

DYNAMICS IN AGRICULTURAL

**EXTENSION PROGRAMME PLANNING,
MONITORING AND EVALUATION**



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Dynamics in Agricultural Extension Programme Planning, Monitoring and Evaluation

CHAPTER EIGHT

PARTICIPATORY AGRICULTURAL PROGRAMME PLANNING, MONITORING AND EVALUATION

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Introduction

Since the 1970s the concept and practice of participation in development gained prominence and in some cases even mainstreamed. This was largely inspired by Paulo Freire's philosophy and activist movement based on the fundamental recognition that the poor and disempowered people and marginalized communities abound with knowledge, creativity and capacities that have hitherto not been valued by dominant research and development practices (Freire, 1973). Participatory approaches, therefore, evolved as strategies to involve communities, create profound links between 'outsiders' knowledge and peoples' realities and tap into their indigenous knowledge and experiences in programme planning, monitoring and evaluation. In this context the agenda for development would be driven by the people themselves and external agencies who claim to support the development process (Government, Researchers, Extension workers, Non Governmental Organisation etc) and would in fact be acting as facilitators of this process in the community.

In this emerging development paradigm, the key emphasis is to move away from the traditional approach of project planning, monitoring and evaluation in which the top-down rather than the bottom-up approach is the norm. In the conventional approach, governments and other development agencies draw out a development plan which they feel would benefit the farmers and hand it down to them without asking for their contribution. Participatory planning, monitoring and evaluation has gained popularity because of the recognition of the limitations of the orthodox approaches to development in terms of exclusivity, non recognition of the value of people's perceptions, knowledge and practices and the increased desire for accountability to

beneficiaries. The current trend in development thinking and practice is the involvement of all stakeholders to ensure that they are consulted and adequately carried along in the planning, monitoring and evaluation processes. As recognised by Farinde (2008) successful and effective programme planning evolves from active participation of all the stakeholders from situation analysis to monitoring and evaluation of the projects. Extension personnel must avoid planning 'for clientele but with the clientele'. It is a well known fact that most past development plans failed because they ignored the contribution or participation of the community where the projects were sited (Akindunmade, 2008).

Governments, development organisations and partners (both local and international) need to know the effectiveness and efficiency of their efforts in changing peoples' lives through their programmes and projects. The key issue is who should provide the evidence and judge as to whether development efforts have succeeded or failed. In conventional planning, monitoring and evaluation it has been outsiders (government officials, extension agents, external monitors and evaluators) coming to measure performance against pre-set targets, using standardized procedures and tools (Institute of Development Studies, IDS, 1998). Participatory planning, monitoring and evaluation (PPMandE) approaches have emerged because of a recognition of the limitations of the conventional approach. In fact there is no gainsaying the fact that participatory development is an idea whose time has come (Mulwa, 2008).

This chapter discusses participatory planning, monitoring and evaluation focusing on:

- Concepts of participation, participatory planning, monitoring and evaluation
- Rationale for participatory planning, monitoring and evaluation
- Principles of participatory planning, monitoring and evaluation
- Stakeholders and their roles in programme planning, monitoring and evaluation

- Steps in undertaking participatory planning, monitoring and evaluation
- Overview of methodology for participatory planning, monitoring and evaluation

CONCEPTS OF PARTICIPATION AND PARTICIPATORY PLANNING, MONITORING AND EVALUATION

Participation and the Participatory Development Paradigm

Participation is referred to by a variety of names such as 'community participation', 'peoples' participation' and 'popular participation'. Cohen and Uphoff (1977) conceptualized participation to include people's involvement in decision-making process in implementing programmes, their sharing in the benefits of development programmes and their involvement in efforts to evaluate such programmes. Community participation is conceived as a process (over a period of time) by which the community are made aware that they themselves have the abilities and the energies (and some of the resources) to take initiative to improve their own lives. They can then identify their own needs and take appropriate action (Malawi Department of Forestry, 1996). In the view of Chukwumaeze and Olanrewaju (2006), participation can be seen as collaboration between two or more independent entities. According to the authors, participation has the propensity to change people from passive to active dispositions, and makes it easy generally to gain access to the benefits of the major out-puts resulting from the encounter. Paul (1987) viewed participation as an active process by which the beneficiary or client group influences the direction and execution of a development project for enhancing their well-being in terms of income, personal growth, self reliance or other values they cherish. Participation can be regarded as a process of complex social change (Organisation of Economic Cooperation and Development, OECD, 1997). Stakeholder participation is based on what Friere (1973) has termed 'praxis', that is, the concurrent, dynamic process of action and reflection. Such an approach involves people in analysing their

problems and situation in its concrete objective reality so that being critically aware of it; they can also act critically on it. Knowing what participation entails knowing what participation is not. According to Malawi Department of Forestry (1996) participation is not:

- Making people to go along and agree with projects that have already been designed for them;
- Mere contribution of labour by villagers;
- If the delivery of government service is improved, it means that communities are participating or the enthusiastic support of a few village leaders.

The 'term' paradigm refers to a worldview, beliefs or norms, which shapes our whole approach to being in the world. Participatory development paradigm embraces participatory approach to programme planning derived from a worldview based on participation and participative realities. According to Heron and Reason (1997) the participatory world view allows us as human beings to know that we are part of the whole, rather than separated as mind over and against matter, or placed here as a relatively separate creation. It allows us to join with fellow humans in collaborative forms of enquiry and project design and implementation.

Participatory approaches to development evolved from experience with the conventional approaches. Under the conventional approaches farmers were usually told what to do while their views on issues and concerns were not sought in research and extension programme development. Consequently, over the last three decades, pragmatic, ethical, efficiency and empowerment considerations about the inadequacies of the conventional approaches to development has fuelled the search for alternative, more participatory strategies for technology development and dissemination (Pretty, 1995). The conventional development paradigm represents what is now being

regarded as 'old style extension' that has the assumption that its primary task is to convey superior technologies into local practices (Moris, 1991). Farmers were seen as recipients of expert decision making either as adopters or rejecters of innovations but not the originators of technical knowledge or improved practices. However there is now a rival view of extension represented by the participatory approaches to development. The bottom-up views of these strategies are an emerging paradigm in development thinking and practice (Ogunbameru, 2012). The proponents of the participatory approaches are concerned with issues of power, powerlessness and empowerment linking theory with practice praxis and giving a 'voice' to the poor. For instance, Friere (1970) advocated the use of the participatory approaches to encourage social change in favour of the marginalized. Chambers (1997) argued that Participatory Rural Appraisal (PRA) is an example of the participatory approaches fundamentally aimed at facilitating and empowering all groups of people in the development processes.

The participatory paradigm recognises the significance of all stakeholders in extension programme development. This is contrary to the hitherto existing situation where the main stakeholders, the farmers, were overlooked in the process of the search for and development of knowledge, despite their extremely rich indigenous capability (Indigenous Knowledge, IK Notes, 2004). For development to be termed participatory it means that the various stakeholders influence and share control and risk over initiatives, decisions and resources which affect their lives. More succinctly, participation according to Odoh (2008) refers to the 'partnership built upon the basis of dialogue among the various actors during which the development agenda is jointly set and local views and indigenous knowledge are deliberately sought and respected'.

Meaning of Participatory Planning

Participatory planning entails 'planning with the people rather than for them. The term 'planning' is generally used to refer to a wide-

ranging process, involving a number of different but related and usually sequential steps, including: defining objectives; identifying and appraising alternative policies, programmes or projects for achieving these objectives; selecting the preferred alternatives; implementing the selected policy programme or project; monitoring its implementation, and evaluating its impact. Participatory planning is most commonly used to refer to participation in the process of identifying and comparing alternative policies, programmes and projects (through various forms of participatory research) and /or in plan implementation (for example by contributing cash or labour or merely being cooperative). At any stage in the planning process, the extent to which the people concerned participate can vary from nominal form of participation in which the people are only informed of what is going to happen through varying degrees of consultation and collaborative decision making to a situation where they are virtually in control.

