THE ROLE OF COMMUNITY–DRIVEN PARTICIPATORY MONITORING AND EVALUATION IN EMPOWERING COMMUNITIES AND IMPROVING THEIR DECISION MAKING

A CASE STUDY OF THE KARI/CIAT COLLABORATIVE PROJECT, COASTAL KENYA.

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SUPERVISOR: SHARON PENDERIS
DECLARATION

I, the undersigned, hereby declare that this mini-thesis is my own work, that it has not been submitted for any degree or examination in any other University, and that all the sources I have used or quoted have been indicated and acknowledged as complete references.

Signed:…………………………………………………..

Date:……………………………………………………
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ABBREVIATIONS

ATIRI  Agricultural Technology and Information Response Initiative
EE    Empowerment Evaluation
CIAT  International Centre for Tropical Agriculture
CD-PM&E  Community driven participatory monitoring and evaluation
CL    Coastal Lowland
FFS   Farmer Field School
KARI  Kenya Agricultural Research Institute
MOA   Ministry of Agriculture
R&D   Research and Development
PIM   Participatory Impact Monitoring
PM&E  Participatory Monitoring and Evaluation
SWMP  Soil and Water Management project
FAO   Food and Agriculture Organization
IFAD  International Fund for Agriculture Development
ASAL  Arid and Semi-Arid Lands
SICPIPFI  Strengthening the Institutional Change Process by Intensifying Participation of Farmers in Research and Development
TMT   Tree Management Team
UWC   University of the Western Cape
ABSTRACT

Community-driven participatory monitoring and evaluation (PM&E) offers new ways of promoting learning and change. These processes have emerged as important tools for enhancing the participation of local people in planning, decision making and managing their activities. Local people are involved in the design and implementation of mechanisms for observing, systematizing, analyzing and reflecting on their project activities and goals as a basis for joint decision-making. However, whether these systems can promote learning, group functioning process, and community empowerment, is an empirical question.

A comparative analysis of three categories of groups; with, without and those that partially integrated some elements of PM&E was conducted in Kenya. A total of 49 farmer field school (FFS) groups (18 with PM&E, 18 without PM&E and 13 that partially integrated some elements of PM&E) were surveyed in Coastal Kenya from three projects implemented by KARI- Mtwapa research centre in partnership with the International Centre for Tropical Agriculture, Ministry of Agriculture and other NGOs.

Individual interviews were also conducted to assess the level of empowerment as a result of PM&E systems at individual level and a total of 37 individuals from groups with PM&E systems and 36 individuals from groups without PM&E were interviewed. The empirical findings comparing groups with and without PM&E showed that: (1) there was more consistent participation in group meetings and activities for groups with PM&E compared to those without. For example, the study found that FFS groups with PM&E have continued to hold regular meetings and monitor their activities despite the fact that the learning cycle was completed. In contrast, those without PM&E had stopped meeting as regularly as they used to do previously. (2) Groups with PM&E demonstrated higher levels of trust and joint decision-making. For example, groups with PM&E indicated that important decisions within the group were made through discussions and participation of all members. (3) Groups with PM&E were more able to approach project staff and
other service providers to articulate their needs. These groups had used the process of establishing the PM&E to improve the planning their activities and hold project staff accountable to the joint work plans. (4) Results on improvements on financial accountability and transparency were mixed, where groups with and without PM&E had not significantly improved the management of group funds.

These results indicate that PM&E can provide a systematic process for self-reflection and learning; documenting experiences and lessons; and assessing progress. In effect, the PM&E system empowers communities to take charge of their development initiatives, and can be regarded as a means for demanding greater social responsiveness and ethical responsibility, within groups. Finally, these systems can play an important role in enhancing group decision making process and ultimately empowering them.
CHAPTER ONE

1 INTRODUCTION

1.1 Background to the research and study area

1.1.1 General overview of Kenya

Kenya is located in East Africa and straddles the equator. It covers an area of 582,646 km$^2$ of which 13,396 km$^2$ comprises water. It is bordered by Tanzania to the south and Uganda to the west, Sudan and Ethiopia to the north and Somalia to the east. The southeast coastline on the Indian Ocean has several natural harbours that have proved advantageous to the Kenyan economy (GoK, 2004; Turner, 2007).

The Kenyan economy is relatively strong and diversified by African standards (GDP sector: 25% Agriculture, 16% Industry and 59% Services), almost making Kenya the economic powerhouse of Eastern and Central Africa. The country has a good transportation infrastructure and fairly effective educational and health systems. However, over the past two decades, population growth and deteriorating terms of trade, particularly for tea and coffee, have contributed to weak economic growth and decline of living standards (UNESCO, 2005). The Human Development Report (2004) classified Kenya under the low human development category and ranked it 148 out of the 177 countries in the World. It is also estimated that nearly half of the country’s 30 million inhabitants live below the poverty line (UNESCO, 2005; Welfare Survey, 1997).

Kenya has eight administrative provinces (namely Central, Coastal, Eastern, Nairobi, North Eastern, Nyaza, Rift Valley and Western provinces) which are further divided into 78 districts and municipalities. Provincial Commissioners (PCs) head the provinces while District Commissioners (DCs) head districts. The districts are sub-divided into divisions, locations and sub-locations that are headed by District Officers (DOs), Chiefs and Assistant Chiefs, respectively (UNESCO, 2005).
In order to alleviate the prevailing poverty and attain sustainable development, the government is working in collaboration with different developmental actors, which include international and national research organizations, international financial institutions, NGOs and development associations at national, regional and local levels.

1.1.2 The Coastal Province case study area

The Coastal Province of Kenya comprises six districts, namely Mombasa, Kwale, Kilifi, Malindi, Ramu and Tana River. The Kenya Agricultural Research Institute (KARI) has one of its research centres located within this coastal region. This regional centre is known as Mtwapa, which is situated 20 km north of Mombasa. The regional research centre is mandated to carry out adaptive research relevant to the coastal region’s crop and livestock production systems in all six districts of the Coastal Province (Kiome, 2005; Njunie, 2002). These districts cover a total land area of 4.6 million ha, out of which 3 million ha comprises agricultural land.

However, this research was conducted in only four of the six districts, namely Mombasa, Kwale, Kilifi and Malindi. All four districts fall within the jurisdiction of the KARI-Mtwapa regional research centre which has been the operating base for the researcher.

Coastal Kenya’s KARI-Mtwapa regional research centre was chosen as the case study area; firstly, because it consists of districts that have farmer field school groups that have completed the full cycle of designing community driven, participatory monitoring and evaluation systems (PM&E) and others that have not. This full cycle includes being involved in the planning process, developing monitoring indicators, data collection, data analysis/reflection as well as making decisions and adjustments when needed. Secondly, this centre has three projects that have incorporated PM&E systems at different levels, thus providing an opportunity for this research to examine the role that such PM&E systems have played in empowering communities/groups by comparing groups that instituted PM&E systems and those that didn’t.
The three projects include the Soil and Water Management project (SWMP), Agricultural Technology and Information Response Initiative (ATIRI) and the Cashew Nuts project. The SWMP project comprises 27 groups (9 with PM&E and 18 without PM&E). The project is located in Kilifi district (12 groups) and Kwale district (15 groups). The ATIRI project comprises 31 groups (15 with PM&E and 16 without). It is located in all the four selected districts of Kilifi (13 groups), Kwale (7 groups), Malindi (5 groups) and Mombasa (6 groups). Finally, the Cashew Nuts project comprises 36 groups (27 from Kilifi and 9 groups from Malindi). In the Cashew Nuts project all the groups integrated a few elements of PM&E. The three projects will be examined in more detail in the section below.

1.1.3 The Strengthening Institutional Change Process by Intensifying the Participation of Farmers in Research and Development Process (SICPIPF) project

The International Centre for Tropical Agriculture (CIAT) and the Kenya Agricultural Research Institute (KARI) initiated a collaborative research and developmental project entitled “Strengthening Institutional Change Process by Intensifying the Participation of Farmers in Research and Development process (SICPIPF)”. One of the main objectives of this project was to develop and strengthen participatory monitoring and evaluation (PM&E) processes to critically analyse institutional change processes, drive lessons and assess their impacts on information feedback and knowledge flow processes and on the effectiveness of research and development (CIAT-Technical Report, 2005).

In order to achieve the above objective, the SICPIPF project, among other activities, conducted capacity building workshops, mentoring activities and the actual establishment of PM&E systems with project staff from KARI. Three projects under the Coastal Kenya’s KARI-Mtwapa research centre benefited from these capacity building initiatives conducted by the SICPIPF project and were thus selected as case study projects for this investigation. These projects include the Soil and Water Management project (SWMP), the Agricultural Technology and Information Response Initiative (ATIRI) and the Cashew Nuts project. These projects later designed community driven participatory
monitoring and evaluation (PM&E) systems with some of their respective farmer field school groups. The process of designing these PM&E systems can best be classified into three phases. These phases are classified according to the different level of training in PM&E that was carried out to the groups under the three projects. Since the SICPIPF project wanted to introduce the concept of PM&E to more groups, it adopted different training strategies for the different groups in the three case study projects as described below:

Phase one is the **Soil and Water Management project (SWMP)**. Here the staff from the CIAT-SICPIPF project was involved directly in designing community driven PM&E systems with farmer field school groups under the Soil and Water Management (SWMP) project together with project staff from SWMP.

Phase two is the **Agricultural Technology and Information Response Initiative (ATIRI)**. The CIAT-SCIPIPF project trained KARI staff in the ATIRI project in designing the PM&E systems. Thereafter, the KARI-ATIRI project staff trained their farmer field school groups and designed the PM&E systems with them, but without CIAT-SCIPIPF’s direct involvement with the farmer field school groups.

Phase three is the **Cashew Nuts project** where KARI staff trained another stakeholder, namely the Ministry of Agriculture extension staff, who in turn trained the farmer field school groups under the Cashew nuts project and only integrated some of the components of community driven PM&E systems. In training the farmers field school groups there was no direct involvement, neither of the CIAT-SCIPIPF project staff nor the KARI staff.

### 1.1.4 The Farmer Field School Approach

The Farmer Field School (FFS) approach was introduced in Kenya in 1995 by the Food and Agriculture Organization (FAO) and was institutionalised in 2000 as an extension methodology (Mataka, 2001). Farmer field schools (FFS) is a participatory approach that uses non-formal adult education methods based on participatory training and experiential learning (Mureithi et al., 2005). It is an adaptation of the group approach to extension and
learning as it encourages members to learn from one another and develop individual and collective action. The groups under the farmer field schools share common interests, are faced with similar problems, and thus are able to mutually support one another in the process of learning. Additionally, farmer field schools enhance group relations (trust building, team building, leadership skills etc), which are critical for not only creating an enabling environment, but also sustainable community structures which are necessary for mobilising communities to design community based PM&E systems (Onduru et al., 2002).

1.2 The Research problem

In recent years, participatory monitoring and evaluation in the development arena has gained increased prominence over the more conventional approaches to monitoring and evaluation (Coupland, 2001; Estralla et. al, 2000). However, Estralla et al (2000) and Mayo (2001) observed that until recently, there has been little documentation on how PM&E works in practice or its successes and challenges. Although many people acknowledge that PM&E is important, few can explain how it should be designed and implemented at community level (Miller & Campbell, 2006: Estralla et al, 2000: Mayo, 2001). Where PM&E has been used in the past, it was often at program or project level and usually with the aim of providing the project donor an account of the activities executed in readiness for more funding (Estrella et.al, 2000; Mayo, 2001; Kusek & Rist, 2004).

Miller and Campbell (2006) conducted a review of empowerment evaluation by examining 47 case examples published from 1994 through June 2005. The study found that there are wide variations among practitioners in the adherence to participatory/empowerment evaluation principles and weak emphasis on the attainment of empowered outcomes for program or project beneficiaries.

Paradoxically, many benefits are promised by PM&E. For instance, one such benefit is that it may serve as an instrument to foster experiential learning as well as dialogue and negotiation among stakeholders, such that communities may better engage with service providers through better articulation of their needs. Another benefit is to provide
decision-support for process-oriented management and planning to enhance downward accountability to communities. However, not much is known currently about how to validate such claims. Reviews conducted around the world, have shown that in most cases, much effort has been placed on documenting the findings and results of participatory evaluation, whereas a few examples illustrate the process of conducting community based PM&E and how they empower communities (Miller & Campbell, 2006; Hohenheim, 2002; Estrella & Gaventa, 1998). Therefore the limited availability of detailed research and the apparent absence of research publications and documentation on the process of conducting and designing community driven PM&E systems and their role in empowering communities/groups propelled the researcher to undertake this investigation.

1.2.1 Aims of the study

The aim of this study was to establish the role that community driven PM&E systems play in empowering communities, strengthening group organization and improving information flow processes for the purposes of better decision-making by comparing groups that designed PM&E systems and those that did not in the three selected pilot projects under KARI Mtwapa research centre. Against this background the more specific objectives of the study were to:

1. Provide the study with an interpretive theoretical base and conceptual framework.
2. Provide a general background of the case study area of Mtwapa, Coastal Kenya.
3. Provide background information of the SICIPF- CIAT/KARI collaborative project and general overview of the nature and extent of community based PM&E systems initiated by the project with the pilot farmer field school groups under the SWMP, ATIRI and Cashew Nuts projects.
4. Assess the level of community empowerment and improved decision-making as a result of community based PM&E systems by comparing:
   1. The farmer field school groups that designed PM&E systems and those that did not, on their ability to engage with service providers through better articulation of their needs.
2. The farmer groups with PM&E systems and those without PM&E, on their ability to reflect, learn and make informed decisions through the use of information generated from their M&E processes.

5. Provide recommendations on how best community based PM&E systems can be structured to improve community empowerment and decision making.

1.2.2 Research questions

In order to achieve the above stated aims and objectives, this study attempted to answer the following research questions: Does community driven PM&E strengthen local organizational capacity? Does it enhance participation within groups? Does it lead to better information generation and sharing within the groups? Does it lead to the decision-making process? Does it improve accountability and transparency within groups and management of community projects? Does it lead to better information feedback? Does PM&E increase accountability by service providers and finally does PM&E lead to increased involvement of communities in projects (planning, designing, implementation, monitoring and evaluation)?

1.3 Research design

A research design is vital in that it provides a structure or framework for collecting and analysing information for the research. Mouton (1996) stipulated that a research design is the set of guidelines to be followed in addressing a research problem.

1.3.1 Research methodology

According to Mouton (2001) research methodology pays attention to the research process and the paraphernalia of tools and procedures to be used. For this study, combinations of different research tools were employed in order to gather the relevant information. Both qualitative and quantitative methods were necessary for a study of this nature in order to gather comprehensive information on the research topic. Waysman and Savaya (1995) observed that combining qualitative and quantitative methods provides not only the
unique advantages of each method, but also certain additional advantages that stem from their conjoint application. Additionally, Cook and Reichardt (1979) noted that a combination of these methods may have the potential to produce a study that is superior to that which can be produced by any single-method approach.

Data gathering entailed a literature review, secondary data analysis, the case study approach and use of a structured questionnaire to gather quantitative data. Qualitative research methods such as direct and unobtrusive observation proved most useful to a study of this nature, whereas group discussions and semi-structured interviews were used with the view of complementing and substantiating quantitative findings.

1.3.1.1 Literature review

The literature review entailed the researcher reviewing the related body of literature in order to discern relevant and pertinent information and debates that are related to the topic (Reid, 2000; Mouton, 2001). The review guided the researcher to concentrate his efforts where information was deficient, rather than having a mere duplication of similar efforts. It has further helped the researcher to provide a conceptual background to this study and to locate the topic in a body of theory.

1.3.1.2 Secondary Analysis

This exercise entailed scrutinizing and reanalysing documents and information compiled by other authors. Secondary analysis was useful in this study as it helped to incorporate ideas found in previously executed research reports (published and unpublished), technical reports, statistical reports, project strategic plans, project proposals, village action plans, group records and social maps related to the research questions. This ultimately saved the researcher time and avoided duplication of efforts.

1.3.1.3 The Case study:

This investigation adopted a case study approach and according to Yin (1984:23) a case study research method is defined as empirical research that examines a contemporary
phenomenon within its real-life context. The case study area of this research is Coastal Kenya which falls under the Mtewapa regional research centre and is situated about 20 km from Mombasa. Four of Coastal Kenya’s six districts were selected for the case study area and these fall under the mandate of Mtewapa research centre. They were selected due to their accessibility, distance from the research centre and availability of farmer field school groups that had designed PM&E systems and groups that did not to act as control. The four districts are Mombasa, Kwale, Kilifi and Malindi.

1.3.1.4 Data Collection

1.3.1.4.1 Quantitative data

According to Casley and Kumar (1988), quantitative data is needed when a number, rate or proportion related to the target population must be estimated. This study used a structured individual questionnaire (Appendix I) to gather quantitative information from selected individual group members under the soil and water management project (SWMP). A group questionnaire was also used to gather both quantitative and qualitative data from different FFS groups (Appendix II)

All the individual respondents were selected from the farmer field school groups under the SWMP project which, as described earlier, comprised phase one of establishing PM&E systems. Under the SWMP project there were groups that had fully implemented PM&E systems and those that did not. Therefore from the 9 SWMP groups with PM&E systems, 4 groups were selected using systematic random sampling, where every second group was selected and from each of the 4 selected groups 10 individual members per group were selected using systematic random sampling depending on the size of group, this gave a total of 40 members. However, the actual number of individuals interviewed was 37. Similarly, from the 18 SWMP groups that did not design PM&E systems, 4 groups were selected using systematic random sampling where every 4th group was targeted. From each of the 4 groups, 10 members per group were selected, again using systematic random sampling depending number of members per group, giving a total of 40, but we only managed to interview 36 individuals.
Table 1.1 below shows that 27 individual members were interviewed from the Kilifi district (representing FFS groups with PM&E), while 46 individual members were interviewed from the Kwale district (representing 36 FFS groups without PM&E and 10 with PM&E). Therefore, the total sample size for individual members interviewed amounted to 73 persons.

It was important to interview individuals from the two different groups as respondents, from the farmer field school groups that did not implement the PM&E systems not only acted as a control, but also provided a basis for comparison. This was accomplished by comparing the level of empowerment that had occurred at individual level between individual group members under the SWMP project that had instituted PM&E systems and those individual members that did not. The level of empowerment was determined, amongst others by examining the level of participation in group meetings by individual members, the ability to keep and use individual records, examples of decisions made as a result of records kept, knowledge of the group resources, objectives and constitutions by individual members. For the purposes of this study an individual group member was chosen as a unit of analysis.

**Table 1.1: Number of individual interviews per district**

<table>
<thead>
<tr>
<th>Groups with PM&amp;E</th>
<th>District</th>
<th>Individuals interviewed per group with PM&amp;E</th>
<th>Groups without PM&amp;E</th>
<th>District</th>
<th>Individuals interviewed per group without PM&amp;E</th>
<th>Total no. of individuals interviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matatizo</td>
<td>Kilifi</td>
<td>10</td>
<td>K. Buruta</td>
<td>Kwale</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Mwananyati</td>
<td>Kwale</td>
<td>10</td>
<td>Hanzoro</td>
<td>Kwale</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Upendo</td>
<td>Kilifi</td>
<td>9</td>
<td>Peleleza</td>
<td>Kwale</td>
<td>10</td>
<td>19</td>
</tr>
<tr>
<td>Galana</td>
<td>Kilifi</td>
<td>8</td>
<td>Tuungane</td>
<td>Kwale</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>37</td>
<td></td>
<td></td>
<td>36</td>
<td>73</td>
</tr>
</tbody>
</table>
The group interviews were one of the most challenging parts of the study, as the researcher used group interviews to compile quantitative data. The researcher initially developed a checklist for group discussions with the different groups and after pre-testing it with four groups and getting an idea of the common responses coming through, the checklist was formatted into a group questionnaire. The group questionnaire was a compromise of a checklist and a structured questionnaire. It comprised both closed and open-ended questions. This was done for the purposes of easy analysis of information, but also to be able use a group as a unit of analysis and compare the level of empowerment among the different groups interviewed. This also enabled the researcher to interview as many FFS groups as possible.

What follows is a detailed breakdown of the number of groups interviewed, the project under which they fall, their district location and whether they had designed PM&E systems or not. In this study we interviewed groups with PM&E and groups without PM&E for the SWMP and ATIRI projects, as well as those groups that integrated elements of PM&E under the Cashew Nuts project.

