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For immediate release

Biochar^{Plus}

“Energy, health, agricultural and environmental benefits from biochar use: building capacities in ACP Countries”
ACP Science and Technology Programme.



A programme of the ACP Group of States
with the financial assistance of the European Union

Project Abstract

Biochar Plus promotes knowledge and use of biochar, a promising and environmentally-friendly technology which offers several benefits in terms of energy access and efficiency, health, agriculture, environment, and socio-economic development. Seizing the opportunity offered by the widespread availability of feedstock (agricultural bio-wastes), the simplicity of converting biomass into biochar through pyrolysis with Elsa's stoves, the low level of economic investment required, the high demand for charcoal as cooking fuel and the increasing demand for smoke-free cooking stoves, the project will channel the production of biochar - around energy clusters - into a sustainable and eco-friendly business opportunity for local communities.

Challenge

Growth in demand for wood fuel, coupled with a lack of alternative resources, has contributed to an increase in tree felling to ensure adequate wood fuel supply to households. This has resulted in ecological decline (i.e. a decrease in forest area, increase in savannah, loss of biodiversity), soil erosion (by wind in dry season and run-off in wet season) and health side effects. A recent study in Ghana indicated that there is high consumption of wood (about 15 kg of wood per day per person) and that the highest wood fuel consumption (charcoal or wood fuel) was observed at the largest households, which may be attributed to the fact that wood fuel collection carries no financial cost to households. As a consequence, people do not value energy conservation. In fact, after cooking a meal the firewood is left burning until the next meal is cooked. As long as women and children's labour is unpaid, this will continue to be considered a cheap energy source that does not require any efficiency. Unfortunately, this habit is seriously threatening the availability of fuel: it is estimated that in Togo, for instance, there will not be any wood available in 20 years' time.

Some available options to change the approach to fuel use need to be explored:

- Using other available biomass as feedstock.
- Improving cooking stoves to reduce the daily amount of charcoal or wood used per family.
- Improving feedstock characteristics (i.e. pellets).
- Studying, developing and applying sustainable forms of forest management, where it is possible to harvest forest without reducing forest area.

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Focus

Biochar Plus improves the capacities of developing countries to absorb and use biochar technology, knowledge of which is readily available and promotes socio-economic development of families and communities. It also stimulates the development of specific biochar-related policies and incentive schemes, and builds the technical, entrepreneurial and scientific capacities of all stakeholders involved. The development of four energy clusters is expected to reduce anthropogenic pressure on forested areas and increase the soil fertility of cropland :

- Producing and selling biochar stoves.
- Producing and selling the fuel produced with locally available feedstock (pellets).
- Collecting and distributing the biochar.
- Receiving carbon credits and selling them in the international carbon markets.

The Biochar Plus project will develop the following sub-activities:

A1. Capacity building on small-scale biochar plants through participatory approach;

A2. Biochar large-scale plants and value chains;

A3. Dissemination and mainstreaming;

A4. Project management and coordination.

Project's implementation period : from February 1st, 2014 to January 31th 2017

Project partners:

University of Udine (Italy, Lead Partner)

ECREEE, ECOWAS Centre for Renewable Energy and Energy Efficiencies, (Cape Verde)

STARTER, services company for euro-planning and use of Community programs (Italy)

ASA Initiative, NGO (Ghana)

University of Lomé (Togo)

CORD SL, NGO (Sierra Leon)

Jimma University (Ethiopia)

Bindura University of Science Education (Zimbabwe)

Associated Partner:

African Union, Ethiopia

UNIDO, International Organization based in Wien

Cornell University, USA

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Figura 1 Picture taken in Ghana (2012) during the training course held within the BeBi project for building the Elsa stove.
(courtesy of Alessandro Peressotti)

Grant	FED/2013/330-236
Title	BIOCHAR PLUS - Energy, health, agricultural and environmental benefits from biochar use: building capacities in ACP Countries
Co-ordinator	Università degli Studi di Udine, Italy
Partners	<ol style="list-style-type: none"> 1. ECREEE, ECOWAS Centre for Renewable Energy and Energy Efficiencies), Cape Verde 2. STARTER, Italy 3. ASA Initiative, Ghana 4. Université de Lomé, Togo 5. Counterpart in Rehabilitation and Development in Sierra Leone (CORD SL), Sierra Leone 6. Jimma University, Ethiopia 7. Bindura University of Science Education, Zimbabwe
Project duration	36 months 1 February 2014 - 31 January 2017
EU grant	EUR 999.979,30
ACP regions and countries involved	Eastern Africa – Ethiopia, Zimbabwe Western Africa – Cape Verde, Sierra Leone, Ghana, Togo, Guinea Bissau
Programme theme(s)	Energy access and efficiency Agriculture and food security

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