



ECOWAS/GBEP Workshop on the Piloting of GBEP Sustainability Indicators

**Conference Room, Ministry of Foreign Affairs
Praia, Cape Verde, 7-8 November 2013**

Workshop Report

In the context of GBEP, the Government of the Netherlands - Ministry of Infrastructure and the Environment – supported the development of a pilot study on the applicability of GBEP Sustainability Indicators (SI) in Ghana. This pilot study was conducted effectively in 2012. GBEP and ECOWAS were supported by the Government of the Netherlands to organize this workshop to share experience and disseminate the results of the Pilot Study conducted in Ghana with other member states of ECOWAS.

Opening Remarks

Mr. Bah F. M. Saho, Renewable Energy Expert, on behalf of the Executive Director of the ECOWAS Center for Renewable Energy and Energy Efficiency (ECREEE) welcomed participants to the meeting. He stated that the overall purpose of the meeting was to ensure the sustainable use of bioenergy resources in the ECOWAS to provide sustainable energy for all.

Dr. M. Michela Morese, Executive Secretary of GBEP, on behalf of the co-chairs thanked the Government of the Netherlands for the generous contribution, ECREEE for a fruitful collaboration and the Government of Cape Verde for hosting the meeting. She gave an overview of the work being done by GBEP. The Global Bioenergy Partnership (GBEP) is a forum where national governments, international organizations and other partners engage in a dialogue on effective policy frameworks, identifying ways and means to facilitate investment, transfer of technology, and enhance collaborative project development as well as their implementation to optimize the contribution of bioenergy to sustainable development, taking account of environmental, social and economic factors.

She stated that GBEP has been working with ECREEE to facilitate transition away from the traditional use of biomass towards more modern and sustainable use of it in the ECOWAS region.

Introduction and background

1. Mr. Marco Colangeli, Program Advisor at GBEP, presented on the development and structure of the GBEP sustainability indicators (SI). He emphasized the relevance and usefulness of the Indicators in assessing the sustainability of bioenergy development in various regions. He stated that the focus of the sustainability indicators as a tool is on providing science-based measurements useful for informing national-level policy analysis and development. He also stressed the SI are not binding requirements and do not contain threshold values.
2. Mr. Bah F. M. Saho, Renewable Energy Expert at ECREEE, gave an update on the implementation of the ECOWAS Regional Bioenergy Strategy Framework. He highlighted the key components of the



strategy document and stated that the main goal of the workshop/meeting is to expose the rest of the region to the GBEP sustainability indicators. He encouraged all member states to come forward in putting an application of membership to GBEP because it is the aim of ECREEE to have all the member states join GBEP to benefit from this huge organization.

3. Mr. Kwabena Otu Danquah, Director Renewable Energy at the Ghana Energy Commission, presented an introduction of the pilot project in Ghana implementing the GBEP sustainability indicators (SI) . He stated that biomass constitutes 60% of Ghana's total annual energy consumption. Therefore the objective of the GBEP SI pilot project was to assess the practicality and applicability of the GBEP SI in Ghana. He spoke about the process and methodology used in carrying out the study and presented the overall results. He also noted that the Dutch government provided support for the study.

Additional information were requested by participants on the followings:

- overall added value of adopting the GBEP SI indicators;
- constraints and barriers to implement the pilot project in Ghana;
- how the project was financed and the role of GBEP in the study especially for mobilizing of various stakeholders;
- how the 24 sustainability indicators are cross cutting with other indicators in other sectors;
- how to feed in all 24 indicators in a more comprehensive study; and
- relevance and adaptability of the indicators to national circumstances.

In response, Mr. Kwabena Otu Danquah of the Ghana Energy Commission elucidated on the added value for countries in applying the SI indicators. He stated that GBEP is ready to work on similar pilot projects in other countries and explore funding opportunities. On the issues raised on the experiences from implementing the SI indicators in Ghana, he reminded participants that the project was a pilot study and concluded by saying that the GBEP SI indicators is a tool that provides guidance on how countries can get the best understanding on the sustainability of their bioenergy resources production and utilization.

On the relevance and adaptability of the SI, Dr. M. Michela Morese highlighted that GBEP indicators were not developed for specific countries. She stressed that the sustainability indicators were general and flexible enough to be applicable and adapted to different national circumstances.