The SWMP project was implemented only in two districts, namely Kilifi and Kwale. The total number of groups according to the list of groups obtained from KARI-Mtwapa centre for SWMP project was 27 groups, 9 of these designed PM&E systems while the remaining 18 did not. All the 9 SWMP groups with PM&E were selected to be interviewed because they were already few however one group did not turn up hence we interviewed 8 groups (6 groups from Kilifi and 2 groups from Kwale districts). From the 18 SWMP groups that did not implement PM&E, it was felt that interviewing half of them would provide a good comparison with the groups with PM&E. Nine groups were selected using systematic random sampling where every 2nd group was targeted but another group also turned up for the interviews due to poor communication hence we ended up interviewing 10 groups (4 groups from Kilifi and 6 groups from Kwale).
The ATIRI project was implemented in all the four case study districts of Kilifi, Kwale, Malindi and Mombasa. KARI Mtwapa provided a list of 31 groups (15 with PM&E and 16 without PM&E). From the 15 groups with PM&E, 10 groups were systematically sampled whereby every 3rd group was not selected thus leaving behind 10 groups which were interviewed as follows; 3 from Kilifi, 4 from Kwale, 2 from Malindi and 1 group from Mombasa. On the other hand, from the 16 groups without PM&E, 11 groups were sampled using systematic random sampling whereby every 3rd group was not selected. However the research team only managed to interview 8 groups, (3 from Kilifi, 1 from Kwale, 1 from Malindi and 3 from Mombasa). This was because 3 of the 11 sampled groups did not turn up.

The Cashew Nuts groups were said to have integrated some elements of PM&E. The researcher obtained a list of 36 groups from KARI-Mtwapa offices that comprised 27 groups from Kilifi district and 9 groups from Malindi district. From these 36 groups, 13 were selected using systematic random sampling whereby every 3rd group was targeted and interviewed including the 1st group. We thus interviewed 11 groups from Kilifi district and 2 groups from Malindi district.

The total sample of all interviewed groups (with PM&E, without PM&E and integrated elements of PM&E) amounted to 49 groups. The total number of groups interviewed per district was as follows 27 from Kilifi, 13 from Kwale, 5 from Malindi and 4 from Mombasa as shown in Table 1.2 below.
Table 1.2: Number of groups interviewed per district

<table>
<thead>
<tr>
<th>Project name</th>
<th>Total number of groups in the project</th>
<th>Groups interviewed</th>
<th>District</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Kilifi</td>
</tr>
<tr>
<td>SWMP</td>
<td>Groups with PM&amp;E</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Groups without PM&amp;E</td>
<td>18</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td><strong>Sub total</strong></td>
<td><strong>27</strong></td>
<td><strong>18</strong></td>
</tr>
<tr>
<td>ATIRI</td>
<td>Groups with PM&amp;E</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Groups without PM&amp;E</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td><strong>Sub total</strong></td>
<td><strong>31</strong></td>
<td><strong>18</strong></td>
</tr>
<tr>
<td>Cashew Nuts</td>
<td>Groups integrated some elements of PM&amp;E</td>
<td>36</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td><strong>Grand total</strong></td>
<td><strong>94</strong></td>
<td><strong>49</strong></td>
</tr>
</tbody>
</table>

The researcher was, however, aware that these methods are resource-intensive and work cannot be done on a large scale unless carried out over a long period of time. Another aspect is that in order to gather useful results the approach requires good-quality facilitation. Sanginga and Chitsike (2005:31) hinted that facilitation requires commitment and willingness to learn from and with farmers, discovering, seeing and experimenting, rather than instructing or teaching. Mastery of ‘soft skills’ such as listening, question asking, probing, effective dialogue and systemic conceptualisation, which are not typical components of academic training and do not come naturally to people, but need to be
internalised and mastered by the facilitator/researcher, were used. The researcher believes that he has over time acquired most of these skills due to his vast experience in this field in Eastern and Southern Africa over the past five years. Two enumerators were recruited for a period of two months to assist in facilitating the group discussion and taking comprehensive notes on the group questionnaire and language translation.

1.3.1.4.2 Qualitative data

In addition to quantitative data collection methods, this research also utilised qualitative methods for data collection in order to gain an in-depth-understanding of the topic in question. According to Stern, et al (2004:95) and Casley & Kumar (1988:5), qualitative methods encourage more discussion and involvement of the respondents who may be individuals, focus groups, or village committees. The tools used for data collection are a rich set, familiar to anthropologists and other qualitative researchers. Furthermore, qualitative tools allow information to be collected on complex issues and can generate useful insights into a community and its dynamics. The qualitative research methods used in this investigation included semi-structured interviews, direct observation and group interviews.

1.3.1.4.2.1 Semi-structured interviews

Flick (1998) noted that certain open-ended questions must be used in the interview situation as a form of interview guide. This research conducted eight semi-structured interviews with agricultural extension staff from the Ministry of Agriculture. Two extension staff, from each of the four districts of Kilifi, Malindi, Kwale and Mombasa were interviewed using a check list (Appendix III). The two extension staff that were interviewed per district were purposely selected based on whether the sampled groups fell under their jurisdiction. The rationale behind this was to understand the manner in which the extension staff have been interacting with the farmer field school groups, the level of PM&E systems that was established with the different groups and their perception of the role of PM&E in empowering communities.
1.3.1.4.2.2 Observation

Observation was used as a methodology for data collection by systematically and keenly noting and recording the flow of events. This method was used during both group and individual interviews at community level and played a crucial role in verifying some of the responses to questions such as: Do you have a visitor’s book? Do you keep record of your activities or minutes? Do you attend meetings? The researcher would simply observe if indeed such the records were available and who was keeping or not keeping such records.

1.3.1.5 Data processing, analysis and presentation

As noted from the preceding discussion, two sets of data were collected, namely qualitative and quantitative data. The data from both individual and group questionnaires were coded, processed and analysed using the Statistical Package for Social Scientists (SPSS) and presented in the form of frequencies, tables, graphs and charts. The explanation and responses from the different group discussions/interviews have been grouped into related themes, patterns and categories in order to answer the different research questions under study. This data has also been presented in the form of written textual quotes, frequencies, graphs and labelled categories.

1.3.2 Research procedure

In order to gather both qualitative and quantitative data the following procedure was applied:

After obtaining permission from the Director of KARI in Kenya to conduct the research, the researcher organized a planning meeting that was held at the KARI- Mtwapa Regional Research centre (9th to 19th January 2007) and was attended by the researcher, one CIAT representative and three representatives from KARI-Mtwapa. The meeting was aimed at sharing the objectives of the study and fine tuning the tools for data collection
especially the individual and group questionnaires. This meeting was further used for selecting the sample groups and individual members to be interviewed, both during the pre-testing phase of the study and during the actual data collection phase.

As mentioned earlier, the researcher recruited two enumerators (male and female) to assist in data collection and facilitation of group discussions and individual interviews. The two enumerators were trained in data collection and the training entailed going through the questionnaire, question by question to understand it first in English then interpreting it in vernacular language, namely Kiswahili.

The actual field data collection was undertaken between the periods of January to March 2007. Semi-structured interviews were conducted upon arriving in each of the four districts with two front line staff from the Ministry of Agriculture who are collaborators with KARI, followed by individual and group interviews.

1.4 Motivation for the study

The researcher has been working for CIAT, as a community development facilitator and research assistant for past five years (2001-2006). CIAT has been involved in testing tools and methods for promoting participation and tracking changes at community level under different pilot projects in Eastern and Central Africa in partnership with national research organizations of respective countries. One of CIAT’s areas of research is developing participatory monitoring and evaluation systems that are appropriate for rural communities. The researcher has been involved in designing and setting up community-driven participatory monitoring and evaluation systems on a pilot basis with communities in Eastern and Southern Africa.

1.5 Limitation of the study

There were some limitations in the process of executing this study and they included the following:
Firstly it was a big challenge to properly translate some of the key terminologies into the local language especially with groups that had not previously developed PM&E systems. This included, for example, asking some of the questions in the local language, so that the respondents could understand what they were being asked without having to define the term for them. A typical example is the use of terminology like monitoring and evaluation. In order to minimise this problem, the research team used the PM&E graphics when introducing the topic of M&E in order to establish a common understanding of local terminology for the word monitoring and evaluation which was then referred to throughout the discussion or interview.

Secondly, the researcher had to rely heavily on the two enumerators who were well conversant with the local languages used by different groups. However elements of information distortion through translations cannot be ruled out completely.

Thirdly, some of the groups that were selected to be interviewed had disintegrated or had merged with other groups and the research team had to make impromptu replacements for such groups within a short period of time. This was particularly the case for the groups that did not implement PM&E systems.

Despite these limitations, the researcher is confident enough that lessons drawn from the study serves as a point of departure for other related research on the topic. The findings of the research are still reliable and will provide insight not only to CIAT and KARI, but also to other development partners that are involved in designing community driven PM&E systems.

1.6 Research agenda

Chapter one introduced the research problem that led into the formulation of the research questions, aims of the study, research design and methodology to be used. This thesis has been divided into five chapters. Below is an outline of how the subsequent chapters proceed:
Chapter 2 (entitled Literature review and theoretical framework) provides the literature review and a theoretical background of the study and lays a solid conceptual foundation for the research.

Chapter 3 (entitled General background of Coastal Kenya’s Mtwapa research centre case study area) focuses on physical and demographic aspects of the case study area of Coastal Kenya’s KARI-Mtwapa regional research centre and the four districts that were selected for the interviews namely Mombasa, Kwale, Kilifi and Malindi.

Chapter 4 (entitled CIAT and KARI collaborative project: The nature and extent of established PM&E systems) places the study topic in perspective. This is done by providing a general overview of the nature and extent of the PM&E systems established by the collaborative project with respect to KARI-Mtwapa’s mandate area of Coastal Kenya and the three case study projects.

Chapter 5 (entitled Main findings) provides a detailed account of the empirical field work undertaken in the different case study sites and presents the research findings on the research questions that were raised for investigation on the role of community driven PM&E in empowering groups and enhancing their decision making.

Chapter 6 (entitled Recommendations) presents general conclusions and recommendations on how best community driven PM&E systems can be structured to improve community empowerment and decision making.
CHAPTER TWO

2 LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

The last two decades have witnessed a growing interest amongst international development organizations and research institutes in the usage of participatory approaches to monitoring and evaluation of community development projects. This is a direct reflection of the international community’s disenchantment with conventional approaches to development in general and monitoring and evaluation (M&E) in particular (De Beer & Swanepoel, 1998; Complain, 1997; Estralla et al., 2000; Green, 1994; Mozammel & Schechter, 2005; Rubin, 1995; Talikdar et al., 2001).

The proponents of participatory approaches to development portray it as a centrepiece for achieving sustained development. However, despite its apparent popularity and resonance, it has remained a controversial and contested approach in some quarters in the development field. The subsequent sections, therefore, provide a review of some of the main arguments propounded by those who advocate for the use of participatory approaches in development, but also highlight the major criticisms leveled against these participatory approaches.

2.1.1 Arguments for participatory approaches in development

In recent years, participation has become a buzzword and means many things to many people. From a development concept, however, participation can be confusing because it involves processes such as information sharing, consultation, debate and empowerment. Scrutiny of the literature reveals that a host of authors (Chambers, 2003; Estrella, et al. 2000; Kenny, 1997; Korten, 1990; Oakley, 1991; Paul 1987; Penderis, 1996; Rahman, 1993) seem to agree that participation is a new form of development intervention and is essentially a self-transformation process and proactive experiential learning method aimed at creating sustainable development. Therefore every stage of the project cycle,
including M&E requires a participatory approach to the implementation of the project in order to achieve meaningful development.

There is now widespread recognition in the literature (Guijt, 1999; Njuki, 2004; Estrella et al, 2000; Rahman, 1993; Chambers, 2003), in name at least, that participatory development is critical for achieving sound resource management. However, this kind of development requires a more flexible and evolving process to plan for change and poses new challenges for decision-makers and evaluators alike. In particular, this requires major institutional reorientation at the policy level to ensure responsiveness to local demand and in order to empower and enable communities to act or participate (Rahman, 1993; Chambers, 2003).

Participatory approaches involve a two way interchange of decision making, views and preferences. According to Davids, Maphunye and Theron (2005) true public participation should be perceived as participation in decision making, participation in the implementation of development programmes and projects, participation in the monitoring and evaluation of development programmes and projects and participation in sharing the benefits of development.

The field of monitoring and evaluation that was previously dominated by program evaluators and program staff is now recognizing the importance of participation by all stakeholders in the M&E process. According to Estrella et al (2000:10) participatory M&E is distinguished from other more conventional monitoring and evaluation approaches, because of its emphasis on the inclusion of a wider range of stakeholders in the M&E process. Participatory M&E practitioners believe that the stakeholders who are involved in development planning and implementation should also be involved in monitoring changes and determining the indicators for ‘successes’. However, defining who the stakeholders are, who should be involved and to what extent or depth they can or want to be involved, is not necessarily an easy task. For instance, the traditional M&E process may include beneficiaries as stakeholders, but still, in practice, pays little attention to marginalized groups such as women, the poor, aged and non-literate sectors of society (Estralla et al, 2000; Coupal, 2001; Guijt, 1999).
In order to incorporate even the marginalized groups, it means that at the programme level, detailed outlines for actions can no longer be drawn up at the outset, since problem solving is based on partnerships and cooperation and the quest to achieve some externally identified goods. Because these programmes are designed to be responsive to changing community needs, one of the most pressing challenges is to develop participatory community based monitoring and evaluation systems that reflect local indicators to allow for on-going learning, correction and adjustment by all parties concerned (Estrella et al., 2000; Guijt, 1999). Njuki (2004) adds that participatory monitoring and evaluation systems are key for strengthening learning, self-reflection, facilitating institutional learning and change and promoting ownership of the project by the rural communities.

A host of authors (Ukaga & Maser, 2004; UNDP, 2004; Vernooy et al, 2003; World Bank, 2002) have pointed out that participatory M&E is an integral part of community empowerment that allows communities themselves to set their own goals, strategies and indicators and to actively monitor and evaluate whether they are moving towards achieving them. They further contend that community involvement in M&E will enhance transparency and accountability in resource use.

Kaaria (2005) further asserted that community driven participatory monitoring and evaluation systems enhance local learning, management capacity and skills in assessing the quality of service delivery. Besides tracking and monitoring government decision-making, the system involves communities in research and builds their capacity to bring about significant change and facilitates in-depth learning by large numbers of people on pertinent issues.

2.1.2 Criticisms against participatory approaches

It must however be mentioned here that some quarters have criticised the romanticism of participatory approaches (Bentley, 1994; Hailey, 2001; Mansuri & Rao, 2004; Martinusson, 2003; Neubert, 2000; Patton, 2005; Miller & Campbell, 2006; Patton, 2005).
Bentley (1994) has argued that practical experiences have revealed that the implementation of participatory research approaches under field conditions has proven to be more complicated than anticipated. Defending this argument, Hailey (2001) notes that issues of class, ethnic, gender, economic and linguistic differences between scientists, development workers and farmers may hinder smooth interaction between these stakeholders.

Martinusson (2003) adds that the political, cultural and institutional context may also not be conducive to ‘participation’. There is now a growing realization that communities are not always harmonic entities, and that there is no such thing as a stock of uniform, systematized, local knowledge available for assimilation and incorporation into research.

Another common critique is that participatory approaches are too slow, time consuming and expensive. Mansuri and Rao (2004) argued that, for example, the exercise of giving the voiceless, voice and choice could be costly under certain conditions. “…at the most basic level, it may involve real or imputed financial losses due to the time commitments required for adequate participation. In addition participation may lead to psychological or physical duress for the most socially and economically disadvantaged, because genuine participation may require taking positions that are contrary to the interest of powerful groups (Ibid: 20)”.

For Neubert (2000), though, despite participatory approaches being slow, time consuming and expensive, even when a specific (technical) solution to a local problem has been developed, the question of scaling-up i.e. how the output and benefit of the approach or research can be distributed to more people on a larger scale becomes problematic.

Miller and Campbell (2006) criticized the participatory evaluation approaches of providing little systematic evidence of their effects and that there is lack of unanimity in using the approaches. The diverse ways in which one might conduct participatory or
empowerment evaluation has been a bone of contention to those that want clear procedure for undertaking such evaluations. Patton (2005) has argued further that there is weak evidence that participatory evaluation approaches, specifically empowerment evaluation leads to empowered outcomes. He notes also that there are few case examples that provide systematic evidence that by using an empowerment/participatory evaluation approach, one can attain such desired outcomes like improved evaluation capacity, high levels of evaluation use and increased perceived and actual self-determination.

Therefore these criticisms should serve as a wake up call to development practitioners not to be over complacent with these approaches and realise that the potential benefits of participation do not suggest that it is a panacea for all development problems facing developing countries like Kenya. It is this realisation that participation may have its own set of costs and constraints that will help the development practitioners to plan properly and adhere to its underlying principles in order to produce the desired outcomes. This also epitomises the need for the development practitioner to properly and systemically document the success stories of using participatory approaches particularly in the field of monitoring and evaluation in order to sway the critics. This is the task that this study attempts to achieve.

2.2 Theoretical framework

In this section, the topic of this research is located within its body of theory. The theoretical framework has been used to guide and inform this study and functioned as a base for launching the empirical fieldwork. The section commences by defining and reviewing the concept of development, the classical development theories and the alternative development approaches. Thereafter, a strong argument against the classical theories in favour of the alternative/people-centred approaches to development will be developed. Furthermore, a detailed explanation of the concept of monitoring and evaluation will be provided and finally the contrast between traditional M&E and community driven participatory M&E or empowerment evaluation will be presented.
2.2.1 Conceptualisation of development

Until more recently, the vast development literature at both academic and activists’ levels concentrated on macro approaches to development. These approaches emphasised economic growth (GDP) as the indicator for development. In other words, development was defined in terms of the structure and growth of the national economy and degrees of development or underdevelopment were most often measured in terms of national income (Conyers & Hills, 1984; Trainer, 2005; Friedmann, 1992; Max Neef, 1991).

However, the understanding of the concept of development has evolved with time. Development is now being conceived as a state of human well-being rather than as the state of a national economy (Max Neef, 1991; Conyers & Hills, 1984).

A scrutiny at the current development literature reveals that the concept of the term development is so complex and requires a multi dimensional approach to defining it. In general it is perceived as encompassing values such as participation, capacity building, empowerment, conscientisation, sustainability (Chambers, 2005; Rahman, 1993; David et. al; 2005; Freire, 1972; Swanepoel, 2002), transparency, accountability, equity, and equality (Blair, 2000, Todaro, 1987; Narayan, 2002) and access to improved opportunities by the disadvantaged groups, ultimately leading to improvements in all spheres of life; socially, economically, politically, environmentally and materially (Allen & Thomas, 2002; Coetzee, 2001; Todaro, 1987).

Development should not be construed as a one off event but rather a process of change from worse to better, it should involve major changes in social structures, popular attitudes and national institutions and this should be an all encompassing change, not just an improvement in one aspect (Todaro, 1987; Allen & Thomas, 2000). Coetzee (2001:120) adds that development must have a connotation of favourable change “…advancing away from inferior… a form of social change that will lead to progress… the process of enlarging people’s choices acquiring knowledge, and having access to resources for a decent standard of living”.
2.2.2 Theories of development

The past few decades has witnessed the emergence of a number of development paradigms in an effort to explain what must be done in order for underdeveloped countries to progress (Eisenstadt, 1966; Graaff et al., 2003; Davids et al. 2005). Some of these traditional classical theories (i.e. modernization and dependency) as well as the alternative approach or paradigm (people-centred) will be unpacked in the subsequent pages.

2.2.2.1 Classical development theories

Modernization theory: The 1960s marked the beginning of a paradigm shift in the development debate. The period prior to this was marked by strenuous debates on what constitutes development. Among the prevailing theories, the theory of modernization, chiefly propounded by Rostow, gained an upper hand (Coetzee, 2001; Davids et al., 2005). The tenet of this theory portrays development as a progressive change from a traditional to a more sophisticated modern society (Smith, 1973). According to Dube (1988), development is perceived by implication as a revolutionary process, where for instance efforts have to be made to transform the rural agrarian cultures into modern or urban industrial cultures like those of the developed West and Northern countries.

In order to design modernization theory, two other theories were studied namely the evolutionary and functionalist theories. The evolutionary theory was particularly important because it helped the modernization school to understand and explain the transition that took place in the 19th century in the Western Europe from traditional to modern society. While on the other hand, Graaff et al., expounds that “functionalist” theory looks at the constructive benefits that parts of the society bring to the whole. Each part has a particular role to play in the sustainability and continuation of the bigger entity (Graaff et al., 2003).
Development of the western world is explained in the light of the modernization theory. As such, development was viewed as a process that progresses in a significantly uniform evolutionary path. Consequently, western countries took a paternalistic attitude toward the developing countries. They saw themselves as having the responsibility of leading the so called ‘backward’ nations to catch up with the development of the ‘advanced’ developed nations (Mehmet, 1999; So, 1990).

However, this theory has received criticism from many quarters (Coetzee & Graaff, 1996; So, 1990; Gran, 1983). The basis for this criticism is that human co-existence cannot be analysed to predict what the social consequences of change will be. Furthermore, modernization theory presents development in terms of a linear model. In this theory societal development is described as a dichotomy of traditionality on the one hand and modernity on the other and the critics argue that this description suggests a typical, identifiable condition of development. That means that the processes related to development are not necessarily linked to a specific time period or context and implies that they are a-historical. The theory further assumes that developing countries possess a homogenous culture that impedes development.

