



**Strengthening Sustainable Bioenergy Service Delivery:
Study Tour on Integrated Biogas Systems in rural
Communities in Senegal**

17 – 18 August 2021

Concept note and Agenda

Supported by:



**The Capacity Building Activity will enhance the implementation of ECOWAS
Bioenergy Policy & and the West Africa Clean Cooking Alliance (WACCA)
Regional Action Plan**

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1. Background

The majority of the people in the ECOWAS region still rely on solid biomass as their primary cooking fuel, often used in a traditional and unsustainable manner. In several countries in the region, biomass based fuels (wood fuel and charcoal) represent more than 90% of the household energy needs especially in rural and peri-urban areas. Due to inefficient utilization in cooking devices, it poses a serious threat to health of people especially women and children and contributes to depletion of forests.

There is ample evidence pointing to high emission of greenhouse gases (GHGs) by direct combustion of the solid wood, the demand of which is increasingly growing as a result of rapid urbanization (especially in the sub-Saharan Africa) and increase costs of LPG and other fossil fuel alternatives. The consequences are the rapid deforestation, leading to desertification and other adverse effects on both local and global environments. In the ECOWAS region, the rate of deforestation and forest degradation has assumed an alarming proportion and many reasons have been assigned to this trend of practice:

1. Lack of adequate policy frameworks to manage the forests and wood industry sector;
2. Lack of information and knowledge on efficient and sustainable Biomass management and utilization particularly in:
 - a. sustainable management and production of biomass resources in the ECOWAS region;
 - b. efficient utilization of biomass for energy generation (cooking, heating and power generation)
 - c. The food-energy-water nexus in sustainable production and utilization of biomass resources while enhancing agricultural productivity;
3. Rapid urbanization that has characterized many sub-Saharan African countries as a result of rural-urban migration;
4. Rapid population growth and the quest to meet domestic energy needs (e.g. Over 80% of the people in the region rely on solid biomass for heating and cooking)

To address the sustainable management and utilization of Biomass resources, including bio-waste such as animal and abattoir waste that ECREEE organize on study tour on integrated biogas systems projects in rural communities in Senegal. This activity is the continuation of the Training Workshop on the Integrated Biogas System of ECOWAS, organized by ECREEE from June 17 to 28, 2019 at the Songhai Center in Porto Novo, Benin for the private sector / NGOs and of the Civil Society of ECOWAS Member States.

This activity is in-line with the ECOWAS Bioenergy Policy and Implementation Plan approved by the ECOWAS Heads of State and Government in June 2017. The activity will support sustainable biomass management (REDD+) and the WACCA program.

The activity will take the form of a two (02) day study tour consisting of a workshop to exchange experiences with stakeholders in Senegal on national biogas programs and biogas projects developed in Senegal, especially in rural areas. as well as visits to integrated biogas system projects implemented and whose significant impacts can be appreciated in terms of access to lighting and modern cooking services but also in terms of improving agricultural production and therefore living conditions for the beneficiary rural populations.

2. Rationale for the activity

The ECOWAS region is characterized by low access to skills and technical capacity for many of its stakeholders in the Bioenergy sector. If the ECOWAS Bioenergy Policy is to be implemented successfully to achieve the targets set in the policy document, stakeholders across the entire value chain would have to be adequately trained to take the challenges of providing sustainable Bioenergy Services to the Populations.

