



REPORT ON THE ECOWAS CAPACITY BUILDING WORKSHOP ON BIOCHAR PLUS

THEME: Energy, Health, Agricultural and Environmental benefits from BIOCHAR use: Building Capacities in ACP countries.

13th August 2014, Banjul, The Gambia

1. Introduction

The ECOWAS region continues to be plagued by low access rates to sustainable energy with very high dependency on traditional biomass, mainly for cooking. Fuelwood use in the overall energy demand of the region is estimated at around 80% with negative consequences of smoke-filled kitchens resulting in health problems, especially for women and children. Inefficient stoves are often unsafe and uncomfortable to use and cooking fuel expenses continue to rise while the unsustainable wood fuel supply chains cause environmental degradation and deforestation.

Against this background, there is an urgent need to address the sustainable energy access challenges. ECREEE therefore, in partnership with the University of Udine, Italy are participating in an EU Science & Technology II funding to promote Biochar technology in the ECOWAS Region. As part of the project implementation, a regional workshop on enhancing capacities on Biochar technology was convened in Banjul on the 13th of August 2014 and held back-to-back with the WACCA workshop in Banjul on 11th & 12th August 2014.

The Biochar Capacity Building Workshop

The capacity building workshop on the benefits of biochar use was held back-to-back with the WACCA regional workshop on the Development of National Cooking Energy Action Plans for the Gambia. In attendance were delegates from the ECOWAS region and from the international community who were invited to the WACCA workshop. From Italy were Prof. Alessandro Peressotti, Dr. Giorgio Alberti and Dr. Tiziana Pirelli who came as delegates from the “Biochar Plus” Beneficiary Institution (University of Udine – UNIUD -, Italy).

The workshop was officially opened by the Honourable Minister for Energy of The Gambia- Dr. Edward Saja Sanneh, who expressed his appreciation to ECREEE and the UNIUD for choosing the Gambia to share the experience in this novel technology. The Opening Session was graced by Ms. Ndey Bakurin – Executive Director, National Environment Agency (NEA), Prof. Alessandro Peressotti of UNIUD and Mr. Bah F. M. Saho – Renewable Energy Expert, representing the Executive Director of ECREEE. All the dignitaries addressed the workshop and expressed their delight in re-igniting this technology that is clean, efficient and sustainable and has numerous

benefits for energy, health, agriculture and the environment. The welcome remarks were delivered by Mr. Demba S. Bah – Deputy Permanent Secretary at the Ministry of Energy.

As part of his opening remarks, Prof. Peressotti requested the Honourable Minister for Energy of the Gambia to ignite the ELSA/Biochar stove, which continued to burn for almost 1 hour, inside the venue room, without producing any smoke while the workshop activities continued.

The Morning Session

The morning session proceeded with Power Point presentations explaining to the audience the three components of the Biochar value chain:

1. the pyrolytic stove by Prof. Peressotti;
2. the feedstock by Dr. Giorgio Alberti; and
3. the biochar (Dr. Tiziana Pirelli).

The materials presented and/or distributed during the workshop can be found at the Biochar Plus official website (<https://sites.google.com/site/biocharplusproject/events/capacity-building-workshop---the-gambia>).

1. Pyrolytic stoves in Europe and ACP countries

This presentation was made by Prof. Peressotti who invited participants to handle the informative kit, specifically prepared for the workshop. The kits displayed included: a set of biochar pieces derived from the pyrolysis of different raw materials and a set of pellets produced by treating different kinds of biomass waste resources.

2. Biomass availability

Dr. Giorgio Alberti, in his presentation, reiterated the main outcomes achieved during the implementation of the previous project “Agricultural and environmental Benefits from Biochar use in ACP Countries - BeBi” (FED/2009/221814). Hard copies of the study report entitled “Benefits and Opportunities from the Biochar Value Chain: outcomes from pilot experiences in Ghana and Sierra Leone” were distributed to each participant. The study first describes the ELSA stove and reports about its adaptation, spread and use made in Ghana and Sierra Leone from 2011 until 2013. Then, it reports the main result of the “SWOT analysis” performed in the target countries.