The use of participatory approach to planning in rural development entails that those prospective beneficiaries of programmes and projects should be involved in the following steps (Adeniyi, 2008):

- Assessment of the available resources and opportunities
- Analysis of development constraints
- Determination of development priorities
- Definition of development objectives and implementation options
- Estimation of costs and identification of sources of funds
- Selection of preferred options based on feasibility and acceptability to beneficiaries
- Assignment of responsibilities and time frame (who is to do what and when?).
- Appraisal of progress and redesign (if necessary)

Concepts of Participatory Monitoring and Evaluation

Participatory monitoring and evaluation are extremely important for learning about the achievements and/or deviations from original

concerns and problems faced by local development projects or programmes being implemented so that corrective measures can be taken in time. Participatory monitoring involves local beneficiaries in measuring, recording, collecting, processing and communicating information to assist local development project extension workers and local group members in decision-making. In participatory monitoring and evaluation people that are most affected by a project: Decide what should be monitored and evaluated; Select indicators for doing so; Organise the collection of information; Answer questions such as how can this be done? Who should do what? When? Analyse and interpret data, and use the information (Murray and Flores, 1999). The authors also made a clear distinction between participatory monitoring and evaluation. Participatory monitoring is the process of routinely gathering information on all aspects of a project- a surveillance system for continuous feedback. What to monitor and evaluate in a project includes: the progress of each activity; effectiveness in reaching objectives; the relevance to the priorities agreed upon by the community; how the group in charge of the activity functions; how the different activities are carried out and how the project evolves as a whole; and the relationship between the community and the different external institutions involved in the project. Participatory evaluation is a broader concept which deals with assessment of project performance (compares achievement with expected outputs concerned with the use of resources and timeliness of activity); relevance (its relationship to problems and objectives, target group under consideration, quality (adherence to accepted standards of scientific work and precision) as well as impact (the broad changes, economic or social brought about by the project) on target population. Monitoring and evaluation are complementary activities in project planning and implementation. Evaluation draws on data created during monitoring process and is supplemented as necessary with additional data.

Participatory monitoring and evaluation must show all stakeholders in agricultural development whether or not the programmes have

enhanced the capacity of farmers to experiment and innovate, and whether this increased capacity and the emerging innovations contribute to the well-being of farm families and to the improved management of natural resources. As indicated by Reij and Waters-Bayers (2001) participatory monitoring and evaluation entail asking the questions and documenting who has done what, where, how and why. This also means that if the monitoring and evaluation of programme activities are to be done well and be useful, then all partners must be ready and willing to do the work.

Distinction between Participatory and Conventional Monitoring and Evaluation

PPMandE differs from conventional monitoring and evaluation approaches in several respects as depicted in Table 8.1.

Table 8.1: Differences between Conventional and Participatory Monitoring and Evaluation

Basis of Comparison	Conventional Monitoring and Evaluation	Participatory Monitoring and Evaluation
Who plans and manages the process.	Senior managers or outside experts.	Local people, project staff, managers and other stakeholders often helped by a Facilitator.
Role of 'primary stakeholders' (the intended beneficiaries).	Provide information only.	Design and adapt the methodology, collect and analyse data, share findings and link them to action.
How success is measured.	Externally defined, mainly quantitative indicators.	Internally –defined indicators including more qualitative judgments.
Approach.	Pre-determined.	Adaptive.

Source: Adapted from IDS (1998)

Murray and Flores (1999) provide a summary of differences between participatory and conventional evaluations:

- Conventional evaluations have been more donor financed and donor driven. More often, the evaluation is carried out to fulfill a management or accountability requirement than to respond to project needs.
- In a conventional evaluation the evaluator collects the data, reviews the project or programme and prepares a report. In most cases, stakeholders or beneficiaries play a passive role providing information but not participating in the evaluation itself.
- A participatory evaluation lays emphasis on the final output, that is, the final report. The purpose of the evaluation is to develop the capacity of stakeholders to assess their environment and take action.
- In a participatory evaluation, stakeholders and beneficiaries do more than provide information. They also decide on the terms of reference, conduct research, analyze findings and make recommendations.
- Participatory evaluations recognise the wide range of knowledge, values and concerns of stakeholders and acknowledge that these should be to assess and then guide the project's performance.
- In a participatory evaluation, the active participation of stakeholders can result in new knowledge or a better understanding of their environment. Stakeholders feel a sense of ownership of the results which does not come from an outsider or a donor.

RATIONALE FOR PARTICIPATORY PLANNING, MONITORING AND EVALUATION

The underlying idea behind participation is for the target population to be involved in an agriculture or rural development programme. This implies that they are involved directly in planning and implementing the principal development activities that affect them. In practice they are encouraged to make greater inputs during implementation than at the planning stage (Casley and Kumar, 1990).

Participatory planning, monitoring and evaluation should be seen as a process of helping people to learn how to do things better. Consequently, the theory and practice of adult learning has been recognised as very important and applicable to PPMandE (IUCN, 2000). A participatory learning approach also means that there is much more to monitoring and evaluation than just identifying and monitoring quantitative indicators. The Learning paradigm implies understanding, analysis, questioning, being critical and trying to explain why things have worked or failed. In PPMandE therefore quantitative indicators are equally vital. In a major review of the approach to its monitoring and evaluation activities, International Fund for Agricultural Development, IFAD (1999) noted that the conventional approach hitherto used was largely unfavourable as many projects saw monitoring and evaluation as a policing exercise which led to a lack of commitment, mistrust or even resistance to learning from experience. Other problems identified as associated with the use of the traditional approaches include: monitoring is seen as an obligation imposed from the exterior; scarce attention paid to monitoring needs of stakeholders; widespread lack of integration and cooperation between monitoring and evaluation function and project management; poor use of participatory and qualitative monitoring and evaluation methods due to limited capacity and little recognition of the need for such methods. The use of the participatory approaches has been largely due to growing dissatisfaction with the poor rates of adoption of agricultural technologies in resource poor farming systems. The poor adoption and use of innovations has resulted partly because when extension, research and development programmes are designed, implemented and evaluated there is little input from farmers. PPMandE offers a way forward through active, decision making involvement from the onset from needs assessment and problem diagnosis to monitoring and evaluation.

Various authors (Institute of Tropical Medicine, 1991; Pretty, 1995; IFAD, 2000; Moris, 1991; Ellis-Jones *et al.*, 2004; Farinde, 2008;

Gwary, 2008) have advanced reasons for a participatory approach to planning, monitoring and evaluation which can be summarised thus:

- Participation is a means of improving the quality of plans and increasing the chances that they will be successfully implemented. This is because the plans are more likely to be relevant to local needs and conditions and take cognizance of the specific socio-economic context.
- Participation is also of direct benefit to the participants (both individually and, in the case of group participation, collectively), in that it increases their awareness and understanding of the world and gives them more control over their lives. Consequently, it is widely regarded as a basic human right. This is the fundamental principle behind democratic government and one might thus regard participatory planning as a natural extension of democracy into the field of development planning.
- Participatory evaluation theory suggests that when stakeholders take a more active part in planning evaluations, collecting information and reporting results, the results of an evaluation are more likely to be used.
- PPMandE provides an opportunity for development organisations to focus better on their ultimate goal of improving poor peoples' lives. By broadening involvement in identifying and analysing change, a clearer picture can be gained of what really is happening on the ground. It allows people to celebrate successes and learn from failures. For those involved it can also be a very empowering process, since it puts them in charge, helps develop skills and shows that their views matter.
- Participatory community monitoring and evaluation are extremely important for learning about the achievement/deviation from the original concerns and problems faced by local development projects/programmes being implemented, so that corrective measures can be taken in time.
- Participatory evaluation assists in adjusting and redefining objectives, reorganising institutional arrangements and re-

allocating resources as necessary. Monitoring and evaluation systems allow continuous surveillance in order to assess the local development project's impact on intended beneficiaries.