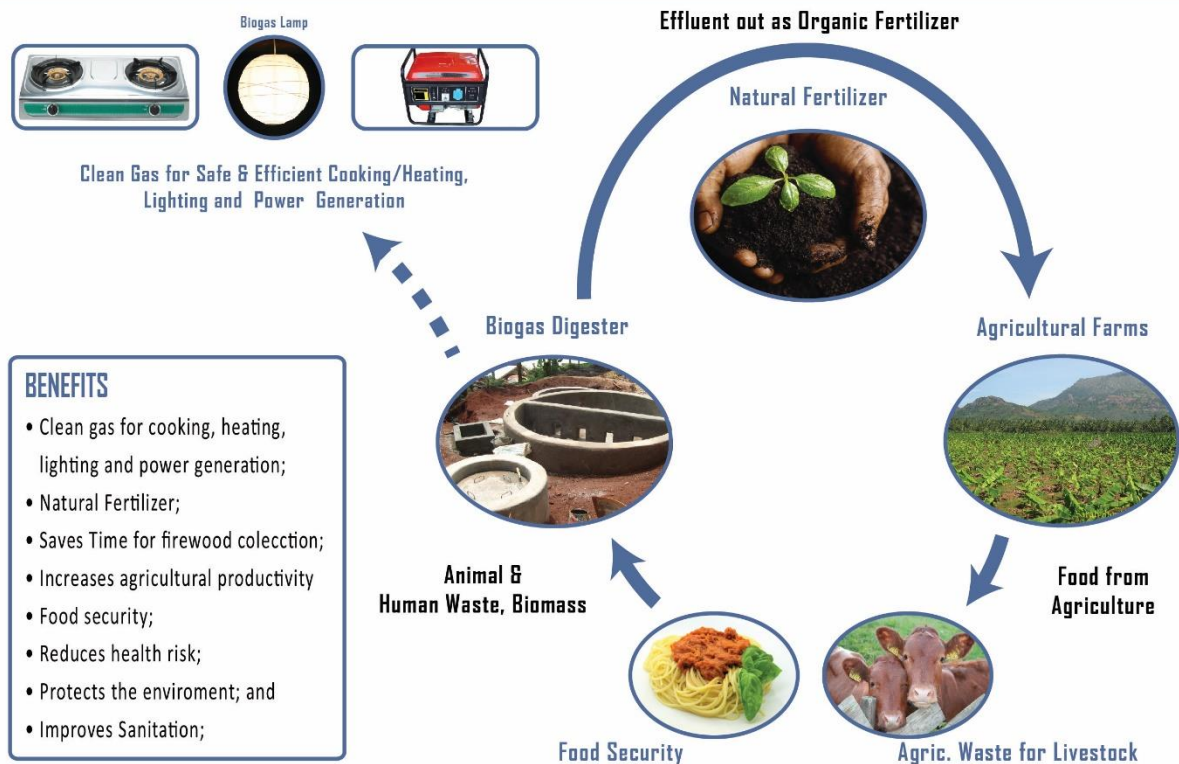
The Region has appreciable amount of Biomass resources, including bio-waste. This notwithstanding, people continue to depend on the forests for their livelihoods and in most of the time, without consideration of the adverse long term consequences on the environment. In most instances, the rest of the biomass resources in the form of waste or residue are never used or considered due to lack of knowledge and information. Yet the bio-waste could contribute to providing bioenergy for cooking, heating and power generation and thereby lead to the utilization of more biomass resources that can significantly contribute to stem deforestation and natural resources and environmental degradation.

This study tour will allow participants to appreciate the impacts on rural populations of an integrated biogas system, which is a "system" or a circular economy, where bio agricultural and animal wastes are used for energy generation for a cleaner and healthier environment and energy. It helps improve the environment and the agricultural sector with the residue that is natural manure to increase productivity.

The ECOWAS Bioenergy Program has among the activities, capacity building with the aim to:

- Increasing awareness among high-level actors in agriculture and energy;
- Reinforcing existing institutional and human structures;
- Providing professional and on the job training;
- Transferring knowledge and promoting innovation and technology across all levels of production; and
- Development of job training and professional profiles, including on existing sustainable bioenergy tools.

ECOWAS INTEGRATED BIOGAS PROGRAMME



ECOWAS Integrated Biogas Program (System)

3. Objectives

The overall objective of these activities is to strengthen the capacity of decision makers, private sector actors / NGOs working in the field of promotion and development of biogas, on the Integrated Biogas System, through a study trip and experience sharing.

The specific objective of this activity is to build peoples capacities:

- On better information on sustainable management and utilization of biomass resources by providing them with specific guides and practical examples.
- Sensitize and create aware on the menace of the current unsustainable and tradition use of biomass resources, typically wood energy and charcoal and its negative consequences on health, deforestation and ecological degradation particularly for the stakeholders from the local communities where charcoal production and firewood cutting are seen as economic livelihood;
- Train participants on the ECOWAS Integrated Biogas System, that is a circular economy principle for enhancing the environment, energy access, health and agricultural productivity.
- Train participants on the setting up of bankable integrated biogas system projects and their business models;
- Discuss planning tools for sustainable Biogas projects.

4. Expected outcome/deliverables

- Participants are sensitized, and capacities enhanced on the modern and appropriate sustainable Biomass management and utilization;
- Information on the ECOWAS Integrated Biogas System are disseminated.
- Practical training on activities for the biogas technology from bio-waste resources for energy management and sustainable biomass energy production and utilization and related benefits are enhanced.
- Planning tools on sustainable planning for biogas projects are shared with participants.

5. Participants/Target group

The target group for the capacity building activity (and sensitization) is policy makers, private sector/NGOs and Civil Society from the ECOWAS member states.

6. Language

Interpretation will be available in English and French

Agenda

TIME	ACTIVITIES
DAY 1 WHORKSHOP SESSION	
08:30 – 09:00	Présentation des participants
09:00 – 09:30	Opening Session <ul style="list-style-type: none"> - Keynote Speech by Mr. Bah Saho - Opening Remarks by Ministry of Energy Senegal
09:30 – 10:00	Introduction - M. Guei Kouhie, ECREEE
10:30 – 11:00	Tea break and Photograph
11:00 - 11:30	Presentation of National Biogas program Senegal, representative of PNB Senegal, Ministry of Energy
11:30 – 13:00	Presentation of integrated biogas systems: <ul style="list-style-type: none"> • Technical aspect • Economic and financial aspect • Socioeconomic aspect • Gender aspect • environmental aspect
13:00 - 14:00	Lunch break
14:00 - 17:00	- COVID test of Participants
DAY 2 – FIELD VISIT	
08:30 – 17 :00	- - Visit to a biogas projects in rural communities