Technical presentations on the GBEP SI pilot study in Ghana

1) *Presentation of study on the Environmental Pillar*

Dr. Ernest Foli, from the Forestry Research Institute of Ghana (CSIR-FORIG), spoke on the approach and methodology for assessing the Environmental indicators in the Ghana pilot study. Four indicators (1 GHG emissions, 2 Soil quality, 3 Harvest levels of wood resources and 8 Land use change) were considered feasible for the pilot study given the availability of relevant data and within the limits of time and resources available for the study. Mr Foli stated that the study only involved the use of existing or primary data. No actual measurements, tests or surveys were carried out. The data gathering approach was by interviews with relevant ministries, industry association and desk studies. He concluded his presentations highlighting the relevance of the GBEP SI. He stated that although the SI are adaptable to the local



Ghana conditions, gaps in data availability posed severe constraints on data quality in the Ghana pilot study.

2) *Presentation of study on the Social Pillar*

Dr. Simon Bawakyillenuo, from the Institute of statistical, social and economic research (ISSER) University Ghana, stated that three indicators (10 Price and supply of national food basket, 12 Jobs in bioenergy sector and 14 Bioenergy used to expand access to modern energy) were selected for assessing the social pillar of the GBEP pilot study in Ghana. In some instances methodologies used to collect data for indicators were not fully in line with GBEP methodology. He stated that paucity of data was a major challenge, for instance, out of 13 institutions listed only 3 could provide secondary data for some sub-indicators. In conclusion, the relatively recent and immature nature of the bioenergy sector is considered a major problem for data gathering.

3) *Presentation of study on the Economic Pillar*

Dr. Mawuena Aggey, from the CSIR-Institute of Industrial Research (CSIR-IIR), spoke extensively on the economic pillar, the adopted indicators and sub indicators, the scope of the study and the study approach utilized by the institute in conducting the pilot study. He stated that 4 indicators (17 Productivity, 18 Energy balance, 20 Change in consumption of fossil fuels and traditional use of biomass and 23 Infrastructure and logistics) were selected, with 36 sub indicators implied. The project planned to use existing data and not generate data through actual measurements, tests or surveys. His presentation also focused on the findings and lessons learned. Mawuena Aggey expressed his concerns on the quality of data gathered and the effects on the accuracy of the study. He stated that what manifested is partially old so there is a need to build data banks for bioenergy resources in Ghana. In conclusion, the pilot study was exploratory and tentative and requires critical review and scaling up studies to fill the data gaps.

4) *Conclusions of the Ghana pilot project and further implementation in Ghana*

Mr. Kwabena Otu Danquah, Director Renewable Energy at the Ghana Energy Commission, presented the conclusions of the Ghana pilot project, the added value of the pilot for Ghana and how to further implement the GBEP SI in Ghana. He emphasized the value of the pilot for Ghana and how it facilitated the discussion and cooperation between policymakers and researchers. He also stressed the importance of starting with the indicators in a simplified but structured manner and that a full-fledged implementation of the indicators in Ghana would require significant time and resources but is currently not necessary, given the immaturity of the bioenergy sector.

5) *Presentation on first lessons learned in testing the GBEP sustainability indicators*

Mr. Emiel Hanekamp, Senior Expert at Partners for Innovation BV (the Netherlands), gave an overview of the other GBEP pilot studies and the lesson learned from the Ghana study. He stated that different pilot studies have different approaches. Some have a national scope while others focus on specific cases which are then scaled up to the national levels. Some focus on different bioenergy sectors (e.g. biofuels, biomass, and biogas) depending on relevance and availability of data. On lessons learned on the Ghana pilot study, Emiel Hanekamp, stated that learning by doing approach seems to be the most efficient. Finally he spoke about the opportunities and procedure necessary for scaling up utilization of GBEP SI in the ECOWAS member states. He also referred to the "EU Climate Support Facility" as an opportunity for funding related projects in the ECOWAS countries.



Technical conclusions of the pilot testing in Ghana

On data availability:

- Secondary data related to bioenergy production and use is scarce in Ghana. Bioenergy sectors in many African countries including Ghana are relatively new. This does not mean that the SI are not relevant or applicable in those countries, but that more work needs to be done to gather relevant data in the sector to guide and inform policy development of the bioenergy sector.
- The pilot study has enabled gaps to be identified and has given a better understanding on how to conduct a holistic study.
- Data collection on sustainability of the bioenergy sector can be guided by national governments and represent a pre phase to every SI pilot study. In addition a data collection strategy for each indicator and sub-indicators should be agreed with relevant national stakeholders in the initial stages of the pilot testing.