The other major criticism or weakness of the modernization theory is that when using this model the donors, policy makers, academicians from developed countries construct themselves as part of a non-problem, and a source of solutions and resources and therefore a superior people, with superior thinking and superior culture. On the other hand, people and countries in the so-called first and second stages of growth like Kenya in this case, are constructed as poor, resources-less, and part of a problem that needs to be solved for development to take place (Dube, 1988). Therefore the theory has a top-down paternalistic view of development and this top-down approach of persuasion models implicitly assumed that the knowledge of government, agencies, and research institutions was correct and that the indigenous communities were ignorant or had incorrect knowledge and beliefs (Waishbord, 2001; Coetzee et.al, 2001).
**Dependency theory:** The failure by modernization theorists to explain and address the underdevelopment of less developed countries led to the rise of the dependency theory around the 1970s to the 1980s. Andre Gunder Frank, one of the strong critics of the modernization theory, argued that underdevelopment is not a natural situation. He used the centre-periphery model to explain underdevelopment, arguing that underdevelopment of certain countries and regions is created and maintained by the international capitalist economic system, which sucks resources from the periphery to the centre (Frank, 1969). The movement of resources takes place on two levels: on a national level, i.e. between the urban and rural areas of developing countries; and at the international level, i.e. between developed (“First World”) and less-developed (“Third World”) countries (Theron & Graaff, 1987; Palma, 1995). According to the dependency theory, development requires the elimination of foreign involvement and the creation of a socialist context of development (Alvin, 1953).

This theory has also been criticized largely due to the fact that it places too much emphasis on external variables and ignores internal factors that could also explain the underdevelopment of the third world countries (Davids et al, 2005). Secondly, it does not provide tangible solutions on what the least developed countries (LDCs) should do to progress apart from the de-linking strategy, which advocates for self-reliance by LDCs by detaching themselves from the capitalist world economy (Burkey, 1993). However, Davids et al (2005) and Friedmann (1992) have argued that the de-linking strategy proposed by this theory could actually lead to self-destruction rather than self-reliance, because most LDCs countries do not have the technological and industrial base to sustain themselves.

Although both modernisation and dependency theories give us insight into the notion of development, they fail to provide an all-encompassing explanation of the concept of development within the Kenyan context. Both are prescriptive, both assume universal applicability, both propose oversimplified macro-solutions to the complex development problematic of the developing world, and they share a Western genealogy of history. The element of a people-centred form of development, community participation and building
the capacity of the ordinary people to manage their own development, is particularly devoid in the development process outlined by these orthodox theories.

### 2.2.2.2 Alternative development approaches.

Due to the failure of these ‘classical theories’ to address development, development theorists and practitioners realised that development cannot be studied or brought about by merely concentrating on theories and macro-strategies. Development had to become more human-centred and more empowering. In order to reflect this new human orientation of development, the late 1980s saw a shift from the macro theories of development (modernization and dependency) to a micro-approach focused on people and the community (Davids et al, 2005:17; Friedmann, 1992).

Whilst the macro development approaches were largely capital-centred as opposed to people-centred, the current micro-approaches focus on ‘participatory development’, ‘empowerment’, ‘community development’, ‘self-reliant development’, participatory M&E and ‘human scale development’ (Burkey, 1993; Dube, 1988, Max-Neef, 1991; Oakley, 1991; Penderis, 1996; Rahman, 1993; Ukaga & Maser, 2004) and the notion that meaningful development emanates from the capacity of the ordinary people to manage their own development.

Both Dube (1988) and Max-Neef (1991) have further, vehemently argued that although economic growth is necessary, it does not constitute development, unless it is clearly linked to a set of well-defined human, social, political and culture objectives. It should first be able to satisfy the dynamic human needs of the targeted countries or communities and then proceed to improving and enriching their quality of life. For Friedmann (1992), what is fundamental within the alternative development paradigm is the concept of empowerment, which places the emphasis on autonomy in decision-making of the local communities, local self-reliance, participatory democracy and experiential social learning.
2.2.2.1 People centred development

Coetzee and Graaff (1996: 317) observed that the current status of participatory development is reflected in what has become known as “people-centred development”, a paradigm which views people as being pivotal to any meaningful development. In fact, the manifesto for this particular approach is the Manila Declaration on People’s Participation and Sustainable development drawn up by 31 NGO leaders in June 1989. People–centred development is defined by Korten (1990:76) as “a process by which the members of a society increase their personal and institutional capacities to mobilize and manage resources to produce sustainable and justly distributed improvements in their quality of life consistent with their aspirations”.

Extending this definition, De Beer and Swanepoel (1998) note that people centred development approaches build on participatory and learning approaches. For these authors, as well as others (Davids et al., 2005; Max Neef, 1991; Burkey, 1993), additional important components of the people centred approach include popular participation in development, the need for sustainable development and the support and the advocacy of the people’s role in development by the bureaucracy, NGOs, CBOs and voluntary organizations.

2.2.2.2 Participatory development

Participatory philosophy says that people have a wide knowledge base and that this knowledge comes from their vast experiences. Therefore, as noted by Datta (in Cornwall & Pratt, 2003:56), their active involvement in decision-making in the implementation of processes, programs and projects that affect their life is crucial in order to attain sustained development. Dinham (2005) adds that participation of local communities is not necessarily a new idea, but it derives from the theory and practice of community development where participation, empowerment and ownership are seen as necessary conditions for change. According to Kera and Campbell (1985), participatory development allows people to direct themselves and control the process of action that is initiated by them. This concept entails the possession of a sufficient combination of
mental and material resources to be able to resist the dictates of others on one’s course of action.

2.2.2.3 Empowerment

Empowerment is a concept that goes beyond participation. It implies enabling people to understand the reality of their environment, reflect on the factors shaping that environment and taking steps to effect changes to improve the situation (Gajanayake, & Gajanayake, 1993). For Rappaport “empowerment conveys both a psychological sense of personal control or influence and a concern with actual social influence, political power and legal rights (1987:121).

According to Davids et al (2005: 21), the importance of empowerment as a building block of people-centred development is illustrated by the fact that development is not about the delivery of goods to a passive citizenry. It is about active involvement and growing in confidence and capacity of such citizenry. Empowerment is a process where you are able to stimulate others (stakeholders) and raise their morale to the extent that they are able to achieve what they are capable of.

Empowerment relates to “power to” and also “power from within”. Empowerment is thus more than simply bringing people who are outside the decision-making process into it (“power to”); it includes the processes that lead people to perceive themselves as able and entitled to occupy the decision-making space (“power from within”) (Rowlands, 1996:88-92). The concept empowerment can also be related to that of Paulo Freire’s ‘conscientization’ that advocates for self-reflected awareness of the people rather than having a teacher-student asymmetrical relationship but giving the people power to assert their voice and stimulate their self-driven collective action to transform their reality (Freire, 1972).

The Word Bank provides a more encompassing definition of empowerment. It has defined it as “the expansion of assets and capabilities of poor people to participate in, negotiate with, influence, control, and hold accountable institutions that affect their lives
(Narayan, 2002:14). They have identified four key elements of the empowerment framework as access to information, inclusion and participation, accountability and local organizational capacity. This research adopted this World Bank empowerment framework in assessing the level of community empowerment as a result of community–based PM&E in the case study areas.

As observed from the above definitions and explanations, the term empowerment, however is broad and used differently in various contexts. One extreme is where empowerment is used conservatively to mean total self-help by the stakeholders (communities). Within this description, communities are expected to identify their needs or opportunities, prescribe possible solutions or strategies, make decisions and take actions, mobilize their resources and implement the decisions on their own with minimal external support or intervention (Onyx & Benton, 1995). However this approach is criticised of failing to recognize the fact that no community can develop and perform properly in isolation. Sometimes communities will simply not have all the resources that they require, hence the need for external intervention and support.

On the other hand, the other extreme is the view that for empowerment to occur the only thing required is participation in decision-making. With such a view, in order to achieve personal or project goals, empowerment might mean just consultation with the communities on the needs or opportunities and the choices of decisions to take. All the other tasks are done on behalf of the so called ‘empowered community or person’ by the professionals or project staff. This approach to empowerment has been criticised, as it fails to realise that as long the process is controlled by others who have access to resources, it is actually disempowering as argued by Rose and Black (in Onyx & Benton, 1995).

Therefore the empowerment approach needs to be rightly assimilated so that it is not perceived as only paying attention or emphasis on autonomy in the participation in the decision making of the local communities, but also expansion of their assets (knowledge, skills, physical, financial) (Nayaran, 2002), local self-reliance, but not autarchy.
(Friedmann, 1992), participatory democracy (Rappaport, 1987) and experiential social learning (David et.al, 2005; Freire, 1972).

2.2.2.4 Participation

In recent years, the word participation has become one of the most commonly used terms in the development lexicon and it is broadly understood and defined in various ways. FAO (2007), Burkey (1993) and Swanepoel and De Beer (1998) seem to share the same understanding that participation is a process of equitable and active involvement of all stakeholders in the designing or formulation of developmental policies and strategies in the analysis, planning, implementation and monitoring and evaluation of developmental activities. They further assert that it is a deliberate organized effort within institutions and organizations through the realization that participation is a human right to the communities such that they need to have increased access and control over resources and related decision making that contributes to sustainable livelihoods.

Participation in the context of community development can be also perceived as sharing and active involvement of the targeted communities. Involvement implies that there is a feeling of belonging and people become involved in development projects on the basis of this feeling. The development of such feelings of belonging comes about when people identify themselves with the development efforts. This means that participation is not forced but rather driven by feeling and sense of ownership. This may be argued that development can only take place with the preparedness of the local people and their desire to participate in the development efforts (Lombard, 1991).

To compliment the above, Burkey (1993) points out that Cohen and Uphoff (1977) reported that an evaluation study of 50 rural development projects conducted by Development Alternatives, Inc. found out that public participation in decision-making during implementation was even more critical to project success than mere participation in the initial design. This implies that in order to increase the likelihood for successful projects, participation of the beneficiaries (with particular attention to the marginalized
groups) must take place at all stages of the project cycle from analysis or project identification to planning, implementation, and monitoring and evaluation.

Continuing with the above analysis, since people centered development involves control over one’s destiny, then the prime targets/beneficiaries should be those who are most vulnerable and least able to voice their needs (marginalized groups). In the Kenyan context however, this includes the majority of rural women, people with no real access to agricultural resources and the youth. As a result of their impoverished background these groups are least likely to be able to comply with stringent requirements attached to applications for assistance from both the private and public sector. It is therefore important that organizations wishing to support them should be flexible and not insist on screening procedures as they may exclude the most needy. It is important to ensure that whatever the nature of the activity that is embarked upon, it should be made clear to the group and supporting agents who shall be participating in the project and how they stand to benefit from the activity.

As evidenced from the preceding discussion, it is worth noting that there are different degrees or typologies of participation ranging from simple consultation to joint decision making and self-management by stakeholders themselves. It should therefore be the genuine desire of all development practitioners and organizations to increase the degree of participation in their programs and projects by allowing the local stakeholders to drive the developmental agenda (Anandajayasekeram, 2001).

2.2.2.5 Capacity building

The term capacity building, according to Eade (1997), refers to enabling institutions to be more effective and efficient in the process of identifying, implementing, monitoring and the evaluation of development projects. Eade and Williams (1995) also note that capacity building is a mechanism of enabling local people to determine their own values, priorities and act on their decisions. According to Schuftan (1996), the term capacity building refers to an approach to community development that raises people’s knowledge,
awareness and skills to use their own capacity and, using available support systems, to resolve the more underlying causes of underdevelopment.

Conventional approaches to development have tended to under emphasize the importance of local institutional structures and processes. People centered development emerged as an alternative approach to development, which recognizes the potential of the local people in the development process. It highlights the importance of using local institutions as capacity building centers and it involves institution building at the local level, since in the final analysis it is the local people who must make sustained development happen (Kotze, 1997).

The transfer of skills during the implementation stage of the development activity pays attention mainly towards hard skills. These skills enable the community members to perform specialized tasks. By identifying such needed skills, the objective is to equip people with capacities which can be utilized even beyond the project’s implementation stage. Training programmes during the implementation stage focus on the transfer of accredited training and will enhance opportunities for building permanent employment. Hard skills training usually include various forms of technical as well as organizational management skills such as supervision, mobilizing people and leadership skills (Roodt, 2001).

2.2.2.6 Community development

There seems to be no clear definition of community development in the literature. Numerous attempts have been made by different authors to describe what community development entails (Kotze & Swanepoel, 1983; Homan, 1999; De Beer & Swanepoel, 1998; Abbot, 1995).

Kotze and Swanepoel (1983:6) define community development as a process as well as a method. As a process, community development is described, as “an attempt by a community collectively and with own initiative to realize self identified needs according
to pre-established procedures through societal institutions in order to reach certain set goals”. As a method, these authors describe it as “an attempt by external agents to help a community to take the initiative in defining its own needs and in deciding upon a course of action to develop towards the fulfilment of those needs according to its own values”. This is very similar to how Homan (1998:37) described community development. He perceived it as the acquisition, maturation and connection of community assets to benefit the whole. He pointed out that community members are central to decision making and taking action and as such community development produces self-reliant, self-sustaining communities that mobilise resources for their benefit.

Abbot (1995) adds that community development also operates successfully within the specific environment where the government is open for community involvement in the decision-making process. Finally, De Beer and Swanepoel (1998) state that a community is in most cases described in terms of its geographic locality, where people in that locality will usually have common interests and needs or they may have common problems or disadvantages.

2.2.3 Monitoring and evaluation (M&E)

This section firstly provides a brief background to monitoring and evaluation and the definition of M&E. This is followed by an overview of different views on the contrast between conventional M&E and participatory M&E. Secondly, the different types or forms of participatory monitoring and evaluation approaches that commonly appear in literature are briefly highlighted.

2.2.3.1 Background to monitoring and evaluation (M&E)

The very first attempts at programme monitoring and evaluation can be traced back to the 1920s when it was first propagated in education for testing the achievement of learners in schools. Later on, programme evaluation, as an important component in professional practice, emerged as a result of felt needs to assess large-scale developmental
programmes and government interventions in the 1960s. This was further used to gauge its success and to ascertain whether to provide further funding or not (Hohenheim, 2002).

There seems to be no uniform definition of monitoring and evaluation in the literature. However, all the definitions that were reviewed in literature shared common features and general procedures for carrying it out.

2.2.3.2 Definition of monitoring and evaluation

Monitoring is a continuous assessment of the functioning of the project activities that allows early recognition of the social effects in particular, which are regressive or incompatible with equity objectives and enables one to institute the necessary corrective measures (Casley & Kumar in Oakley & Clayton, 2000; Kellerman, 1997; Randel, 2002). Monitoring is usually seen as an internal project activity, an essential part of good, day-to-day management practice.

Evaluation on the other hand is concerned with the objective periodic assessment of the relevance, performance, efficiency and impact of an on-going or completed project. An evaluation should provide information that is credible and useful enabling the incorporation of lessons learnt into decision making processes of both beneficiaries and donors (Kusek & Risk, 2004; OECD, 2002; Kellerman, 1997; Kaaria & Njuki, 2005; Casley & Kumar in Oakley & Clayton, 2000).

2.2.3.3 Conventional versus participatory monitoring and evaluation approaches

Conventional monitoring and evaluation approaches are becoming less and less popular amongst development practitioners (De Beer & Swanepoel, 1998; Talukder et al, 2001; Campilan et al, 2001). For De Beer and Swanepoel (quoted in Ramphele, 1990:2) “conventional monitoring and evaluation approaches are insensitive to issues of power relations between the researcher and the subjects of research; that they are too dogmatic in their demand for scientific distance; that they fail to acknowledge apparent biases…”.
Talukder et al (2001) and Guijt (1999) pointed out that conventional M&E is generally seen as a means to assess project efficiency, effectiveness, relevance and causality. They argue further that traditionally, its purpose is to promote accountability and transparency to outsiders and that it is expected to yield objective information about project progress and accomplishments.

Similarly, Campilan et al (2001) observed that more recently, participatory monitoring and evaluation (PM&E) has emerged as an approach that seeks to involve those that contribute to or are affected by the project (e.g. local communities, collaborating organizations, program field staff) from planning M&E to using its results for learning and change. Supporting this assertion, De Beer and Swanepoel (1998) add that participatory evaluation has its origins in action research, which used formal organizational settings. Within this context, social scientists were brought in to do on-the-job research with the help of the members of that organization.

Mozammel and Schechter (2005), as well as Kaaria (2005), contend that participatory community–based planning and monitoring and evaluation is critical for the community to collectively understand, learn from and reflect upon the design, management and implementation activities related to the local development plan. However, Guijt cautions that “Participatory monitoring and evaluation is not just a matter of using participatory techniques within a conventional M&E setting. It is about radically rethinking who undertakes and carries out the process, and who learns or benefits from the findings (Guijt, 1999:10)”.

2.2.3.4 Types of participatory monitoring and evaluation

As interest in participatory monitoring and evaluation has grown, so have a number of types of PM&E been identified depending on the function and purpose that they are intended to serve. This often depends on the needs of various stakeholders, which can range from community-based organizations and NGOs, to researchers, consultants, government, the private sector and donors. It is therefore clear that participatory approaches to M&E are now gaining prominence in development literature and being
employed more widely in the field (Coupal, 2001; World Bank; 2002; Eldis, 2005; Estralla et al, 2000).

Below is a list of some of the types or terms used to describe PM&E (Estralla, 2000:5). However, although for the purposes of this discussion it will not be possible to describe all of them, an effort will be made to describe the few that commonly appear in literature. It must be mentioned that these participatory approaches to monitoring and evaluation overlap and is therefore sometimes difficult to differentiate between concepts. They include empowerment evaluation/community driven PM&E; participatory monitoring/participatory evaluation; participatory impact monitoring (PIM); participatory planning monitoring and evaluation; self-monitoring and evaluation.

2.2.3.4.1 Empowerment evaluation / community driven PM&E

Empowerment evaluation is a relatively new concept and was introduced in 1992 and is gaining acceptance in the mainstream evaluation circles (Wandersman et al 2004). Fetterman (2001:3) has defined empowerment evaluation as “the use of evaluation concepts, techniques, and findings to foster improvement and self-determination”. Empowerment evaluation aims to increase the likelihood that programs will achieve results by increasing the capacity of program stakeholders namely individuals, groups, or organizations that have an important interest in how well a program function, in order for them to plan, implement, and evaluate their own programs (Wandersman et al., 2004).

According to Suarez-Barcalzor (2005) empowerment evaluation is rooted in empowerment theory and participatory action research. In the empowerment evaluation approach, stakeholders are actively involved throughout the evaluation process and are seen as experts with respect to community issues.

In contrast to the other types of evaluation, empowerment evaluation does not depend on outsiders to undertake the task of measuring the project’s success upon its completion. Instead, members of the project assess the project while it is being implemented by
systematically and carefully reviewing the objectives and activities and using the reflection sessions to make adjustments that improve the project (Strober, 2005).

Empowerment evaluation is an approach that is very similar to the community driven PM&E approach. In the community driven PM&E approach, just like empowerment evaluation, members themselves identify their own objectives and initiate activities to achieve these objectives. They develop their indicators for measuring progress towards achievement of the objectives; indicators to assess change, are in charge of the data collection and analysis and finally use the PM&E results and make necessary adjustments to their activities. Community indicators are based on local experience, perceptions and knowledge (Njuki et al., 2004). The purpose of community driven PM&E is to empower the local community to initiate control and take corrective action and to basically empower themselves to improve their social well being. This type of PM&E approach is unique because of the emphasis in developing a system that is managed and supported by local communities, for their own purposes (Njuki et al.2004; Eldis, 2005).

The project that will be investigated for this study has facilitated the development of community driven participatory monitoring and evaluation systems with the empowerment evaluation approach. The farmer field school groups have devised their own criteria for measuring success and held reflection meetings that have guided them to make the necessary adjustments to their projects.

2.2.3.4.2 Participatory monitoring/Participatory evaluation

According to FAO (1997), participatory monitoring is “a process of collecting, processing and sharing data to assist project participants in decision-making and learning”. They argue that the purpose is to provide all concerned with information as to whether group or community objectives are being achieved. On the other hand, the implementing agencies/NGOs and donors also require data on progress towards overall project objectives.
Participatory evaluation has been defined by the same organization as “a systematic analysis by beneficiaries and project staff of monitored information with a view of enabling them to adjust or redefine project objectives, policies, institutional arrangements, resources and activities and activities, where necessary (FAO, http://www.fao.org/sd/Ppdirect/PPre0053.htm). Although this approach seeks to involve the beneficiaries in monitoring and evaluation of the project activities, it appears that the process of designing and using the PM&E systems is not fully controlled, managed and supported by the local communities/beneficiaries as is the case in the empowerment/community driven PM&E approach.

2.2.3.4.3  Participatory impact monitoring

Eberhard Gohl (1993:1) defined participatory impact monitoring (PIM) as a “process–oriented, project–steering process maintained by those involved. Constant observation of the (chiefly socio-cultural) impacts leads to a better understanding of the processes within the project. Collective reflection makes it possible for the activities to be adopted to the changing goals of self-help organization”.

