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Monitoring and evaluation

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• PBME and Rapid Rural Appraisal

Introduction

A new discipline has emerged in recent years - Monitoring and Evaluation, usually known as M&E.

M&E usually involves analysis of three aspects of development projects:

- Physical programmes;
- Financial progress; and,
- Project impact or benefit monitoring.

The last of these has its own acronym, PBME (Project Benefit Monitoring and Evaluation). PBME aims to identify the extent to which intended project beneficiaries are in fact receiving the benefits planned. It also looks more broadly at the impact (positive or negative) the project may be having on other people, on the environment, on the regional or national economy.

The following notes look at the role RRA may have in PBME of agricultural development projects.

Weaknesses of 'conventional' PBME

The typical M&E programme has a number of shortcomings:

- use of expensive random sample surveys;
- use of randomly selected crop-cutting samples;
- long delays in presentation of results and reports;

- a need to drastically reduce the data collection programme after two or three years, when it is realised that the original programme was over-ambitious;
- detachment of the M&E unit from the day to day activities and preoccupations of project management and other line staff;
- a tendency for routinisation and for the M&E unit to become the project report writing unit;
- concentration of PBME activities during the donor funded period of project activities;
- low priority given to PMBE by the host government once donor funded activities have ceased.

The potential contributions from RRA

Cost effective data collection

For certain kinds of data that have 'conventionally' been collected by random sample survey methods RRA techniques offer a cheaper, faster method of data collection, that has been shown to provide data of acceptable quality for PBME. These data areas include:

- cropping calendars;
- labour profiles;
- crop and variety preferences;
- cropping constraints, and problem identification in general; and,
- crop and input prices.

These forms of data tend either to be qualitative but with relatively small expected standard deviations.

Cropping parameters

Three key parameters usually need to be measured if an agricultural development project's impact is to be monitored effectively:

- changes in cropping patterns;
- changes in cropping intensity; and,
- changes in crop yields.

Various RRA techniques have been tried to measure changes in the three parameters:

- ground transects (village walks; along irrigation bunds);
- aerial surveyor photography, including use of video cameras;
- interviews with key informants;
- the use of secondary indicators; and,
- group interviews.

Where the extent of change in cropping patterns and intensity is substantial, secondary indicators and group interviews have proved effective. However the effectiveness of all RRA techniques to contribute in this area is limited by three factors:

- Project boundaries often do not coincide with the boundaries used to assemble secondary data, or perceived by observers.
- The scale of annual changes anticipated is often small. For example a 50% increase in yield over ten years is only a 4.1% per year increase. As cropping data from a sample of farms tends to be subject to substantial variation, only data from a large random sample is ever likely to provide data to a degree of accuracy that could reliably trace such small trends.
- Short-term factors tend in any case to disguise trends of change of this magnitude. Short term relative price variations and climatic fluctuations can cause blips in cropping pattern and yield trends which are far larger than the 'expected' 5% or 10% annual average increase.

The use of diagnostic surveys

Diagnostic surveys have been shown to make a substantial contribution to improving M&E programmes, both at the outset of project activities (to better define existing conditions and needs) and during implementation to permit enquiries into problems identified by project management, by project technical staff or by the M&E unit itself.

The advantages of Diagnostic surveys include:

- allowing the scope of periodic surveys to be reduced, thus accelerating the process of data processing and reporting;
- adding flexibility to the PBME programme;
- drawing the M&E staff closer to other project staff; and,
- improving the motivation of M&E staff.

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Using RRA to evaluate NGO projects

Background

The early 1980s saw a rapid increase in the level of support provided by the EEC to NGOs under its programme of Small Development Projects. This expansion took place in a largely ad hoc fashion, without any real overall sense of direction or priorities. In 1984, I was asked to work with a small team of consultants which would review what had been achieved, and suggest cleared guidelines for future action. Our first major task was to design and test an evaluation system which would reflect the distinctive objectives of NGOs. This was then to be used in some 30 individual investigations, from which more general conclusions could be derived.

