GOVERNMENT OF THE GAMBIA, OFFICE OF THE

PRESIDENT, ENERGY DIVISION

Renewable Energy Study for The Gambia

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Lahmeyer International

Social and Gender Report

5 Application of Renewable Energy: Gender and social aspects (Past experiences and lessons learned)

5.1 The Gambia national cookstoves project

Between 1984 and 1991 The Government of the Gambia through the Department of Community Development implemented the Gambia National Cookstoves Project. The was funded by the Danish government through the United Nations Sudano Sahalian Office and it was in response to the Banjul Declaration to preserve the flora and fauna of the forest of the Gambia. Cooking stoves such as the Furno Nufflie, the Kumba Gaye Stove and Sinkiri Kuto were introduced as a way of reducing the consumption of fuel wood. Despite the vigorous sensitisation of communities through radio and open demonstrations, the use of these alternative cooking stoves became more popular in the urban area than in the rural area, the reason may be related to cost. For example, the Furno Noflie with metal lining costs D 350 (US$ 12.5), the one made from just clay costs D 50 (US$ 1.8) and the Sinkiri Kuto which is a more permanent structure costs between D 3,500 to D 5,000 (US$ 126 to US$ 180). The recent study on household energy consumption conducted in 2005, revealed that urban households use Furno Jambar more often than the rural households 10.9% and 3.0% respectively. Furno Nufflie is also more frequently used in the urban households than in the rural households 30.6% and 11.0% respectively. Although the technology is accepted by women, the cost involved is a deterring factor especially for the rural communities.

5.2 The Gambia peace corps environmental education programme

In 1994, as part of its environmental education programme in schools and communities, the United Nations Peace Corps in the Gambia adopted the building of Kumba Gaye stoves as a strategy. Environmental Clubs were formed in schools with membership varying from 5 to 35 comprising 40% girls and 60% boys. Environmental training manuals and environmental plays were developed for use in schools. The clubs were assisted by motivated teachers and community members. Kaur, a village in the Central River Division was used as a pilot. Members of the environmental clubs were asked to calculate the amount of fuel wood consumed in their homes using the three stone stove, over a period of six months. Between D 250 to D 300 (US$ 8.9 - 10.7), was spent by individual families on fuelwood. Following these, the new stoves were built f the families using locally available materials such as cow dung, anthill mud, grass and three stones. Over a period of six months, families made savings of 2/3 on cost of fuel wood. As a result of this, other families requested for the stoves. Members of the clubs built the stoves for families and schools, women within the village were also trained to build and repair the stoves on request. The idea was replicated in other parts of the country (Kaiaf, in LRD, and Njaba kunda in NBD). Initially the idea was well received by the women since it is cheaper to use than the three stone-cooking stoves in terms of fuel consumption. Presently with the exception of the schools, almost 90% of the communities in which the Kumba Gaye stove was introduced have reverted back to the three stone system, the reason being that the Kumba Gaye stove is slow, the women spent more time cooking with the Kumba Gaye stove. Since the rural woman uses manual labour for most of her domestic chores, time is a valuable factor. Further investigation is needed in this area by the project implementers.

Training video by Forest Farm Facility (FFF) in stove construction <https://www.youtube.com/watch?v=JkYDtjDcTA0>

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Pirang Barending Women Horticultural Group is a member of Kombo East Vegetable Growers Association which is an affiliated member of NFPG.   
Knowledge and practice of energy saving and efficient technology is essential for forest conservation and management by reducing the consumption of fuel wood which has saving effect on the forest and positive impact on climate change.  
The improved mud stove "Kumba Gaye" is very easy in construction, low cost and easy to maintenance. It saves about 60% fuel wood used in cooking thereby saving the forest

5.3 Gas and briquette

When government banned the sale and use of charcoal in the 1980s, alternative sources of energy (gas and briquette) for cooking were introduced. These were not well received, while gas is expensive for most households, the smoke of briquettes and the problem of regular supply was a problem. The use of biogas as an alternative source of energy will require the use of cow dung and human waste as raw materials. The challenges in this will be the need for constant supply of cow dung; since cattle owners use the dung as manure on their farms, alternative forms of manure will be sought. Women do not own moveable assets like cattle, as a result they will not have control over cattle dung. A lot of sensitisation will be required for individuals and communities to accept and use gas from human waste for domestic use, for obvious reasons most people may not appreciate the use of gas from human waste for whatever purpose.