



ENERGY EFFICIENT STOVES CHARITY KAWINGA

CATEGORY: CLIMATE CHANGE AND SUSTAINABLE DEVELOPMENT

INSTITUTION: 3 ROCKS LIMITED

ZAMBIA SADC GENDER PROTOCOL SUMMIT

25TH TO 26TH MARCH, 2013

CRESTA GOLFVIEW HOTEL LUSAKA

Brief Description of the Good Practice

- 3 Rocks Limited (3RL) is promoting the use of energy efficient stoves in Zambia:
 - As a replacement for the 3 stone fire
 - For cooking, water heating and space heating
- This is a commercial carbon finance project:
 - Stoves are funded by shareholders
 - Shareholders are reimbursed through sale of carbon credits generated from the project
 - It is not an NGO of charity



What is the problem being addressed? Why?

- Environment:
 - There is deforestation due excessive wood use for domestic use
 - Deforestation leads to soil erosion and climate change
 - Can result in flooding
 - Destruction of wildlife habitat
- Human / Social:
 - Environmental damage compromises farming and food security
 - Women and children spend too much time looking for a collection wood in rural villages
 - Women are exposed to too much smoke when cooking over a 3 stone fore
 - Open fires are dangerous



How will the project contribute towards achieving the 28 targets of the SADC protocol?

PROTOCOL TARGET	ACTIONS
Article 15 - 19 Productive Resources and employment, economic empowerment	Reducing the burden on women and men on looking for firewood
	To protect the natural environment in order to allow sustainable development

Describe your Target Group

- Our target group is rural households:
 - That use wood as the main source of domestic fuel
 - Where the women (and children) collect wood
 - Where women do the cooking
 - That have little or no income
 - In areas where there is excessive deforestation



Objectives

- Our objective is to address climate change by:
 - Convincing rural householders to switch from using an inefficient 3 stone for cooking, water heating and space heating to a 3RL energy efficient
 - In turn this will reduce:
 - Green house gas emissions
 - Cutting of trees
 - Time spent looking for fire wood
 - Amount of smoke in the kitchen



Process

- Get buy in from local and national stakeholders
- Introduce the concept to the community and target householders
- Sign up those householders that are interested in an energy efficient stove
- Install stoves in the houses of people that have signed up for a stove
- Monitor the use of the stove by the householders
- On going education about the use of the stove



Process

- Householder requirements:
 - Must be part of target group
 - Household has a proper kitchen – enclosed, roofed
 - Household to supply 25 half timber bricks, 1 Wheelbarrow of building sand and 20L water
 - Signs agreement stating that environmental benefits belong to 3RL
 - attends 3RL sign up and installation meetings
 - agrees to monitoring of his/her use of stove



What has been the main success?

- Installed stoves in 35000 rural households in Katete District
- This includes:
 - Education about how to use the stove
 - Education on the impact of their wood use on the environment
 - Collected names, locations, NRCs and GPS coordinates of every household that has a stove
- About 180 000 people impacted by the project



Key outcomes

- The aggregate use of stoves is approximately 70% - in other words 70% of all cooking, water heating and space heating is now being carried out on a 3RL energy efficient stove in households that have a stove
- Household feedback about benefits:
 - Less wood
 - Less time collecting wood
 - Faster cooking
 - Less smoke in the kitchen
- Less demand on forests fewer greenhouse gas emissions emitted which will be better for the environment



Changing Lives

- Betty Phiri of Songwe:
 - Before stove:
 - used to carry big logs from the field 3 kilometres away
 - This was very demanding of and tiring for her
 - After stove:
 - She now collects twigs and sticks found near her home
 - She is not so tired
 - She has more time to devote to economic activities such as farming



Lessons Learned

- Cultural and behaviour change are a challenge
- On going education is important if change is to be achieved
- Stakeholder engagement and community participation are key to success



Way Forward

- Education and communication must be continued
- Stoves must be used by those that have them in order for the project to expand, as use translates in environmental credits which have a \$ value and these funds are needed to buy and install more stoves
- The project will continue in other districts in Eastern Province



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