The system we devised was strongly influenced by ideas about RRA current at that time. If the exercise were to be repeated today, it would almost certainly be modified to take account of more recent developments. But although somewhat dated, the experience may

still be instructive, since accounts of the use of RRA for evaluation, as opposed to identification, remain comparatively rare.

General parameters

We took the EEC's existing 'general evaluation criteria' as our point of departure, developing these in three particular directions to reflect what we took to be central NGO concerns.

In the first instance, an attempt was made to go beyond conventional pre-occupations with inputs, outputs and immediate effects to look, in more detail than usual, at impacts. In the case of a project designed to increase production, for example, analysis would not be confined to identifying increased income, but would aim to explore how this was allocated between different types of expenditure, and at the consequences following from this for those providing the goods and services consumed; as well as for the future prospects and well being of the household itself.

Secondly, provision would be made to look at who was capturing any benefits arising, with particular emphasis being placed on the implications for women and the poorer inhabitants of areas in which activities were located.

Thirdly, the analysis would extend beyond direct material outcomes to explore institutional developments. A number of dimensions were to be considered here, including:

- the viability of the structures created for the implementation of the project itself;
- the consequences of participation for the weakening or strengthening of the existing external relationships of those households taking part; and
- the effect on relationships within the household.

The approach

To illustrate what this entailed, I shall use the example of the preliminary study of an irrigation tank renovation project in Sri Lanka, for which I was responsible. This was

administered by the Sri Lankan National Freedom from Hunger Campaign Board (FFHC), and was jointly funded by the German freedom from Hunger Campaign and the EEC. I was given 16 days for data collection analysis, followed by a further 14 days for report writing. I was assisted in the field by a Sri Lankan anthropologist, who worked half time, and a member of the FFHC staff who was available throughout the initial period.

In outline, the material required was divided into three broad categories:

- the context or environment;
- the project system; and,
- the impact.

Presented in the broad sequence in which they were used, the methods employed for data collection included:

- analysis of secondary sources (including project records);
- interviews with project staff;
- direct observation and mapping;
- key informant interviews with local leaders and officials;
- separate group interviews with male and female participants; and,
- household case studies with male and female interviewees.

The content of individual categories and the ways in which they were explored may now be considered in more detail.

The project context

The particular objectives guiding the exercise led me to devote a greater proportion of the total time available to the investigation of context than is customary in project evaluation. This was an essential pre-requisite for the subsequent identification of the changes arising in 'external' social and economic relationships. In view of the increasing number of factors, deriving from beyond the project itself, which come into play as one moves further down the chain of impacts, this was also important as an aid in isolating project impacts from other changes taking place during the same period of time.

The context was treated as a matrix of possible influences (Table 1). Four areas of investigation were identified along one axis, and four different levels, at which each could be explored, were set out along the other. Entries in individual boxes in the figure provide examples of the types of data collected. The amount of time devoted to different aspects of the context increased moving from the left of the matrix to the right.

The national level was reviewed almost entirely from secondary sources, and was relevant primarily as a means of assessing potential replicability. The physical environment of the project area was explored mainly through a series of walks, which were undertaken during the first two days in the field. The structure and evolving nature of production activities, and of economic, political and social relations at the area level, were explored initially through key informant interviews with leading male and female residents. Findings were then checked in subsequent semi-structured group interviews. Some groups only involved women, and these

were used as the primary source of information about intra-household relations.

The project system

Although the context precedes the project system in the formal presentation of the methodology, logistics dictated that there should be a considerable degree of overlap in the way in which they were investigated in practice. Enquiries started here with initial interviews with project staff, combined with inspection of project records. These were used to construct a preliminary picture of overall objectives; to capture basic input/output relationships and to understand the strategy for building the institutions which would be required to implement the project and sustain activities in the post-project period. Preliminary impressions were then fleshed out in the group interviews, where it was possible to look in greater depth at the sequence of events in individual instances, starting with group formation, and working through the tank construction phase, to the provisions made subsequently for the organisation of irrigated agriculture.