- Involving local people in project evaluation is one of the learning objectives of participatory management. Apart from the project impact on the life of the people, participatory evaluation is valuable in assessing attitudinal changes in the local community about their role and sense of responsibility, determine if people have gained confidence in their ability to undertake new activities; provide lessons about people's capacity, extent of participation and community responsibilities.
- PPMandE provides opportunity to project implementers to assess deficiencies in the project design-if objectives and work plan were realistic, if local funding was adequate and whether project actually owned by the people. Answers to these questions indicate future precautions and modifications in the method and approach which also represents an achievement in capacity building at the local level.
- According to Pretty (1995) there are two schools of thought regarding the rationale for community participation in project planning, monitoring and evaluation. One can view community participation as a means to increase efficiency, the central notion being that if people are involved, then they are more likely to agree with and support the new development or service. The other school of thought sees community participation as a right, in which the main aim is to initiate mobilization for collective action, empowerment and institution building.
- As opined by Ajayi (2005) one of the basic philosophical objectives of extension is to involve people in its programmes for democratic purpose. This makes agricultural extension to be democratic in nature. The benefits associated with stakeholder participation includes, but not limited to: long term commitment of the people to the programme; good rapport between the extension agents and the rural farm families; more accurate decision making process is possible; quick legitimization of actions, and

involvement is functional, ethical, educative as well as leading to self-reliance.

- Participatory methods of project planning, monitoring and evaluation promote innovation and ownership, increase adoption rate and acceptability of new technologies. It is an opportunity to encourage linkages between the various actors such as the researchers, farmers, extension workers and input providers and increase learning from each other (Sinkaiye, 2005).
- Mulwa (2008) opined that participatory methodologies are effective tools for causing development by the people and for the people. They are empowering processes that will enable people make informed choices and decisions based on collective analysis.
- A participatory or collaborative evaluation approach provides the partners and stakeholders involved with hands on practical, experiential training in monitoring and evaluation techniques. It can contribute to the institutionalization and use of information for project improvement by local actors (Aubel, 1999).

PRINCIPLES OF PARTICIPATORY PLANNING, MONITORING AND EVALUATION

IDS (1998), IFAD (2000) and IUCN (2000) highlighted the basic principles guiding participatory planning, monitoring and evaluation as follows:

- To develop programmes and projects based on a thorough understanding of the situation in which an intervention is planned.
- To involve stakeholders in a participatory process of programme or project design and evaluation
- To develop a set of clear logical objectives that can realistically be achieved within a particular timeframe and within an allocated budget and which will make a significant and sustained contribution to a higher level development objective.
- To make explicit the and effect (means ends) relationships and external factors that underpin the programme or project and

which must hold true if planned activities are going to lead to desired results and impacts.

- To establish a monitoring and evaluation system, including indicators which will show if the objectives have been achieved and provide information to support effective management and learning.
- Monitoring and evaluation are considered as a learning process and not as an external 'top down' policing function.
- Involvement of stakeholders should be guided by the socio-cultural milieu
- The inclusiveness of PPMandE requires negotiation to reach agreement about what will be monitored or evaluated, how and when data will be collected and analysed, what the data actually means, and how the findings will be shared and action taken. Since the number, role and skills of stakeholders, the external environment and other factors change over time, flexibility is essential.

Principles of participation as enumerated by Egger and Majeres in Coady International Institute (2008) is as applicable to participatory monitoring and evaluation as it is to other development activities and contexts. It can be outlined as follows:

- Inclusion of all people, groups, representative, affected by a project.
- Equal partnership: everyone brings capacity, equal rights, skills to the process
- Transparency: climate of open communication and building dialogue
- Sharing power: avoid the domination of one group over the other
- Sharing responsibility: all have equal responsibility for outcomes and decisions
- Empowerment: encouragement of people with skills to apply them, mutual reinforcement and promotion of what exists in people to be used for the project.

- Cooperation: operating together, 'sharing everyone's strength reduces everybody's weakness

Role of stakeholders in Participatory Programme Planning, Monitoring and Evaluation

Stakeholders are people with interest in the project or programme. They affect or are affected by the outcome of the development activity and impact a programme future. Generally, they consist of project sponsors (local public agencies and

international donors), taxpayers, programme participants (beneficiaries and non beneficiaries) and those helping to deliver the programme. Table 8.1 highlights the role of various stakeholders in programme planning in agricultural extension services.

Table 8.1: Stakeholders and their role in Participatory Programme Planning, Monitoring and Evaluation

Category of stakeholders	Type of stakeholder	Functions of stakeholder	Level of planning/ participation
Farm families	Household heads, men, women and children	Provide information on household characteristics, livelihood, resources, crop/ livestock production problems, needs, community factors/ culture, successful and failed projects. Provide resources like money, land, labour, farm/inputs, drawing of project plan, execution monitoring and evaluation.	Individual and family level

	Youths	Female/male youths, out-of-school youths, in-school youths' associations (young farmer's clubs/associations).	Form extension clientele, agents and medium of change, provide information for planning. Mobilization and sensitisation of peers and other people to participate in programme planning. Provide both material and non-material resources. Drawing of project plan, execution, monitoring and evaluation of plan.	Individual, family group and community levels
	Community leaders	Local leaders, opinion leaders, women local leaders, political leaders and youth leaders.	Legitimation of projects/programme. Drawing up of project/programme. Donation of resources. Mobilisation and sensitization of people. Provision of information. Execution of plan. Monitoring and evaluation of project plan	Group and community levels.
	Extension personnel (Extension Educators)	Village Extension Agents (VEAs), Block Extension Supervisors (BES) and Zonal Extension Officers (ZEOs).	Extension workers are important means of channeling information downwards from higher levels in the civil service as well as upwards as a source of	All levels-individual, family, group and community levels.

			feedback from the farmers to researchers. Analyse situation and determine needs, develop programme, implement, monitor and evaluate with clientele groups. Provide feedback to sponsors and extension administrators.	
	Extension Administrators	Programme managers of ADP, Directors of Extension Services, Directors of Engineering and Technical Services	Provide logistic support, endorsement of extension delivery services, monitoring and evaluation with concerned clientele. Supervision of extension activities. Publicity of the project.	All levels of programme planning
	Ministries	Directors of Agricultural Services, Director General or Permanent Secretary of Agriculture, Water Resources, Commissioners of Agriculture, Directors of Forestry and Zonal Forest Officers.	Policy formulation and implementation. Provide adequate logistic and conducive environment including funding for extension delivery services.	All levels of programme planning
	Community Based	Farmer groups, Credit	Provide information on	Group and

	Organisations (CBOs).	organisations and development Associations	clientele situations. Provide resources for programme planning. Determine needs, and set programme objectives with others. Draw up programme plan with extension personnel. Execute programme. Monitoring and evaluation of plan.	community levels.
	Commodity Associations	Cassava Growers Association, Cocoa Growers Association of Nigeria, Rice Farmers Association of Nigeria, Fish Farmers Association of Nigeria, Poultry Farmers Association of Nigeria etc.	Provide information on clientele situations; provide resources for programme planning; determine needs and set programme objectives with others. Draw up programme plan with extension personnel, execute programme, monitoring and evaluation of plan. Provide specialized knowledge on commodity as input in programme planning.	Group and community levels.
	Service Providers	Agrochemicals, farm tools, credits, health and advisory services.	Provide agrochemicals, farm tools, and health and advisory	At all levels of programme planning

			services to the farmers.	
10	Project Sponsors	NGOs, Government, Local Private Partners, International Donor Agencies etc.	Provide funds and logistic support.	At all levels of programme planning

Source: Adapted and modified from Farinde (2008)

Steps in Undertaking Participatory Planning, Monitoring and Evaluation

Participatory planning process as outlined by Odoh (2008) consists of the following sequential steps:

1) Stakeholder Analysis

This step includes activities to clarify individuals, groups or institutions/organisations involvement, who are the beneficiaries and the principal financiers. What are their stakes in the project? Who are the primary or core stakeholders and who are the secondary ones? What contributions do they bring to bear on the project (in what ways are they involved in the project?). Who are the negatively affected groups? Which groups can constitute a threat to the project?

- Stakeholder analysis also includes collecting relevant baseline information on community resources (human, physical, institutional and financial). Such analysis would involve:
- Basic information on population, age, educational level, organisational structure, socio-cultural characteristics, economy and technical ability.
- Physical resources such as agricultural land, agricultural activities, water bodies and sources, forest, grassland, energy sources and other resources.
- Infrastructures such as roads, schools, health institutions, electricity, markets and others.

- Community problems and needs (Needs Assessment of communities).
- Actions. Kinds of actions project can take given the problems, needs, weaknesses and potentials of the communities. All these will provide baseline data against which successes recorded in the project can be monitored and evaluated. It will also enhance the efficiency of the project.

