

### **5.3.4 Petroleum**

Malawi imports all its petroleum products by road and rail through Mozambique and Tanzania. These modes of transport are quite costly and impact significantly on the pump price of petroleum products.

### **5.3.5 Renewable Energy**

This sub sector is not yet fully developed. However, the potential for renewable energy development and utilisation in Malawi is very high whether solar, biogas, or wind. The harnessing of solar, wind and biogas are severely constrained by inadequate local knowledge and the high cost of the end-use technologies commensurate with these sources of energy. The result is that until a year or two ago investment, research and development in renewable energy was very low compared to the other energy sub sectors.

## **6.0 FINDINGS**

### **6.1 MAJOR ISSUES WITH RESPECT TO WOMEN IN THE ENERGY SECTOR**

- Depleting of Fuelwood sources

As noted earlier on, fuelwood is the most important source of energy for over 90% of the population. Provision and usage of wood is primarily the responsibility of women who are the major energy collectors and users. However due to deforestation and other forms of environmental degradation, there is an acute shortage of the resource and this has serious negative implications on the role of women. Activities like travelling to fuelwood gathering area, collection and preparation of fuelwood ( wood cutting, splitting, breaking and bundling and fire making ) have become more time consuming and strenuous for women. Studies on deforestation in most of the refugee impacted areas indicate that women walk about 16 and 20km into Mozambique to collect firewood. Thus diminishing supply of fuelwood automatically increases the demands made on women's labour-time and thereby limiting their abilities to engage in other productive activities such as income generating activities.

- Limited alternative sources of energy

Because of minimal research and development that has been done in this sector, Malawi has not yet fully exploited the potentials in alternative sources of energy. Most of the Malawian communities are still conservative in adopting the use of alternative sources of energy. The technologies that have been developed to date are not being used massively by the urban poor and rural population. As a result the urban poor and rural communities still use firewood and charcoal which is obviously getting scarce due to deforestation.

- Lack of adequate and effective involvement of women in technology development

Most of the research and development of energy technologies has usually fallen short of adequately and effectively involving women although they are the primary users of energy sources. As a result the energy devices that are designed are inappropriate, and do not meet the energy needs and requirements of the women

Apart from the inadequate involvement of women, there are indications that the research studies that are done do not specifically take a gendered approach in terms of finding out both the practical and the strategic energy needs of women and men. Most of the traditional research approaches are likely to bring out results and recommend interventions that reinforce rather than challenge the existing gender disparities between men and women.

- Increased workload for women

The limited availability of fuelwood has obviously put greater demands on women in Malawi in terms of their time and labour. Majority of women however lack access to basic technology that would enable them to perform these activities more efficiently. Women lack access to ox-carts and bicycles for the transportation of the fuelwood. Women transport their firewood as headloads, and while men may use ox carts and bicycles for the collection of the same firewood it is usually for sale and not for domestic use.

Apart from the burden of the roles at household level, there is also a tendency to increase women's work load by involving them in community projects without compensatory measures. In most cases, unfortunately, women's participation in community activities is often justified as an extension of their responsibility for ensuring care and sustenance for the family. In most of the Malawian communities, women are unlikely to say no to opportunities to improve household or community well being, but their multiple responsibilities usually make it very difficult or impossible for them to participate.

- Involvement of girls in household chores

The unequal gender division of labour in most of the Malawian households, entails that apart from women, the female children bear the burden of any increased workload. The female children are often seen as a source of additional labour at the household level. In cases where families are faced with shortage of energy sources, female children are expected to supplement their labour in carrying out the roles that the adult female members undertake. In areas where male migrant labour is a common feature, women are frequently left in the rural areas to carry out all tasks that were previously shared with men, this makes the woman further reliant on children's labour.

This is however, usually done at the expense of the children's opportunity to go to schools and take part in learning and recreational activities. In extreme cases of the use and abuse of child labour, this may result into retarded growth and ill health for the girls and loss of education.

- Health Implications

The heavy work load of women at household level is so much that it causes stress to the women. Apart from that, since most of the household cooking devices are of a low design and have to be used while placed on the ground, women users are confined to uncomfortable positions and postures.

Since it is a women's role to fetch firewood, it has been noted that men do not provide enough money for women to buy fuelwood. This is common in the urban poor where women have no control over resources. Situations like these force women to get involved in prostitution as a coping up mechanism for survival. Some isolated cases have been reported of forest guards that demand sexual favours from women in exchange to gaining entry into forest reserves to collect firewood. These extreme cases might result into the spread of Sexually Transmitted Diseases and worse still AIDS which is very costly to the community and the nation in terms of purchase of drugs and the loss of productive men and women.

The majority of households prepare meals three times a day which is considered normal and is dependent on food availability and firewood. In cases of less firewood being available, it means that food prepared might not be adequately cooked, hence having an implication on the health of the family especially the under five children. In other cases this may lead into one meal a day thereby impairing the nutrition at household level.

