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Advisory Report on Project Monitoring and Questionnaire Methodology

For FRP R8305 ‘Developing biometric sampling systems and optimal harvesting methods for medicinal tree bark in southern Africa’ (Bark harvesting project)

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1.0 Introduction

1.1 The Consultancy approach

This report is based on a two day input by Interface-nrm Ltd, spread out between December 2003 - May 2004. The original terms of reference were to:

- Advise on a suitable sampling strategy to ensure the project monitoring achieves the objectives laid out in the Project Memorandum Form
- Comment on draft questionnaires for Project Monitoring
- Comment on draft questionnaire for collection of IK on bark harvesting

There was an additional request to examine the draft methodology for collecting IK, and to review the analysis of the monitoring data collected from the Malawi Forest Department.

There are two main parts to this advisory review: advising on the monitoring programme for the project; and advising on the questionnaire research methodology designed to elicit information from stakeholders and beneficiaries. It appears that this distinction has not been clearly articulated in the methodological development**.**

Our approach was to review the original project memorandum form, and identify the documented monitoring requirements, and also the impacts that require monitoring. This information was used to identify monitoring criteria, and a monitoring programme. The various questionnaires, methodology and draft analysis of results have also been reviewed and commented on.

The aim of this report is to provide a critical review of method, which necessitates identifying and highlighting areas where improvements can be made, which it is hoped will be viewed as constructive. It should be noted that the quality of the proposal, methodology and implementation to date all appear high, and the project appears to be progressing well.

The overall recommendation is to move away from a reliance on questionnaires, which appear to be used to provide some form of statistically valid sample of stakeholder views, towards using semi-structured interviews, interest groups, key informants and secondary sources. The questionnaires will not provide any meaningful quantifiable and statistically valid data, their use greatly reduces the depth and richness of the information from respondents, and their use is largely unnecessary and not tied to research or monitoring objectives. This is easily rectified and should improve the social research and simplify the monitoring.

1.2 Defining the issues

The participatory activities within this FRP project are designed to elicit information from primary beneficiaries and target groups, as both part of the research methodology and as key parts of the impact monitoring. It appears that there is some lack of clarity regarding what are monitoring activities and what are social science research methods. There needs to a clearer distinction between eliciting research information from the target group and beneficiaries (through questionnaire and focus group research) and project monitoring activities. This does not necessarily require the activities to be conducted independently, but the specific objectives of the research and the monitoring need to be determined, and method and activities designed to achieve the objectives.

A key issue is to define what the monitoring objectives are, and then to identify how best to achieve the objectives: this is addressed in the next section.

Another key issue is to ensure that the social science research methods are appropriate, workable and objective-led. This is examined in section 3.

2.0 Project Monitoring

Although this is primarily a research project, the activities and impact of the activities sit within the wider DFID livelihoods and development objectives. While the project outputs are protocols, practices and models for bark harvesting (and the dissemination of these results), the monitoring justification and activities in the proposal give a clear indication of the anticipated wider impact (see 15 f vi and activity 4.2 – 'Implement monitoring of impact of project in client institutions').

Monitoring occurs at different levels, which should be closely linked with the project logical framework. Monitoring the **activities** is known as progress monitoring. The annual workplan is divided into quarterly workplans, and planned activities are linked with quantifiable indicators, a source of information and a target for the quarter. These are monitored by actual achievements for the quarter. Evaluation should take place after end of an activity.

The main purpose of the **result** (or output) monitoring is to improve the quality of the activities through increasing knowledge about their effect (not their impact). Result monitoring is usually carried out on an annual basis, and provides the basis for planning of the following year. It also aims at documenting progress on result level for the use of the project management team in the annual report.

The monitoring for this project is primarily concerned with the developmental impact. The objective of **impact** monitoring is to analyse whether the medium to long-term objectives of the project's activities have been met. This allows for the project strategy to be reviewed at the end the project actions, and also feeds into the monitoring and evaluation of budget support programmes (the FRP). Impact monitoring is closely associated with base-line data collection. Therefore it is important that baseline studies are based on the same indicators and in the same geographical area as the monitoring programme. This necessitates thinking about the impact monitoring at the *start* of project activities.