2) Problem Analysis

The community diagnosis in the first step as highlighted above can result in along list of problems. From such problems, needs assessment exercise can be conducted through an analysis of a few priority problems referred to as problem analysis. This involves subjecting a core problem to statements of causes and effects. Problem analysis is symbolized by a tree in which the core problem under analysis is the trunk of the tree, the causes are the roots, while the effects are the branches. Problem tree analysis is used in project identification. This is a diagnostic technique which identifies the major elements of a problem by establishing the causes and effect relationship of the given problem. A hierarchy of causes and effects called the problem tree is built around the problem. Examples, a core problem identified in a community is malnutrition, the causes are ignorance, poverty and illiteracy and the effects are high infant mortality, low productivity and low school enrolment as depicted in Figure 8.1.

The objective analysis is the next stage where the cause and effects could be replaced by 'ends' and 'means', respectively. The means are the actions to be taken to reduce malnutrition while the original problem (transformed) and the ends represent the objectives. This is done to make community members set objective and plan actions to achieve these objectives. In the middle is reduction in malnutrition. This means to reduce malnutrition includes: organise health talks, provide special subsidy for mother groups, increase school enrolment and establish adult literacy school (Figure 8.2).

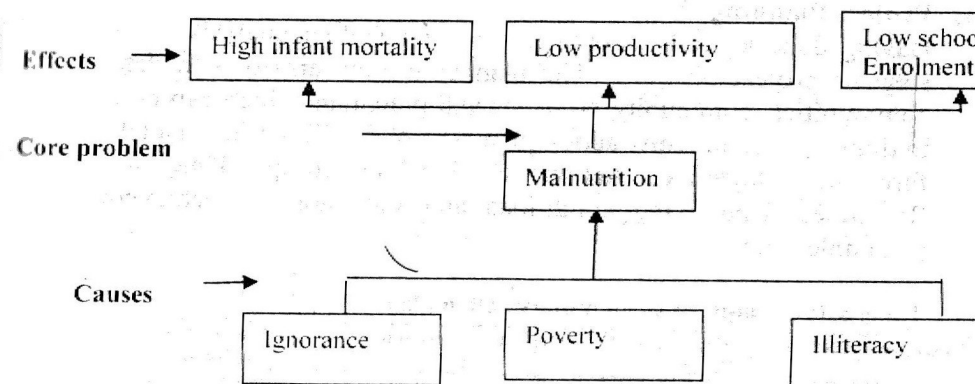


Figure 8.1: Problem Tree (Causes of Malnutrition)

Source: Odoh (2008)

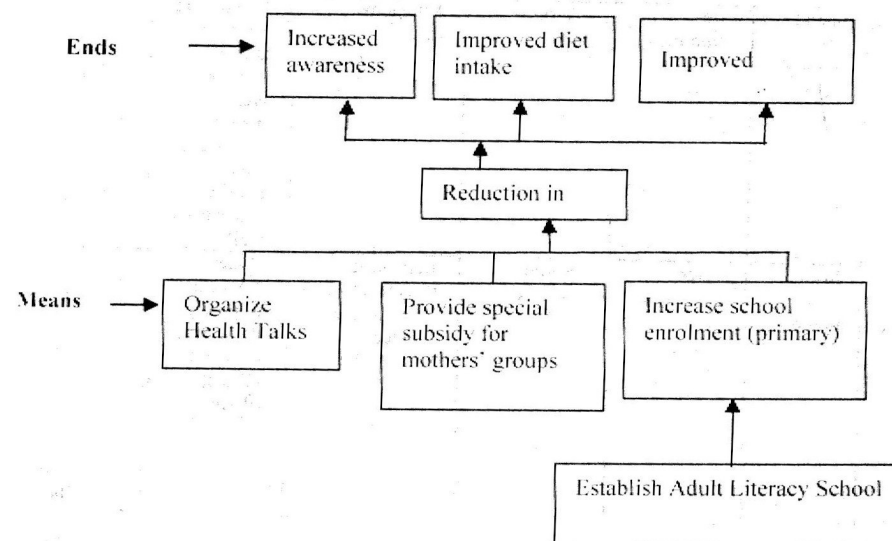


Figure 8.2: Objective analysis (Reduction of malnutrition in a community)

Source: Odoh (2008)

3) Project Planning.

Having done a needs assessment and stakeholder analysis, the next stage is project planning. The planner is now armed with data on communities, community priorities and potentials which can be used to draw up a community action plan. The plan will outline in a tabular form the Objective, Action, Responsible group, Time frame, Resources, Underlying conditions and Indicators of achievement (Example, Table 8.3).

Table 8.3: Example of a community action plan

Objective	Action	Responsible Group	Timeframe	Resources	Underlying conditions	Indicators
Improve drinking water	Clean up wells	Water committee	April 5-May 5	Village labour required.	None	All wells cleaned by the deadline (time frame).
	Install new shallow wells	Water committee	April 5-June 5	Village will raise ₦50,000.00.	Discussion where to situate shallow well. Ask district engineer to check quality of water from well.	Shallow well ready.
	Install new borehole.	Water committee.	Before October 31 st	Representatives to contact local NGO office for finance.	Water Committee to prepare document to send to project office.	Financing confirmed before June 30 th . Work started by September 30 th . Borehole ready before October 31 st .

Source: Odoh (2008)

4) Implementation

Implementation of action plan specifies who does what, which committee oversees what, which individual or official supervises what and who is accountable for what. The implementation stage also addresses timing and target issues, including quality. It is such activities that produce outputs and indicators, which are the subject of monitoring and evaluation. This is also the stage when village committee or organisations that carry out the activities are formalized and activated.

5) Monitoring and Evaluation

Monitoring seeks to answer the question: Are we making progress and how do we know the project is making the right progress? If not, what are the problems and how can we address them to move forward? In participatory monitoring and evaluation baseline information collected before the start of the project is compared to outcome indicators of the project. The difference of which constitutes progress. However, in participatory project planning there is interest not only outputs but also in outcomes or impact. The monitoring and evaluation activities are participatory because the key stakeholders including the community have to participate in designing the indicators to be measured, how to measure them and who will record or provide what data for the monitoring and evaluation activities.

OVERVIEW OF METHODOLOGY FOR PARTICIPATORY PLANNING, MONITORING AND EVALUATION

A wide range of methods and tools have been developed for carrying out participatory planning, monitoring and evaluation. They all seek to collect and analyze baseline data and/or compare the situation before and after a particular project or a set of events or with and without an intervention. Some of the key approaches are the use of Rapid Rural Appraisal (RRA) techniques (Chambers, 1983), Participatory Rural Appraisal (PRA) tools and procedures (Chambers and Gijlt, 1995), Socio-economic and Gender Analysis (SEAGA) (Murray and Flores, 1999) and Gender Equality Wheel (Guarung *et al.*, 2008). Such tools are useful for collecting and analysing local

information and situations. They are important for collecting data, subsequent checking, sampling, recording, collating and analysing the information. The rationale for development of the participatory methodology was to counter the limitations of the traditional research approaches mainly questionnaire surveys and quick rural visits. The problem associated with the questionnaire surveys is that the questionnaire designer has to determine the questions well in advance. Yet those who design these instruments cannot know which issues are important for local people. The predetermined issues may not have relevance to the felt needs and concerns of the local people. Moreover, the orthodox research methods are usually narrow in scope and non exhaustive with respects to issues addressed, follow a long process of data analysis and report writing based on statistical analysis and sampling. With respect to the brief field visits made by development professionals, otherwise called 'rural development tourism' its key flaw is that it is full of biases that misguide professionals into believing that they have seen an accurate picture of rural life. Chambers (1983) characterized these biases into four main types: **Spatial biases** in which the better-off people living near roads and services are visited, with those who are remote and thus poorer being missed; **time biases**, in which visits are made during the seasons when roads are open and at times of day when people are busy in the fields; **people biases**, in which professionals speak only to rural leaders and articulate people who represent only the elite, dominant and wealthy groups; and **project biases**, in which a show case village or technology is repeatedly shown to outsiders, who get the impression that this is typical of all efforts. Due to these problems associated with the conventional research and programme planning methods, it became imperative to search for and adopt participatory methodologies for planning, monitoring and evaluation of projects and programmes. Participatory methodology will ensure farmer involvement in decision making during situation analysis, planning and implementation of research and development programmes.

