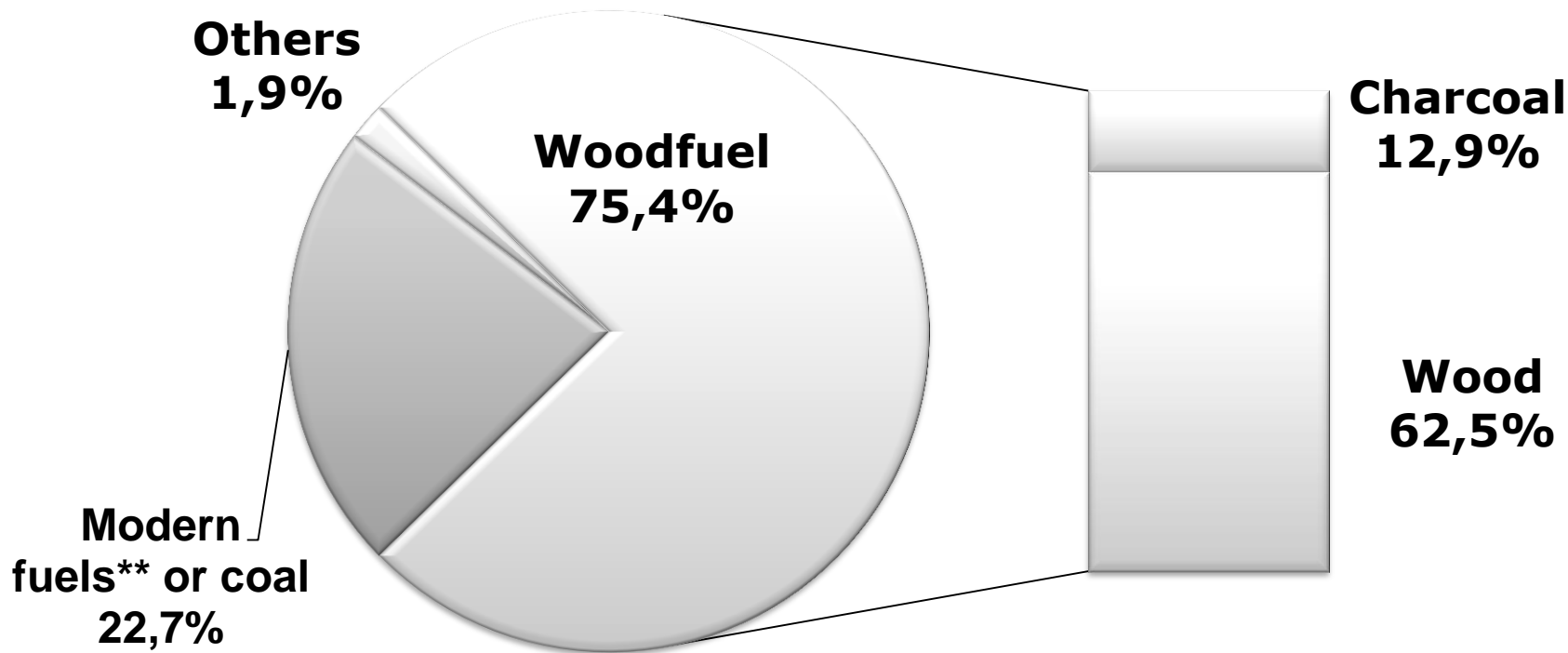


- **Over-dependence of population on traditional biomass for cooking**
 - Almost 80% of the total energy demand.
 - Over 90% of the population uses wood and charcoal.
 - No policy/strategy framework in most countries
 - Promotion of clean cookstoves limited
 - Limited or no budgetary support for promotion of clean cooking
 - Increase in populations eroded most of the gains to reduce dependence on the forests



- **deforestation, desertification, loss of biodiversity and increased GHG emissions.**
- **Inefficient production and use of resources**
- as is the case for charcoal and cookstoves
- **unsustainable use of wood resources is**
 - damaging to public health
 - reduces the time available for women and children to pursue other economically beneficial activities, such as education and entrepreneurship.