According to Gohl and Germann (1996), PIM is a concept for guiding self–help projects in the development field. The actors involved carry out the monitoring themselves. PIM assumes that these actors are autonomous, has several strands or strings and the monitoring systems of the self-help groups and the development organizations are separate. The strings are periodically compared: the actors reflect on their observations and assessments, adopt their planning accordingly and deepen their dialogue with one another.

PIM was thus developed as an alternative to conventional planning, monitoring and evaluation procedures. As such “it does not presuppose the availability of good planning documents nor does it postpone reflection to a late evaluation (Gohl & Germann, 1996:
The main purpose of PIM is to document socio-cultural impacts and by doing so it initiates and reinforces learning processes and complements more technically or economically oriented monitoring (CATAD, 1998).

This approach is very similar to the empowerment evaluation and community driven PM&E approaches since it also puts much emphasis on the process of monitoring social impacts and additionally, monitoring is carried out by the people themselves who are involved in the project rather than it being done externally. This has been used as a yardstick in measuring how well the beneficiaries of the case study projects were documenting the processes of monitoring and using them for learning and making necessary adjustments where necessary.

2.2.3.4.4 Participatory planning, monitoring and evaluation

According to Charles Norchi (2003) the rationale behind participatory planning, monitoring and evaluation is that in order for the communities to effectively develop indicators for measuring progress they must first participate in the formulation of the objectives of the project. This is usually done during the planning stage. Therefore such an approach combines methods and tools that communities can use to participate in development based on the explicit recognition, identification and clarification of their own local values.

The National Agricultural Advisory Services (NAADS), noted that participatory planning, monitoring and evaluation is necessary if the community development initiatives that are being undertaken for the benefits of the communities are to lead to lasting results, then they have to be involved actively in the identification of needs, setting of priorities, formulation of plans and monitoring and evaluation of outputs and outcomes (NAADS, 2000).
2.2.3.4.5 **Self-monitoring and evaluation**

Self-monitoring and evaluation is considered to be an effective monitoring and evaluation tool for supporting the institutionalisation of the internal learning cycle. In establishing such a learning process, it is believed that it will assist in better targeting of post-formation support as the communities gain capacity to analyse their own needs and then feed it into the bottom-up planning process already in place (Hamilton et al., 1998).

2.2.3.5 **Concluding comments**

From the preceding discussion it can be safely concluded that all the different types and forms of PM&E described here seem to point to one thing, namely the need for change in power structures. They are all advocating for changing power structures to remove the barriers that prevent people from participating in the issues that affect their lives (Gilchrist, 2003).

By extension, the authors of participatory M&E mentioned above suggest that if properly carried out, PM&E should result in actual shifts in power which will be evidenced by locals’ engagement and participation in making decisions in which they were previously minimally involved or uninvolved. It will also result in an increased ability to garner for resources and influence relevant policy concerning issues related to a program (Miller & Campbell, 2006). This is a humanistic approach to development which places the local beneficiaries at the centre of development. It recognizes that in order to attain meaningful development, the local stakeholders need to be involved in decision making in all the stages of the project cycle including monitoring and evaluation. Farm Africa (1996) as well as IFAD (2001) pointed out that this shift in power in favour of the local communities is what leads to community empowerment. This implies that since the community takes a crucial role in decision-making of issues affecting them, they feel more capable as their capacity to analyse information is enhanced. Furthermore, there is collective learning and this results in community empowerment which is a positive social change that will likely culminate in positive community development.
CHAPTER THREE

3 GENERAL DESCRIPTION OF THE CASE STUDY AREA

3.1 Introduction

This research was carried out in four of the six districts in the Coast Province of Kenya, namely Mombasa, Malindi, Kilifi and Kwale. The Coast Province is one of the eight administrative provinces of the Republic of Kenya (Appendix IV) and is located in the South East of Kenya bordering the Indian Ocean. It is inhabited by the Mijikenda and Swahili among others. The province covers an area of 83,603 km$^2$, and has a population of 2,487,264 (Central Bureau Statistics, 1999). This represents about 7% of the country’s land area and about 15% of Kenya’s population.

The province has a bi-modal rainfall with averages ranging from 1200mm at the Coastal strip to less than 400mm in the hinterland. The rainfall is distributed over two distinct seasons. The long rainfall season occurs between April and July and the short rainfall season occurs from October to December. Mean annual temperature ranges from 22°C – 32°C in the lowland and 12°C-21°C in the mid-altitude areas of the Taita Taveta District. There are three main natural regions in the province, namely the coastal lowlands, arid and semi arid lands (ASAL) and the midlands. Each of these natural regions is divided into various agro-ecological zones based on rainfall patterns, soil types and number of plant growing days (KARI Report, 2006).

The coastal region of Kenya has six zones based on their agricultural potential. These zones are commonly referred to as the Coastal Lowland (CL) Agro-ecological zones. They include: CL2 (Sugarcane zone), CL3 (Coconut-cassava zone), CL4 (Cashew nut-cassava zone), CL5 (Livestock-millet zone), and CL6 (Livestock arid and semi arid lands ranching zone). Soils in the largest part of coastal Kenya are sandy in nature and, therefore, have low water holding capacity. However, pockets of clayey and loamy soils exist within the region. Farmers in the Kwale and Kilifi districts (the districts covered by SWMP) have classified soils based on colour and texture and have often used the soil
classes as a tool to distinguish between fertile and infertile soils. The farmers’ classification places soils in the region into three major classes: Gandika/Ngama (Clay), (Lutsanga/chilongo (Loam) and Sheshe (Sand) (KARI Report, 2006).

The region is a food deficit area, producing only 20% of its food requirement. Agricultural production in the region is constrained by the low inherent fertility of the soils, its poor water retention and high infestation by weeds that compete with crops for nutrients and water. The problems associated with low soil fertility and low water holding capacity, have been aggravated by practices that cause net losses of nutrients and soil water. Increasing population pressure has resulted in reduced farm sizes and more intensive farming in the high potential areas (CL3 and CL4), without substantial replenishment of plant nutrients. Farms in these areas cannot be left fallow, as was the tradition in the past. This has led to soil nutrient depletion and low crop yields. Another practice that has led to loss of plant nutrients is the cultivation of crops along slopes without use of the recommended soil conservation measures. This practice has resulted in excessive soil erosion in some parts of the Samburu division in the Kwale district (Jaetzold & Schimdt in Njunie, 2002).

3.2 Farming systems

A major feature of agriculture in the coastal zone has been the rapid change from Sorghum and millet to maize, cassava and rice production over the course of the last century (Waaijenberg, 1994). Maize has become a dominant staple crop while rice and millet have disappeared from the area. Agriculture is still the main source of livelihood in the region, and crop and livestock sales are the major source of income for most households. Money for school fees, labor for farm activities, and food in periods of scarcity is often secured through the sale of cash crops. Mixed cropping is practiced in all areas. Both tree and annual crops are grown and intercropping is common. This combination varies from place to place but, in general, there is a decrease in the number of trees compared to the annual crops from the coast to the hinterland in the west (Wekesa et.al, 2003).
Although the annual crops can generate income, they are usually produced primarily for human consumption and only sold when there is a surplus or sudden urgent need for cash. Maize, cassava, cowpeas, green gram, sweet-potatoes and rice are major crops whereas pigeon peas, beans bananas, and vegetables are minor crops. Maize is the main annual staple crop (Njunie, 2002; Wekesa et. al, 2003).

3.3 Districts of the Coastal Kenyan Province

This study covers four districts in the Coastal Kenyan Province as stated above namely: Mombasa, Kilifi, Kwale and Malindi. What follows is a brief description of each of the four districts.

3.3.1 Mombasa District

Mombasa is the oldest and second largest city in Kenya and. It is situated on the South-Eastern part of Kenya and covers about 230 km$^2$ of which 67km$^2$ is water. In 1999 it supported a population of 665,018 (Central Bureau Statistics, 1999). It is bordered by Kilifi district to the north, Kwale to the south and the Indian Ocean to the east (Turner, 2007).

Four ATIRI groups were interviewed from this district, one of the four groups had designed PM&E system while the other three groups did not. SWMP and Cashew Nuts projects were not operational in the district.

3.3.2 Malindi District

Malindi (once known as Melinde) is a town on Malindi Bay at the mouth of the Galana River, lying on the Indian Ocean coast of Kenya. It is situated 120 km north east of Mombasa. It covers a total area of 7751 km$^2$ that includes 2958 km$^2$ of game reserve and 155 km of coastline. The population of Malindi was 281,552 in 1999 (Central Bureau Statistics, 1999).
Administratively the district is divided into three divisions; Malindi, Marafa and Magarini. This study was conducted in Malindi division. A total of 5 groups were interviewed in this district, 2 groups from Cashew nuts project that had integrated some elements of PM&E and 3 groups (2 with PM&E and 1 without PM&E) from the ATIRI project. The SWMP project was not operational in the Malindi district.

3.3.3 Kwale District

Kwale is one of the seven administrative districts in the Coast Province of Kenya. Its capital town is Kwale although Msabweni and Ukunda are larger towns. The district has a population of 496,133. The town of Kwale is small, situated 30 km south west of Mombasa and 15 km inland, covering an area of 8,295 km\(^2\). Kwale is mainly an inland district but it has a coastline south of Mombasa. It is divided into about six divisions namely: Kinango, Kubo, Matunga, Msabweni, Samburu and the Shimba Hills. Diani Beach is part of the Msabweni division (Central bureau statistics, 1999; Ministry of Health, 2002).

This study was executed in four of the six divisions namely: Matunga, Msabweni, Samburu and Shimba hills. A total of 13 groups were interviewed from this district. Five groups were sampled from the ATIRI project and 8 groups were drawn from the SWMP project. In addition to the group interviews, individual interviews were also conducted from respondents in the same district, but only from the SWMP project. In these cases a total of 46 individual members were interviewed. Both the ATIRI and the SWMP project were operational in the Kwale district, but not the Cashew Nut project.

3.3.4 Kilifi District

Kilifi has a population of 544,303 (Central bureau statistics, 1999). The district is located north and northwest of Mombasa. It has seven administrative divisions namely: Bahari, Bamba, Chonyi, Ganze, Kaloleni, Kikambala and Vitengeni.
This study was carried out in four divisions of Kilifi namely: Bamba, Chonyi, Ganze and Kaloleni. With regard to the group interviews, a total of 27 groups were interviewed in total (10 SWMP groups, 6 ATIRI groups and 11 Cashew Nuts groups). All the three projects were operational in Kilifi and the highest number of groups were interviewed in this district can be attributed to this fact.

3.4 Concluding remarks

As seen from the four districts that were visited, there was wide variation in the number of groups interviewed per district with Kilifi having the highest number of groups interviewed seconded by Kwale. This is not surprising because Kilifi is the only district where all the three case study projects are operational. In addition to this most of the Cashew Nut groups were from Kilifi (27 groups) compared to Malindi which had only 9 groups.

This broad overview of the four districts provides background information of the case study area and a backdrop to Chapter 4. In this chapter the nature and extent of the establishment of participatory monitoring and evaluation systems will be discussed and presented.
CHAPTER FOUR

4 THE NATURE AND EXTENT OF THE ESTABLISHMENT OF THE PM&E SYSTEMS.

4.1 The SICPIPF project

The “Strengthening Institutional Change Process by Intensifying the Participation of Farmers in research and development process (SICPIPF)” is a collaborative project between the International Center for Tropical Agriculture (CIAT) and the Kenya Agricultural Research Institute (KARI). Both institutions share the same vision of reducing poverty and hunger in developing countries through collaborative research and development.

The International Centre for Tropical Agriculture (CIAT) is a not-for-profit organization that conducts socially and environmentally progressive research aimed at reducing hunger and poverty and preserving natural resources in developing countries. CIAT is one of the fifteen centres that make up the Consultative Group on International Agricultural Research (CGIAR). In pursuit of these goals, CIAT works closely with national institutions, NGOs, and the private sector and uses participatory approaches that offer rural people an active role in devising better ways to improve crop productivity, build rural agro-enterprises and manage soil fertility, pests and plant diseases (CIAT-

Similarly, the Kenya Agriculture Research Institute (KARI) is the premier national agricultural research organization. The institute has the legal mandate to carry out research in fields specified in the fifth schedule of the Science and Technology Act. This includes agriculture, veterinary sciences; cooperation with other organizations and institutions of higher learning in training programs and on matters of relevance to research; liaison with other research bodies worldwide carrying out similar functions; dissemination of research findings; cooperation with relevant ministries, the National
Council for Science and Technology (NCST), and relevant research committees in matters pertaining to research policies and priorities; and to perform all tasks as appear to be necessary, desirable or expedient in order to carry out its functions (Kiome, 2005).

4.2 Project goal and objectives

The goal of the SICIPF project was to strengthen the institutional change process by empowering resource-poor farmers to participate more effectively in research and developmental activities and make more effective demands on the research services by enhancing the flow of information by developing effective linkages between farmers and formal research systems.

The specific objectives of the project were as follows:

- To develop and strengthen monitoring and evaluation (M&E) processes to critically analyze the institutional change processes, derive lessons and assess their impacts on information feedback and knowledge flow processes between farmer groups and service providers.
- To develop a model for farmer participatory research which can be applied to analyze complex/knowledge intensive systems across a range of farming systems and can also be used on a wider scale to strengthen innovative capacity of rural communities as well as the research and development organizations which support them.
- To analyze the key factors that influence the flow of information and recommend strategies to increase the effectiveness of information flow between farmers, farmer research groups (FRGs), agricultural CBOs, with research and development systems.
- To develop a model for the institutionalization of participatory approaches within research and development institutions, which will include factors that provide support as well as strategies for effective institutionalization of new approaches (CIAT-Technical Report, 2005)
4.3 Project management and implementation

Five KARI- centers were selected as pilot sites for the SICPIPF project. They were selected based on their regional and broad focus and their experiences of other participatory research approaches. These five KARI centers are Embu, Kisii, Kitale, Mtwapa and Kakamega. However this particular study only covers the KARI – Mtwapa pilot site.

Within this pilot site, as noted previously, three projects were selected as case study projects namely, the Soil and Water Management (SWMP), the Agricultural Technology and Information Response Initiative (ATIRI) and the Cashew Nuts project. A number of steps were undertaken by the SICPIPF project in order to institutionalize and design PM&E systems both at project and community level. However this process was done in three phases and still continues today in order to scale out to all KARI projects and to as many farmers’ groups as possible. Below is a description of the keys steps undertaken by the CIAT-SICPIPF project staff in collaboration with KARI to initiate the process of institutionalizing PM&E systems.

4.3.1 Sensitization and awareness workshops

The SICPIPF project first organized six sensitization workshops on PM&E. One was organized for senior research managers and partners of KARI-Mtwapa and five sensitization workshops were organized for medium managers, scientists, NGO partners and extension staff from Ministry of Agriculture. These workshops were aimed at creating an awareness of the SICPIPF project to KARI-Mtwapa management and other scientists, highlighting the importance of participatory monitoring and evaluation and to place the project in the context of other ongoing KARI-Mtwapa activities.

4.3.2 Assessment of the status of monitoring and evaluation in KARI

The second step was the presentation of the three case study projects at the KARI – Mtwapa centre. Here each project presented their monitoring and evaluation systems in
workshops attended by KARI scientists and partners from the Ministry of Agriculture. Each of the three projects (SWMP, ATIRI and Cashew Nuts) identified the objectives of their M&E systems and some critical gaps and opportunities for improving their current monitoring and evaluation (M&E) system. The critical gaps, opportunities and critical areas for intervention were identified and strategies were developed for improving the M&E systems.

4.3.3 Increasing capacity of scientists to implement PM&E

Capacity building workshops were conducted and were attended by scientist from KARI, Ministry of Agriculture extension staff and NGO partners. These workshops were aimed at (i) building capacity of scientists to establish and implement project level PM&E systems, (ii) building capacity of scientists to establish and support PM&E systems, (iii) building skills in facilitation, data collection, analysis and reporting, and (iv) developing action plans for implementing PM&E systems in pilot sites. To date, a total of 140 research and development personnel have been trained on establishing and implementing project level and community based PM&E systems. Out of these, 71% are KARI researchers and technical officers and 29% are their extension and NGO sectors partners.

4.3.4 Formation of a PM&E core team at the KARI-Mtwapa centre

The SICPIPF project facilitated the formation of a PM&E core team at the KARI-Mtwapa research centre. The PM&E core team was responsible for organizing and conducting capacity development workshops at the centre. These capacity building workshops included sessions on implementation of the actual PM&E systems at project and community level and follow-up mentoring activities.

4.4 Establishment of PM&E at project and community level at the KARI-Mtwapa research centre

After building the capacity of scientists, extension staff and NGO partners in developing and implementing PM&E systems, the project then focused on building the capacity of
farmer groups. This was followed by development of PM&E performance frameworks for pilot projects and then setting up community based -PM&E systems by developing tools for data collection and finally devising mechanisms for feedback.

The subsequent sections provide a brief outline of the objectives of each of the three case study projects, the major project activities and the general process that was followed to establish the PM&E systems at community level.

4.4.1 Soil and Water management project (SWMP)

The Soil and Water Management project was initiated in the year 2002. The main objective of the project was to increase food production in Coastal Kenya through improved soil and water management and integration of green manure legumes into the crop and livestock production system.

4.4.1.1 Key activities

Several activities were undertaken in order to address the identified constraints. These were conducted under the following four themes:

**Theme 1: Socio–economics, training and gender issues.** Under this theme, 9 of the 27 SWMP groups were trained in participatory monitoring and evaluation (PM&E) i.e. how to monitor and document the different soil and water management technologies that were being implemented by the SWMP project in the Kwale and Kilifi districts.

**Theme 2: Use of organic manures for various crop production systems.** Here, the farmer field school groups were exposed to various options of soil amendments, initially concentrating on combinations of organic and inorganic fertilizers in maize production and later use of legume-maize rotations.

**Theme 3: Soil and water management for sustainable and efficient resource use.** The activities in this theme were to verify the effect of soil amendments on soil characteristics and weed species. Different organic and inorganic fertilizers and their combinations were
tested on-station. In the marginal areas, water harvesting and storage technologies, crops tolerant to drought; cassava, banana and legumes were up-scaled.

Theme 4: Integration of crop and livestock production. In this theme, the use of forage legumes for milk production and their effect on manure quantity and quality were verified. Dairy cattle were fed various forage legumes and manure quantity and quality were verified. Manure quality was assessed in the field using maize and Napier grass as test crops. Data was collected to help determine the tradeoff of using land, labor and other inputs for relay- or rotational cropping of food crops, forage or grain legumes in crop and livestock production systems.

4.4.1.2 The process of establishing community level PM&E systems in SWMP project

Participatory rural appraisal (PRA) tools such as group discussions, PM&E graphics, role-plays, and stories were used to engage the farmers who subsequently suggested local terms for M&E in different languages such as: kulaula, kuthuathua, kuthuwiriza for Giriama language; kuraura for Digo; kusuvia for Kamba; Kunughia for Taita, and kufuatiliza/ kufuatilia/ ufuatilizi/ uchunguzi for Kiswahili. The groups were able to agree on indicators (both quantitative and qualitative) in terms of their outputs, outcomes and impacts. These indicators would be used to regularly and systematically monitor their progress in term of achieving their objectives. They discussed both internal and external factors that could influence failure or success of the project. Each FFS group developed its own set of key activities to be monitored that were necessary to help achieve their stated objectives. Monitoring and evaluation committees usually comprising three to five members, were formed for each FFS group and roles of collecting the required data were assigned. Appropriate data collection tools as well as reporting formats were discussed and adopted.
4.4.2 Agricultural Technology and Information Response Initiative (ATIRI)

4.4.2.1 Goal and Objectives

The Agricultural Technology and Information Response Initiative (ATIRI) was launched in 2000 by KARI to respond to Kenya’s rising levels of poverty and food insecurity. Its role was also to find out how best KARI could demonstrate the relevance of its research products to increase food production and thus ensure food security, enhance poverty alleviation, while at the same time combating natural resource degradation. The initiative aims to disseminate agricultural knowledge and information and to catalyze the process of outreach and adoption of the technologies (Annual Report, 2003).

4.4.2.2 Key activities of project

The ATIRI project is supporting a myriad of activities that are implemented by different groups with different objectives. Some of the activities initiated by the groups and facilitated by ATIRI include the following: Anthurium production, ox-ploughing, improved dairy production, improved maize production, horticultural production, modern beekeeping, and business skills development.

4.4.2.3 The process of establishing community level PM&E systems in ATIRI project

This has been categorized as phase two of establishing PM&E systems. The ATIRI project followed almost the same process as that of the SWMP project in establishing PM&E systems with different farmer field school groups. The only difference is that here, this process was fully controlled and lead by the KARI–ATIRI project staff without the direct intervention of CIAT-SICPIPF project staff as was the case with SWMP project. The training of the FFS groups in PM&E systems was solely conducted by KARI-staff.
4.4.3 The Cashew Nuts project

Cashew nuts (*Anacadium occidentale*) have been an important source of income for smallholder farmers in the Coast Province of Kenya. However, a significant decline in cashew nut production has been experienced over the last decade. Besides poor management practices, pests and diseases are the major reasons for the low production. The most devastating diseases are powdery mildew and anthracnose. In the recent past (from 2003) prices of cashew nuts have increased and demand for nuts, both locally and internationally, has also increased.