3. Biochar and African Dark Hearths (ADE)

The third presentation was made by Dr. Tiziana Pirelli, who explained the main characteristics of biochar through a comprehensive literature review and reported on the overall benefits after biochar incorporation into soil. The historical background of biochar as well as the chemistry of biochar in the soil was well explored by Dr. Tiziana. The morning session was rounded up by Prof. Alessandro Peressotti who explained the future expectations and the activities planned for the Biochar Plus project. In particular, his speech focused on the Capacity Building aspects and on the opportunity of spreading the biochar technology in Africa.

After each speech, time was left for questions and discussion. The participants demonstrated keen interest in all the topics, particularly on the stove and the use of biochar.

The afternoon Session

In the afternoon, a round table among participants was organized. Each participant was asked to identify possible Strengths, Weaknesses, Opportunities and Threats (SWOT) related to the introduction of biochar technology in their countries. By so doing, participants were asked to take into account the social, environmental and economic conditions prevailing in each situation (i.e. cooking habits, feedstock availability, farm management practices, etc.). In all, the following were identified as barriers to availability of the cooking stove in West African countries:

1. The lack of micro-financing schemes to fund the cost of purchasing the stoves;
2. The lack of financing opportunities for entrepreneurs who want to implement activities to produce possible feedstock, i.e. by collecting, processing, packaging and selling the biomass products.

Moreover, it emerged that stoves are probably too expensive and people will need some form of financing/credit to buy them if dissemination would be effective. One important aspect of the Biochar stove technology, it was pointed out, was the possibility to use the agro-industrial waste directly in the stove that would reduce the cost of people having to purchase the transformed biomass waste.

In an effort to better appreciate the backgrounds of participants, a questionnaire was completed by each participant, indicating their contact details (phone, e-mail address) as well. The questionnaire would also be used to evaluate the quality of the event, to understand the topics the local communities of the region are interested in and to create a database of potential stakeholders. It is anticipated that, the list will be used for periodic updates on project activities and outcomes and to distribute the kits produced during project implementation. These kits will include, among others, pdf blue prints of the ELSA stove in order to allow stakeholders to build the stove by themselves. At the end of the day, 49 questionnaires were collected.

In the afternoon session, a presentation on the strategy for promotion and dissemination of the Biochar technology was made by Mr. Bah F. M. Saho - Renewable Energy Expert at ECREEE. He reminded the audience on the current energy access situation that is characterized by inefficient and sustainable use of traditional biomass that dominates the sector with its negative consequences. He finally proposed actions that go towards mitigating barriers of increasing renewable energy and energy efficiency access that this technology falls under. These include: policies, strategies and standardization, sensitization and dissemination of the technology to the wider populace, capacity enhancement for the critical mass, and enabling financing schemes for those who want to take up the technology to develop it further.

The final presentation of the workshop was on Sustainable Financing mechanisms by Mr. Sire Abdoul Diallo – Appointed WACCA Coordinator. In his presentation, Mr. Diallo introduced the financing options and conditions. While sustainable financing options can be available within our region, the right enabling environment has to be created in terms of clear policies, legal and

regulatory environment. He provided details of the various sustainable financing opportunities and recommendations to access sustainable financing.

The workshop attracted almost seventy (70) participants with thirteen (13) from the ECOWAS Region. The attendance list is attached.

The workshop ended with closing remarks, delivered on behalf of the Deputy Permanent Secretary at the Ministry of Energy of the Gambia by Bafoday Sanyang, Energy Officer at the Ministry. He expressed his delight that the workshop on Biochar was held in The Gambia and urged participants to take the knowledge gained, from this innovative technology, to their respective countries, especially those from the member states. He expressed the hope that the technology would become more adaptable for the benefit of the people. He finally wished everybody a safe journey back to their respective countries.