An example of the above could be the production of guidelines for low-impact bark harvesting. Progress monitoring would measure the progress of developing and producing the guidelines against the milestones, interim milestones and anticipated progress of the project. The result monitoring would look at the requests for and dissemination of handbooks and guidelines (taken from the MoV's at the output level of the logical framework). Impact monitoring would examine whether the guidelines are benefitting the beneficiaries – are the guidelines helping the forest department, are they being adopted, and is this likely to help the forest and tree dependent poor?

2.1 Monitoring Impact

The monitoring of impact is a key part of development activities, and is often seen as integral to Project Cycle Management. Owing to the complexities of development activities, the wide range of implementing agencies, stakeholders, intermediate and ultimate beneficiaries there is usually a need for quite complex participatory impact monitoring. It is suggested that some of the tools and approaches of development-oriented impact monitoring are utilised in this project, however the detailed integrated approaches of participatory impact monitoring are probably not appropriate and would be time consuming for what is essentially a research project.

The monitoring of the project and its impact should address the following key areas and criteria:

1. Are more people in the client institutions sufficiently skilled to facilitate the development of bark management plans? (From 15 f vi)

2. Is there an increase in the number of harvesters who are conversant with best bark harvesting practice?) From 15 f vi)

3. Can the target institutions undertake their job more effectively and with greater confidence? This is the project aim for the intermediate beneficiaries of the project (15g)

4. Will bark harvesters adopt the sustainable practices proposed? This is a basic measure of impact and sustainability: all too often research identified improved, sound methods of resource use, but for often complex and inter-related reasons local people do not adopt them.

5. Will the forest department consider the methods developed legal and appropriate? This is another basic measure of impact and sustainability. Even though the forest departments have been integral to this research, it does not necessarily follow that methods developed will be approved by forest departments. Interim project results from Malawi indicate a high level of misunderstanding amongst different levels of forestry staff as to the legality of bark harvesting.

In addition to the above there will be a need to demonstrate that the research outputs are methodologically sound and valid, and it is presumed this will be achieved through peer reviewing.

1,3 and 5 above require baseline data from client institutions (forest departments, their research institutions etc.). The current 'monitoring' questionnaire addresses some of these issues. It does not adequately address the current level of skills in developing bark management plans, and does not explore 3 in enough detail. It provides interesting information on 5. To adequately monitor 1, 3 and 5 the following is suggested:

Work with focus groups and key informants at a representative sample[1] of client institutions to identify the level of knowledge regarding the technical and participatory issues associated with developing bark management plans, the level of confidence with developing bark management approaches, plans and the policy environment, and their views regarding legality. It is suggested that the key informant/focus groups adopt a semi-structured interview approach, with key questions (Who, What, Where, Why, When, How etc.) to be used as 'probes' to initiate and structure responses. It may be appropriate to develop some form of questionnaire that can be used with, or in addition to, the focus groups/key informants. However, it is better to get good responses to a few, key questions than to try to cover all possible issues. It is important that the *objectives* of the activity are always considered: if a question or activity is not directly contributing

[1]It is difficult to determine a representative sample in statistical terms: instead method and justification needs to come from qualitative research methodology. A matrix of all client beneficiaries should be developed (eg DFO, extension officers – agriculture, forestry, agroforestry, countries, etc etc.) and all identified beneficiaries need to be sampled. Trends should be identified, and methods of *triangulation* should be used to ascertain reliability: more than one source of information should be used. Therefore to back up the primary research element of baseline data collection previously published work, discussion with other agencies, other key informants should be used. This should be used to generate a clear picture and should validate assumptions. A term often used in participatory appraisal and monitoring is 'optimal ignorance': the point where you have used the minimal time and resources to get a reliable picture of a situation. Advantages over questionnaire approaches are that a deeper and richer understanding of the situation should be obtained, and that the results are in reality much more reliable. Additionally questionnaires have been repeatedly shown to be unreliable and to obtain statistically valid data a large number of questionnaires must be applied in a rigid manner according to predetermined selection criteria. Therefore questionnaires often product quantitative data that has little real value.

to the objective it should not be asked or used. 5 above is a difficult issues to explore: there is a need to identify current perceptions of the legality of bark harvesting (already underway by the project), identify how forest departments will promote the new approaches and how policy and policy implementation are likely to impact on the adoption.