4.4.3.1 Objectives of the project

The main objective of this project is to improve the quality and quantity of cashew production and hence contribute to improved incomes through provision of smallholder farmers with improved cashew clones, appropriate knowledge and technologies to sustain and increase cashew nuts production and quality.

The main collaborating partners for the Cashew Nuts project include the Ministry of Agriculture (to provide extension services), Action AID and HDC (main funding agent), Bayer EA (to provide chemicals for pest/disease control), Kenya Nut Company (to buy the nuts) and K Rep (a micro finance agent to provide loans to the farmer groups involved in cashew nuts production).

4.4.3.2 The Process of establishing PM&E systems under Cashew Nuts project

This has been classified as phase three of establishing PM&E systems. The field extension workers were trained on cashew nut management. This included disease management, weeding, pruning, coppicing, top working, pollarding, planting new cashew trees to replace old trees, post harvest handling and cottage processing.
After being trained, the extension staff was mandated to mobilize farmers into groups and train them on a regular basis (twice per month) in modern cashew nut production techniques. Some selected group members were trained on cashew nut grafting and supported to establish community cashew nut nurseries.

During these training sessions some components of PM&E were incorporated by extension staff, by establishing a common understanding of what kind of data was required and deciding what they needed to monitor. The groups were then encouraged and facilitated to develop monitoring indicators specific for each group with regard to performance of the cashew nuts and loan repayments. Most groups then formed management committees to oversee management of the orchards and the loan repayments. The groups also formed tree management teams. In some groups these teams acted as an M&E committee and kept accurate records. In others the tree management team was largely responsible for spraying and pruning and the team even comprised people that were not registered members of the group, but were incorporated in the group because they had expertise in either pruning or spraying of the cashew nut trees.

4.5 Integration of community-based PM&E within the FFS approach

4.5.1 Introduction

As stated early on, most of the groups under KARI were using the Farmer Field School (FFS) approach to implement their activities. This approach uses participatory principles when working with farmers. It was realized that some of the elements in the process of implementing PM&E systems were very similar to those in the FFS approach. It was therefore deemed fit to integrate the FFS approach with participatory monitoring and evaluation so as to avoid duplication and to provide the necessary synergy. Abate and Duveskug (2003) quoted in Njunie and Lewa (2006) reported that although the FFS emphasized farmers’ monitoring of field activities through Agro ecosystems analysis (AESA), the monitoring and evaluation of FFS impacts and achievements were still poor in most FFS initiatives in Kenya. In addition to that, the FFS monitoring system did not offer an opportunity to develop measurable indicators of success or failure appropriate for
different stakeholders. Therefore the need to develop a comprehensive methodology that incorporates both the FFS curricula with the PM&E system was discussed and adopted.

4.5.2 Process followed

A workshop to integrate FFS and PM&E was held in August 2005. A total of 23 participants attended the workshop. The participants comprised of five FFS farmers facilitators, 11 extension staff (two from divisional level), six research staff and one FFS Network official. The workshop was facilitated by an FFS specialist and a PM&E specialist assisted by members of the centre PM&E core team. The workshop began by an introduction of the FFS methodology (history, background, approach and concepts) and a review of the steps in conducting FFS methodology. This was later followed by an introduction of the basic concepts and principles of participatory monitoring and evaluation. Participants shared their experiences of implementation of PM&E and FFS methodology at the community level. The participants then identified and wrote down the steps in the PM&E and FFS process. These two sets of steps were then placed side by side and participants had a brainstorming session to attempt to match the activities for each step in order to see where the various PM&E elements fitted in with the FFS process.

4.5.3 The Integration process

The participants were a balanced group that brought together perspectives from research, extension workers and the farmers. Participants noted the complementarity between the FFS process and PM&E and viewed integration of PM&E as having the potential to strengthen the FFS approach. The integrated process would facilitate performance monitoring of the technologies under investigation as well as the dynamics of the FFS itself, thus enhancing both the acquisition of technical knowledge and collective action by the group members. The FFS activities were matched with those of PM&E and a procedure that combines both was adopted as summarized below in Figure 4.1.
<table>
<thead>
<tr>
<th>Ground working</th>
<th>Engaging with stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification of FFS participants</td>
<td>Building stakeholders capacity for PM&amp;E</td>
</tr>
<tr>
<td>Identification of the FFS site</td>
<td>Deciding what to monitor and evaluate</td>
</tr>
<tr>
<td>Training of trainers (TOT)</td>
<td>Developing and formulating indicators</td>
</tr>
<tr>
<td>Establishment of FFS [group formation, technology development, curriculum development, special topics]</td>
<td>Gathering information</td>
</tr>
<tr>
<td>Follow up by TOT graduates</td>
<td>Managing and analyzing data</td>
</tr>
<tr>
<td>Field day</td>
<td>Reflection, sharing and using results of PM&amp;E</td>
</tr>
<tr>
<td>Graduation</td>
<td>Learning and change; closing the loop</td>
</tr>
<tr>
<td>Farmer run FFS</td>
<td></td>
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</table>

**INTEGRATED PM&E AND FFS**

<table>
<thead>
<tr>
<th>TOT for integrated PM&amp;E and FFS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground working and awareness creation on PM&amp;E</td>
</tr>
<tr>
<td>Identification of site</td>
</tr>
<tr>
<td>Establishment of FFS, PT Development</td>
</tr>
<tr>
<td>Facilitation of FFS members on: what to monitor, establish their expectations, outcomes and outputs, Agree on success / failures factors, key activities indicators, and evaluation tools</td>
</tr>
<tr>
<td>The FFS curriculum (curriculum development and harmonization) should be built around the key activities</td>
</tr>
<tr>
<td>Introduction to agro ecological system analysis (AESA); and PM&amp;E as a monitoring tool</td>
</tr>
</tbody>
</table>
Data collection to include the reflection process: what went well, what is not going well and what needs to be changed, group processes

<table>
<thead>
<tr>
<th>Regular meetings for reflection, sharing and using results of PM&amp;E, learning and change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field days</td>
</tr>
<tr>
<td>Graduation</td>
</tr>
<tr>
<td>Farmer run FFS</td>
</tr>
</tbody>
</table>

**Figure 4.1** Integration of the FFS approach and the PM&E process (Source: KARI Report, 2006). Figure 4.1, indicated above, illustrates the integration process.

The first step in the harmonized process is conducting training of trainers on how to integrate PM&E and FFS approaches in order to build the capacity of stakeholders in both PM&E and FFS. The second step which is referred to as ‘ground working’ fits in well with the awareness creation on PM&E with various stakeholders. Ground working is a process whereby the facilitators of the planned FFS enter into a community and hold a series of meetings with various stakeholders and explain the goals and objectives of the anticipated FFS project. The third step is site identification and selection of FFS participants. Although this did not match the steps in the PM&E approach, it was still incorporated as a useful step in the integrated process. The fourth step is the establishment of FFS and participatory technology development (PTD). PTD is a process whereby farmers are involved in planning, laying out of plots and planting the different technological options that are later monitored by the group. Again, there was no matching activity of the PM&E steps with the PTD in the FFS steps hence it stood on its own. The fifth step is drawn from both approaches as is involves deciding what to monitor, in terms of activities, outputs and outcome indicators of the project. The sixth step is a combination of the agro-ecological system analysis and the use of PM&E as a monitoring tool. Both emphasize involvement of all the stakeholders in monitoring and evaluation. The seventh step is data collection or information gathering; it is a very important step in PM&E and was also indicated in the FFS approach. The eighth step is that of holding regular meetings and reflections and using the PM&E results for learning and change. This was apparent in both approaches, but was more elaborate in the PM&E steps.
Finally, the last three steps involved holding field days, graduation of the FFS participants and having farmer field schools that are entirely run by farmers. These steps emanated mainly from the FFS approach.

4.5.4 Concluding remarks

In this chapter, the nature and extent of the establishment of the PM&E systems in the three case study projects has been outlined. In each section the major activities and the process followed in establishing the PM&E systems by each case study project have been discussed. The integration process of the FFS approach and PM&E process has also been duly explained. Using this information as a background the following chapter investigates the role played by these PM&E systems in empowering the groups and improving their decision making and presents the results of the empirical findings undertaken in the case study area.
CHAPTER FIVE

5 RESEARCH FINDINGS

5.1 Introduction

As noted in chapter one, in the section relating to the methodology of the study, three different categories of respondents have been used in this investigation as follows:

1. The first category is the individual interviews; where a total of 73 individual-members from eight different farmer field school groups, four that had designed PM&E and the other four that did not were interviewed under the SWMP project which has been classified according to this study as phase one of implementing the PM&E systems.

2. The second category is the group interviews; here a total of 49 groups were interviewed (18, 18 and 13 groups) from SWMP, ATIRI and Cashew Nuts projects respectively in the four case study districts of Mombasa, Kilifi, Kwale and Malindi. These interviews generated both quantitative and qualitative data as will be seen in the subsequent sections.

3. Lastly, 8 semi structured interviews were conducted, two interviews in each district with the Ministry of Agriculture front line staff. These informal interviews were done prior to individual and group interviews in the respective case study districts in order to have a glimpse of how the staff were involved in the process of implementing community based PM&E systems and their opinion on the role played by PM&E in empowering groups. These meetings also served as an opportunity to verify the existence of the sampled groups since selection of the case study groups was based on the list of groups obtained from the KARI – Mtwapa offices. This was particularly important for the groups that did not design
PM&E systems as some of them had disbanded and we did not want to waste time visiting groups that were no longer active or in existence. Such groups were replaced in advance.

5.2 Socio-economic characteristics of the individual groups members

Information patterning to personal characteristics such as gender of the respondents, educational/literacy level and occupation was sought during the individual interviews.

5.2.1 Gender

According to the individual sample as illustrated in Figure 5.1, 74 % of the individual respondents were female, while only 26 % were male. This is not surprising because most of the groups under the SWMP project comprised more females than males. Therefore any sample that one would take from the groups under this project was likely to have a higher percentage of females compared to males. This was because the SWMP project had a deliberate gender policy that emphasized on having more females individuals members compared to males.

Fig 5.1: Gender of respondents

\[ n = 73 \]
5.2.2 Educational/literacy level

The individual respondents were asked to indicate their literacy level and their educational background. Literacy was defined as the ability of an individual to read and write. In terms of educational status, the study found that more than half of the respondents (56.2%) had no formal education, 32.9% attended primary school, 8.2% attended secondary school and only 2.7% completed secondary school with a high school certificate. None of the sample indicated that they had a diploma or degree. The results further indicate that women had the lowest level of education, for instance, 70.4% of the women interviewed had no formal education as opposed to only 15.8% of men. This is illustrated in Table 5.1. This is a common trend in most of the developing countries in Africa, and Kenya is not an exception.

Table 5.1: Educational status of the individual respondents

<table>
<thead>
<tr>
<th>Level of education</th>
<th>Females (n = 54)</th>
<th>Males (n = 19)</th>
<th>Both (n = 73)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No formal education</td>
<td>70.4%</td>
<td>15.8%</td>
<td>56.2%</td>
</tr>
<tr>
<td>Primary education</td>
<td>24.1%</td>
<td>57.9%</td>
<td>32.9%</td>
</tr>
<tr>
<td>Secondary education</td>
<td>1.9%</td>
<td>26.3%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Completed high school certificate</td>
<td>3.7%</td>
<td>0%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Completed diploma/degree</td>
<td>0.0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

In terms of literacy level, 57.5% (not shown) of the individual sample indicated that they were illiterate, while disaggregated data by gender indicated that 70.4% of women interviewed were illiterate and only 29.6% were literate while for men only 21.1% were illiterate but the majority (79.9%) were literate. However a recently launched Kenyan National Adult Literacy Survey reported that the national adult literacy rate stands at 61.5% while an average of 38.5% of the Kenyan population is illiterate (Elimu Yetu Coalition, 2007). This implies that illiteracy rate was higher in the case study areas compared to the average national adult literacy rate. This is not surprising as it has already been shown in Table 5.1 that most of the respondents (56.2%) of both, females
and males did not have formal education hence it is likely that would not be able to read and write. In addition, this research was conducted in rural areas and literacy rates are likely to be lower compared to urbanized areas.

5.2.3 Occupational status

According to Figure 5.2, the majority (78.1%) of the respondents from the individual sample mentioned farming as their primary source of occupation. They noted that they are mainly involved in mixed farming such as crops and livestock. A smaller proportion (19.2%) indicated that they were involved in small business activities such as running a restaurant or kiosk, carpentry, tailoring, selling charcoal, coconuts and vegetables. The remaining 2.7% are employed in the civil service as teachers in the primary education sector.

Figure 5.2: Occupational status

5.3 Group membership and composition

This section presents the general picture of the group membership by providing the average number females and male per group, but also the average total membership of all the groups interviewed. The groups with the lowest and highest number of males and
females are cited. We have also highlighted the groups with the lowest and highest total membership and their location.

The total membership per group and gender composition varied from one group to another. There were also some groups that comprised female members only. According to Table 5.2 below, the mean number of women per group was 17 while that of men was about 6. The mean number of both men and women per group was about 23. The highest number of women per group was 36, this was recorded in the Mwangaza group which had also the highest total membership of 50 (36 females and 14 males) compared to all the groups interviewed. On the other hand, the lowest number of females per group was recorded in the Deteni group in the Kwale district which had a total membership of 14 people (3 females and 11 males). The highest number of males per group was recorded in the Mwanayati group in the Kwale district which had 20 males and 5 females. However, there were other groups which did not have male members at all and 12 out of the 49 groups interviewed fell under this category. In other words 24% of group sample were solely women’s groups. This was so because the projects under KARI Mtwapa had a deliberate policy that encouraged formation of more women’s groups compared men’s groups.

Table 5.2: Group composition

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Minimum</th>
<th>Maximum</th>
<th>95% confidence interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females</td>
<td>17.02</td>
<td>3</td>
<td>36</td>
<td>14.53 – 19.51</td>
</tr>
<tr>
<td>Males</td>
<td>5.83</td>
<td>0</td>
<td>20</td>
<td>4.18 – 7.47</td>
</tr>
<tr>
<td>Total</td>
<td>22.72</td>
<td>10</td>
<td>50</td>
<td>20.24 – 25.21</td>
</tr>
</tbody>
</table>

n = 73

5.4 Characterization of the PM&E process

This section seeks to provide empirical information as regards to the knowledge and understanding of PM&E by individual members that were interviewed. The section
further explains how different groups and group members are involved or have been involved in monitoring project activities.

5.4.1 Knowledge and understanding of PM&E

5.4.1.1 Individual interviews

Individual respondents were asked to define the terms monitoring and evaluation. The individual respondents from the groups with PM&E and those without PM&E systems seemed to have a varied understanding of what monitoring is all about. Most of the individuals from groups without PM&E defined monitoring as the exercise of going to the field to observe how the different crops and livestock are performing. On the other hand, respondents from groups with PM&E defined monitoring beyond just observing the crop and livestock performance in the field to include the exercise of recording relevant information on such observations but also on group functioning processes such as attendance at meetings and payment of penalty fees.

Defining the concept of evaluation was even more difficult. Most of the individual respondents from groups without PM&E simply indicated that they did not know how to define evaluation because they thought it was just the same as monitoring. The respondents from groups with PM&E systems showed a better understanding of the term evaluation and in general they defined it as a process of looking back to see how the project or the group has performed at the end of the year or at harvest by specifically looking at what went well and what didn’t go so well. Some of their definitions are presented below:

“It is the final assessment of whether the desired goal was reached”
“It is finding out if there is progress or profit or loss or and assessing if the group work has been done properly”
“It is sitting down to decide what to do on what you have seen as going on well and not so well and measure the impact caused by the activities”
“It is the periodic activity where as a group you reflect and assess if the desired objectives have been met or satisfied”
“It is the final confirmation whether things have worked well according to plan or not”
In the literature, the term evaluation is generally defined as a periodic assessment of the relevance, performance, efficiency and impact of an ongoing or completed project and it provides information and lessons learnt useful for decision-making (Kusek & Risk, 2004, Killerman, 1997 and OECD, 2002). Comparing this definition with the ones provided by individual respondents presented above, one can conclude that they are very similar and can therefore conclude that these respondents have a basic understanding of the term evaluation.

5.4.2 Monitoring of project activities

5.4.2.1 Group interviews

The different groups, with and without PM&E systems, were asked whether they monitored their project activities. All the groups without exception responded with a resounding yes. However differences began to emerge when we further inquired how this monitoring was done. Some of the groups indicated that they had an M&E committee that is responsible for monitoring and keeping records of project activities.

Figure 5.3: Availability of a monitoring committee

According to the group interviews as show in Figure 5.3 above, 33.3% of the groups with PM&E systems and 53.8% of the groups that integrated some elements of PM&E
reported having an M&E committee while only 16.7% of the groups without PM&E systems indicated having a PM&E committee.

Other groups reported that they monitored their group activities collectively as a group. While in some groups, certain members volunteered to monitor the group activities, particularly the field crop performance, by mere observations without taking records. They asserted that they are able to remember the information. This was particularly common for the groups without PM&E systems. The following example was given by the chairlady of Shaza Women Group (without PM&E systems) from the Kwale district where the group’s chairlady was quoted as follows:

“Some of our group members volunteer to monitor on behalf of the whole group and they keep whatever they have observed by heart and they come to report to me as chairlady of this group and I also keep the information by heart and at an opportune time I share with all the group members”

When the group was asked whether they may forget the information when they do not record their observations, the group insisted that they are used to such kinds of monitoring and that they do not forget the information. Whilst it is certainly possible to recall what was observed, one is likely to forget some of the information with the passage of time especially if the group has many activities to monitor. Hence, there is high likelihood that during reflection meetings, there may not be enough information for decision making. Furthermore, lack of full information can lead to making false conclusions.

According to the group interviews, monitoring of the project activities for most of the groups without PM&E was said to be done by the group collectively (61.1%), individually (16.7%), by the secretary and chairperson or any member who is literate (11.1%) or by smaller groups within the group (11.1%). As stated above, for most of the groups without PM&E systems, monitoring was done by mere observation with little and haphazard documentation as the groups largely relied on their recalling capacity. When asked why they did not keep records of the information that they observed, the two most frequent responses were that they did not know how to read and write and that writing itself is too involving and cannot be done consistently. They explained that the records
they prefer to keep most are the attendance at group activities and meetings. They argued that these records are easy to keep and are less demanding, since what is required for these records is just to tick in the register the names of members that are present or absent during a meeting/activity.

5.5 Interviews with the Ministry of Agriculture (MOA) front line staff

Semi structured interviews were conducted with the Ministry of Agricultural front line extension staff in all the four case study districts. During the entire data collection exercise, the research team was accompanied by these MOA extension officers in their respective jurisdictions. They were vital in mobilizing the groups and assisting with other logistical arrangements while in the field.

The rationale behind these informal interviews was to find out if the MOA staff were trained in PM&E, who trained them and if they were trained, did they train any farmer groups in establishing PM&E systems. The researcher was also interested in ascertaining how MOA staff collaborate with the staff from KARI in supporting the farmer groups in using PM&E systems and whether in their own assessment MOA staff felt that PM&E plays a role in empowering farmer groups and lastly what were the major challenges faced in the implementation of PM&E systems.

Firstly, the interviews revealed that only half of the MOA extension officers were trained in PM&E and in the process of establishing community based PM&E systems with groups. The training was offered by the CIAT-SICPIPF project staff and KARI –Mtwapa PM&E core team. One of the extension officers, Mr. Disi Kadenge indicated that he had attended these PM&E trainings more than once and these included refresher courses. Four officers who indicated that they have not been trained, were relatively new at their respective duty stations and had arrived when the process of establishing PM&E was almost completed. However, these officers were quick to point out that they have a fairly good understanding of the process of establishing PM&E systems through frequent visits to the groups and interaction with the KARI project staff.
The staff stressed that their major role in this process has been to assist groups in collecting data in terms of the indicators selected by the groups themselves. According to Mr Mkono (Kwale district) one of the challenging tasks is to facilitate the farmer groups to analyze and use the information to make decisions or see whether they are making progress or not. He said this analysis is usually done using simple tables, symbols and calculations for instance of profit and loss. He stated that they usually hold quarterly reflection meetings with FFS groups with PM&E systems.

With regard to the role of PM&E in empowering groups, all the MOA staff felt that community driven PM&E systems have played a very vital role in empowering groups. They claimed that groups with PM&E systems are able to generate more data, assess progress systematically, take corrective measures in order to achieve their objectives, demand services from service providers, and have increased participation in project activities, including decision making.