The discussion in this section presents some key tools and techniques drawn from participatory frameworks and approaches which have been found useful for collecting and analysing information for programme planning, monitoring and evaluation. It outlines the 'how to' in using such methods and cites examples and experiences of its usage in the development context.

RRA/PRA Tools and Their Use in Planning, Monitoring and Evaluation

Coady International Institute (2008), Conyers (1993); Swanson *et al.* (1997); Sontheimer *et al.* (1999) outlined practical guidelines for applying the tools in the field setting. Igbokwe and Enwere (2001); Elis-Jones *et al.* (2005); Gwaryet *et al.* (2009) provided some practical instances and cited examples of application of the techniques in the Nigerian context for planning, monitoring and evaluation of development projects and interventions. The following section presents a review and synthesis of information from these authors on the application of the participatory methods in programme planning, monitoring and evaluation.

Menu of Tools

RRA and PRA share common tools and techniques which could be used in participatory research and development work. Box 1 provides a non exhaustive inventory of key participatory tools while Table 8.4 highlights the potentials of the techniques in project management.

Box 8.1: Inventory of Key Field RRA/PRA Tools

- Livelihood analysis
- Livelihood assets analysis
- Livelihood activities
- Wealth (resource) ranking
- Resource mapping
- Institutional analysis
- Seasonal calendars
- Gender analysis techniques
- Flow diagrams
- Ranking Techniques
- Preference ranking
- Pair wise ranking
- Matrix ranking
- Crop ranking
- Problem ranking
- Causal diagrams
- Mapping
- Market information network
- Map infrastructure map
- Marketing channels
- Activity profile
- Daily Activity clocks
- Seasonal Calendar
- Coping strategies
- Venn diagrams
- Farmers' evaluation criteria for options
- Transect walks
- SWOT analysis
- Participatory budgeting

Examples of procedure in using some of these tools are highlighted in subsequent discussions in this chapter.

Source: Gwary, *et al.* (2009)

Table 8.4: Matching Different RRA/PRA Tools for Each Step in the Project Cycle

S/No	Step in Project Cycle	RRA/PRA Tools
1.	Awareness raising of the problem	Popular theatre, consultations, Focus-group discussions, reporting, vignettes.
2.	Project formulation	Stakeholders' analysis, wealth ranking, census mapping, timelines, story with a gap, demographic profiles, seasonal calendars, Venn diagrams, transect, semi-structured interview.
3.	Project Planning	Strengths, Weaknesses, opportunities and Threats (SWOT) analysis, Community action plans (CAPs), community workshop, problem tree, objective tree, Gant chart,, organisational chart, budget problem analysis.
4.	Resource Mobilization	Consultations where the RRA/PRA reports are presented to justify need for support from external agencies and from community contributions.
5.	Project implementation	Alternative technologies or methods like micro-finance, sustainable agriculture, alternative medicine, co-operative, indigenous forest management, appropriate technologies for livelihoods.
6.	Monitoring and evaluation	Gant Charts, Chrice matrix, focus-group discussions, community based monitoring tools based on the data-gathering PRA tools, other scales (such as Likert type scales) built for MandE, reflection sessions.

Source: Informal Working Group on Participatory approaches and Methods to support Sustainable livelihoods and Food Security (2012)

Description and Application of Some Participatory Tools

Livelihoods analysis

Livelihood analysis is used to collect baseline data on livelihood strategies of community members as an essential input in project planning. The main objective of this activity is to assist participants to assess the means by which different members of the community derive their livelihood, the importance of each in providing food and cash income, trends and the reasons for such changes. The sustainable livelihood is basically used to diagnose livelihood strategies of different people's needs and priorities with emphasis on asset ownership. Some guiding questions in livelihood analysis include:

- 1) What is the asset base on which livelihood strategies are based (financial, natural, physical infrastructure, human and social groups?).
- 2) What are the livelihood strategies of households (how households use their assets to make a living).
- 3) What are the internal and external shocks that challenge the livelihood system?
- 4) How stable are livelihood systems (stable, improving or deteriorating?)
- 5) How do the local people cope with livelihood disruptions?

Steps for Undertaking Livelihood Analysis

This can be undertaken in mixed or gender specific groups.

- 1) Make sure everyone knows the purpose of the exercise
- 2) Identify all the means of deriving a livelihood within community (crop, livestock production, non-farm activity etc).
- 3) Identify who in the community, (men, women, boys or girls etc) is involved, and the percentage of households participating
- 4) Establish the relative importance of each activity for growing food or earning money. This can be done on a scale of 1-4 (1=not important, 4=very important)
- 5) Establish the trend, whether this activity is increasing or decreasing and why.

- 6) Record the information on a matrix as the information is discussed and agreed.

Expected Output of Activity

At the end of the process, information was available to researchers and the community on:

- 1) How people derived their livelihoods
- 2) The extent of peoples' involvement in each of the livelihood strategies
- 3) The relative importance of each
- 4) Trends in the performance of these livelihood means over the years, and
- 5) The reasons for such trends.

Scored Causal Diagrams

This aims to assist participants to understand the causes of problems by increasing awareness and help in identifying possible options for control.

Steps for Undertaking a Causal Diagram

- 1) Make sure everyone knows the purpose of the exercise.
- 2) Place the problem at the top of a sheet of paper (or blackboard)
- 3) Ask participants to list and discuss all the causes of a problem, asking "why did this happen" or "why did this occur".
- 4) Through discussion further problems and causes may be added to the diagram.
- 5) Scoring can be considered after the diagram has been completed using percentages (or numbers up to 10) to indicate contributory causes of the problem to one or more levels.
- 6) Through undertaking this analysis with farmers, researchers were able to gain a clear insight of how farmers were aware of the consequences of lack of inputs.

Problem Priority Pair Wise Ranking

The aim is to assist participants identify and rank the problems that they are facing in producing their farming activities. Pair wise ranking is a useful technique to find out about the reasons for a particular choice, but it can only be used when there are not too many options (maximum of 6-7).

Steps for Undertaking Pair-Wise Ranking

This can be done in mixed, gender or youth specific groups.

- 1) Make sure everyone knows the purpose of the exercise.
- 2) List all the problems. It may be necessary to limit these to natural resource problems.
- 3) Ask participants to decide which is the most important, limiting these to no more than 6 or 7 through mutual agreement, hand or stone voting.
- 4) Prepare a blank matrix.
- 5) Compare each problem against all the others, in pairs going through each pair in turn. This gives participants two options to discuss and agree which is the most serious.
- 6) Make comparisons of all the possible pairs (starting with weeds and fertiliser availability), recording the greater problem for each comparison.
- 7) Add the number of times each problem is scored and then rank.

Gender Analysis

A Gender Equality Wheel is a tool which provides a framework to categorise the outcomes and impact of gender mainstreaming on women, men, families, and communities for diverse range of Research and Development (RandD) projects (Guarang *et al.*, 2008). It tracks women's transition from alienation and isolation to ultimate involvement in community activities and strategic participation in social, economic cultural and political transformation and significant, men's recognition, support, and involvement in this process. The

Gender Equality Wheel identifies four stages of the progress toward gender equality.

- **Empowerment**- refers to resources such as ideas, knowledge and skills that become available to the community as a result of collaboration with the project. Such resources are the cornerstone of social capital building self-confidence in women and men as they explore new ways of seeing and acting
- **Engagement**- refers to the stage at which people (especially women) come out of isolation, discover new possibilities for their lives, and begin to build mutual support.
- **Enhancement**- refers to the process when women and men begin to apply the new ideas, knowledge and skills to enhance lives of family and community members and provide household and community gains.
- **Emergence**- refers to the process when women and men move onto the public stage, to social and political action that transforms their social, cultural, and political environment.

Checklist for Analysing the Level of Gender Mainstreaming

Empowerment

- New skills and knowledge acquired
- Access to resources (land, credit, input)
- Acquisition of social capital (self confidence, new ways of seeing and acting)

Engagement:

- Discovery of own potential and possibilities
- Acquisition of entrepreneurial skills and its use
- Build mutual support system (cooperatives, CBOs)

Enhancement:

- Adoption of innovations
- Application of skills and knowledge to enhance livelihood

Emergence:

- Development of leadership skill
- Join and be active members of political parties
- Via for political position
- Acquire local leadership position among women groups and the community
- Become vocal members of the community

Institutional Analysis

The aim is to assist participants to identify institutions within the community that are already or would like to be involved in agricultural activities.

