

CHARCOAL PRODUCTION IN KAMULI



***IGNORED YET CRUCIAL FOR;
THE SURVIVAL OF A SIGNIFICANT POPULATION OF KAMULI DISTRICT
AND
A GREAT POTENTIAL FOR REVENUE FOR KAMULI LOCAL GOVERNMENT***



1.0 The charcoal industry in Uganda

Biomass is the most important form of energy in Uganda. Even when it is now established that Uganda has viable oil deposits, it may not be economically sustainable to supply communities with cheap oil for cooking when the country is pursuing a policy of economic integration. This means that the cost of petroleum products will remain unaffordable to the bulk of the population for years to come. Another challenge for the energy sector

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in Uganda is that the total potential for hydropower production (big hydro and the small, micro and pico) is a mere 3,000 MW according to government estimates. This is far below the energy requirements of this country. Besides, the unit cost of electricity is far beyond the reach of the majority of Ugandans and most households only use it for lighting, TV and radio.

While rural households use biomass in the form of firewood, urban households use charcoal because it is cleaner and has higher energy content per unit mass which makes its transportation and storage cheaper and convenient. Kamuli, together with other areas such as

Nakasongola, Masindi and Kiboga, provide the charcoal which is used in urban centres. In the case of Kamuli, charcoal is produced from woodlands mainly in the sub counties of Balawoli, Namasagali, Bugaya, Kagulu, Buyende, Nkondo and Kidera. According to a study carried out by IRDI in 2006, charcoal production and trading provides an immediate employment opportunity to the youth who have no access to land, and are unskilled and unemployed.

2.0 The problem of charcoal

Most of the charcoal which is produced in Uganda is from natural forests. 70% of such trees are found on private land where government has limited control on land use and tree harvesting. The tree resources are however very crucial in maintaining the environment. In this way they support both rural and urban communities.

Due to government limitations in controlling land use on private land, it has recognized that the best way to influence maintenance of tree cover on private land is through incentives and institutional frameworks. This approach by government is captured by policy statement number two of the Uganda Forestry Policy (2002) which, states that the development and sustainable management of natural forests on private and customary land will be promoted. However, the development of instruments to implement this policy has not taken place since 2002. What

obtains now is a lack of control of the sector and as a result alarming rates of tree cover loss with the accompanying deforestation.

The response to these problems country wide has been a blanket declaration that charcoal production is a dangerous activity to the environment. Unfortunately, charcoal as a fuel does not have an immediate substitute. The consequence of this is that charcoal will continue to have a high demand in Uganda. Where there is demand, production will continue. The crucial question therefore is how we make charcoal production a viable and sustainable income generating activity for Kamuli and Uganda as a whole.

3.0 Challenges to the Management of Forests on Private Land

Some of the key challenges to the management of forests on private land are policy related. These include:-

1. The lack of a formal policy specifying forestry as a preferred land use on private customary land. This implies that legislation as an instrument can not be applied in this case since the macro-economic strategy for Uganda is a liberalized economy.
2. Lack of standard mechanisms to control the harvesting of forest stocks which is leading to their liquidation and over exploitation.
3. The unrealistically low and stagnant market prices for charcoal as compared to other fuels such as

petroleum products and electricity that has persisted for almost two decades has seriously eroded the incentives for investment in charcoal production by majority land owners leaving the practice to the landless who have no interest in long term environment conditions of the land.

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4. At the same time cheap charcoal provides no incentive for its conservation by the consumers. To compound the problem further, cheap wood will not motivate charcoal makers to invest in efficient conversion technologies to maximize profits. This is because trees are obtained freely and improved charcoal production technologies require some investment.

5.0 The mandate of local governments

The Local Governments Act (1997) points out that, local governments are mandated to implement government policies such as the forestry policy. Also the forestry policy recognizes that local authorities must play an important role in promoting forest sector development, including community, private and farm forestry as well as management of local forest reserves. According to Article 39 of the Local Government Act, the district council is empowered to make

laws which enable implementation of its mandate under policies such as the Forestry Policy.

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Such laws and other processes necessary to implement the forestry policy are guided by technical input from the district natural resources officer in charge of forestry and line ministries. According to the forest policy, the Kamuli district forest department is mandated to cause increased economic, social and environmental benefits from forests and trees by:

- i. Promoting forestry on private land;
- ii. Promoting profitable and productive forest plantation business;
- iii. Promoting a modern, competitive, efficient and well-regulated wood and non-wood processing industry in the private sector;
- iv. Delivering extension and advisory services so as to promote tree growing on farmland;
- v. Conserving forests/woodlands and soils in the watershed especially along the Nile River

6.0 Achievements of the district so far

(i) Promoting forestry on private land; Despite the fact that forests provide employment for a good percentage of

landless youth and some women, the budget required to develop the sector is limited in accordance with the budget for the natural resources sector which is also limited. Although forests fetch good revenue for the district through charcoal sales and to a lesser extent, timber marketing, the district has done very little to promote the forestry sub-sector.