In terms of challenges faced in implementing PM&E systems; the officers indicated that the PM&E concept itself is a bit difficult as one needs to clearly understand the project activities, output, outcomes and goals so as to develop relevant indicators. Finding the right local terminologies with groups was challenging and making the groups understand the concept, especially in the initial stages, was said to have been exacting. The officers also hinted that establishing community based PM&E systems requires more time hence more trips and meetings with the groups especially in the initial stages. This requires resources which were sometimes not readily available from the project. They also informed us that since PM&E emphasize the need to record information, it became a setback as most adults are illiterate and have to rely on others to assist them.

5.6 Role of PM&E in improving group decision making

It is now widely accepted in the development arena that PM&E improves decision making among all stakeholders involved in the implementation of development projects because it provides the stakeholders with timely information needed for making informed decisions (Estrella & Gaventa, 1998, Parks, et.al. 2005).
In order to assess the role played by PM&E in enhancing decision making for the different groups, several questions were posed to the respondents in order to gain insight on how decisions are made within the different groups (with PM&E systems and without). The extent to which groups were undertaking corrective measures in order to meet their objectives and the number of times the communities met to reflect and adjust their activities were sought. The researcher also endeavored to find out whether the PM&E information aided the groups in deciding what kind of technology to adopt hence the responses from groups with PM&E systems are compared with groups without PM&E systems, but also within the different phases of establishing PM&E systems.

### 5.6.1 Involvement of group members in decision-making

In order to gather the necessary information on this subject, firstly we sought to know how decision making is done in the group, for instance if the group wanted to allocate a large piece of land to a particular crop, how are group members involved in making such a decision? Or if the group wanted to make any kind of decision, how does such decision making take place. An attempt was also made to assess the level of satisfaction with the way decisions are made within the groups.

Most of the groups that designed PM&E systems stated that crucial decisions are usually made during weekly group meetings by all group members through consensus building and in some cases through voting. In the case of consensus building, they said that when the need arises to make a decision about a particular issue, then the issue is brought before all members of the group for discussion and debate. It is during this time that every member is free to voice their opinions on the issue and finally consensus is reached based on the facts and information at hand. Sometimes they reach a stalemate but they take time to make a decision so that other members do not feel left out.

One of the groups with PM&E (Amina), recalled that at one time in 2005, when they were about to make a decision on what type of variety to grow on their group garden (shamba), they had two divergent views. Some members wanted to grow both local and
hybrid varieties while others wanted the hybrid variety only which they had just experimented on, with facilitation from SWMP project staff as it had performed very well. Another camp argued the need to grow both varieties because the local maize variety is easy to store while the hybrid would give them high yield and they would sell all of it and make a good cash profit and would not have to worry about its storability. The group decided to reschedule the meeting for another day so that they would all think over it. During the next meeting they resolved the issue as evidenced in this quotation by Theresia Mwagonali:

“We eventually all agreed that we must have two gardens (shambas) so that we could grow both varieties of maize, although I was against this view the first day we discussed this issue, I later felt it made sense after thinking over it and considering the arguments advanced by other colleagues”.

Having looked at how decisions are made within the groups with PM&E systems, it is worthwhile comparing how similar decisions are made within groups without PM&E systems. From the group discussions undertaken, it was noted that decisions in the groups without PM&E were largely made by the group executive members with very little input from the ordinary members. This was worse for groups that do not meet frequently to discuss issues affecting their groups. Most of the groups without PM&E preferred to leave decision making in the hands of the committee or some selected members of the committee i.e. the chairperson, secretary and treasurer. In some groups the committee members were compelled to make decisions without consulting fellow members because some members did not attend group meetings. A typical example is the Tuungane Women Group. The secretary of this group noted the following during our interviews with the group.

“We no longer meet frequently as a group these days, our group is not as active as one would want it to be, we are supposed to have fortnightly meetings but only few members turn up, mostly the committee members as such we are forced to make decision on our own on behalf of the whole group”.

With regard to the level of satisfaction with the way decisions are made within the groups, the survey results indicate that there are considerable differences between groups with and without PM&E systems, but also within the three phases of establishing PM&E systems. Table 5.3 below, illustrates that 100% of the SWMP groups with PM&E
systems, contrasted with only 10% of SWMP groups without PM&E systems were very satisfied with the way decisions are made within the groups. In terms of the ATIRI project, 70% of the groups with PM&E systems and 50% of the groups without PM&E systems stipulated that they were very satisfied with the way decisions are made within the group. Lastly in the Cashew Nuts project, 61.5% of the groups that integrated elements of PM&E systems were very satisfied with the way decisions are made within the group.

Table 5.3: Level of satisfaction with the group’s decision making process

<table>
<thead>
<tr>
<th>Project name</th>
<th>Type of group</th>
<th>Level of satisfaction on how decisions are made in the group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>% Very satisfied</td>
</tr>
<tr>
<td>SWMP</td>
<td>With PM&amp;E</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Without PM&amp;E</td>
<td>10%</td>
</tr>
<tr>
<td>ATIRI</td>
<td>With PM&amp;E</td>
<td>70%</td>
</tr>
<tr>
<td></td>
<td>Without PM&amp;E</td>
<td>50.0%</td>
</tr>
<tr>
<td>Cashew Nuts</td>
<td>Integrated PM&amp;E</td>
<td>61.5%</td>
</tr>
</tbody>
</table>

These results show that high levels of group satisfaction with the way decisions are made within the group were reported in groups with PM&E systems. In these groups, as stated earlier, decisions were made through consensus building, consultation and negotiation whereas in groups without PM&E systems decisions were largely made by the executive members with little consultation. It is not surprising therefore that the groups without PM&E systems reported low levels of group satisfaction with the way decisions are made within their groups. Furthermore, the results indicate that the highest levels of satisfaction were indicated in SWMP groups with PM&E systems, followed by the ATIRI groups with PM&E then the Cashew Nut groups which only integrated some elements of PM&E systems. This may imply that the PM&E systems were well established under phase one (SWMP project) compared to phases two and three (ATIRI and Cashew Nuts) projects, respectively. This could also be attributed to the fact that phase one of establishing
PM&E systems (SWMP project) was facilitated directly by staff from the CIAT-SICIPF collaborative project.

5.6.2 Use of PM&E information in enhancing decision making

Njuki et al. (2005) draws attention to the fact that community driven PM&E systems help project staff and groups to analyze what is working well, what is not working and why. Group reflection meetings permit members to reflect and assess the progress of the project towards achieving its goals and adjust activities as required. Reflections needs to be carried out for each activity or process, and its indicators, one at a time.

With respect to the role played by PM&E in helping groups to decide what adjustments to make, the research team inquired if there were any activities that had been adjusted by the groups or individual members due to the monitored information and reflection meetings. Examples of activities that were adjusted and decisions made by different groups as a result of holding reflection meetings, were solicited from the groups. The groups were asked to recall what was going well, what was not going well and what decisions were made in their groups during their last three reflection meetings.

<table>
<thead>
<tr>
<th>Project name</th>
<th>Type of group</th>
<th>Did the group adjust its activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>SWMP</td>
<td>With PM&amp;E</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Without PM&amp;E</td>
<td>20%</td>
</tr>
<tr>
<td>ATIRI</td>
<td>With PM&amp;E</td>
<td>66.7%</td>
</tr>
<tr>
<td></td>
<td>Without PM&amp;E</td>
<td>14.3%</td>
</tr>
<tr>
<td>Cashew Nuts</td>
<td>Integrated PM&amp;E</td>
<td>23.1%</td>
</tr>
</tbody>
</table>

The results as shown in Table 5.4 above indicate that the majority of the respondents from groups that designed community driven PM&E systems reported that they had adjusted a number of their activities due the feedback and reflection meetings. In the
SWMP project, 100% of the sample with PM&E systems stipulated that they have been able to adjust or change some of their activities due to the PM&E feedback meeting, contrasted with only 20% of the groups without PM&E systems.

For the ATIRI project, 66.7% of the groups with PM&E systems explained that they had been able to adjust some of their activities as a result of PM&E feedback information, while for the groups without PM&E only 14.3% stated that this was the case. In the Cashew nuts project, only 23.1% of groups stated that they had adjusted their activities due to the PM&E reflection and feedback meetings.

These results reinforce the belief that PM&E systems lead to changes in the project implementation process. According to this study, these changes or adjustments varied from aspects such as better targeting of the beneficiaries or stakeholders, to more complex changes such as the addition of activities, adjustment of methodologies, as well as revision of the project or group’s objectives.

As an example of the above, members of the Mwananyati group in the Kwale district informed us that they had agreed to change from carrying manure on their head to using a homemade structure like an ox-cart so that they could carry more manure at a time, but with less effort. Furthermore, members of the Upendo group in the Ganze, Kilifi district, resolved to exploit ways of utilizing irrigated farming instead of just relying on rain-fed farming which had proved to be so unreliable due to perpetual drought. Both of these groups fall under the SWMP project with PM&E systems.

Some groups under the ATIRI project, with PM&E systems, such as the Vuga group in the Kwale district agreed that their members must plant more napier grass to feed the dairy cows and stop using the local grass which gave them less milk. Another example is that of the Tumaini group in the Kilifi district where members resolved to increase the size of the group plot. This group noticed that they needed more harvest in order to make more sales as this could bring a tangible impact on their livelihood.
The Ziwani farmers’ livestock group in Matunga, Kwale district decided to sell all unproductive cows as quoted below from one of the female group members:

"We agreed as a group to sell all unproductive cows...all the cows that failed to conceive through artificial insemination but also those cows whose records showed that they were consistently producing low milk, we wanted to change and buy better breeds that would perform according to our expectations…"

Some groups from the Cashew Nuts project such as Nguluweni and Chanagande in the Kilifi district had experienced problems of non compliance to the constitution by some of their members. The Chanagade group had also witnessed increased levels of non attendance at group meetings and activities by group members. During one of their reflection meetings, the Nguluweni group decided to form a constitutional enforcement committee. This committee was specifically formed to ensure that each and every provision of the constitution would be adhered to and followed by every member. For instance, if any member is supposed to pay a penalty fee for not attending a group activity this committee would make sure he/she pays the penalty. In the Chanagade group, they decided to divide themselves into smaller groups of about 6 people each and report their activities to the whole group during reflection meetings. They felt doing so would increase participation of every member as one would easily be noticed in a small group if she or he became inactive.

From the above discussion it quite evident that PM&E feedback and reflection meetings assisted the groups in learning and taking corrective measures by adjusting some of their objectives or activities accordingly after analyzing their monitored information. In this case, consistent record keeping and holding reflection meetings with stakeholders, a typical characteristic of community driven PM&E systems, were key in aiding the groups to make decisions, learn and adjust some of their activities.

5.6.3 Use of PM&E information in deciding what technologies to adopt

Adoption of new technologies and approaches by the targeted groups so as to improve their own livelihood is one of the key objectives of both KARI and CIAT. Both of these
institutions, as stated in chapter four, are involved in developing new technologies and approaches aimed at improving rural livelihoods in developing countries. This section provides information on whether there are any differences in term of adoption of technologies between groups with PM&E systems and those without and also if there are any differences in the adoption of technologies among the three phases of establishing PM&E systems.

As depicted in Table 5.5 below, 87.5% of the SWMP groups with PM&E systems reported using PM&E information in deciding what kind of technologies to adopt compared to 60% of the SWMP groups without PM&E systems.

Table 5.5: Use of PM&E information in deciding what kind of technologies to adopt

<table>
<thead>
<tr>
<th>Project name</th>
<th>Type of group</th>
<th>Does the group use PM&amp;E information in deciding what technologies to adopt</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>SWMP</td>
<td>With PM&amp;E</td>
<td>87.5%</td>
</tr>
<tr>
<td></td>
<td>Without PM&amp;E</td>
<td>60.0%</td>
</tr>
<tr>
<td>ATIRI</td>
<td>With PM&amp;E</td>
<td>70%</td>
</tr>
<tr>
<td></td>
<td>Without PM&amp;E</td>
<td>25%</td>
</tr>
<tr>
<td>Cashew Nuts</td>
<td>Integrated PM&amp;E</td>
<td>61.5%</td>
</tr>
</tbody>
</table>

In phase two of implementing PM&E systems which is ATIRI project, 70% of the groups with PM&E systems had used PM&E information in deciding what type of technologies to adopt and the same was reported by only 25% of the groups without PM&E systems. These groups explained that since they keep records of the performance of different technologies such as new forage species, maize varieties, banana planting methods, organic and inorganic fertilizers just to mention a few; members were able to reflect as a group on which technologies performed well by looking at parameters like yield, affordability, adaptability, time of maturity and disease resistance and could then make an informed decision on whether to adopt the technology or not.
In phase three (Cashew Nuts project), about 62% of the groups indicated that they had ever used PM&E information to decide on the type of technology to adopt. Some of the technologies adopted by the groups included pruning the cashew nuts trees, application of manure to cashew nuts trees, as well as spraying the cashew nuts at least four times in the season.

From the above information it is evident that groups with PM&E systems were more able to use their monitored information to make decision of what kind of technology to adopt than the groups without PM&E systems. Looking at it from the perspective of the project phase; phase one of implementing PM&E systems had the highest proportion (87.5%) of groups that had used their monitored information to decide on what type of technology to adopt. Phase two of implementing PM&E systems, the ATIRI project had the second highest proportion (70%) and finally the Cashew Nuts project, which is phase three, had the lowest proportion (61.5%) of the groups reported to have used their PM&E information to decide on what type of technology to adopt.

5.7 Role of PM&E in enhancing group organizational capacity, information sharing, participation and transparency and accountability

This section attempts to provide a detailed account of the findings of this study on the role played by PM&E in empowering and enhancing group organizational capacity, information sharing, participation, transparency and accountability within groups. The section has been subdivided to four sub-heading as follows: Group organizational capacity, transparency and accountability, group participation and information sharing.

5.7.1 Group organizational capacity

In order to assess the level of group organizational capacity, the study analyzed the changes in the level of social capital within the case study groups. Four social capital indicators were analyzed and have been reported on. These are (i) perception of group members on effectiveness of the leadership (ii) level of trust amongst group members (iii)
capacity of group members to work well together, and (iv) the extent to which group constitution/rules are enforced.

With regards to capacity of group members to work well together, all the groups (100%) under the SWMP project (with PM&E systems) claimed that the capacity of their respective group members to work well together has improved over the last three years, whereas for the SWMP groups without PM&E systems, less than half (30%) stipulated that their capacity to work well together had improved, 40% felt that there was no change at all, while the remaining 30% were of the view that the group members capacity to work well together was not good at all. These findings are depicted in Table 5.6 below.

Table 5.6: Capacity of the group members to work well together in the last 3 years

<table>
<thead>
<tr>
<th>Project name</th>
<th>Type of group</th>
<th>Group’s capacity to work well together in the last 3 years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Improved</td>
<td>No change</td>
</tr>
<tr>
<td>SWMP</td>
<td>With PM&amp;E</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Without PM&amp;E</td>
<td>30%</td>
<td>40%</td>
</tr>
<tr>
<td>ATIRI</td>
<td>With PM&amp;E</td>
<td>70%</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>Without PM&amp;E</td>
<td>75%</td>
<td>25%</td>
</tr>
<tr>
<td>Cashew Nuts</td>
<td>Integrated PM&amp;E</td>
<td>84.6%</td>
<td>0%</td>
</tr>
</tbody>
</table>

In the ATIRI project, as shown in table 5.6 above, 70% of the groups with PM&E systems reported that the capacity of group members to work well together has improved, 20% indicated there was no change, while 10% thought that their capacity to work together was not good. On the other hand for ATIRI groups without PM&E systems, 75% claimed there was an improvement while 25% felt there was no change. This means that the groups without PM&E in ATIRI had witnessed more improvement in the capacity of their group members to work well together. For the Cashew Nuts project, 84.6% of groups interviewed felt that the capacity of group members to work harmoniously together had improved over the last three years while 15.4% were of the contrary opinion.
The qualitative data helped to elicit an explanation from the groups that felt the members’ capacity to work well together had either improved or remained the same. Reasons given by the groups that felt that the members’ capacity to work well together had improved were that (i) new members had joined the group; (ii) group members were able to meet frequently and discuss group matters; (iii) members were able to assist each other during difficult times; and (iv) members were punctual during group meetings and activities. Punctuality was considered as a symbol of cooperation and group solidarity as reflected in the quotation below from members of the Dambale group in the Kwale district:

“Our group has changed a lot since we started working with this project… previously members would always come late to meetings and sometimes we would just be forced to call off the meeting because we could not form a quorum” another participant chipped in “…the issue here is that members are afraid of penalty fees, if you come late for more than three consecutive meetings you are supposed to pay a fine”

For the groups that felt the capacity of group members to work well together had not changed or was not good at all, the following reasons were given: frequent misunderstandings amongst group members, members being more committed to personal activities than group activities, more members leaving the group and members not seeing any real benefits from the group.

The level of trust among the group members has a bearing on the capacity of group members to work well together. During the group discussions, one of the respondents from the Matatizo group argued that you cannot work well together if you do not trust each other. According to Table 5.7 below, 100% of the SWMP groups with PM&E systems reported that the level of trust among group members has improved in the last three years, while for the groups without PM&E systems, 40 %, 50% and 10% said the level of trust had improved, remained the same and was not good at all respectively.

The majority (80%) of the ATIRI groups with PM&E reported an improvement in the level of trust among members; 10% said the level of trust remained the same and the other 10% indicated that it was not good. There was a very similar response from the ATIRI groups that did not implement PM&E systems because 75% stated that the level
of trust had also improved and the remaining 25% was of the opinion that trust levels amongst group members had remained the same. This means that in the ATIRI project, PM&E did not bring about any significant differences between the groups with and without PM&E as regards the level of trust among group members.

Table 5.7: Changes in the level of trust among group members in the last 3 years

<table>
<thead>
<tr>
<th>Project name</th>
<th>Group type</th>
<th>Level of trust among group members</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Improved</td>
<td>No change</td>
</tr>
<tr>
<td>SWMP</td>
<td>With PM&amp;E</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Without PM&amp;E</td>
<td>40%</td>
<td>50%</td>
</tr>
<tr>
<td>ATIRI</td>
<td>With PM&amp;E</td>
<td>80%</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Without PM&amp;E</td>
<td>75%</td>
<td>25%</td>
</tr>
<tr>
<td>Cashew Nuts</td>
<td>Integrated PM&amp;E</td>
<td>69.2%</td>
<td>7.7%</td>
</tr>
</tbody>
</table>

On the effectiveness of leadership in the group, 100% of the groups with PM&E systems under the SWMP project reported that the quality of leadership in the group had improved as apposed to only 50% of the groups without PM&E systems who stated that the quality had improved. A total of 40% noted that there had been no change in effectiveness and 10% felt the leadership’s effectiveness was not good as shown in Table 5.8 below.

Table 5.8: Changes in the effectiveness of leadership in the group in the last 3 years

<table>
<thead>
<tr>
<th>Project name</th>
<th>Group type</th>
<th>Effectiveness of leadership in the group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Improved</td>
<td>No change</td>
</tr>
<tr>
<td>SWMP</td>
<td>With PM&amp;E</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Without PM&amp;E</td>
<td>50%</td>
<td>40%</td>
</tr>
<tr>
<td>ATIRI</td>
<td>With PM&amp;E</td>
<td>70%</td>
<td>30%</td>
</tr>
<tr>
<td></td>
<td>Without PM&amp;E</td>
<td>87.5%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Cashew Nuts</td>
<td>Integrated PM&amp;E</td>
<td>53.8%</td>
<td>15.4%</td>
</tr>
</tbody>
</table>
In the ATIRI project, more groups (87.5%) without PM&E systems reported a greater improvement in the effectiveness of the group leadership compared to the groups (70%) with PM&E systems. This suggests that there may be other factors that may also influence effectiveness of leadership. These may include factors like, the age of leaders, educational level but also the nature of the PM&E system within the groups. For the Cashew Nuts project only 53.8% of the groups said the quality or effectiveness of the group leadership had improved, 15.4% said it had remained the same and 30.8% mentioned that it was not good.

The extent to which the group constitution or rules are enforced was also considered to be one of the important variables for measuring social capital or group empowerment. A group that is cohesive will usually have clear rules and regulations or a constitution. Many are the times that groups have crafted wonderful constitutions or rules but they are hardly adhered to and have no consequence on its members. Therefore having a constitution or rules that are enforced is likely to strengthen group functioning, ultimately improving group performance. In this regard we were interested in finding out how well the different groups are able to enforce their constitution.

Table 5.9: Level of enforcement of the constitution by the group

<table>
<thead>
<tr>
<th>Project name</th>
<th>Group type</th>
<th>Very well</th>
<th>average</th>
<th>Not well</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWMP</td>
<td>With PM&amp;E</td>
<td>75%</td>
<td>12.5%</td>
<td>12.5%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Without PM&amp;E</td>
<td>30%</td>
<td>50%</td>
<td>20%</td>
<td>100%</td>
</tr>
<tr>
<td>ATIRI</td>
<td>With PM&amp;E</td>
<td>60%</td>
<td>20%</td>
<td>20%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Without PM&amp;E</td>
<td>50%</td>
<td>37.5%</td>
<td>12.5%</td>
<td>100%</td>
</tr>
<tr>
<td>Cashew Nuts</td>
<td>Integrated PM&amp;E</td>
<td>53.8%</td>
<td>30.8%</td>
<td>15.4%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 5.9 above, illustrates that the majority (75%) of the respondents from groups with PM&E systems under the SWMP project were of the view that their constitution and group rules are very well enforced, this was followed by 60% of the ATIRI groups with
PM&E systems who claimed that their constitution is very well enforced, while for the Cashew Nuts group the same was echoed by 53.8% of the respondents.