- Low or non adoption of alternative energy sources, technology and devices

Alternative energy saving technologies and devices have been introduced in Malawi through a number of initiatives. The successes of these initiatives has been to various degrees. Low or non adoption of such initiatives is however among the common issues that have been identified as a concern. This has been attributed to a number of factors such as:

a. *Unequal decision making levels at household level in energy issues*

Despite the existence of matrilineal areas, Malawi is a patriarchal and male dominated society characterised by unequal power relations between men and women. Although women may have vast indigenous knowledge in sustainable energy utilisation and conservation, the dynamics at household level entail that most decisions are still made by male members of the family. This has implications on the extent to which women have opportunities to adopt innovative approaches to energy conservation within the household unit. Generally as a result of the patriarchal culture and traditions, women are looked upon as subordinates, this type of thinking is prevalent at community as well as at national level.

Apart from that, most of the pilot projects that have been introduced have taken a traditional approach of exclusively targeting women. While women are in reality the end users of such knowledge and technologies, the exclusion of men has worked negatively against such initiatives because they usually do not have vital information on such initiatives and as a result may not give women the necessary support to sustain the process.

However, in some projects the trends may be different. If effective strategies of maintaining a balance in power relations between men and women are not put in place, the involvement of men in projects targeting women may work against the desired goals. Such projects are usually characterised by higher levels of women's involvement in implementation of project activities rather than decision making activities. This projects maintain the status quo to the disadvantage of women.

b. *Low literacy levels of women*

Statistics show that 64% of the Malawian population is illiterate, out of which 54% are women. This has led to high fertility rate which is currently at 6.7%. High fertility rate leads to more fuelwood requirements and in addition to this

illiterate women find it challenging to venture into energy projects as they can not readily access information.

c. *Cultural restrictions*

Some cultural aspects prevent women from utilising other sources of energy and energy devices in certain quarters. For example, a mud stove which was introduced in some parts of Malawi was not successful. The stove which was designed to be moulded inside the house looked like a grave and was found to be culturally unacceptable. The mud stove could not allow the families to sit around together, as such it failed to meet other society uses of fire like children counselling, and story telling.

In the Southern part of Malawi, a redesigned stove that had deviated from the typical three-stone fire place was found unacceptable because the communities regarded the three stones as a symbol of unity among the members of the household. Sufficient consultation and awareness raising is therefore important if women are to adopt use of other sources of energy and devices.

d. *Low economic status of women*

The economic status of the majority of women is low. This puts the women in a disadvantaged position as they do not have the opportunity of having a variety of energy sources and energy devices. At the same time they do not have the opportunity to decide on which type of energy resource or device to use since they are relying on income from other members of the household especially the husbands.

e. *Unequal allocation of resources at household level*

It has been found that in most households, energy sources do not receive adequate financial support. This makes women to be overburdened in the sourcing of energy resources.

- More vulnerable groups

Generally all women are affected by the trends in the energy sector in Malawi, however, there exist some women's groups that are more vulnerable to any negative changes and impact that may occur especially in terms of limited energy sources at household levels. These are the elderly women, majority of whom are in the rural areas, women living with disabilities, pregnant women, women with under five children and women refugees.

## **7.0 THE ROLE AND POTENTIAL OF WOMEN IN THE ENERGY PLANNING SECTOR**

Though women play a key role in the utilisation and conservation of energy resources, the general trend is that women have been marginalised in the central planning of the energy sector. There are several factors that lead to this situation at various levels of planning. From Community, District and National level institutions, women's composition leaves a lot to be desired as these institutions have more representation of men than women, hence women's energy needs are not well considered during project identification, planning, design and implementation. If anything practical gender needs are in certain cases fully addressed without paying much attention to strategic gender energy needs, and the sustainability of such projects has always been questionable.

Although women do planning for energy utilisation at grass root level much more still needs to be done. They need to be involved in the central planning of energy issues. Because of lack of documented information on women's indigenous knowledge systems this vital information has not been used in most of the energy planning initiatives.

Women have inadequate technical information in natural resources management and environmental friendly technologies. Women professionals in the energy sector are not well represented in managerial positions hence they are generally not involved in policy and decision making processes on energy issues.

Despite the fact that women are not largely involved in the planning of the energy sector they have the potential to contribute significantly to the sector. Because of their closer interaction with the environment, women have got the indigenous knowledge systems that can improve energy conservation.

Given opportunities, women have the ability to design and manufacture reliable energy devices, and utilise existing credit facilities to invest in the energy sector.

