

Training on Portable Charcoal and Wood stove Technologies

Through Women Group Association Portable charcoal/wood stove (Sahara Type)



*During theory training (Sahara Portable charcoal/Wood stove) at Associacao
Nova Esperance in Mecufi District*

Submitted to:

Fredskorpset, Norway and ADEL - CD

Prepared by:

Dora Joel – FK Norway Volunteer from TaTEDO, Tanzania

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1.0 INTRODUCTION:

I have conducted a training of improved portable charcoal and wood stove at Associacao Nova Esperance Mulheres Group at Sassalane village in Mecufi District. The Association started 2012 with support of Arquitectos Sin Fronteras from Spain. Who came to Mecufi and formulate the women group by supporting the construction of one big house for stove production and Fish pond. After his left the Group stop stove production till now because of lucky of raw materials. And the fish pond already sold to another organization. In March 2015 we had visited this association and showing us interest to starting again with stove production if there are opportunity. This type of stove are popular in Tanzania especial in the Pare Mountain and Usambara Mountain where clay soil are available.

2.0. TRAINING DESCRIPTION

2.1 Training Objectives:

The main objectives of the training were:-

- To build capacity of people in Mecufi to produce portable charcoal and wood stoves by using clay soil.
- To promote the use of energy technologies related to environment conservation.
- To build public relationship between ADEL-CD and community.
- To mitigate deforestation due to the use of inefficient firewood stove technology.
- To introduce other kind of efficient energy technologies for income generation and domestic use (Baking oven, flower port, and production of bricks).
- To train members how to produce portable charcoal/wood stove and train how to market their product.
- To building kiln and trained how to burned their products.

2.2 List of the products/technologies produce during the stove training:

- Portable Charcoal/wood stove
- Bricks production
- Port flower (Round style) and Pot flower (Square style)
- Kiln construction (*see below photos*)



2.3 Participants List and Training Schedule:

The portable charcoal/wood stove training were trained in one group for ten days (10). The stove training were conducted for five days while the work for kiln construction was also for five days. All the participants were from Mecufi District at Sassalane village. The firewood cook stove is very famous at the areas where people use wood for cooking. Most of community in Mecufi were using three stone stoves. This portable charcoal/wood stove was the new technology introduced in Mecufi District. After the training all participants promised to adapt the improved new portable stove at their house and mobilize to community and outside of the Mecufi. The list of participants and training materials shown in below:

SN	Name	ORG	Sex	Contact No
1	Albertiina	Nova Esperance associations	F	876466860
2	Rabo Nihima	Nova Esperance associations	F	869300366

3	Nalawa Amado	Nova Esperance associations	F	865888004
4	Mariava Amade	Nova Esperance associations	F	860549117
5	ABudo Ndukaza	Nova Esperance associations	F	-
6	Motelena Iahaia	Nova Esperance associations	F	-
7	Julita Sumaila	Nova Esperance associations	F	
8	Muhapahar Tunupi	Nova Esperance associations	F	
9	Caroline Yahaia	Nova Esperance associations	F	
10	Taima Mustafa	Nova Esperance associations	F	
11	Elena Membe	Nova Esperance associations	F	
12	Anna Pira	Nova Esperance associations	F	869233197
13	Zena Juma	Nova Esperance associations	F	
14	Zanipa Faqira	Nova Esperance associations	F	
15	Omar Juma	Nova Esperance associations	F	
16	Jasnata Massirate	Nova Esperance associations	F	
17	Augusto Janela	Nova Esperance associations	M	
18	Muanesa Saasa	Nova Esperance associations	F	
19	Tahabu Adrian		M	-

2.4 Tools and Equipment's:

The required material list is shown in *below*:

Stove Training- Materials

<i>SN</i>	<i>Particular</i>	<i>Quantity</i>	<i>Unity</i>	<i>Remark</i>
1	Plastic material	1	pc	
2	Buckets	10	pc	
3	Rulers	10	pc	
4	Ash race			
5	Knives	10	pc	
6	Water		Bucket	
7	Scissor	1	pc	
8	Manila card	1	pc	
9	Clay Soil	2	pc	