Steps for Undertaking an Institutional Analysis

Small groups organised according to gender, age or wealth can create visual diagrams which reflect their perceptions of the relationship between institutions and the people they serve.

- 1) Make sure everyone knows the purpose of the exercise.
- 2) Identify and list the institutions within and outside the community at local (village), LGA or State levels. Identify which institutions interact with each other.
- 3) Draw circles to represent institutions. Their perceived importance is rated by the size, the larger the more important. The further the circle is away from the centre of the diagram, the less contact it has with the community.
- 4) Agree which institution would be best to be involved in the action programme. Opinions can vary considerably but when discussed it can help in creating a common understanding of which institution is best placed to undertake the required tasks.
- 5) Such diagrams are easier to construct if the relevant topic is selected, such as management of natural resources rather than having a general discussion on all community structures in abstract.

Access to Resources (Wealth Ranking)

The aim is to assist the participants to identify different types of households in the community using their criteria for assessing differences. Information about the distribution of well-being in a community is very important because the poorest group tend to be forgotten in interventions meant to reduce poverty. People who fall in the poor group are the most vulnerable and voiceless so that they are excluded from benefiting from information and assistance that could improve their wellbeing.

Wealth Ranking Objectives:

- 1). To investigate perceptions of wealth differences and inequalities in a community
- 2). To identify and understand local indicators and criteria of wealth and well-being
- 3). To map the relative position of households in a community

Guiding Questions:

- 1) What are local perceptions of wealth, well-being and inequality?
- 2) What socio-economic groupings are there in the community and who belongs in what group?

Steps in Undertaking the Activity

- 1) Make sure everyone knows the purpose of the exercise
- 2) A numbered list is made of all the households in the community and the name each household head and the household number is written on a separate card
- 3) A number of key informants who know the village and its inhabitants very well are asked to sort the cards in as many piles as there are wealth categories in the community, using their own criteria.
- 4) After sorting, ask the informants for the wealth criteria for each pile and differences between the piles. Assure the informants of confidentiality and do not discuss the ranks of individual families, so as not to cause bad feelings within the community.

- 5) Identify with participants the criteria they use in differentiating households
- 6) Agree how many categories there are in the community. Usually this varies between three (3) and five(5).
- 7) Describe for each category a typical profile for each criteria
- 8) Ask participants to estimate what percentage of the community fall into each category

Resource Map

The Village Resource Map is a tool that helps us to learn about a community and its resource base. The primary concern is not to develop an accurate map but to get useful information about local perceptions of resources. The participants should develop the content of the map according to what is important for them. The Resource map is to learn the villagers' perception of what natural resources are available and how they are used.

Some Guiding Questions:

- 1) What resources are abundant?
- 2) What resources are scarce?
- 3) Does everyone have equal access to land?
- 4) Do women have access to land?
- 5) Do the poor have access to land?
- 6) Who makes decision on land allocation?
- 7) Where do people go to collect water?
- 8) Who collects water?
- 9) Where do people go to collect firewood?
- 10) Who collects firewood?
- 11) Where do people go graze livestock?
- 12) What kind of development activities do you carry out as a whole community? Where?
- 13) Which resource do you have the most problem with?

Steps in Undertaking the Activity

- 1) Find a large open place to work.

- 2) Start by placing a rock or leaf to represent a central and important landmark.
- 3) Ask the participants to draw the boundaries of the community.
- 4) Ask the participants to draw other things on the map that are important. Don't interrupt the participants unless they stop drawing.
- 5) Once they stop, you can ask whether there is anything else of importance that should be added.
- 6) When the map is completed, facilitators should ask the participants to describe it. Ask questions about anything that is unclear.

Venn Diagram of Institutions

The Venn Diagram of Institutions shows institutions, organisations, groups and important individuals found in the village as well as the villagers view of their importance in the community. Additionally the diagram explains who participates in these groups are in terms of gender and wealth. The Institutional Relationship Diagram also indicates how close the contact and cooperation between those organisations and groups is.

Objectives:

- 1) To identify external and internal organisations/groups/important persons active in the community
- 2) To identify who participates in local organisations/institutions by gender and wealth
- 3) To find out how the different organisations and groups relate to each other in terms of contact, co-operation, flow of information and provision of services

Guiding Questions

- 1) Which organisations/institutions/groups are working in or with the community?

- 2) Which institutions/groups do the villagers regard as most important, and why?
- 3) Which groups are addressing household food security and nutrition issues?
- 4) Which organisations work together?
- 5) Are there groups which are meant for women or men only?
- 6) Are some particular groups or kind of people excluded from being members of or receiving services from certain institutions?

Steps in Undertaking the Activity

- 1) If time allows it will be good to form separate focus groups for women and men. Make sure that also the poorest and most disadvantaged join the group.
- 2) Make sure that you have all material that is needed. You can a) either draw or write with a stick on a soft ground or b) you might use a BIG sheet of paper, pencil and markers. If you decide to use paper, people should first use a pencil to be able to still change the size of the circles that the participants will draw.
- 3) Explain to the participants the objectives of the Venndiagram of institutions.
- 4) Ask the participants which organisations/institutions/groups are found in the village and which other ones from elsewhere are working with them. Make sure that they also think of the small not formal groups like e.g. neighborhood committees. These questions will be useful to ask:

What kind of ways of assisting each other does exist among people? Which local groups are organised along environmental issues (water, grazing, arable land), economic issues (saving, credit, agriculture or livestock), social issues (health, literacy, religion, tradition, education, sport). Are their political groups? Who makes important decisions in the community?

- 5) Ask one of the villagers to write down all the institutions that are mentioned and to give each organisation a symbol which everybody can understand.
- 6) Ask the participants to draw a big circle in the centre of the paper or on the ground that represents themselves.
- 7) Ask them to discuss for each organisation how important it is for them. The most important ones are then drawn as a big circle and the less important ones as smaller circles. Ask the participants to compare the sizes of the circles and to adjust them so that the sizes of the circles represent the importance of the institution, organisation or group.
- 8) Every organisation/group should be marked with the name or symbol.
- 9) Ask them to discuss in which way they benefit from the different organisations.
- 10) The facilitator and notetaker have to listen very carefully and the notetaker writes down, why the different organisations are considered important or less important!
- 11) Ask them to show the degree of contact/co-operation between themselves and those institutions by distance between the circles. Institutions which they do not have much contact with should be far away from their own big circle. Institutions that are in close contact with the participants and which whom they co-operate most, should be inside their own circle. The contact between all other institutions should also be shown by the distance between the circles on the map:

largely distanced circles:	no or little contact or co-operation
circles close to each other:	only loose contacts exist

touching circles: some co-operation

overlapping circles: close co-operation

Seasonal Calendar

A seasonal calendar is a participatory tool to explore seasonal changes (e.g. gender-specific workload, diseases, income, expenditure etc.) according seasonal variations.

It is used to learn about changes in livelihoods over the year and to show the seasonality of agricultural and non agricultural workload, food availability, human diseases, gender-specific income and expenditure, water, forage, credit and holidays.

Guiding questions:

- 1) What are the busiest months of the year?
- 2) At what time of the year is food scarce?
- 3) How does income vary over the year for men and women?
- 4) How does expenditure vary over the year for men and women?
- 5) How does rainfall vary over the year?
- 6) How does water availability for human consumption vary over the year?
- 7) How does livestock forage availability vary over the year?
- 8) How does credit availability vary over the year?
- 9) When are holidays and how many days in which month?
- 10) When are most agricultural work carried out by women?
- 11) When are most agricultural work carried out by men?
- 12) When is most non-agricultural work carried out by women?
- 13) When is most non-agricultural work carried out by men?
- 14) Which could be the most appropriate season for additional activities for men and women?
- 15) What time constraints do exist and for what reason?