With the adoption of Poverty Alleviation as the country's central development objective, the Government of Malawi has through a number of programmes established credit and grant facilities that deliberately target the rural and urban poor especially women. In addition to this, a number of Non Governmental Organisations have also integrated micro credits into their development programmes. There are currently notable institutions like the National Association of Business Women (NABW), Women's World Banking (WWB), Malawi Rural Finance Company (MRFC), National Association of Small and

Medium Enterprises (NASME), FINCA and Malawi Social Action Fund (MASAF) which provide financial resources to rural and urban communities.

Most of these institutions are to a greater extent working with well mobilised women's groups than individuals. Generally Malawian women have a high regard for collective organisation and they are unfailingly the best clients in the contractual relationships in terms of mobilisation of personal contributions, meeting commitments regularly, transfer of skills and capacity for repayments.

This gives a conducive environment for women's investment in the energy sector and ultimately their increased opportunities for poverty reduction and sustainable livelihoods.

## **8.0 PARTICULAR NEEDS OF WOMEN IN THE ENERGY SECTOR**

The particular needs of women in the energy sector were identified as follows:

- Increased levels of decision making

Generally it has been observed that though women play a crucial role in use and conservation of energy resources, they usually lack the ultimate decision making powers. It has been noted that at the micro level where women may decide on the utilisation of particular energy resources, they do not automatically have the power to decide over what source of energy to use within the particular house hold. This reduced power in decision making on the part of women has meant that women have restricted opportunities in using alternative sources of energy that might be sustainable. Increased levels of decision making will obviously entail greater participation in trying out innovative fuel wood sources and planning of the same.

- Access to Information

Because of the prevailing unequal opportunities to education and training between men and women, women generally lack access to vital information. USAID (1994) indicated that only 9% of female have more than four years of schooling. As a result, female literacy in Malawi is estimated to be approximately 35%. Women frequently lack access to training, extension services, technology and labour saving devices. Because of the high illiteracy levels women generally have limited information on alternative sources of energy and technical know how on energy issues. There is a great need to diversify the means of information dissemination , especially for the rural areas.

- Increased access and control of natural resources including energy resources

Women in Malawi have limitations in access and control of natural resources. This is evident in the unequal decision making levels between men and women in most of the communities in Malawi. While women play an active role in the provision of fuelwood at household level they generally have limited control over the vital resources and this has an impact on environmental management.

Women's lack of control of land in both the matrilineal and patrilineal societies and especially the latter, has prevented women from adopting innovative approaches to natural resources management. For example, lack of access and control of land may prevent women from planting tree species required within the household (i.e multi purpose species which contribute to wood energy and food security requirements and which allow women control over products for both subsistence and sale

- Reduced work load at household level

The traditional gender division of labour in Malawi leaves women with a heavier work load than men. Women are primarily responsible for all the household activities.i.e child rearing, family care and maintenance and represent a 63% majority of agricultural workers. Because the majority of women lack access to labour saving devices, their work is more labour intensive and has negative implications on their health. With the role of cooking placed on women and the girl child in almost all the communities in Malawi, the activities of collection of firewood are solely their responsibility. As Malawi is facing acute deforestation problems, the burden of travelling long distances is left to the women and the girl child.

As female children are seen as a source of additional labour and they provide this labour at the expense of their education. This obviously has, immediate implications on their health and in the long-term the literacy levels and the socio- economic status of women.

- Alternative Sources of Income

Though women comprise approximately 52% of the total population in Malawi, various statistics indicate that women remain disadvantaged in comparison to men in the economic sector. Apart from being confined to non-financially rewarding activities women's earnings in both the formal and informal sectors are minimal as compared to men. If women do not have

income that they can ultimately control, they have limited opportunities in investing in appropriate alternative fuel wood saving technologies. In the cases where women have accessed credit facilities and engaged into the production and selling of fuel wood saving devices e.g stoves, they have not excelled in this business due to the lack of end market for their products.

## **8.0 STRATEGIC OBJECTIVES**

The following areas were identified as being key to the promotion of women's effective role in sustainable utilisation and conservation of energy sources in Malawi.

### Strategic Objective 1

**To enhance collaboration amongst the stake holders in the energy sector.**

#### Strategic Actions

1. Strengthen and regularise networking amongst the stake holders.
2. Disseminate information amongst the stake holders.
3. Encourage exchange visits by the stake holders.
4. Document successful initiatives within the energy sector.

### Strategic Objective 2

**To make the energy sector more sensitive to women's needs and priorities.**

#### Strategic Actions

1. Provide training to the users of technologies on use and maintenance of the energy devices.
2. Create marketing opportunities for energy resources and products.
3. Effectively commercialise the production of alternative sources of energy and energy devices.
4. Create an enabling fiscal environment to promote investment in alternative sources of energy so as to make the sector competitive.
5. Strengthen the Information, Education and Communication component of the sector with particular emphasis on the aspect of gender.
6. Diversify the means of information dissemination especially for rural areas.
7. Encourage the participation of women in the energy fora.