2 and 4 require the use of classic participatory appraisal techniques. Healers, harvesters etc., need to be consulted to determine their specific activities and their level of awareness of environmental impact. This will provide knowledge on the base-line situation. A representative sample should be consulted with – when little new information is being collected there is little point in continuing (see footnote 1). The base line data gathering should be combined with a wider set of 'research' questions to maximise the information gathered from these participatory activities. It is recommended that skilled facilitators are used during these sessions. There needs to be another round of consultations towards the end of the project to determine the impact. It is felt unlikely that the project will have had a direct impact on harvesters and healers by the end of the project, except in localised pockets, but the scope for roll-out can be gauged. Key amongst this is the acceptance of the improved practices by the forest and tree using harvesters and healers. Can the see value and benefits? Do they save or consume time? Are they practicable?

2.2 Questionnaires or Semi Structured Interviews and Key Informants?

Monitoring professionals usually prefer SSI's and key informant approaches: researchers usually prefer questionnaires. Although this is a sweeping statement it generally holds true. For monitoring purposes the depth of information that face-to-face contact allows, with the ability to explore interesting and perhaps unforeseen impacts and areas is valuable. Researchers, particularly those schooled in the 'sciences', such as foresters and biologists, prefer something that is quantifiable and replicable. The danger is that questionnaires merely provide 'window-dressing' for quantification: in reality the data is highly unreliable (for instance, most opinion polls in the UK, which are commonly based on 100-10,000 self selecting responses from a population of up to 60 million). However, for this work the approach is not critical as long as the *objectives* of the monitoring are always considered. Once a position of 'optimal ignorance' is obtained (little new information or changes in the situation are forthcoming) the knowledge base should be triangulated by obtaining data from another source. If the project decides to stick with the questionnaire approach, then some key informant and focus group consultation should be conducted to determine the reliability of the information.

2.3 Sampling Strategy and Monitoring Programme

There is an outline sampling strategy in the 'discussion paper: Monitoring the impact of the bark harvesting project'. It is not entirely clear what activities are to be conducted with the client institutions and which are to be conducted with the beneficiaries ('District level staff of forestry departments and NGO's – the target audience for project outputs within client institutions' – *Development indicators* section of the monitoring discussion paper).

The following is suggested:

1. Focus groups and SSI's with key informants are conducted with all 7 client institutions listed in the proposal (15e) and ideally all 16 national organisations identified in the proposal (section 11) to provide a 100% sample of client institutions. As these are the training, research and advisory organisations, a reliable overview of the capacity of the beneficiaries should be obtained (e.g. if there is no capacity for bark management plan development in the client training institutes, this is a strong

indicator of no capacity amongst their client groups). The information obtained from the client institutes can be triangulated by a relatively small number of questionnaires (or, preferably, SSI's) sent to beneficiaries at various management and field levels. It should be noted that the aim is *not* to provide statistically valid data, but to allow for triangulation. This greatly simplifies the monitoring task. Further triangulation can be conducted with the international organisations identified in section 11, or with senior professionals familiar with the issues and the context (for example, LTSI staff etc.). This should be conducted as soon as possible to obtain some base-line data. The existing questionnaire can still be used, but the emphasis should move towards more commonly accepted means of participatory appraisal.

2. The sampling strategy for healers will have to be based on project capacity and budget. There are a huge number of healers and bark harvesters in the countries and regions where the project is operating, and it will only be possible to interact with a small sample. The sample should be as representative as possible, covering all identified groups in each country of operation. It may be best to bring healers and harvesters together for a discussion session at a central point, where focused discussion can elicit information quickly and cost effectively. A commonly used approach for obtaining baseline information for large rural target groups (such as healers, herders, NTFP gatherers etc.) is to use existing literature and key informant interviews to identify current understanding, and then use SSI's and focus group techniques with a fairly small, representative sample of practitioners (healers and harvesters in this case), again to triangulate. This checks that current understanding is correct, and may identify some specific topics, issues or questions that need further exploration. This should be conducted as soon as possible to obtain some base-line data.

The above approach needs to be used to provide the base-line information as soon as is practicable, and then will need to be repeated towards the end of the action to determine any changes that are attributable to the activities of the project. It may be possible to combine the monitoring with 'end of action' workshops for dissemination: if there are representatives from the client institutions and the target beneficiaries within the forest departments and NGO's this would allow for focus group and key informant interviews to be easily conducted; likewise, if there are to be workshops for healers it would be relatively simple to have a session discussing the uptake of proposed methods and how the understanding of sustainable practices is evolving.