- **200 MILLION TONS OF BIOMASS** are burnt yearly in the region
when cooking daily meals
 - strong contribution to forest degradation
 - emission of > 330 million tons of carbon dioxide (CO₂)-equivalent
- **211,500 PREMATURE DEATHS/YEAR** can be attributed to smoke from biomass or coal cooking fuels in ECOWAS countries (WHO and UNDP 2009)



*) fuel used most often for cooking the main daily meals;

**) gas (including LPG), kerosene and electricity

Source: WHO (2009); PREDAS - CILSS

- **Adopted in January 2006, the ECOWAS/UEMOA regional policy proposes increasing access to energy services for populations in rural and peri-urban areas for poverty reduction & to achievement of the MDGs.**

Three targets were proposed:

- 100% of the total population, or 325 million people, will have access to improved cooking fuels and stoves, whereas 9.2% with access to LPG cooking devices
- **ECREEE (ECOWAS Centre for Renewable Energy and Energy Efficiency) established in 2008 to promote sustainable energy access in the Region;**

- ECOWAS Renewable Energy and Energy Efficiency Policies developed
- Policy scenarios target SE4ALL in ECOWAS by 2030
- Adopted by ECOWAS Energy Ministers during the High-Level Energy Forum (29-31 Oct 2012, Accra, Ghana)
- Preparation of national RE&EE action plans in 2013
- **Regional Bioenergy Policy being elaborated with full Strategy document**



- **Since the 1980s:**

- ✓ A lot of training activities were conducted in different parts of the Continent on the construction of improved cook stoves (**ICS**): Artisans were trained in almost all the countries in the production of varieties of ICS
- ✓ Projects to promote **LPG** as primary cooking fuel alternative were also introduced in the 1990s. Biogas was also promoted but to a lesser extent
- ✓ and/or **sustainable biomass fuel** as primary fuel

- **Better Forest Management**

- ✓ Forestry projects were initiated and implemented across sub-Saharan African countries to improve the supply side of wood

- **GLOBAL ALLIANCE FOR CLEAN COOKSTOVES (GACC) was established by the UN Foundation**
- **WORLD BANK established the ACCES**
- **In the ECOWAS, ECREEE and its partners establish the West Africa Clean Cooking Alliance (WACCA)**
 - OBJECTIVES: IMPROVE LIVING CONDITIONS OF THE POPULATION OF ECOWAS COUNTRIES THROUGH AN INCREASED ACCESS TO CLEANER AND MORE EFFICIENT COOKING DEVICES, SUSTAINABLE BIOMASS FUELS AND MODERN FUELS, WHILE REDUCING LOCAL AND GLOBAL ENVIRONMENTAL IMPACTS

Adequate Reforms that cover:

- **Policy, legal and regulatory mechanisms to supports participatory and decentralised approaches**
- **Institutional strengthening including empowering of rural communities**
- **Encourage community and private forest management**
- **Capacity building for all stakeholders on various aspects of sustainable forest management**
- **Information dissemination & Sensitization of the stakeholders: public, private, local communities, users**
- **Enhance financing mechanism for demonstration and investment**

Within the context of the REDD+ Activities: To be developed in collaboration with the Forestry departments and commissions

Overall objective: Simultaneous management of the forest and energy sectors to provide wood energy to the population through participatory forest management by empowering the local communities

Specific objective(s): Ensure

- **Protection of the forests, and the ecological and environmental sustainability of the natural resources**

Specific objective(s) (contd.): Ensure

- **Steady supply of wood energy resources to the rural and urban populations**
- **Empowering the local communities through legal and regulatory reforms to manage their forests**
- **Reduction in the indiscriminate destruction of the forest and provide economic benefits to the people who live by the forest**
- **Improve and increase economic activity in the rural communities and thereby increase incomes and reduce poverty**

Expected Results:

- Reduction in destruction of forest resulting in indiscriminate felling of wood
- Enhanced forest resources resulting in better environment and ecosystems
- Steady supply of wood resources but from managed resources
- Increased economic activity in the rural areas
- Increased income for the communities and reduced drudgery and poverty for women and children

Main Risks:

- Lack of Political buying for the Programs at national levels
- Lack of awareness and information at local level
- Weak individual and institutional structures and capacities, esp at local levels – abuse of systems/programmes
- Higher costs for woody bioenergy as a result of the reforms
- Social and cultural challenges with some fuel usage: bioethanol

Opportunities

- Sustained activities at regional & national levels
- Increased sensitization and capacity enhancement to overcome challenges – economic incentive for local participation: from 0 to 1++
- Higher cost: Opens investments in wood & alternatives
- Markets for local participation for employ. & increased income
- Demonstration and investment projects allay fears & concerns; &
- Informal to formal structures that is completely neglected in the GDP
- Increased social & economic enhancement for poverty reduction!!

Thank You!

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