

2 Introduction

This document reports on the results of a two year research intervention in Northern Ghana.

Research Project R6849 pioneered the use of the Theory of Reasoned Action as a survey method for gaining a better understanding of livelihood strategies. In this case the livelihood component was domestic energy among displaced persons.

The technical report contained a literature review of recent work with communities and refugees regarding energy and the environment. The literature review (Batchelor, McKemey & Dawson 1999) illustrated how much of the work is focussed on the external context of the refugees. Agencies see policy and technology as their main instruments for changing the behaviour of refugees. However the *“main reason for “wrong” decisions in environmental management was found to be lack of communication and insufficient “right” information for decision makers.”* The literature calls for actions to address the internal motivation of the refugee. It acknowledges the important role of dialogue with the refugees and local communities, and of the need for adequate knowledge of their priorities and socio-cognitive processes. Participation and dialogue are key processes. There is a need for multiple entry points for awareness raising and to build upon existing knowledge.

The survey techniques quoted in the literature for finding the existing knowledge and the entry points for awareness raising, are open ended interviews and PRA techniques. The latter in particular has been used to define the *“what, where, when, who and how”* of energy strategies.

However, little attention has been paid to the *“why”*.

Why do people behave as they do - what motivates them, what reasoning fuels their decisions? Some open ended interview surveys have asked the question why but the answers are often inconclusive.

The TORA tool explains the relationship of these different expressed attitudes on the decision to adopt improved practice. It therefore helps isolate the key issues that may be acting as drivers or barriers to positive behaviour. *The added value of the TORA rapid assessment tool is its use of the second more formal survey after the open interview, to give statistically validated findings.*

The new rapid assessment tool is based on an application of the Theory of Reasoned Action (Ajzen and Fishbein, 1980). Prior to this project the Theory has been applied to a wide variety of issues in Northern Countries (e.g. politics and voting intentions, birth control, consumer food choices, career choices, as well as land management practices within the agricultural and forestry sectors in North America). In the last few years it has been applied to environmental and natural resource management decisions in South America. Its use in this project is believed to be its first application to an *“emergency and development”* situation. It is used as an innovative *“transfer of technology”* applying it to the problem of domestic energy management.

A brief explanation of the TORA is given below in the main report in the section on findings.

Both project R6849 and this follow up project (R7843) were conducted in Ghana.



The ethnic conflict in Northern Ghana of 1994 resulted in over 2000 deaths and displacement of large sections of the population. The interviews were taken in an area that is still restricted access because of the potential of ethnic conflict. Over 60% of those interviewed (randomly chosen from the general population) had been forcibly displaced in the last five years. These displaced are not international refugees (they did not cross an international border) and are not in camps but are interwoven with the local communities. They represent an increasing environmental pressure on dryland resources. Communities in the first survey included urban, peri urban and rural areas, however the validation of the TORA has focused on the rural areas. Each community had been approached with alternative energy strategies from Government and Non-Government agencies in the area. The Government has designated the area as one of the most environmentally sensitive in Ghana, and is undertaking projects to alleviate pressure on the environment. The research project was

undertaken in collaboration with the University of Ghana. The development of the tool and data collection involved experienced local extension agents working in the targeted area from a number of agencies.

In the project R6849, 440 interviews were conducted. Seven behaviours were identified and data gathered for all seven. From a preliminary analysis three behaviours were identified for detailed analysis. The report (Batchelor, McKemey and Dawson 1999) presented the findings regarding three of the seven behaviours identified as critical to fuel wood management within the research area, namely,

- firewood collection,
- improved stove adoption.
- wood lot planting,

The other behaviours studied but not reported below were alternative fuel adoption, fuel efficient cooking methods, cooking utensil selection and fire management.

The key drivers, barriers, messages and channels were identified for each behaviour in project R6849 are presented below as a prelude to the findings of this project R 7483.

Specific recommendations were made regarding extension practice based on the findings. The report concluded that the TORA is a useful tool for identifying the internal motivation of community members (both displaced and non-displaced) and could be widely used in development work. The tool is appropriate for environmental programmes, technology transfer and health programmes.

Project R6849 achieved its objective to test the rapid assessment tool. Its main conclusion was that the research had been able to identify a number of key factors that affected behaviour change with regard to energy efficiency. These factors concerned both the content of extension messages and the channels of delivery (the social referent). Local Government and NGOs actively co-operated in the study and were willing to follow up on the recommendations regarding educational messages and mediums.

A further project was proposed – to apply the findings of R6849 and monitor the change in the TORA variables (eg attitude, intention, behaviour).

Accordingly the research presented in this report sought to identify and explain changes that have occurred with regard to three fuel-related behaviours, improved stove adoption, firewood collection and the planting and /or maintenance of wood lots after a period of ‘focused’ education and extension intervention. The deliberate extension intervention included messages that addressed cognitive barriers to the adoption of the three behaviours. The extension initiative was therefore seen to ‘focus’ on these particular barriers. The study therefore determined if the