Defending the above assertions these groups alleged that some members were removed from their groups after failing to attend group meetings and activities consecutively for three times. While in some groups, members that missed meetings were forced to pay fines in line with their constitution. In some groups like Mwanayati in the Kwale district, dairy cows were confiscated from group members who failed to provide enough care for the dairy cows as stated in their constitution.

The results from groups without PM&E systems suggest that only a smaller percentage indicated to have been able to enforce their constitution well enough as this was stated by 30% of the SWMP groups and 50% of the ATIRI groups without PM&E.

In order to conclude this section, it is important to draw attention to the fact that groups with PM&E from all the three case study projects reported more improvement in all the four variables of group functioning except for one variable, effectiveness of group leadership. It can thus be concluded that PM&E systems plays a role in improving group functioning processes i.e. capacity of group members to work well together, level of trust among members, and ability to enforce group rules/constitution. On the effectiveness of group leadership over the last three years, more groups without PM&E systems (87.5%) reported an improvement compared to the groups with PM&E systems (70%) in ATIRI project. This research could not delve too deep into other factors that could be responsible for this as it was felt that it was beyond the scope of this mini thesis. However this shows that there are likely to be other factors which could also influence the group performance such as literacy levels of group members, age, gender, contact with extension staff, size of the group etc.
5.7.2 Role of PM&E in enhancing transparency and accountability within groups

The level of transparency and accountability within the groups was used in an attempt to understand the degree of empowerment amongst group members as result of PM&E. The rationale behind this was that if members of a particular group are well empowered through PM&E processes, they will be able to demand that everyone including their leaders be accountable and transparent in terms of their actions within the group. Literature indicates that PM&E helps to promote transparency and accountability among stakeholders because of its emphasis on information sharing inherent in almost all PM&E approaches (Samarthan, 2007).

Experience has also shown that leaders of groups /communities and even managers of institutions very rarely share information about resources, especially financial resources. Other members are deliberately left in the dark. This usually creates a loophole for these resources to be abused by the leaders without the knowledge of other members or subordinates. In this regard we solicited information on the group members’ knowledge of the group budget, resources and how resources are allocated. We asked some provocative questions such as, if funds were misused in the group how would you know? If funds are misused, what would you as a group do? These questions proved to be so contentious and ignited a hot debate and discussion in some groups. In certain groups, particularly those without PM&E systems where information on group resources was strictly the domain of leaders, these questions aroused a lot of excitement among the ordinary members. This study found out that although the groups with PM&E systems were slightly better in terms of transparency and accountability in group resource management, there were other groups which still had problems in sharing information on financial resources.

Table 5.10 below, illustrates the responses given to the question of knowledge of group funds and expenditure. The majority (88.9%) of the groups with PM&E systems claimed that all members of their respective groups knew how much money the group had and the expenditures that were incurred. For the groups without PM&E systems, only half
(50.0%) reported that all the members of their respective groups knew how much funds the group had and the expenditures incurred. In terms of the Cashew Nuts groups, 69.4% reported knowledge of group funds and expenditure. The remaining 11.1% of the groups with PM&E systems, 22.2% for the groups without PM&E systems and 15.4% for the groups that integrated PM&E systems stipulated that only the committee members (group leaders) knew how much money the group has currently and how much expenditure was incurred. A total of 22%, 5.6% and 22.2% of the groups without PM&E systems reported that some members, very few members and only the committee respectively knew how much money the group has at present.

Table 5.10: Group members’ knowledge of how much money the group has

<table>
<thead>
<tr>
<th>Type of group</th>
<th>Knowledge of group funds</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All members</td>
</tr>
<tr>
<td>With PM&amp;E</td>
<td>88.9%</td>
</tr>
<tr>
<td>Without PM&amp;E</td>
<td>50.0%</td>
</tr>
<tr>
<td>Integrated elements of PM&amp;E</td>
<td>69.4%</td>
</tr>
</tbody>
</table>

To dig further into the issue of group members’ knowledge of funds, we asked some hypothetical questions as follows: if group funds were misused, which members of the group would know, how would they know and what action would they take as a group? On the first question of which members of the group would know if group funds were misused, similar responses to the ones in Table 5.10 were given where the majority of the groups with PM&E systems stated that all members of the group would know, followed by the groups that integrated some elements of PM&E and lastly by the groups without PM&E systems.

On the question of how would the group members know if funds were misused, a number of reasons were given during the group interviews. As depicted in Table 5.11 below, 70.6% of groups with PM&E systems, 47% of groups without PM&E systems and 53.9%
of groups that integrated elements of PM&E stated that before any big financial transaction takes place in the group, all group members meet and discuss the impending expenditure and they review the previous expenditures by demanding receipts and bank statements. In addition to the above, they alleged that financial records are shared during weekly meetings. The other reason that was mentioned by 18% of the groups with PM&E, 35.3% of groups without PM&E and 15.4% of the group that integrated elements of PM&E was that they would know that funds have been misused if the treasurer fails to produce funds when demanded by the group. Finally there were some groups who indicated that they would not know if group funds were abused because the financial records are only known by a few individuals. This was stated by 11.8% of groups with PM&E, 35.3% of groups without PM&E and 15.4% of the groups that integrated PM&E.

Table 5.11: How the group members would know if group funds were misused.

<table>
<thead>
<tr>
<th>Group type</th>
<th>How the group members would know if group funds were misused</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Members agree before any financial transaction takes place</td>
</tr>
<tr>
<td>With PM&amp;E</td>
<td>70.6%</td>
</tr>
<tr>
<td>Without PM&amp;E</td>
<td>47%</td>
</tr>
<tr>
<td>Integrated PM&amp;E</td>
<td>53.9%</td>
</tr>
</tbody>
</table>

The results in this section have shown that groups with PM&E systems were more accountable and transparent as regards to financial transactions compared to the groups without PM&E systems. While the groups that only integrated some elements of PM&E systems were not as good as those who had full PM&E systems but were still better than those without PM&E systems. These findings are therefore in agreement with the theoretical underpinning postulated in the theoretical chapter that PM&E information enhance accountability and transparency among stakeholders. It must be mentioned here that, although it is being concluded the group with PM&E were better off than those
without PM&E in financial transparency and accountability, we still met some groups with PM&E that were not transparent enough, and where information on group resources especially funds was not shared with the rest of the members. Some groups did not have a bank account and were using an external person to keep money for them, usually a business person within their vicinity. They defended their action arguing that if a business person misuses their money, they would easily recover the money compared to a fellow member who is poor.

5.7.3 Role of PM&E in enhancing participation in project activities

In finding out whether community driven PM&E systems enhance participation of members within groups, we sought information on changes in farmer participation in project activities, as well as consistency in attendance at group activities and meetings by group members.

Information on changes in farmer participation in project activities was captured from both individual and group interviews. The individual respondents were asked to state their level of participation in group activities during the past 12 months.

Table 5.12: Level of participation in group activities by individual members

<table>
<thead>
<tr>
<th>Type of the individual members’ group</th>
<th>Level of participation in group meetings in the past 12 months</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>participated in all or most activities</td>
<td>participated in some of the activities</td>
</tr>
<tr>
<td>With PM&amp;E</td>
<td>94.6%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Without PM&amp;E</td>
<td>44.4%</td>
<td>19.4%</td>
</tr>
<tr>
<td>Total</td>
<td>69.9%</td>
<td>11.0%</td>
</tr>
</tbody>
</table>

According to the results portrayed in Table 5.12 above, individual members from the groups with PM&E systems participated in all or most of the group activities compared to
the members that belonged to groups without PM&E systems. In this regard, 94.6% of
the individual respondents from groups with PM&E systems claimed that they
participated in all or most activities, 2.7% participated in some of the activities and 2.7%
participated in very few activities. In contrast, only 44.4% of the individual respondents
from groups without PM&E systems claimed that they participated in all or most
activities, 19.4% participated in some of the activities and 36.1% participated in very few
activities.

The individual respondents that participated in very few activities, were asked to give
reasons for their lack of involvement. The 2.7% of the individual respondents from the
groups with PM&E systems, indicated that they participated in very few activities in the
past 12 months because the group had confiscated the dairy cows from them due to poor
management. However, they felt that the group was harsh on them and hence got
discouraged and stopped attending group activities. On the other hand, several reasons
were given by the 36.1% of the individual respondents from groups without PM&E
systems who indicated that they participated in very few group activities. Some of the
reasons included the following: (i) group leaders had misappropriated group funds and
members got discouraged from regularly participating in group activities (ii) the project
activities coincided with the individual activities (iii) the group itself was not meeting or
conducting activities regularly (iv) there was poor communication from the group leaders
as to when there would be the next group meeting or activity (v) the area was too dry due
to drought, so there were no activities on the group farm (vi) the individual was either
sick or taking care of a sick relative, hence could not attend group activities.

With regard to consistency in attendance at group meetings and activities, each group was
asked to state whether they felt that (i) all or most of their members attend group
meeting/activities (ii) only some of their members attend (iii) very few of their members
attend group meetings and activities. As the groups were responding to this question we
requested that they show us their attendance register so that we could compare the
responses given by the groups with what the attendance record showed.
According to the results from the group interviews, all the SWMP groups (100%) with PM&E systems claimed that all or most of the group members attended group meetings, while for the groups without PM&E systems, 40% stated that all or most members attended group meeting, while 40% and the remaining 20% stated that only some members and very few members respectively attended group meetings in past 12 months.

For the ATIRI project, the majority (60%) of groups with PM&E systems indicated that all or most members attended group meetings and the remaining 40% stated that only some members attended. For the groups without PM&E systems, only 37.5% felt that all or most members attended group meetings while the remaining 62.5% were of the view that only some members attended group meetings. With regard to the Cashew Nuts project, slightly more than half (53.8%) of the groups stated that all or most members attended group meetings, while 38.5% and 7.7% felt that some members and very few members attended group meetings respectively, in the past year.

For the groups that stated that all or most members attend group meetings, we wanted to find out what motivated them. Three main reasons were given for their attendance. The first reason was attributed to the high level of cooperation among group members, the second was that the members were following or obeying the constitution which demands penalty fees to members who miss three consecutive meetings, and lastly, members stated that they wanted to achieve their goal/objectives hence consistency in attending group meetings was considered as vital.

On the other hand, the groups which indicated that only some members or very few members attended group meetings in the past year explained that the major reasons for poor attendance were that (i) there is usually lack of cooperation among group members (ii) some members prioritize family problems and commitments (iii) members do not know and follow their constitution and that the constitution itself is not enforced.
5.7.4 Role of PM&E in enhancing information generation and sharing within groups

To appropriately address the role of PM&E in enhancing information generation and sharing within groups, the researcher used information from individual interviews and group interviews. From the individual interviews, we sought information on whether the individual members were keeping records of the important activities on their farm as a way of information generation. From the group interviews, on the other hand, we sought information on whether the different groups were holding specific forums for sharing information within their group and wanted to find out the frequency of such reflection meetings.

**Information generation:** In terms of information generation, the results from the individual interviews showed a remarkable difference between individual members from groups with PM&E systems and those without PM&E systems. We asked the individual respondents if they were keeping records of the important activities on their farm. The majority (83.8%) of the individual members from groups with PM&E systems indicated that they were keeping records of important activities on their farm, while for the individual members from groups without PM&E systems only 11.1% indicated that they were keeping records of important activities as shown in Table 5.13 below. The most common type of information kept by the individual respondents included the following: amount of milk produced per day, total yield of the crop produce, incidence of pest and disease attack and expenditure records.

These results can be attributed to that fact that PM&E approaches emphasizes generation of relevant information that can be used by different stakeholders in this case, individual members to making informed decisions.
### Table 5.13: Keeping records of important activities on the individual farm

<table>
<thead>
<tr>
<th>Type of the individual’s group</th>
<th>Does the individual keep records of important activities on his/her farm</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>With PM&amp;E</td>
<td>83.8%</td>
<td>16.2%</td>
</tr>
<tr>
<td>Without PM&amp;E</td>
<td>11.1%</td>
<td>88.9%</td>
</tr>
<tr>
<td>Total</td>
<td>47.9%</td>
<td>52.1%</td>
</tr>
</tbody>
</table>

**Information sharing:** Information sharing is very crucial for the growth, sustainability and cohesion of any group. One of the key principles of participatory monitoring and evaluation is information sharing and reflection as noted by Coupal (2001). To capture this information, we inquired from all the groups if they were holding specific meetings to share and reflect information collected and how often?

According to Table 5.14 below, 70% of the groups with PM&E under the ATIRI project compared to 50% of the groups without PM&E systems, reiterated that they had been organizing specific meetings to share and reflect on information collected. While 100% of the group that implemented PM&E and only 40% of the groups without PM&E under the SWMP project reported that they had been organizing specific meetings with the aim of sharing and reflecting on the information collected. Only a small proportion (23.3%) of the groups under the Cashew Nuts claimed that they were able to organize specific meetings to share, learn and reflect on the information collected.

One of the reasons for poor information sharing especially among the groups without PM&E systems was lack of reliable records. It was noted that most of the groups without PM&E systems were very inconsistent in keeping records. This was noticed during the group interviews since we requested each group to produce their group records. It was this inconsistency in record keeping by groups without PM&E system that made it difficult for them to share information among members and learn from this information.
Table 5.14: Organization of specific meetings for information sharing within groups

<table>
<thead>
<tr>
<th>Project name</th>
<th>Type of Group</th>
<th>Does the group organize specific meetings for information sharing within the group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>SWMP</td>
<td>With PM&amp;E</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>With PM&amp;E</td>
<td>40%</td>
</tr>
<tr>
<td>ATIRI</td>
<td>With PM&amp;E</td>
<td>70%</td>
</tr>
<tr>
<td></td>
<td>With PM&amp;E</td>
<td>50%</td>
</tr>
<tr>
<td>Cashew Nuts</td>
<td>Integrated PM&amp;E</td>
<td>23.1%</td>
</tr>
</tbody>
</table>

The frequency of holding information sharing and reflection meetings was considered as a crucial parameter because learning is a continuous process as such a one off event or reflection meeting would obviously not be enough for meaningful learning and change to occur. In this regard we attempted find out how frequently such reflection meetings were held by the groups. The results indicate that most of the groups with PM&E systems met more frequently to reflect on the progress of the project activities than the groups without.

For example 70% and 75% of the ATIRI and SWMP groups with PM&E systems respectively, met once a week to reflect on the progress of the project as contrasted with only 37.5% and 20% of the ATIRI and SWMP groups without PM&E respectively. Less than half (33.3%) of the groups under the Cashew Nuts project informed us that they met once a week to reflect on the progress of their project activities. This implies that the Cashew Nuts groups were no better than the other groups under the SWMP and ATIRI projects that did not design PM&E systems in terms of frequency of holding reflection meetings. Actually the ATIRI groups without PM&E systems reported a higher percentage (37.5%) than the Cashew Nuts groups (33.3%) or groups that met once a week. Some groups stated that they did not meet at all to reflect on project activities; this was echoed by 50% of the Cashew Nuts groups and 40% of the SWMP groups without PM&E.
According to the empirical evidence presented in this section, it can thus be concluded that PM&E plays a crucial role in information generation and sharing. This is backed by the fact that more individual members from groups with PM&E systems reported keeping a record of information of important activities on their farm compared to individual members from groups without PM&E. This implies that more individual members from groups with PM&E systems were able to apply the knowledge and skills in record keeping, gained from their respective groups, to their individual activities. It can thus be argued that PM&E instills a culture of record keeping among groups or individual members. Finally, groups with PM&E systems were more able to share PM&E information and use it for decision making through weekly reflection meetings.

5.8 Role of PM&E in enhancing information flow and accountability between groups and service providers

Samarthan (2007) and Hohenheim (2002) draw attention to the fact that transparency and accountability within the basic delivery system will not be possible unless citizens or groups demand and keep vigilance of the services and commodities legitimately meant for them. Kaaria (2005) and Eldis (2005) also observed that community driven participatory monitoring and evaluation provides decision-support for process oriented management and builds capacity and skills in assessing the quality of service delivery and enhances downward accountability to communities by service providers.

In this regard, this study attempted to assess if there were any differences between groups with PM&E systems and those without in terms of their ability to demand services from service providers and hold them accountable for their actions and promises. As noted by the different authors that a group that is empowered will be able to demand services that are provided by the different service providers.
5.8.1 Ability of groups to engage with service providers and articulate their needs

This section focuses attention on understanding mechanisms for information sharing between groups and project staff (service providers), the extent to which service providers have taken action based on farmer (group) information and the ability of groups to demand additional services from project staff and other organizations in order to meet their group objectives.

In an attempt to capture information on mechanisms for information sharing between project staff and communities (groups), two similar, but technically different questions were asked. The first one was aimed at finding out if the groups were conducting meetings with project staff to give feedback on how the project is progressing and the second question also inquired whether the groups had conducted meetings with project staff with the purpose of explaining to project staff how they wanted the project to proceed.

According to the results illustrated in Table 5.15 below, the majority (94.4%) of the groups with PM&E systems (SWMP and ATIRI combined) and 84.6% of groups that had integrated some elements of PM&E systems, indicated that they had conducted meetings with the project staff to give feedback on how the project was progressing. For the group without PM&E systems, 77% conducting meetings with project staff for giving feedback on the progress of the project. An analysis of these results suggest that although the groups with PM&E systems and those that had integrated elements of PM&E had a higher percentage (94.4% and 84.6%) respectively, the groups that did not design PM&E systems were also doing well in terms of meeting with the project staff to give them feedback. However considerable differences surfaced when it was inquired whether the groups were conducting meetings with the project staff in order to explain to them how they wanted the project to proceed. The same percentage (94.4%) for the groups with PM&E systems was maintained, while for the groups without PM&E it decreased to 50% and for those groups that integrated elements of PM&E, it also decreased slightly to 76.9%.
This clearly shows that more groups with PM&E systems were able to confront the project staff and articulate their needs on how they want the project to proceed. This implies that these groups were capable of demanding the activities or services they wanted to be implemented and this is indicative of group empowerment. For the groups without PM&E systems, only half (50%) were able to demand and explain to the project staff how they want the project to proceed. This is a decrease from 77% of the groups without PM&E, who had initially indicated that they had been conducting meetings with project staff to give feedback on how the project was progressing.

Based on these meetings, it was learnt that project staff have been able to take corrective action including visiting some groups more frequently than before. We heard of several cases where project staff took action or advised the group due to information feedback from the groups. A few examples are cited below:

Project staff were persuaded to bring more seed to the Mwananyati group after the group members decided that every member that had a cow should not only plant napier grass, but also mucuna and glicirdia. Three Cashew Nuts groups namely: Ufanisi, Nguluweni and Mkorosho reported that as a result of meetings with project staff, they were advised not to spray their cashew nuts trees during the peak rainy season, but rather wait until the rain stops. The SWMP Dambale group (with PM&E) incorporated elements of irrigation into their farming system after complaining of drought to the project staff who later trained them in simple irrigation techniques. Similarly, the Nuru farmers group which engaged in tissue culture banana production, successfully managed to lobby project staff, particularly from the Ministry of Agriculture, to help them to solicit funds to construct a dam and provide pumps for irrigating water from the dam to the farmers’ banana field. It was revealed that the cost of this was slightly over 500000 Kenyan Shillings (about 7200US$).
Table 5.15: Meetings with project staff on progression of project

<table>
<thead>
<tr>
<th>Type of group</th>
<th>Does the group meet with project staff to give feedback on how the project is progressing</th>
<th>Does group meet with project staff to explain how they want the project to proceed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>With PM&amp;E</td>
<td>94.4%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Without PM&amp;E</td>
<td>77.8%</td>
<td>22.2%</td>
</tr>
<tr>
<td>Integrated PM&amp;E</td>
<td>84.6%</td>
<td>15.4%</td>
</tr>
</tbody>
</table>

In addition to the above, the groups were also asked if they had ever demanded additional services from the project staff and other organizations to meet their group objectives. In response as indicated in Figure 5.4 below, 83.3% of the groups with PM&E systems and 69.2% of groups that integrated some components of PM&E systems revealed that they had demanded additional services from the project staff and other organizations to meet their group objectives. In contrast, only 33.3% of the groups without PM&E system had been able to demand additional services from the project staff and other organizations. The services demanded by the groups included the following: agricultural inputs (seed, fertilizer, pesticides, and spray pumps), training in a number of aspects (irrigation, artificial insemination, value addition to crops like cashew nuts, fodder production and management, dairy and beef production) and requests for funds. Other organizations contacted besides KARI and MOA included the following: Plan-Kenya, Coastal Development Authority, Constituency Development Fund, Nja Marufuku, Krep bank, Heifer Project International, UNICEF and Samaritan Pulse.
5.8.2 Level of accountability of services providers

To assess whether PM&E systems enhance accountability to groups by service providers, we first asked for the groups’ perception on how committed the project staff were in fulfilling joint work plans. We further asked what each group would do if for example project staff were late for meetings and activities, or if they failed to keep their appointments.