Material for Kiln

No	Particular	<i>Quantity</i>	<i>Unit</i>	<i>Remark</i>
1	Bricks	<i>450</i>	<i>pc</i>	
2	Cement	<i>2</i>	<i>Bag</i>	
3	Cintas	<i>2</i>	<i>pc</i>	
4	Pa	<i>1</i>	<i>pc</i>	
5	Fita Metrica	<i>1</i>	<i>pc</i>	
6	Clulher	<i>1</i>	<i>pc</i>	
7	Clay soil	<i>2</i>	<i>Trip</i>	
8	Nivel	<i>1</i>	<i>pc</i>	
10	Aro saw	<i>1</i>	<i>pc</i>	

2.5 Training Facilitators:

Dora - FK Norway Voluntary from TaTEDO, Tanzania

2.6 Training Methodology:

The entire training was delivered with both theory and practical sessions.

THEORETICAL: Participant introduced the suitable materials for produce portable Charcoal stove, how to mix materials, How to look for marketing and when to sell for optional profit and how to handle the customers.

PRACTICALLY: Practical was done after theory, participant learnt to identify/prepare soil and mixing themselves under supervision, measurement and size and production in general and type of training materials were shown during practical session.

Day: 1/2/3

The training was started with its objectives to provide introduction and skills to selected participants on potable charcoal/wood stove mold, construction and use of biomass energy technologies. After the theory session, the day was occupies with preparation of materials such as mixing soil, identify place for kiln building, troubleshooting bricks for constructed kiln and Identified member in gender balanced. Further, also had explained all the benefits of portable charcoal/wood stove that use of improved stoves with high efficient will contributes to ongoing environmental conservation, human. Health, employment creation, and poverty reduction efforts caused by use of traditional devices. The preparation of mud was started after the lunch session and some samples of training materials were shown. The proceedings of day two include a session on Molding clay soil and practically how to produced portable charcoal/wood stove by using mud technologies. We also covered how to building kiln and what the materials needed. Third day was also begun construct kiln and production of portable stoves and troubleshooting clay soil and bricks. On this day we were able to fixed two doors to the association, this was due to security. In the afternoon session participants were acquired to prepare the mud for the next day. (*Below photos covered day 1-3*)



Day: 4,5,6,7

In this days the training participatory method was applied for hands on practice for both the groups of participants. They were able to prepare 30 portable charcoal stove and 30 portable wood stoves. The participants were able to know how to improved their stove and how to marketing their stoves on the fifth day. They were trained for suited material for portable charcoal/wood stove and each participants practice several times how to mold a port and improved it .On this day participants were learned how to construct the kiln. The work of building kiln takes a long time than expected due to collection of material and up and down delay logistics.



Day: 8,9,10

The morning session was started with interviewed four group members by the people from STV Television who wanted to know objective of the training and what the women will going to benefits. This following by four group members who explained how to benefit and how the training will be sustainable to the women group. And how they will going to save wood interns of saving time and money. Finalize of kiln constructed was also done day ten. In the afternoon session the training was closed by FK Coordinator and wish all association members to work hard means of stove production and other products mentioned in order to generate income and employment to the group and community. *(See below photos for interview and Kiln construction)*



3.0 ACHIEVEMENT

- Most of members shows interest.
- Marketing contact with some customer who visited during the training and show interest of buying stoves.
- Received order for various product and the association were busy with production.
- The Kiln constructed will afford to burn 150-200 stoves.

4.0 LESSON LEANT

The site selected for the stove training were a permanent house for stove production and the area for building kiln. So it was easy for members to be comfortable with production and to make profit on stove business, also participants were willing to learn more about how to find marketing which will increase their income after selling stoves in the community and province of Pemba. The Kiln were constructed there will help the women group to burning stoves and other products produced, and this will increase income generating and employment so far.

5 .0 CONCLUSIONS

Participant works was very successfully conducted they manage to produced 150 portable charcoal/wood stoves during the training. Other product produced during the training were pot flower and port yard. The stoves will be burned after 2 weeks.