Apart from producing seedlings for informed farmers, there are no measures to ensure expansion of the sector and the future of forests is left at the hands of private owners and charcoal producers. Efforts to increase tree cover in the district have mainly been undertaken by NGOs. Even then the district government has not stepped in to support structured such as tree nurseries, once the project has closed. As a result community tree nurseries set up by NGOs have not survived beyond the project and efforts to plant more trees have commonly died with the project. It is not surprising therefore that there exists in the district expanses of unutilized shrub land which could be converted to plantation forests for timber or charcoal. As a result people rely entirely on natural forests for production of firewood and trees are getting depleted.

(ii) Promoting profitable and productive forest plantation business;

Kamuli district has not sufficiently promoted the establishment of forest plantations and most especially for fuel wood production even in ecologically

fragile areas where forestry is one of the few suitable and profitable enterprises.

(iii) Promoting a modern, competitive, efficient and well-regulated wood and non-wood processing industry in the private sector;

With regard to charcoal, the forestry department is taxing the sub-sector without investing in it adequately. In the face of modern and efficient charcoal making technologies, producers are still using old and wasteful charcoaling methods. Also there are no control measures to protect threatened tree species from depletion. Instead producers are free to even use good timber trees such as the *Muvule* for charcoal. In this way the district is failing to meet its mandate of promoting a modern, competitive, efficient and well-regulated wood and non-wood processing industry.

(iv) Delivering extension and advisory services so as to promote tree growing on farmland;

Through the environment department of the district, NGOs such as MFCOI have been contracted to raise seedlings and distribute them to farmers in a bid to promote agroforestry. It is assumed that the NGOs offer some advisory services as they distribute the seedlings.

7.0 Recommendations

Although charcoal is one of the major income earners in Kamuli district it has been regarded as evil and illegal. Consequently the potential of the

charcoal industry to generate revenue is ignored. The sub-sector is therefore never considered as one of the areas for intervention and upgrading for improved livelihoods and revenue for the district. Since charcoal continues to be a key source of energy, production and sale of charcoal will continue in rural areas. Charcoal has a high potential for income generation through domestic consumption within Uganda as well as an export commodity. The recommendations of this paper seek to make charcoal production environmentally sustainable and profitable to the producer and a source of revenue to government.

a) What local government can do to control and manage the charcoal production sub sector sustainably

There is a serious need to set standards for charcoal and fuel wood that is allowed on the market. Currently there are no standards in place to specify the quality of fuel wood (fire wood and charcoal) permissible on the market. A good standard should specify; the tree specie for both firewood and charcoal, the size of fire wood and its moisture content and the quality of the charcoal. Without these standards, any tree can make it on the market including the endangered species, fruit trees and trees from protected areas. When this happens, there are two serious consequences;

- (i) Without standards, it is not possible to determine what should come on the market and

to enforce fire wood and charcoal standards. This results in any tree specie, quality of fire wood and charcoal making it on the market. This fuels deforestation.

- (ii) The incentives to plant particular tree species by the land owners for charcoal therefore, will be destroyed because they will not have any competitive advantage by investing in the planting of trees for fuel wood since any tree is potentially fuel wood including those from protected areas. Fuel wood production therefore will never be sustainable fueling further degradation.

b) Increasing revenue for Local governments and profits for the sustainable charcoal producers

To provide incentives for tree planting for wood fuel and investment in improved charcoal production technologies, the following should be pursued;

- i. Identification of tree species to be planted that are suitable for charcoal and fire wood production and training of land owners in planting of tree species appropriate for charcoal.
- ii. Investment in the training of charcoal producers in modern and

efficient charcoal production technologies. These reduce the rate of tree harvesting through increasing the amount of charcoal obtained by as much as threefold.

- iii. Training producers in the recovery, application and sale of by-products of the charcoaling process that increase the value of the charcoaling process. These by-products include; include pyrolysis oil, and charcoal briquettes from the charcoal fines.
- iv. Enforcement of the charcoal and fuel wood standards.
- v. Organizing and registering of actors in the charcoal production sub sector.

Improved charcoal production technologies give much higher yields of charcoal of excellent quality and they yield by-products of commercial value. This makes the practice very profitable and the actors will have a high motivation for sustainable production.

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Mission Statement