Steps in Undertaking the Activity

- 1) Find a large open space for the group. The calendar can be drawn on the ground or on a very big sheet of paper.
- 2) Ask the participants to draw a matrix, indicating each month along one axis by a symbol.
- 3) It usually easiest to start the calendar by asking about rainfall patterns. Choose a symbol for rain and put/draw it next to the column which participants will now use to illustrate the rainfall. Ask the group to put stones under each month of the calendar to represent relative amounts of rainfall (more stones meaning more rainfall).
- 4) Move to the next topic and ask people during which month the food is usually scarce. Discuss the reasons why it is scarce and make sure that the different kind of food donations that people receive are discussed and that this information is shown in the map.
- 5) Go on like this (meaning topic by topic). After finishing all the columns your matrix should have covered the following 14 topics:
 - (a) Rainfall
 - (b) Food scarcity (*many stones means less food available, indicate during which time people receive food donations (e.g. food for work)*)
 - (c) Income (cash and kind) for women
 - (d) Income (cash and kind) for men
 - (e) Expenditure for men
 - (f) Expenditure for women?
 - (g) Water availability for human consumption
 - (h) Livestock forage availability
 - (i) Credit availability
 - (j) Number of holiday days
 - (k) Agricultural work load for women
 - (l) Agricultural work load for men
 - (m) Non-agricultural work load for women
 - (n) Non-agricultural work load for women

6. After the calendar is finished ask the group which linkages they see among the different topics of the calendar. Encourage the group to discuss what they see on the calendar.

7. Make sure that your copy of the seasonal calendar has a key explaining the different items and symbols used on the map.

Income and Expenditure Matrix

The Income and Expenditure Matrix is a tool that helps us to identify and quantify the relative importance of different sources of income and expenditures. The tool also helps us to understand how secure or how vulnerable certain groups of people incomes are. In the Expenditures matrix, we can see if all, most or only some of people's total income is spent to meet basic needs - food, water, clothing, shelter, health care, education. We can also ask whether people have any money left over to save or to invest in tools, fertilizer, or other important items that could help them in their work. It is used to learn to about sources of income (cash and kind) and how income is proportionality spent by gender and wealth.

Guiding Questions

Income Matrix:

- 1) What are the most important sources of income in the community, both cash and in kind?
- 2) Who has only a few sources of income?
- 3) Who has many sources of income?
- 4) How do poor peoples' sources of income compare to rich people's?
- 5) How do women's sources of income compare to men's?

Expenditure Matrix:

- 6) How are expenditures spread out over the year?
- 7) Which expenditures are common to almost every one?
- 8) For each social group, what proportion of income is spent on basic needs like food, clothing, housing, health care and education?
- 9) Who can save?

10) Who can buy equipment, tools, agricultural inputs, or other things that help improve their work?

11) How do women's expenditures compare to men's?

Steps in Undertaking the Activity

For the group looking at wealth differences:

- 1) Explain to the group that you want to learn about where their income comes from and how they spend it. Reassure them that you don't want to know how much they make but are only interested in learning about where their money comes from.
- 2) Ask the group to list their sources of income. Be sure to prompt them to include both cash sources and payments in kind or by barter.
- 3) Start drawing the matrix on the ground or a large piece of paper.
- 4) Put the sources of income in the horizontal axis. The group may want to use symbols to represent the various sources.
- 5) Collect 50 small stones (ask the children for help). Explain that these stones represent the total income for the whole community for the year.
- 6) Ask the participants to divide the 50 stones between 3 groups - poor, middle and rich.
- 7) Ask the group to select a representative for each of the 3 wealth groups, and give these representatives the portion of the stones the group decided they should have.
- 8) Ask the representative to stand along the vertical axis with his/her stones.
- 9) Ask the representative to take turns placing their stones in the matrix to indicate their sources of income. Carry this out until all the stones are divided.
- 10) Record the matrix, counting all the stones for each source of income for each socio-economic group.
- 11) Repeat the same process for expenditures. Create a new matrix, using local symbols if desired, asking the group to list all of their expenditures, including savings.

- 12) Ask the representatives to collect back their stones and to redistribute them according to how they spend their money

For the Gender Group

1. The process is almost the same. Put two columns on the horizontal matrix - men, women. Again let the group list their sources of income.
2. Again collect 50 stones. Divide them equally among the men and the women (25 each). Select a representative and start the distribution.

Hints:

Discussing incomes and expenditures can be highly sensitive. People are reluctant to talk about these issues in public. Be sure to reassure the participants that you do not want to know about amounts, but will only be talking about relative proportions for each group. There will be a sensitive moment when you ask the group to agree on how to divide the stones among the rich, middle and poor groups. Be sure that you limit the total number of stones for the community as a whole. We suggest 50 stones.

Daily Activity Clocks

Daily Activity Clocks illustrate all of the different kinds of activities carried out in one day. They are particularly useful for looking at relative work-loads between different groups in the community. Comparisons between clocks show who works the longest hours, who concentrates on a few activities and who does a number of tasks in a day, and who has the most leisure time and sleep. To learn what different people do during one day and how heavy their workloads are.

Female and male focus groups; you can also do this with focus groups of boys and girls, if there is time.

Guiding Questions

- 1) For each person, how is his or her time divided?
- 2) What is the difference between the women's and the men's clocks?

- 3) Who has the heaviest workload?
- 4) Who has time for rest and leisure?
- 5) How much time per day do women or girls spend collecting water and fuelwood?

Steps in Undertaking the Activity

1. Organise separate focus groups of men and women.
Make sure that each group includes people from different socio-economic groups.
2. Explain that you would like to learn about what they do on a typical day.
3. Ask the groups of men and women to prepare their clocks. You can start by asking them what they did yesterday and how they generally pass their day this time of the year. It's easy to start the clocks by asking them what time they usually get up.
4. Build up a picture of all the activities they carried out the day before, and how long they took. Plot each activity on a circle which represents a clock. Activities that are carried out at the same time (such as child care and cooking) can be noted in the same spaces.
5. When the clocks are done, ask questions about the activities shown.
6. Note the present season (for example raining season, dry season).
7. If there is time, ask the participants to produce new clocks to represent a typical day in the other season.
8. Compare the clocks.
9. Use the key questions above to guide a discussion about people's activities and workloads.
10. Be sure to draw a picture of the clocks on paper. Be sure that the name of the group/person is noted on the clocks and also the season of the year.

Hints: You can start by drawing a picture of how you spent your day yesterday. Draw a big circle on paper and indicate when you wake up, what time you go to bed and all the activities in-between. No need to go into great detail, but be sure to show that all kinds of activities are included such as work, housework, child

Focus Group Discussion

Focus Group Discussion (FGD) is a tool for studying ideas in a group context (Olawoye, 2004). A group is a collection of people interacting with one another to make a decision. A focus group is typically composed of seven to ten (7-10) participants who have some characteristics in common that relates to the topic of the discussion, for instance poor women, nursing mothers, rice farmers, youth, etc. The significance of FGD as outlined by Igbokwe and Enwere (2001) is that they tap into human tendencies and produce qualitative data that provide insights into the attitudes, perceptions, feelings and manner of thinking and opinions of participants on issues like products, services opportunities, problems and constraints. An important feature of the FGD is that it relies heavily on discussion and interaction within the groups and yields more useful information when the participants are able to talk to each other about the topic of interest. FGD can be used to provide information to decision makers before, during and after a programme is implemented or service provided. For example a FGD study was undertaken in Yobe and Bauchi states by Gwaryet *al.* (2009) prior to the launching of Fadama III in North Eastern Nigeria to constitute a baseline for the project.

Procedure for Conducting an FGD.

Igbokwe and Enwere (2001) outlined the following as the procedure for the successful conduct of a Focus Group Discussion: Select gender and age disaggregated groups (Male Adults; Female Adults; Male and Female youths) to discuss with the FGD team separately on subjects that affect all members of the community. The reason for separation of the groups is to enable women and youth to express their feelings

freely which may not be culturally possible in the presence of adult males.

On a neutral location get the members to sit in a circular form together with members of the team:

- 1) Make introductions to get everybody to be familiar with each other and the subject of discussion
- 2) Begin by making some observations and ask the lead question ensuring that questions requiring 'yes' and 'no' answers and value judgment are avoided.
- 3) Record all comments as given by members of the group.
- 4) Watch out for inactive participants in the group and encourage them to speak out their opinions
- 5) Ensure constant triangulation (cross-checking) by presenting the same issue from different perspectives.
- 6) Limit the session to two (2) hours and reconvene at agreed date if necessary
- 7) Supplement with vignettes, illustrations, rankings and matrix scoring with local materials.

