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Impact monitoring and interventions acquisition

Hellen Odhiambo Owala, Practical Action, East Africa

## Impact monitoring and interventions acquisition.

*Hellen Odhiambo Owala: Practical Action, East Africa*

Since early in 2002, Practical Action has worked on a programme of smoke alleviation in Kenya, Nepal and Sudan, funded by the UK Government DFID. The first project looked at potential interventions to alleviate smoke. In the second project, the research focused on ways to make these interventions sustainable to communities in the longer term.

In this short article, Hellen Owala, from Practical Action East Africa, looks at the issues around the introduction of smoke-alleviating interventions. The need to ensure that the interventions installed are effective sometimes conflicts with an approach to scaling up where goods and services are purchased by households through revolving finance.



**Project household in Kisumu Kenya**

### The timeframe for alleviating kitchen smoke

There are many reasons why adoption may not take place within a project timeline

#### o Family priorities

Families may have many needs, and indoor air pollution may not be top on their list of priorities. Quite often the priorities include putting food on the table, paying school fees, having a better shelter, building a separate kitchen, or they may need to attend to a family crisis such as sickness or death. For reason such as these, a number of families have the reducing indoor air pollution on their agenda, but not necessarily to be realised within the project period.

Households selected for the study were those that stated that they were going to adopt interventions in the near future. In some instances, however, family circumstances change, and it was felt that not all the households monitored in Round 1 would have installed interventions so quickly were it not for the project requirement.

#### Statistics

Total houses monitored in Round 1	159
Households that naturally adopted interventions	80
Households that adopted early to fulfil commitment to second-round monitoring	36

With all the households in the study, the fact that they were part of a study may have influenced them into prioritising smoke alleviation as it was made clear before they joined the study that it was important for the changes to have taken place prior to the second time they were monitored.

## ○ Traditional values

Communities have traditionally defined ways of doing things. Many of these impact on when they can making changes to a house or install a stove.

- A pregnant mother cannot install a new stove
- A daughter-in-law cannot build a new stove before the mother in law does so.
- A daughter-in-law cooking in her late mother-in-law's house is not allowed to make any structural changes to such a house.
- A woman cannot make structural changes to a house or kitchen without the man's consent. Of all the households monitored in the first round, only one household refused to adopt, and this was because the man would not allow the woman even though she was confident that she would be able to pay for the interventions.

**No single intervention provides the answer to all the cooking needs of families.**



**Awareness raising meeting addressed by District Commissioner**

A menu of interventions is very important, since most households aim for a mix of interventions - adoption is thus a process. At an awareness-raising meeting, some families will realise their need to deal with smoke and will develop plans and follow them at their own pace – which may be quite slowly. For example, a cook may realise that she needs to stop cooking in the main living room; hence there is a need to build a new kitchen. After building the kitchen she may need to buy the interventions slowly. Two stories are presented in this document highlighting this issue.

### **Story 1**

A widow with one son earns her living through selling second hand clothes. She is left in a semi-permanent unfinished house, where her living room is also her kitchen. She receives education on smoke and health. She understands that smoke is not good for her health and she needs to improve her exposures and she is very clear that she wants to have a smoke hood.

Her step by step plan:

- She makes her main house look habitable
- She constructs a kitchen and transfers the three stone fire to the kitchen into which she has built eaves spaces
- She installs an upesi stove which she uses with the eaves spaces.
- She plasters the perimeter wall of the main house
- Finally, she installs a smoke hood

All this takes more than two years as her income will not allow it to happen sooner. Thus at the point of final monitoring she only has an upesi stove and eave spaces. However, she already has well-developed plans for significantly reducing smoke in her kitchen – but not before the project ends.

### **Story 2**

The woman's husband is a Primary school teacher. She is the chairperson for one of the theatre groups and she is a theatre group member. Practical Action is encouraging the community leaders to lead by example by being the first to have smoke interventions.

This lady remains cooking in the living room for many months following visits from Practical Action. The team thought she was not interested in making changes in her way of cooking.

But this was not the case she had developed her plan and was not sharing even with the Community Resource Person. We suddenly realised that she was building a big kitchen but to our disappointment she was still using the three stone fire, although she had put eaves spaces in her new kitchen.

Finally, in her own time, she paid a down payment for the smoke hood and was ready to install it. Smoke has finally been significantly removed from her kitchen.

### **Observations**

Even for those who are employed, who are definitely not living below a dollar a day, smoke is still a serious issue to be addressed. In some cases their situation can be even worse as they tend to do more cooking.

Smoke impact monitoring included houses of teachers and other employed people and their smoke situation was not any better. Thus it should be noted that poor biomass users are not always people with low income. In the urban areas, even those with quite a lot of money still use a lot of charcoal for cooking in poorly ventilated rooms.

### **Reasons for not taking action to get rid of smoke**

#### *Lack of finances*

Indeed some families do not have money to part with to adopt interventions like the smoke hood and LPG stove they hardly have enough to eat Hence some interventions are not for the poorest of the poor. This is why packaging simple interventions is important; improved stoves, fireless cookers and eaves spaces.

#### *Lack of security*

This mainly affects the uptake of eaves spaces. Kitchens have multiple purposes such as providing a sleeping space for children, and for keeping poultry at night. Some families do not see the immediate priority of buying a wire mesh for security, and this slows down putting in eave spaces. They also reason that the wire can be cut, thus it is still a weak point created in the kitchen.

### **Adoption theory in play**

The concept of smoke being a health hazard is something new for people to understand. People have lived for ages with smoke in their kitchens; hence some people still believe that it is a myth that smoke is the cause of so much death and ill health. Thus adoption of interventions for smoke reduction is likely to follow the pattern of adoption of anything innovative; we have the group of innovators, the early adopters, the late majority and the laggards. This project case is typical, although more rapid adoption can be attributed to greater knowledge sharing by Practical Action, Community Resource persons, and their focus on particular communities.

### **Issues for consideration**

- How possible is it for a research project with clear time lines to deliver on time for scenarios such as the adoption of interventions.
- To what extent can poor households achieve smoke reduction?.
- Who are the biomass users? Are they always poor?
- It is amazing that even those earning salaries are serious biomass users with lots of smoke in their kitchens and exposure to the women and children. Why is this still the case?