

ACP-EU Facility Seminar 23-24th March

2011

Nairobi

Welcome All

Organization's Profile And Background

Arid Lands Development Focus Kenya (ALDEF- K) is a secular, non-profit humanitarian and development organization founded in 1989.

The organization is currently working in Northern Kenya with its head office in Wajir Town. ALDEF K started as Wajir Volunteer Group (WVG) in 1989.

In order reflect its growth and wider coverage in terms of humanitarian reach it then changed its name to ALDEF in 1999 and ALDEF Kenya in 2005.

Background

Energy is catalyst of social and economic development in any region be it developed or developing.

The greater Wajir district, with a population of 690,000, people is living in dire need of sustainable energy.

The main source of energy for most residents are wood fuel - 99%.

Wajir District has no industries and consumption of energy is mainly for domestic use with few exceptions such as pumping water and powering machines such as motor vehicles, boreholes and operating flour mills.

Due to over reliance of wood fuel for domestic use, there has been overexploitation of wood fuel resources leading to rapid destruction of the environment.

This has presented numerous socio - economic and environmental challenges to the district that threatens the people's livelihoods.

It is based on the above that ALDEF Kenya in partnership with ACP-EU Energy Facility is implementing the Project “**Promoting Use Of Sustainable Energy In Wajir County**” which is intended to promote the use of renewable energy in the target area.

Overall Objective

To contribute to the effective and sustainable use of energy among the vulnerable population in Wajir County.

Specific Objectives

1. To enhance the capacity of 600 households and 20 institutions on the use of sustainable energy in Wajir County by the end of 2011.
2. To inculcate a culture of tree planting among the target communities in Wajir County.

Potential Beneficiaries

- ❖ Pastoral Associations (PAs)
- ❖ Water Users Associations (WUAs)
- ❖ Wood Cutters And Charcoal Burners
- ❖ Women Groups
- ❖ Institutions (Schools)

Chosen Technology – Solar

A photovoltaic array (also called a solar array) is a linked collection of photovoltaic modules which are in turn made of multiple interconnected solar cells.

The cells convert solar energy into direct current electricity via the photovoltaic effect.

It uses energy from the sun to create electricity that will operate electrical appliances and lighting. Solar PV panels require only daylight, not necessarily sunlight, and are therefore capable of generating electricity on cloudy days.

Resources / Materials Available

Locally there are no materials available for the solar technology.

Everything is purchased from Nairobi – about 750 Kms away from Wajir Town, the County Headquarter .

Cost

On average a unit of solar costs Ksh. 64,100 (536.4 Euros) for full installation.

Planned /Actual Production

Solar In Schools

- ❖ Installation of 17 units of solar with each unit producing 40 Watts (680 Watts).

Community Solar Water Pumps

- ❖ Two community solar water pumps were installed with each unit producing 800 Watts (1600 Watts).

Price Of Energy Provided And O & M.

In institutions there are no direct tariffs charged however the schools, in conjunction with the trained technicians do basic operation and maintenance bearing the costs attached once installation is done and the facility handed over.

However for the solar pumps there are active Water Users Associations which charge tariffs for water used – Ksh 1 per 20 litres of water to maintain the facility.

Lessons Learned

Successes

A total of 605 students and pupils in 15 schools have benefited from the solar installation. The students and pupils in the primary and secondary schools are now attending night preps as a result of the installation, which hitherto was not the case. The installation also served as a demonstration to the communities living in the target areas on how the solar technologies can be utilized.

With the installation of the two solar water pumps, 7000 people in the target communities have accessed clean water. It has reduced the household expenditure and time consumed to fetch water. The installations have also reduced competition for water between people and livestock since they were previously using the same source of water.

The solar installation inculcated a sense of environmental conservations in the target schools since it acted as an incentive for the pupils and the students. A total of 2200 neem trees were planted in the targeted schools, with formation of school environmental clubs.

Challenges And Solutions

The concept of alternative and sustainable energy was relatively new to the target communities hence it was not readily accepted initially. It was also difficult to make them establish the link between the energy sources in use and the impact it has on the environment since they saw wood-fuel as a natural resource which can never be depleted however much it is exploited.

This challenge was overcome by continuous sensitization sessions to educate the target communities on the importance and use of renewable energy in relation to their environment.

High poverty level in the target community is also a challenge since the beneficiaries cannot afford the renewable energy technologies like solar and energy saving jikos (stoves). This means the poor who have other competing priorities may not use these technologies for their domestic use.

On access to solar energy the organization is lobbying the line ministries like Ministry of Energy and that of Northern Kenya to boost the accessibility of solar energy to the poor. The costs of the energy saving jikos were subsidized thereby making them affordable to the community members.

High illiteracy level among the target community is another challenge. This has made passing of information difficult during sensitization since they only understand local languages and not English which most of the information is packaged in.

This challenge was overcome by relaying the messages in several local languages and dialects since the facilitation was done by a local resourceful person. The use of the new technologies was also demonstrated to the communities practically during the sensitization campaigns. Drawings, graphics and charts were used to explain some points.

The implementation of the project coincided with the drought periods making mobilization and project implementation difficult since most of the target communities were busy with domestic chores. The drought also affected the afforestation drives since water for the nurseries was not easily available.

Most of the activities were conducted during the off peak hours especially in the afternoons when the communities have watered their animals and are resting. The afforestation drives were conducted in areas where there were permanent water sources especially shallow wells and boreholes, or during the rainy seasons.

The vastness of the area was also a challenge. The project is being implemented in Wajir County which is the third largest in the country hence reaching all the target communities on time is difficult. This challenge is also coupled by the poor road infrastructure of the area making accessibility difficult.

The vastness of the area was overcome by proper planning where the planned activities were implemented timely and accordingly. The project also targeted areas where there was serious environmental degradation so that meaningful results can be achieved. The organization also allocated two vehicles for the project in order to enhance mobility within the project area.

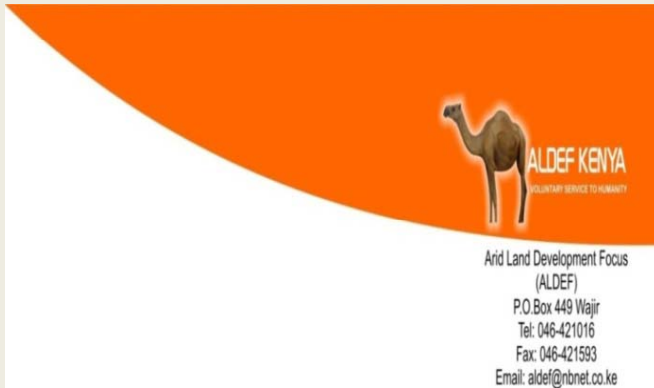












The End
Thanks For Your Attention.