Transect Walk:

These are systematic walks with key informants through the area of interest, observing, asking, listening, looking and seeking problems and solutions. The objectives of a transect work includes; 1) To learn more details about the environmental, economic and social resources in a community; 2) To organise and refine spatial information and to summarise local conditions in the area. The information is gathered from direct observations while walking a straight line through the community. The findings can be mapped on a transect diagram. The resulting diagram is a sort of one-dimensional map of a line cut through a village. It depicts a cross-section of an area along which a number of issues are recorded. Most transect walks result in the outsiders discovering surprising local practices such as indigenous conservation practices, multiple uses of plants, and a great variety of

crops. It has been instructive for many professionals to realise how much they do not see or do not think to ask about. For practical purposes observations can be made and recorded at every 5km interval especially in a transect drive with community members. Some of the information that could be recorded are locations (altitude, latitude, longitude); soil type; vegetation; water sources; crops; cropping system; livestock; land management system; natural resources; land degradation; observed problems and opportunities. Transect can also be organised for specific crops such as rice, sorghum, millet and soybean. A transect could be used to assess varieties planted, area planted, common pests and diseases, yield, farmers preferences and comments.

Note: *Transect can be undertaken walking (transect walk) driving and stopping at designated points (5km) termed transect drive or a ride on the back of a horse, donkey or camel (transect ride)*

Questions to Ask in Facilitating a Transect Walk

- 1) What are the major activities carried out in each zone of the community? By whom?
- 2) What services and infrastructure are available in each zone?
- 3) What are the natural resources available in each zone? Who uses them and for what purpose?
- 4) What economic opportunities are available in each zone?
- 5) Are the rights of access in each zone different for women and men, different ethnic groups or other socio-economic classifications?
- 6) What are the principal problems/challenges?
- 7) What interventions for improvements have been made /can be made?

Steps for Transect Walk

- 1) Organise between 2-4 groups with a mixture of participants such as women and men, young and old with each group having 2-3 team members.
- 2) Define responsibility for groups. Either the different groups take separate walks showing the areas of most importance to them or

each group can have responsibility for a different topic while they all walk together. For example one group to focus on soils, land use and cultivation while another on infrastructure, housing and services with yet another group paying attention to trees vegetation and water resources.

- 3) Using the village resource map, and advice of the community members, choose a more-or-less straight line through the area. The line chosen should take as many of the different physical zones, types of vegetation, land-use areas and sections of the community as much as possible.
- 4) Draw the transect diagram after the walk together with the participants. Also ask participants some things they will like to see in their community that are not currently on the map, in other words to draw a picture of what they will like the future to look like (visualization of expectations).

Double Difference Estimator

The double difference (DD) estimator is an evaluation technique used to measure the short term or long term programme effects or impacts on participants of an agricultural or rural development investment programme (Verner and Verner, 2005). It is used to estimate and compare changes in income/revenue pre and post programme for participants and non-participants (Chen *et al.*, 2006). To use this model both project participants and non-participants per capita income value for before and after programme are computed and used. A positive double mean difference in income/revenue indicates a project impact on the income of the participant, while a negative double mean difference in income value indicates that project have not increased participant's income (Bosede, 2009).

Before the estimator can be used, the data should meet the following requirements: There should be economic and socio-economic data on both project participants and non-participants and also same data on all individuals obtained both before and after the project. Thus, the secondary baseline data collected at the beginning of the project is to be used to provide the data 'before', while the primary data collected

during the evaluation survey provides the data 'after' the project. This provides the estimates difference between the per capita changes in income for the participants and non-participants using the simple form of the double difference. The estimator is the difference between the average changes in the outcome variable for the two groups. A positive and a significant coefficient of the predicted impact variable indicate that the project had positive impact on the per capita income of the participants (Wakawa, 2014).

The Simple Version of the Double difference

The model can be specified as follows:

$$DD^S = \frac{\dots\dots\dots(i) \dots\dots(i)}{\text{the difference between the average cha}}$$

$$DD^S = \left[\frac{1}{P} \sum_{i=1}^P (Y_{i1a} - Y_{i1b}) \right] - \left[\frac{1}{C} \sum_{j=1}^C (Y_{0ja} - Y_{0jb}) \right]$$

income (impact or effect of the project)

Y_{1ia} = per capita income of participants after project

Y_{1ib} = per capita income of participants before project

Y_{0ja} = per capita income of non-participants after project

Y_{0jb} = per capita income of non-participants before project

P = number of participants (No.)

C = number of individuals in the control group (non-participants)

Steps in Determining Double Difference

The double difference method entails comparing a treatment group with a comparison group both before and after the intervention. The main steps are as highlighted by follows:

- Step 1: You need a baseline survey before the intervention is in place, and the survey must cover both non-participants and participants.
- Step 2: You then need one or more follow-up surveys after the programme is put in place. These should be highly comparable to the baseline surveys (in terms of scope of the questionnaire or the interview checklist or issues). Ideally, the follow-up surveys should be of the same sampled observations as the baseline survey.

If this is not possible, then they should be the same geographic clusters or strata in terms of some other variable.

- Step 3: Calculate the mean difference between the after and before values of the outcome indicator for each of the treatment and comparison groups.
- Step 4: Calculate the differences between these two mean differences. That is your estimate of the impact of the programme. This is the simplest version of double difference. You may also want to control for differences in other variables, possibly allowing for interaction effects with the programme (so that the gain from the intervention is some function of observable variables). A suitable regression model can indicate these variations.

Measurement Problems Associated with Use of the Double Difference Method

The central question has been the problem of attribution to programme interventions. This issue arises due the fact that any outcome that a programme aims to change has many other factors that could affect it. This makes it difficult to attribute the impacts to one particular programme intervention. Impact studies basically face three interrelated challenges: (a) establishing a viable counterfactual (the predicted outcome in the absence of the intervention i.e., what would have happened to the participants, had they not participated in the programme); (b) attributing the impact to an intervention; and (c) coping with long and unpredictable lag times (Alston and Pardey 2001; Salter and Martin 2001). They added that other issues that may confound studies include endogeneity in program placement and extension-farmer interactions, farmer-to-farmer information flow, selection bias, and policies that affect various measures. Very few studies use an experimental design, and some studies that have used control groups have run into design problems. Smale *et al.* (2008); Davis and Nkonya (2008) explained that two common sources of bias are programme placement or targeting bias, in which the location or target population of the programme is not random, and self-selection

bias, in which households choose whether or not to participate, and thus may be different in their experiences, endowments, and abilities. It can therefore, be suggested that to overcome the previously mentioned biases is to use an experimental approach to construct an estimate of the counterfactual situation by randomly assigning households to treatment (participant) and control (non-participant) groups. Random assignment ensures that both groups are statistically similar (i.e., drawn from the same distribution) in both observable and unobservable characteristics, thus avoiding program placement and self-selection biases. However, such an approach is not feasible in demand-driven programmes in which participants make their own decisions of whether to participate and the kind of activities to do in the learning process.

CONCLUSION

This chapter has made it clear that the era of top down approaches to project planning, monitoring and evaluation is over. It is evident that participatory programme planning, monitoring and evaluation represent an idea whose time has come. It need to be realised that local communities possesses latent resources of knowledge, experience and indigenous capacity which can a make a difference in sustainable programmes of rural development when and if properly harnessed in participatory project planning, monitoring and evaluation. The conventional, top down approaches to programme development are not only out of tune with current democratic trends and transformative extension but equally important is the fact that the proponents of the participatory approaches are concerned with issues of power, powerlessness and empowerment and giving a 'voice' to the poor which the contemporary participatory development paradigm of stakeholder involvement represents. Therefore to move forward, it is advocated that use of participatory approaches should be the norm rather than an exception in the design, implementation, monitoring and evaluation of rural development projects and programmes. There is a rich and diverse menu of tools and techniques which hold potential for more and enduring involvement of stakeholders and

beneficiaries in project planning, implementation, monitoring and evaluation. The need to take advantage of such methodology for more sustainable development cannot be overemphasised.

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