# **UNDP PROJECT**

# ENERGY AND WOMEN: GENERATING OPPORTUNITIES FOR DEVELOPMENT

NATIONAL CONSULTATIONS REPORT FOR MALAWI

June 1999, Blantyre, Malawi

# **TABLE OF CONTENTS**

1.0	Background	3
2.0	Introduction	4
3.0	Outputs	4
4.0	Socio-Cultural Content of Malawi	
	4.1 Gender Context of Malawi	6
5.0	Overview of the Energy Sector	7
	5.1 Institutional Set Up	
	5.2 Energy Policy	
	5.3 Energy Resources	
	5.3.1 Electricity	8
	5.3.2 Coal	9
	5.3.3 Woodfuel	9
	5.3.4 Petroleum	9
	5.3.5 Renewable Energy	10
6.0	Findings	
	6.1 Major Issues with Respect to Women in the	
	Energy Sector	10
7.0	The Role and Potential of Women in the Energy Pla	
	Sector	
8.0	Particular Needs of Women in the Energy Sector	
9.0	Strategic Objectives	
10.0	Case Studies	20
	Bibliography	
	Acronyms	
	List of Participants	

### **UNDP PROJECT**

# ENERGY AND WOMEN: GENERATING OPPORTUNITIES FOR DEVELOPMENT

### NATIONAL CONSULTATIONS REPORT FOR MALAWI

#### 1.0 BACKGROUND

In 1996, the Energy and Atmosphere Programme completed the UNDP Initiative on Sustainable Energy (UNISE) that seeks to promote an understanding of the relationship between energy services and UNDP's corporate goals of poverty alleviation (both urban and rural); improvement of the status of women; job creation; and environmental protection and regeneration. Through improved efficiency and increased utilisation of renewable sources, energy can become a crucial instrument for achieving UNDP's primary goals. Whilst energy itself is not a basic human need, it is an essential input for the fulfilment of all basic needs. This is directly related to how energy services are provided to target population groups to overcome development obstacles.

In November 1997 the UNDP Sustainable Energy Global Programme was approved allocating \$3.8 million of core resources to promote sustainable energy activities within UNDP programmes. The Sustainable Energy Global Programme has an additional resource mobilisation target of \$4.8 million. This Programme will be implemented consistent with the approach and analysis put forward in *UNISE* and *Energy After Rio*. The end of programme situation will be that UNDP activities can be grouped in four specific areas: 1) support for follow up to the global conferences and UNGASS on energy; 2) support for UNISE and sustainable energy activities at the national level; 3) the creation of resources networks on sustainable energy to support the SURF and 4) piloting activities to promote technologies. The Global Programme is executed by UNOPS, the contracting agency of UNDP.

# Energy and Women: Generating opportunities for development

UNDP has determined that 20% of all programme financing and activities be focused on women and development. Therefore, Energy and Atmosphere Programme (EAP) has designed a project GLO/98/G23- Energy and Women

the conceptual umbrella of UNDP Sustainable Energy Global under Programme with the goal of supporting the initiation of new sustainable energy pilot projects designed to create income-generating opportunities for women. Women are primary users and providers of traditional energy sources in many developing countries. Access to more efficient and environmentally sustainable energy services can provide women with more time and opportunities for income generating work, and also improve their general health and living conditions. This can promote overall development goals, since improvement in women's well being and income has been shown to have a beneficial effect throughout their communities. The geographical focus of the projects on is Africa, where large numbers of people lack modern energy services and where there is a great potential for utilising renewable energy resources. Because this is a complex development issue involving a number of technical and social factors, the project will begin with a learning phase to assure proper pilot orientation.

#### 2.0 INTRODUCTION

This report is a result of the National Consultative Meeting that was held in Blantyre, Malawi on 7th June 1999 as part of the realisation of the broader objectives of this Programme. The specific objective of the meeting was to discuss the particular energy situation in the country in relation to women's development needs and priorities. This meeting was used to identify constraints and opportunities in the capacity building of women and sustainable energy, and identify activities involving women in energy systems and entrepreneurship. Consultations were held with officials from government departments, research institutions, University of Malawi, Non Governmental Organisations, United Nations and other Bilateral agencies, and women groups.

The information collected out of the consultative process will be used as an input into a Regional Workshop on Gender and Sustainable Energy for Southern Africa.

#### 3.0 OUTPUTS

The expected outputs of the Consultative Meeting were:

- Identification of major issues of concern with respect to women at different social levels in the energy sector in Malawi.
- Identification of women's roles in the energy planning sectors.