Table 1. The project context

	Nation	Project area	Community	Household
Physical Environment	Climate	Topography		
Production and Economy	Irrigation policy	Production relationships	Asset distribution	M/F division of labour
Power and Authority	Relevant ministries	Local government	Leadership	Decision making
Social system	Ethnic composition	Ethnic composition	Kinship	

The project impact

The group accounts of the functioning of the project system, and especially of the manner in which the problems encountered had been overcome, led automatically to an appreciation of key institutional impacts. The women's groups provided additional insights into transitory and enduring shifts arising in the division of labour within households. Finally, the interviews also served as a medium for identifying the general types of impacts arising for individual households, which were then taken as hypotheses to inform the detailed case study interviews which completed the investigation.

Six households were used for this purpose, selected on the basis of quality of housing, to represent the upper, middle and lower points in the economic spectrum from which participants were drawn. In a series of interviews taking some three to four hours in all, questions were asked about: land holdings; production activities and relations; exchange relations (i.e. trade, loans and debts); patterns of consumption; patterns of expenditure; patterns of investment and health. In each instance, an attempt was made to establish the situation prior to the start of the project, to compare that with the present, and to account for any differences which might have arisen.

The comparative aspects were dealt with through closed questions, whilst those exploring causes were open-ended. Where possible, and where it appeared likely that understandings and interpretations would diverge along gender lines, both male and female informants were interviewed, although in some cases the absence of the household head made this impossible.

In the course of exploring what, for the most part, may appear to be a rather narrowly economic range of issues, the format in fact yielded a considerable amount of data on institutional change. Increased food production was shown, for example, to reduce purchases and lessen dependence upon traders. Similarly, increased opportunities for productive work on participants' own land reduced the need to seek

work on large farms in the neighbourhood, and improved their bargaining position vis a vis their employers. Increased incomes created opportunities for ceremonial expenditures, which, in turn, contributed to the creation of a sense of community where little had previously existed, and so forth.

Limitations

What has been described is an attempt to deal with a relatively complicated set of questions in a comparatively short period of time. Wherever possible, different methods and different types of informant were used to counteract the dangers of bias and false inference. To this extent, the approach corresponds to RRA as it is currently practised. But readers will have no difficulty in recognising points at which it could be strengthened.

Diagrams could have been used at an early stage as a means of representing key aspects of the project environment, and of confirming or refuting hypothesised relationships with informants. Wealth ranking would have sharpened our perception of economic differences and probably lead to a more satisfactory selection of case study households. A final meeting to report back on major findings would almost certainly have uncovered errors and revealed significant relationships and changes, which had not hitherto been apparent.

It is difficult to see how these modifications could have been made without some net addition to the time required to conduct the exercise, although this would not necessarily have been very large. This, however, could probably have been justified in the light of the improved quality in the data obtained - especially in view of the fact that this was a pilot exercise for a much larger intended programme.

One other limitation should also be noted. Although the approach was applied to reasonably good effect in the case described, it was hardly used at all in the 30 follow up studies which constituted the major data collection part of the overall programme of

work. A number of factors which have no bearing on the present discussion were partially responsible for this omission, but even when these are allowed for, it became abundantly clear, in retrospect, that a manual, by itself, cannot even come close to providing a sufficient basis for the introduction of a new system of evaluation.

Significant advances can only be achieved where the basic text is brought to life through various forms of 'hands on' experience. At the very least, this requires the kinds of workshops with which RRA is now increasingly associated, but which have yet to gain widespread acceptance in the project dominated procedures of the larger agencies. Ideally, it would go beyond this to encompass a process of field testing, followed by modification in the light of experiences. This point needs to be made even more strongly in relation to the more innovative self or participatory forms of evaluation in which NGOs are now showing an increasing interest.

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