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**PRIORITY A.2.3.: Managing Arid and Semi-arid Ecosystems**



**National Policies and Strategies on Bioenergy in Africa**

**Case Study: Burkina Faso**

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**COMPETE**

**Competence Platform on Energy Crop and Agroforestry  
Systems for Arid and Semi-arid Ecosystems - Africa**

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The Competence Platform on Energy Crop and Agroforestry Systems for Arid and Semi-arid Ecosystems – Africa (COMPETE) will establish a **platform for policy dialogue and capacity building** and identify **pathways for the sustainable provision of bioenergy**

- to improve the quality of life and create alternative means of income for the rural population in Africa
- to aid the preservation of intact ecosystems in arid and semi-arid regions in Africa
- to enhance the equitable exchange of knowledge between EU and developing countries

The current document has been elaborated within Work Package 6 on Policy Development of the COMPETE project by the consortium partner WIP Renewable Energies.

The objective of COMPETE Work Package 6 is to coordinate policy research activities in African countries aimed at facilitating the efficient implementation of improved energy crop and agroforestry systems in order to enhance economic productivity and sustain rural and peri-urban livelihoods. It is also aimed at avoiding adverse environmental and social degradation that could arise from faulty policy development and implementation.

Within the context of the COMPETE Work Package 6 current national and international policies and strategies (including national legal and institutional frameworks) are identified addressing the implementation of improved energy crop and agroforestry systems.

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## National Policies and Strategies on Bioenergy in Burkina Faso

Government: Semi-presidential Republic  
President: Blaise Compaoré (since October 15, 1987)  
Premier Minister: Tertius Zongo (since June 2007)  
Capital: Ouagadougou  
Area: 274,000 km<sup>2</sup>  
Population: 13,228,000 (estimate 2005)  
GDP (PPP): 2005 estimate  
- Total: \$16.845 billion<sup>1</sup> (117th)  
- Per capita: \$1,284 (163rd)

### 1.0 Introduction

Like in other Sub-Saharan African countries insufficient energy access is a serious problem in Burkina Faso. Energy access is indispensable for both economic development and poverty alleviation. In the rural areas the majority of the population depends on the use of wood fuel as main energy source. Burkina Faso is the largest cotton producer in Africa with 712.000 tons of cotton seeds produced in 2005-2006. From 225.000 tons of cotton seeds 35.000 tons of oil was produced, the remaining seeds were exported. Due to the low prices of oils, particularly those imported from India, local producers are currently not interested in the production of oil from cotton seeds in Burkina Faso.

Burkina Faso has long experience in the production of ethanol from sugar cane, as well as in the use of ethanol for cooking which was diffused to the south region Lafya between 1980 and 1990. However, this initiative was stopped because the alcohol was used for the production of alcoholic beverages.

### 2.0 Policies in the field of Energy, Environment and Poverty Eradication

In Burkina Faso the renewable energy sector is not regulated. The entire energy sector is not specifically regulated and the coordination between stakeholders is insufficient.

Currently, a national strategy for the regulation of wood fuel trade is being elaborated by the government. Furthermore, in December 2000 the government of Burkina Faso started to elaborate energy and poverty alleviation policies with the following objectives:

- Development of the energy administration (organisation capacity and policy formulation);
- Enhancement of efficient energy supply options (electricity, hydrocarbons, wood fuel, renewable energies);
- Socio- economic development;
- Alleviation of poverty.

Law N°005/97/ADP from January 1997 on environmental issues in Burkina Faso addressed the following prime objectives in its preamble:

- The interdependence between environment and socio-economic development;
- The ratification of international agreements concerning environment conservation;
- The protection of future generations from environmental degradation.

The Environment Plan for Sustainable Development (Plan d'Environnement pour le Développement Durable, PEED) aims to develop a strategy for poverty alleviation and the protection of the environment.

### 3.0 Bioenergy Projects and Initiatives

In the 1980ies the faculty of Sciences of the University of Ouagadougou implemented a *Jatropha* research project. Eight hectares were planted with *Jatropha* in an experimental phase in the village of Gampéla, 25 km south from Ouagadougou. These *Jatropha curcas* activities were supported by the German Technical Assistance (GTZ).

A further project for the promotion of *Jatropha Curcas* was supported by Denmark. This project aimed at the mobilisation of farmers from the region centre-east and east of the Sahel to grow *Jatropha Curcas* in order to sell the seeds to enterprises from Netherlands.

Today, there are several agro-energy projects with the ambition of large scale plantation of *Jatropha Curcas* for biofuel production.

The local NGO Tii Palga initiated a project for the plantation of *Jatropha Curcas* in collaboration with Gebana Afrique. The time planned for this project is five years and it is foreseen to start in 2008. The objectives of this project are:

- To increase incomes of the population through the plantation of *Jathopha*, and the production of oil and by-products;
- To regain soils through *Jatropha* plantations;
- To enhance organisational and institutional capacity;

In order to achieve these aims the following activities are planned:

- Plantation of *Jatropha* fences; about 0,8 kg of seeds are expected per meter of fence. The project will fence an area of 65 hectares with about 65.000 plants. It is estimated that in 2015 the production will be 4.000 litres of oil per year;
- Plantation of *Jatropha* on more than 5.000 hectares to obtain 4.000.000 litres per year in 2015 from about 12.500.000 *Jatropha* plants;
- Production of oil with 6 oil presses with an average capacity to process 150 tons per year;
- Establishment of national and international partnerships to organise sales, transport, processing, local utilization and export;
- Encouragement of local use of *Jatropha* oil in the country;
- Investigation of the opportunities for export.

Additionally, the company SN Citec (Société Nouvelle Citec, Oil and soap Company Citec ) is considering to set-up a factory for the production of biodiesel from cotton seeds with an annual capacity of 10.000 tons.

Finally, the French organisation CIRAD (Centre de Coopération Internationale en Recherche Agronomique pour le Développement), 2IE (International Institute of Water and Environment Engineering), and the International Production Project of Burkina Faso are investigating the possibility to equip the thermal power station providing the main energy supply of the Ville de Lorenzo with facilities to enable it to operate on crude cotton oil. It is foreseen that in 2008 several power plants will operate more than 60% of the time with cotton oil.

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