3.0 Questionnaire and Participatory Research Method Review

A number of questionnaires have been developed and, to a lesser extent, trialled, by the project. Comments on these are below. In addition a number of comments were made to Jenny Wong in December 2003 by telephone/email regarding the discussion paper on monitoring the impact of the project and the draft questionnaire for forestry professionals.

3.1 Indigenous Knowledge Acquisition

It is unclear what the approach is to IK acquisition. It is also unclear where the methodological approach came from. There are certain key statements that appear highly unusual in this type of work, and could lead to criticism during project evaluation (due to them being unfeasible).

The document 'Background to Indigenous Knowledge acquisition' appears to be suggesting some form of Semi-Structured Interview approach, although this is not clear (and page 2 talks about interview technique and 'unstructured questionnaires'. The first page seems to be advocating

some form of statistically reliable approach, which would indicate some form of quantifiable data that can be analysed, perhaps by SPSS? Developing a 'random sample that is statistically representative of the community as a whole' seems ambitious (and unnecessary). The document contains a series of mixed up approaches, which are not related to or framed in any research objectives, and bare little resemblance to any commonly used method (of which there is a wealth of literature). Some parts appear to resemble interrogation rather than participatory research (see bullet point 4). The use of tape recorders is presented as a golden rule: the vast majority of practitioners think that they are intimidating for villagers and make them less willing to discuss semi-legal activities (which often define their livelihoods). The statement that a key informant will need to be interviewed 3-5 times is highly unusual, and as a 'golden rule' needs some considerable justification.

It appears that the 'background to indigenous knowledge acquisition' supports the IK survey of healers, harvesters and users, but the background paper is so unclear that it may instead be supporting the 'Bark harvesting knowledge base elicitation question guide'. It is suggested that this background guide is rewritten after consulting references on participatory research methods for development, particularly key informant, interest group and semi-structured interview techniques. Good sources of basic methodology and approach are Messerschmidt (1995) and Jackson & Ingles, 1998).

It is strongly recommended that the IK survey of healers harvesters and users is **not** used. A questionnaire with respondents of this nature will not produce as much or as valuable information as semi structured interview. Most of the questions asked in the questionnaire beg follow ups, and the data collected from the questionnaire will lack depth. For example, the question 'how important are medicinal plants to you' (answer 1-5 from not very important to very important) means nothing with context and depth: what plants, why, what seasons, for you, family, sale etc etc. There is no value of the questionnaire over a well conducted SSI. In this respect the bark harvesting, knowledge base elicitation question guide is better: this provides a good framework for an SSI.

3.2 Monitoring Data from Malawi Forestry Department

The first use of the monitoring questionnaire has been written up ('The perception of forestry professionals towards bar harvesting by traditional healers'). This represents the analysis and discussion of the data collected by questionnaire. The data is not presented in the usual format for questionnaire results. It is difficult to determine what the responses were to particular questions, and there are many 'vague' statements. It is not possible to tie the responsibilities to job titles or rank. Terms like 'almost all' are used. What is almost all of a sample of 24? Many of the questions asked in the questionnaire are not referred to at all. Some are referred to in the conclusion but not elsewhere (the use of traditional medicine amongst respondents).

The write up is however very interesting and thought provoking. It does provide a strong justification for an SSI and key informant group discussion approach. Only 24 questionnaires were analysed: this number could easily have been obtained in 3-4 group meetings. There is no attempt at providing quantifiable or statistical data (and with this sample size there would be no validity), so the usual justification for questionnaires is absent. Group meetings would allow for interesting, controversial and critical risks/assumptions to be explored in greater depth.

3.3 Questionnaire for medical personnel

Although outside of the TOR's, this was supplied and brief comments are provided. In the proposal the main focus of including a health agenda was to determine the changing role of

traditional medicine within HIV/AIDS treatment and to obtain the health professionals view through focus groups (see proposal 15b). The questionnaire does not mention HIV/AIDS and should be modified as appropriate.

Suggested Reading

Jackson W. J & Ingles A. W., 1998: *Participatory Techniques for Community Forestry – A Field Manual*. IUCN/WWF, Gland, Switzerland.

Messerschmidt, D. A., 1995: *Rapid Rural Appraisal for Community Forestry*. IIED, London