



Summary project description:

Consolation of Basa Magogo use in
Phuthaditjhaba, Free State, South Africa

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1 Background to the Nova Institute

The Nova Institute is an independent organisation that aims to improve the quality of life of low-income households. Nova was founded in 1994 as an association not for gain under Section 21 of the South African Companies Act. The Nova vision is a healthy household culture in Southern Africa. The Nova mission is to develop and promote smart solutions to improve the quality of life of low-income households. A smart solution is an innovative tried and tested solution with discernible value to all stakeholders concerned. It complies with the highest criteria for excellence and should be desirable, beneficial, affordable, effective, replicable, sustainable and quantifiable

The Nova vision is pursued by engaging in participatory action research to bridge the gap between services and products provided by outside institutions to poor households and the perceptions and responses of those households.

The Nova focus areas are: energy, economy, living environment, care and focus area integration.

We believe that it is important to study both the whole as well as its constituent parts in order to gain an understanding of the functioning of a system. Therefore the integration of our focus areas forms an important part of our endeavour to understand the household as a micro system..

2 Basa Magogo

Basa Magogo is an improved top-down ignition method that was developed in a participatory action research project that Nova conducted in the community of eMbalenhle. It is an adaptation of the top-down or Scottish method of igniting a coal fire. Top-down ignition rather than the conventional method of burning coal from the bottom up produces more useful heat from the same mass of coal and thus consumes up to 50% less coal. The method works in stoves and braziers and reduces the particles emitted from the source by more than 80% compared to the conventional method.

3 Rationale

The Nova Institute implemented demonstrations of the alternative top-down ignition technique in the vicinity of Phuthaditjhaba in Maluti a Phofung Municipality in 2008. Our previous experience has shown that monitoring

and support to users is needed between large-scale demonstration campaigns. Because not all coal users are reached by demonstration campaigns and because some households may have initial difficulty before mastering the new technique, it is necessary to continue to visit households in a specific area in order to improve the uptake of the technique. This maximises the benefits to the local community in terms of air pollution.

4 Project aims

The project aims to maintain or increase the level of Basa Magogo use in the Phuthaditjhaba area. It furthermore aims retain skilled personnel and to monitor changes in domestic energy use in the area.

The main objectives are to:

- Find and demonstrate to coal users who are not aware of Basa Magogo
- Find and retrain coal users who experienced initial difficulty with the Basa Magogo technique
- Record impact on coal use of coal users who use Basa Magogo and encourage them to tell other people
- Retain skilled personnel
- Retain relationship with local stakeholders
- Gather information on changes in household energy patterns that are taking place

5 Activities

Three groups of people are targeted:

1. Coal users who have not attended demonstrations.
2. Coal users who have attended demonstrations but have not tried the new technique or have failed when they tried the first time.
3. Coal users who already use the technique

These groups are traced through a door-to-door survey. Demonstrations are held for the the first two groups at their homes. For people who have tried the technique once but have failed, the fieldworker must ascertain what went wrong and, through a proper demonstration, retrain them and ask them to try again.

Record are kept of all interaction between the fieldworker and households. These records are captured on a mobile phone through a customised application and uploaded on the Nova Institute Field Tracking System where data is stored and analysed.

6 Personnel

The maintenance and monitoring project is a small project aimed at retaining and possibly increasing the number of users of Basa Magogo in a certain area. Two personnel members will be appointed for this project. In the first place the contract of the Area Leader will be extended. The Area Leader is responsible for all liaison with local stakeholders such as the local government, community organisations and churches. She will furthermore be responsible for all quality control and issue management related to the fieldwork. The Fieldworker will do daily visits to households to gather information and to demonstrate the technique where necessary. The Fieldworker will systematically cover the whole area over the course of the project duration.

7 Quality control

Apart from weekly quality control by the Area Leader, telephonic interviews will be conducted with a sample of households who have been visited by the fieldworker in order to ensure accuracy of the data submitted by the fieldworker. The Nova project manager will also do a number of site visits during he course of the project.

8 Budget

The project has an initial start-up cost of R1560 and monthly operating cost of R13559. With €6000 at an exchange rate of R11/€ the project can be operated for 105 working days which is 4.75 months. The summary budget for a 105 day project is given below.

Table 1: Budget

Income		Establishment Monthly		Total
	Donations Received	R 66 000		R 66 000
Total Income		R 66 000	R 0	R 66 000
Expense				
	Area		R 8 360	R 8 360
	Leader			
	Fieldworker		R 12 540	R 12 540
	Coal & Wood		R 3 135	R 3 135
	Demo			
		Clothes	R 500	R 500
		Demo	R 500	R 500
		Equipment		
		Printing of clothes	R 200	R 200
	Total Demo		R 1 200	R 1 200
	Office Expense			
		Stationery	R 950	R 950
		Office Expense – contribution	R 950	R 950
	Total Office Expense		R 1 900	R 1 900
	Postage and Delivery		R 713	R 713
	Printing and Reproduction		R 713	R 713
	Telephone			
		Landlines and fax	R 475	R 475
		Mobile Airtime	R 950	R 950
		Mobile Phones	R 950	R 950
		Depreciation		
	Total Telephone		R 2 375	R 2 375
	Travel and Accommodation			R 0
		Local Travel	R 4 180	R 4 180
		Public ⁴	R 2 090	R 2 090
		Transport		
		Toll Fees	R 238	R 238
		Other	R 13 300	R 13 300
	Total Travel and Accommodation		R 19 808	R 19 808
Total Expense		R 1 200	R 49 543	R 50 743