- Identification of the areas where the energy sector is insensitive or not adequately sensitive to women and suggestion of ways on how this could be improved.
- Identification of case studies/projects implemented in Malawi, that have proved successful in promoting the role of women in sustainable energy utilisation.
- Proposals of projects/activities which could result in benefiting women or having positive impacts as well as form of benefits expected.
- Strategies on how to promote gender related participation in formation and implementation of energy policies.

# 4.0 SOCIAL AND CULTURAL CONTEXT OF MALAWI

Malawi is a landlocked country in Southern Africa. It boarders Tanzania to the north and east, Mozambique to the south and east, and Zambia to the west. The total surface area is 119,140 square kilometres out of which 23,832 square kilometres is covered by water.

The total population is over 9 million with an annual growth rate of 3.2 percent. Over 85% of this population lives in the rural areas. Of this significant proportion of rural dwellers, it is estimated that more than 92% of women live in the rural areas and that 70% of the female rural population are full time farmers.

An analysis of poverty in Malawi by the United Nations and the Government of Malawi (UNICEF), led to the conclusion that 'more than half the population live below the poverty line' with poor people having limited access to productive resources and basic services.

The most vulnerable people are identified as 'smallholders with less than one hectare, estate workers, estate tenants, the urban poor, households headed by women and children'. These suffer from chronic food insecurity and have to do casual labour to survive which traps them in poverty. Three major causes of food insecurity are low agricultural productivity, limited non farm employment opportunities and low levels of labour incomes. Limited access to primary health services and basic education also contribute to food insecurity.

As farmers, it was found that women frequently lack access to the same tools, equipment, agricultural extension services, training and credit that men can access. As a result, women's work is frequently more time consuming and

more labour intensive without these necessary inputs and time/labour saving technologies.

#### 4.1 Gender Context of Malawi

Women comprise approximately 52% of the total population in Malawi. Yet various statistics that have been collected at the national level reveal that women remain disadvantaged in comparison to men in virtually every social and economic sector. This is reflected in women's low levels of literacy, education, political representation, formal and non-traditional employment opportunities

and in access to resources (particularly to increase agricultural productivity).

It is estimated that trees provide 93 percent of energy, most of which is used at the household level. As the supply of this resource becomes scarce due to deforestation, women suffer most as they have to walk long distances to gather firewood and water. Also affected is the nutritional status of the family as the limited supply of energy will force families to reduce meal frequency and not to prepare more nutritious and affordable foods such as beans which require more energy. The need for fuelwood has also resulted in the cutting down of fruit trees thereby limiting availability of additional sources of nutrients. Most importantly, the combined effects of the degradation of these resources is household food insecurity which affects the most resource poor households, the majority of whom are women.

The legal framework within Malawi is some how conducive to the promotion of the participation of women in sustainable development. The protection of the rights of both men and women is enshrined in the Malawi Constitution of 1994. Since the Fourth World Conference on Women in 1995, the Government of Malawi has initiated the formulation of a National Gender Policy. The policy which is in its first draft has ably identified Natural Resource and Environmental Management as one of its key areas of concern.

At the global level, Malawi has ratified a number of International Declarations and Conventions that aim at promoting the role of women in sustainable environmental management. In particular Malawi has ratified the Earth Summit of Rio de Jenario in 1990, the World Summit for Social Development in Copenhagen and the Fourth World Conference on Women in 1995, the World Food Summit in Rome in 1996 and of late in 1997, the SADC Gender Declaration in Malawi.

The effective implementation of both the national and the international instruments sets a good background for further ensuring the promotion of women in sound environmental protection and the equal access to the resources and the benefits derived for their sustainable livelihoods.

#### 5.0 OVERVIEW OF THE ENERGY SECTOR

# 5.1 Institutional Set Up

There are a number of institutions that are currently operating in the energy sector in Malawi. Until last year, 1998, the government had an established ministry responsible for energy and mining. However, through restructuring programmes, the ministry has since been abolished and three separate departments exist in stead. These are departments of Energy, Mining and Geological Survey. The Energy Department is responsible for Energy Sector in Malawi and it is charged with the overall responsibility of overseeing and advising on issues of policy direction. Apart from that the Department also implements and co-ordinates energy projects and programmes.