On GBEP SI indicators:

- The pilot testing of the GBEP Sustainability Indicators was very important for Ghana. The indicators provide very sound, fundamental and comprehensive framework for bioenergy resource measurement, monitoring and management.
- The Ghanaian experience with the GBEP SI has offered important information that will enhance a practical and feasible implementation of the SI.
- The SI has fostered closer links between relevant institutions in Ghana. In the future this will minimize the problem of uncoordinated and fragmented data gathering efforts and ensure better synergies in data gathering and information sharing among sectors.

Workshop conclusions

1. The cooperation between ECREEE and GBEP has yielded fruitful results:
 - Capacity building programme of GBEP in West Africa
 - ECOWAS Regional Bioenergy Strategy
 - Piloting of GBEP SI in Ghana
2. The dissemination of the results of the pilot testing of the GBEP SI in Ghana funded by the Dutch government has raised interest among many ECOWAS member states.
3. The SI provides opportunities to incorporate some sustainability aspects of the indicators to the bioenergy sector. However the full implementation of the 24 indicators was considered challenging in terms of feasibility (from a time and resource point of view).
4. In the implementation of the indicators there are opportunities and challenges-difficulties. This however provided opportunities for innovative approaches to problem solving.
5. Since data availability was a major constraint in the Ghana pilot, countries should therefore buttress the need to start collecting relevant data required that can be adapted to the GBEP SI indicators.



6. The Ghanaian experience revealed the challenges and opportunities of pilot testing the GBEP SI; however the SI provided sound fundamental and comprehensive framework for bioenergy resource measurements and assessment.

Workshop recommendations

1. Improve the policy and regulatory frameworks especially with regards to improving data collection particularly from local entrepreneurs in the bioenergy sector.
2. There must be firm governmental/institutional support. Institutions should endeavor with government intervention to improve data collection and establish data banks for bioenergy resource assessment.
3. There is a need for collaboration between stakeholders for effective sharing of knowledge, information and efficient implementation of the sustainability indicators.
4. GBEP is invited to provide technical backstopping to take the pilot project team through SI prior to the implementation of the project.
5. Simplistic approach for data gathering of SI should be used for countries that have limited resources.
6. In implementing SI, prioritization of indicators could be done as a first step to learn through the process.
7. A GBEP SI expert exchange platform at both technical and policy levels would be useful. GBEP has recently developed an e-forum for this purpose and participants were invited to make best use of it.
8. Participants were called upon to bring the aspect of sustainable bioenergy to the attention of their Ministers.

Closing Remarks

In her closing remarks, Dr. Michela Morese, Executive Secretary of GBEP, stated that bioenergy presents good opportunities as well as challenges and that is why the issue of sustainability is important. GBEP sustainability indicators allow countries to gain the best from the bioenergy production and use. She thanked all participants for their active contributions and discussions during the course of the meeting and stated that a lot of feedback about the indicators has been well received. She called upon interested participants of various countries to use the GBEP online forum to facilitate an exchange of experiences and lessons learned on the technical challenges related to the implementation of GBEP SI. In ending her speech, she thanked the Government of Netherlands and of Cape Verde for their support and ECREEE for fruitful cooperation. Finally she requested all the participants to bring the aspect of sustainable bioenergy to the attention of their Ministers.

Mr. Steven Potter (NFI) from the Ministry of Energy of Liberia, on behalf of the ECOWAS member states and representatives, thanked ECREEE, GBEP and respective donors of the workshop. He expressed that the meeting has provided a wealth of knowledge, and allowed for exchange of ideas. He stated that there are many reasons for all countries in the ECOWAS to pilot the GBEP SI because it has inter alia the potential to balance food security and the use of bioenergy resources.



The closing remarks were delivered by Mr. Bah F. M. Saho of ECREEE, who stated that the GBEP sustainability indicator tool provides a lot of insight to what sustainable bioenergy is all about. He concluded his speech by saying that the opportunity to drive the process lies with representatives of the ministries present at the meeting. He also thanked GBEP, the Dutch Government and the Government of Cape Verde and wished all participants safe trips to their various countries.

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