In the private sector, key institutions are the Electricity Supply Commission of Malawi, (ESCOM), which is responsible for the generation and supply of electricity in Malawi. The Petroleum Control Commission (PCC) a government parastatal is being restructured and has since relinquished its role of procuring petroleum products and is now concentrating the provision of guidelines to companies that are dealing in petroleum products the country. The Malawi Institute of Research , Technology Development Centre (MIRTDC) is responsible for research and technology development and an organisation called Solartek is involved in the development of solar energy.

There is good number of Non Governmental Organisations that are carrying out explicit activities in energy sector. In the early 1990's a few of the NGOs that were involved in the refugee programmes, integrated the fuelwood saving devices in their Environmental Rehabilitation Programmes. Most of the projects have however phased out. Current activities of NGOs in this sector, are predominantly the provision of training in Community Based Natural Resource Management (CBNRM) activities like reforestation and afforestation,. Other activities are the provision of training in energy saving technologies, and provision of micro loans for Income Generating Activities.

# 5.2 Energy Policy

Malawi is in the process of developing a National Energy Policy. The policy will provide the operational framework for the energy sector as well as guidelines on crucial issues related to energy supply and demand in the country such as legislation, pricing, technology, research and development, environmental protection, institutional linkages, consumer protection and international

co-operation. Thus the policy will spell out the role of energy in national development as well as the long term strategy for the energy sector in Malawi.

# 5.3 Energy Resources

Malawi's major indigenous energy resource is biomass which is used in the form of firewood and charcoal. Biomass meets the bulk of household and a significant proportion of agricultural energy needs. Biomass accounts for 93 percent of the total energy needs of the country. Commercial fuels account for the remaining 7 percent. Non conventional renewable energy resources are being developed.

## 5.3.1 Electricity

The Hydropower potential for Malawi is concentrated on the Shire River which flows from South Lake Malawi and joins the Zambezi River in Mozambique. Estimated hydro power potential for the Shire River is about 600MW. This is capable of providing nearly 3,500 GWH of electric energy. To date only 220MW has been installed on the Shire River. This is a combined total amount for Tedzani and Nkula Power stations. In addition a 4.5 MW power station was commissioned on the Wowve River in 1996 in the Northern part of Malawi.

The 128 MW Kapichira Hydro power Project is under construction. Phase 1 of the project consists of 64 MW of installed power generation capacity. This is planned for commissioning later this year. Phase 11, also carrying a 64 MW capacity is planned for commissioning around the year 2003.

Recently, the country has revised the Electricity Supply Commission Of Malawi Act and introduced of the Electricity Act. This change has removed monopoly from the Electricity Supply Commission of Malawi in the generation, transmission and distribution of electricity in the country allowing private investors and likely emergence of diversified means of electricity production rather than depending on hydro-power only.

In February 1998, Malawi concluded negotiations for the power interconnection with Mozambique within the framework of the Southern Africa

Power Pool (SAPP), thus enabling Malawi to import electricity from Mozambique.

To date only 4 percent of the total population has access to electricity. In spite of many rural areas having the potential demand for electricity, only less than one percent of rural homes are electrified. This is due to high capital costs associated with grid extension and high connection fees against a background of low income of potential consumers. In response, the Government of Malawi has established a Rural Electrification Programme which will be partially financed through an Energy Fund from levy on fuel. It is expected that the Programme will among other things;

- encourage the establishment of locally agro based and small scale industries
- improve health services
- improve agricultural production through irrigation and enhanced agricultural processing and
- reduce dependency on fuelwood as a source of energy

#### 5.3.2 Coal

Coal deposits occur in the Northern and Southern parts of Malawi. A coal mine, Mchenga produces about 96,000 tonnes of coal per annum. In addition to this Malawi continues to import coal from Moatize in Mozambique. Coal is mainly used in the industry sector.

#### 5.3.3 Wood fuel

Woodfuel (firewood and charcoal) remains the dominant source of energy in Malawi. It is estimated that woodfuel provides about 93 percent of the total primary energy demand annually. This trend is unlikely to change for a very long time since woodfuel is a major source of energy for rural and urban households and formal export industries such as tobacco and tea. It is a major source of energy for small scale industries such as brick making, fish processing and lime production.

Average annual sustainable wood yield is low due to the slow growing characteristic of the indigenous stock and generally poor ecological conditions. In aggregate, sustainable biomass supply is estimated to be lower than the current national consumption, a situation which is contributing to deforestation.

In 1995, annual consumption of fuel wood was at 12.98 million cubic metres and in 1996 the demand was 14.28 cubic metres, a growth of approximately 10 per cent per annum.