According to the group interviews, 72.2% of the groups with PM&E systems felt that project staffs were very committed to fulfilling the joint work plans, while only 55.6% of the groups without PM&E systems shared the same view. Analyzing the same results in terms of the type of projects, shows that 80% of the groups in the ATIRI project with PM&E and 50% without PM&E, 66.7% of SWMP groups with PM&E systems and 62.5% of the groups without PM&E and 76.9% of the groups from Cashew Nuts project indicated that the project staff are very committed to joint work plans. This means that a greater proportion of the groups with PM&E systems felt the project staff were more accountable to their commitment compared to groups without PM&E.
With regard to the question of what actions the group would take if project staff were late for meetings and activities or if project staff did not keep their appointments, 11 out of 18 groups that had implemented PM&E systems stated they would ask the officer why he or she was late and would complain about how inconvenienced they feel. Four groups said that they would summon the staff for a meeting to complain about the behavior, while the remaining 3 groups stipulated that they would just leave the meeting place. For groups that integrated some elements of PM&E, 4 groups out of 13 contended that they would go to the offices of the project staff especially staff from Ministry of Agriculture and demand an explanation of why they were late to meetings and do not honour their appointments. Six of these groups said they would just wait for project staff until they come so that they could have the meetings and would not say anything, while 3 groups stated that they would just complain.

For groups that did not implement PM&E systems, 7 out of the 18 groups indicated that they would ask for an explanation from project staff, while 6 groups stated that they would just wait for the project staff for some time then disperse if they do not show up. The remaining 5 groups informed us that they would never wait for them after the agreed time had passed.

These results show that more groups that designed PM&E systems were inclined to confront the project staff and demand an explanation from them as to why they were always late for meetings or were failing to honour their appointments. This can be contrasted to groups without PM&E systems where most groups said they would just wait or leave the rendezvous; very few groups indicated that they would demand an explanation from the project staff.

5.9 Conclusion

The findings of this investigation have demonstrated that community driven PM&E systems plays a significant role in empowering groups and improving their decision making processes. Groups with PM&E systems under the SWMP, ATIRI and Cashew Nuts projects were more able to make informed decisions, hold reflection meetings,
participate in group meetings and activities, generate and share information, enforce their constitution, work well together, articulate their needs and demand more services and hold service providers and project staff accountable to their promises. However, there was not much difference between groups with PM&E and without in terms of financial accountability and management. Therefore, using these research findings as a base, the proceeding chapter will present general conclusions and recommendations for the study.
CHAPTER SIX

6 CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This Chapter is aimed at providing general conclusions on the research. It also provides recommendations on how best community based participatory monitoring and evaluation systems can be structured in order to improve project management and decision making. Furthermore, the lessons learnt and areas for future research have been embedded in the recommendations and are all presented below.

This research largely used the World Bank empowerment framework for assessing the level of empowerment in the different groups (with PM&E and without PM&E) that were sampled. The World Bank outlined four key elements of the empowerment framework namely: local organizational capacity, inclusion and participation, access to information and accountability (Nayaran, 2002:14).

In general, the research findings indicate that the level of group empowerment was high in groups that established PM&E systems in the implementation of their project activities compared to those groups that did not. Similarly, higher levels of empowerment were noticed in individual group members from the groups with PM&E systems than those from groups without PM&E systems. Furthermore, the level of group empowerment was more pronounced in the SWMP groups with PM&E, compared to the PM&E groups in the ATIRI and Cashew Nuts projects which were from phases two and three respectively in terms of establishing PM&E systems as outlined in Chapter 1.

It can thus be argued that the groups that designed community based PM&E systems had followed the principles of people centred development, i.e. the development approach that places emphasis on the involvement of people. Here, the beneficiaries developed their own indicators for monitoring project/group activities, outputs and outcomes, while the project staff just facilitated the process. In addition, this study has ably shown that
participation of all group members in decision making was prevalent in groups that
designed community based PM&E systems. This implies that the group members were
able to voice their opinions regarding decisions that affect them. Participation in
decision-making is a key principle of people centred approaches.

It can therefore be concluded that the direct mentoring and facilitation that was provided
in Phase one of establishing PM&E systems by the CIAT-SICPIPF project staff had a
more positive effect on groups under the SWMP project. This is evidenced by the fact
that these groups seemed to have been more empowered, had more capacity and were
more able to make informed decisions using PM&E information compared to the PM&E
groups in the ATIRI and Cashew Nuts projects which were categorized as phase two and
three respectively of establishing PM&E systems.

Secondly, just integrating some elements of PM&E in the project, as was the case with
Cashew Nuts project, did not necessarily produce that same output compared to the
projects that had fully implemented PM&E systems (SWMP and ATIRI projects). These
groups were therefore less empowered and less able to make informed decisions.

6.2 Local organizational capacity/ group functioning processes

A number of variables were used to assess the groups’ local organizational capacity,
which is one of the key elements of empowerment. These variables included the capacity
of group member to work well together, effectiveness of group leadership, consistent
attendance at group meetings and activities, having a constitution that is enforced, and
level of trust and accountability within groups. These will be discussed below.

6.2.1 Consistent participation at group meetings and activities

This study found that high levels of consistent attendance/participation at group meetings
and activities was noticeable in most of the groups that had established PM&E compared
to those that did not, for both the SWMP and ATIRI projects. This was however not very
conspicuous for the Cashew Nuts groups, which in general, seemed to have incorporated
very little of the PM&E concepts. At individual level, a similar pattern was observed; individual group members from groups with PM&E attended all or most of the group meetings and activities, while individual members from groups without PM&E attended some of the meetings or very few meetings. Consistent participation by group members at group meetings and activities is one of the key principles of community participation. In this regard group members were able participate consistently in group activities and meetings.

6.2.2 Having an enforced constitution

Almost all the 49 groups interviewed stated that they had a constitution. However, it was discovered that having a constitution is one thing and following or enforcing it, is another. Most of the FFS groups without PM&E failed to enforce their constitution compared to the FFS groups that had designed PM&E systems.

6.2.3 Trust and accountability

High levels of trust and accountability in decision making were frequently mentioned in groups with PM&E compared to those without. The groups informed us that decisions are arrived at through discussions and participation of all members where consensus building is the order of the day. However, financial accountability and transparency seemed to have been a problem for most of the groups, including those with PM&E. It appeared that most groups have not been well facilitated on how to keep financial records and to share this information with the rest of the group members. Therefore financial transparency still leaves a lot to be desired for both groups with or without PM&E systems.

6.3 Participation and decision making

With regard to community participation, the empirical research findings have revealed that most of the groups that designed PM&E systems made their decisions through consensus building by participation of all group members based on the available information generated through PM&E. For groups that did not implement PM&E
systems, decisions were made by few leaders, usually without enough information. As a result high levels of group members’ dissatisfaction with the decisions made by the group leaders were reported in the groups that did not design PM&E systems compared to the groups that designed PM&E systems. This therefore leads to the conclusion that PM&E enhances participation in decision making by all group members, but also improves group members’ participation in group meetings and group activities. This is in agreement with the theoretical underpinning presented in Chapter Two that use of the people centred approaches to development enhances community participation at grass roots level and also increases the success and sustainability of projects.

6.4 Level of information generation and sharing

At individual level, there were more individual group members from groups with PM&E than those without PM&E who indicated that they were keeping individual records of their activities on their farm. The exception was that of records for milk production, where it was observed that even individuals from group without PM&E kept these records.

It can thus be concluded that PM&E instills a culture of record keeping among groups or individuals members. Finally it can also be concluded that gathering information in the group is one thing, but sharing the same and using it is another. Groups with PM&E systems were more able to use PM&E information to perform simple data analysis and use it for decision making. This is a typical characteristic of all forms of participatory evaluation in general and the empowerment evaluation/ community driven PM&E in particular. These approaches simulate the spirit of self-reliance among the targeted groups. As it has been demonstrated from the findings of this study, the groups with PM&E system were more self-reliant compared to those without PM&E.

6.5 Information sharing/ reflection meetings and learning

As already alluded to earlier on, almost all the groups interviewed had kept or were still keeping records of some kind. However, sharing these records and analysis of the
information to make informed decisions i.e. on what type of technology to adopt was absent in most of the groups without PM&E and in a few groups with PM&E.

Most of the groups with PM&E systems held reflection meetings regularly. Here they could discuss which activities were successful and which ones needed attention. This enabled the groups to learn from their mistakes and take corrective measures. Since information sharing is one of the key principles of participatory development and the empowerment framework, as postulated in the theoretical chapter, it can be concluded that the groups with PM&E system were applying principles of participatory development and this is what might have brought about the difference in comparison with the groups without PM&E as noted below.

Most of the FFS groups without PM&E systems had stopped keeping records of their activities during the time of this research. In most cases they were also not meeting as regularly as they used to do previously. This is in sharp contrast to most of the groups with PM&E, who indicated having continued with regular meetings and monitoring of their activities despite the fact that the FFS learning cycle had reached completion and that they had graduated from the training. However the groups under the Cashew Nuts project seemed not to have been consistent in monitoring and recording the performance of their group activities in relation to cashew nuts production.

6.6 Ability of groups to demand services from service providers

The results of this study have clearly shown that more groups with PM&E systems were more able to confront the project staff and articulate their needs on how they want the project to proceed. These groups were more able to demand services and activities they wanted to implement in their respective groups. For the groups with PM&E systems, only half (50%) were able to demand and explain to the project staff how they wanted their project to proceed, compared to 94.4% for the groups with PM&E. The first scenario presents a shift in power relations where the groups with PM&E systems were able to demand services and articulate their needs. As was discussed in Chapter Two, the people centred approach is about change in power relations such that the beneficiaries who were
previously excluded in decision making of issues affecting their lives, can now articulate their needs and decide their development agenda. In this connection, Roodt (2001) noted that genuine participation in development entails people having the power to influence the decisions that affect their lives. This was also the case for the groups with PM&E systems, whilst those without exhibited less ability and less power in terms of influencing decision making.

6.7 Recommendations

- Higher levels of group and individual empowerment were noted in the groups with PM&E systems than the groups without. In addition the SWMP groups with PM&E performed better in terms of most of the indicators of empowerment compared to groups with PM&E from the ATIRI and Cashew Nuts projects. It is therefore recommended that when establishing PM&E systems with new groups, KARI-Mtwapa needs to follow the process that was used for the SWMP PM&E groups. There should be direct contact with groups with a lot of mentoring in the initial stage. This implies making frequent field visits to the groups and therefore more resources are required to satisfy these processes, especially in the initial stages. This is typical of all participatory approaches; they require a lot of time and resources in the initial stages but the long term benefits of such processes by far outweighs the cost.

- The findings of this research also showed that most of the groups without PM&E systems were still able to monitor their activities; however their understanding of monitoring was limited to mere observation without keeping records of the activities being undertaken or technologies being used. They only relied on remembering the information; the Shaza women group argued that it was the easiest and simplest way. Yet this made it difficult for them to hold reflection meetings as it was impossible to remember everything unless it was written down. However, there were some groups that had previously kept records because of the FFS approach. But after completing the FFS learning cycle and graduating, they
became very inconsistent in their record keeping. Yet, for the groups to make tangible decisions or conclusions on the type of technology/strategy to adopt, they need to have consistent information and accurate records, otherwise they are likely to arrive at false conclusions. It is therefore recommended that project staff must encourage and make sure that groups are consistent and thorough in their record keeping in order to be able to make decisions that are not only plausible but also relevant and value-adding. However this study could not establish the minimum required standard records that a group should keep for it to function properly and make plausible decisions. This could be an area for future research.

- In most of the Cashew Nuts groups that integrated some elements of PM&E, there seemed to have been too little PM&E to cause a significant impact on how the groups would monitor and analyze information related to cashew nuts production as well as other activities of their group organization. However, in some groups, the Tree Management Team (TM&T) also acted as an M&E committee and managed to collect some basic information for decision making. In this case, the TM&T comprised of members from the group itself, while in other groups the TM&T was made up of people that were not members of the group and as such they were not concerned with gathering information on the production or performance of the cashew nuts. Their interest was purely on the work and payment from the group for doing the job of spraying the cashew nuts. However, it is still recommended that in instances where the project does not have enough resources to institute a fully fledged PM&E system, integrating some element of PM&E would still add some value to the project performance provided the project pays attention to other importance factors like the formation of an M&E committee or a TM&T committee that comprises members from within the group.

- Half of the Ministry of Agricultural frontline extension staff that was interviewed indicated that they had not been trained in PM&E. It is therefore recommended that projects, should urgently consider organizing PM&E training for their staff.
This is important to them as they are expected to facilitate and mentor the PM&E groups and also to scale out to other groups in the project area.

- Extension staff and scientists noted that PM&E was a very difficult concept and was not easy to implement in rural communities. They explained that the training offered to them is in English, but they were expected to communicate and train farmers or groups in the vernacular language. Finding the right terminologies and vocabulary to describe terms such as output indicator, outcome indicator, impact indicator, monitoring and evaluation poses a great challenge. It is therefore recommended that PM&E practitioners should consider developing PM&E manuals that are translated into vernacular languages by language experts. The manuals should also rely more on the use of symbols or graphics that are easy to understand. These manuals would then be easily used by the extension staff and scientists as well as the FFS field facilitators.

- In some groups very few or none of the members were able to read and write. Hence despite their desire to document, they were not be able to do so. It is therefore recommended that when designing PM&E systems, the literacy level of the target group must be taken into consideration and accompanying programs such as adult literacy must be initiated and the use of symbols and graphics should be explored as an option. The FFS groups can use graphics/pictures to show the changes that are occurring in their groups.

- The project staff must resist the temptation of making groups collect information on everything. To begin with, this is not feasible as the groups get bogged down with too much information which they cannot process and make use of. There is need to prioritize the most important information that each group needs. It is therefore recommended that the project staff should negotiate with the different groups on their information needs and that of the project staff so that information is collected only on those indicators that are relevant, from the perspective of all the different stakeholders.
• Most groups have stronger interactive than recording skills consequently key project insights are communicated mainly through anecdotes and remain undocumented. This then limits the potential for institutional learning. It is therefore recommended that more and continued information feedback between communities and service providers be strengthened through regular joint meetings and communications. The project staff should also assist groups in acquiring skills to analyze and interpret information gathered using simple tools like simple tables, graphs and other appropriate graphics.

6.8 Concluding remarks

With regard to the objectives of this study, the researcher feels that they have been adequately addressed. This thesis has provided the background to the case study area, a theoretical framework that was used as a base to launch the empirical fieldwork, the nature and extent of the PM&E systems established by the three case study projects and the role played by community based PM&E system in empowering groups. It has also provided recommendation on how best to structure PM&E systems in order to improve community driven PM&E systems.

The study has also attempted to address all the research questions that were raised in Chapter one and it has succeeded in demonstrating that community driven PM&E systems play a significant part in empowering groups and improving their decision making. This has been backed by the fact that groups that design community driven PM&E systems displayed high levels of empowerment compared to the groups that did not. The level of empowerment within a group was determined by the level of access to information, participation of group members in group meetings, activities and decision making, level of accountability, ability to negotiate or demand services from service providers or project staff, ability to adopt technologies and ability to adjust project activities due to the regular group reflection meetings.
7 REFERENCES


Couplal, F. 2001. Results based participatory monitoring and evaluation: CIDA.


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Internet sources


Uganda Debt Network http://www.udn.or.ug/cbmesi.htm. (accessed 26/02/06)


8 APPENDIXES

Appendix-I: Household Questionnaire

Study on the role of CD- PM&E systems in empowering communities

Firstly I would like to thank you for accepting to take part in this study. I would like to ask you some questions that will help me understand how you have been working under SWMP project in relation to monitoring and evaluation of the project activities, how you have participated in the PM&E process, how you have benefited and what you have learnt and how much control you feel you have when you are making decisions. If you keep records I would like to find out whether the monitored information helps you to make informed decisions.

Section I: Respondent Details

Date……………………………Interviewer………………………………..

Name………………………….District……………………………………….

1. What are your household’s characteristics (to be asked at the end)

<table>
<thead>
<tr>
<th>Questions</th>
<th>Codes</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex of household head</td>
<td>1=FEMALE; 0=MALE</td>
<td></td>
</tr>
<tr>
<td>Sex of respondent</td>
<td>1=FEMALE; 0=MALE</td>
<td></td>
</tr>
<tr>
<td>Relationship to h/h head</td>
<td>1=Wife; 2=Husband; 3=Son; 4=Daughter; other specify</td>
<td></td>
</tr>
<tr>
<td>Age of household head</td>
<td>Actual number of years</td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td>1=Married; 2=single; 3=Divorced; 4=Widowed 5=others (specify)</td>
<td></td>
</tr>
<tr>
<td>Where does your spouse (husband or wife) reside?</td>
<td>1=within village; 2=other village; 3=town/city; 4= other</td>
<td></td>
</tr>
<tr>
<td>What is your level of education?</td>
<td>1=no formal education; 2=primary education (P1-P7); 3=secondary education (S1-S4); 4=completed high school certificate; 5=diploma</td>
<td></td>
</tr>
<tr>
<td>Questions</td>
<td>Codes</td>
<td>Response</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>and degrees; 6=adult education; 7=other (specify)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literacy of respondent</td>
<td>Can read</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Can write</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of other household members that can read or write</td>
<td></td>
</tr>
<tr>
<td>Type of residential main house (observe) roofing</td>
<td>1=Iron roof sheets; 2=grass thatched; 3=Others (specify)</td>
<td></td>
</tr>
<tr>
<td>Type of wall</td>
<td>1=burned bricks, 2=bricks; 3=stone; 4=mud; 5=other (specify)</td>
<td></td>
</tr>
<tr>
<td>Number of rooms in the house</td>
<td>1= one room; 2=Two rooms; 3= More than two room</td>
<td></td>
</tr>
<tr>
<td>What is your current primary occupation?</td>
<td>1=farming; 2=teacher; 3=Agric. officer; 4=others (specify);</td>
<td></td>
</tr>
<tr>
<td>What is your secondary occupation</td>
<td>1=farming; 2=teacher; 3=Agric. Officer</td>
<td></td>
</tr>
<tr>
<td>What was your previous occupation?</td>
<td>1=farming; 2=teacher; 2=Agric. officer; 4=others (specify)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Group membership</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group name</td>
<td>When joined</td>
<td>Position</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Through which of the above-mentioned groups are you implementing the project?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge of the groups’ objectives and activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Do you clearly know and understand the objectives and activities of your group?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. If yes,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. What are the objectives of the group?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. What are the key activities of the group?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Social capital and accountability

6. In the past 12 months what has been your level of attendance to group meetings?
   1. Attended all or most meetings
   2. Attended some meetings
   3. Attended very few meetings

7. If attended very few meetings what was the reason?
   ..............................................................................................................................
   ..............................................................................................................................

8. In the past 12 months what was your level of participation in group activities?
   1. Participated in all or most activities
   2. Participated in some of the activities
   3. Participated in very few activities

9. If you participated in few activities what were the reasons?
   ..............................................................................................................................
   ..............................................................................................................................
   ........................................

10. If you fail to attend the group meetings, what does the group do?
    1. Nothing
    2. Cautions you
    3. Demands penalty fee
    4. Other (specify)

11. If you fail to participate in the group activities, what does the group do?
    1. Nothing
    2. Cautions you
    3. Demands penalty fee
    4. Other (specify)

12. Are you well conversant with the group budget, resources and how the resources are used?
    1. Very conversant
    2. Partially conversant
    3. Not conversant

13. Have you seen the records of the group accounts and other resources that the group has?
    1. Yes
    2. No

14. If yes, how did you access these records
    1. Asked to see them
    2. During group meeting
3. Other (specify)

15. How often do you see the records of the group account?
   1. Fortnightly
   2. Monthly
   3. Quarterly
   4. Half yearly
   5. Yearly
   6. Other (specify)

16. Do you know how much money your group has currently?
   1. Yes
   2. No

17. What were major expenditures for your group last year?
    ………………………………………………………………………………………………………
    ……………………………………………………………………………………………

18. Who made decisions on these expenditures?
   1. Project staff
   2. Group leaders
   3. Selected representatives of the group
   4. All group members
   5. Other (specify)

19. Over the last 3 years, do you think the level at which the group is able to enforce your constitution has gotten better, worse or stayed about the same?
   1. Better
   2. Worse
   3. Stayed the same

20. Give reasons for your answer
    ………………………………………………………………………………………………………
    ……………………………………………………………………………………………

21. In the past 2 years has membership in the group increased, remained the same, or decreased?
   1. Increased
   2. Remained the same
   3. Decreased

22. What are the two main reasons for the increase, decrease, or lack of change?
    ………………………………………………………………………………………………………
    ……………………………………………………………………………………………

23. When there is a decision to be made in the group how does this usually come about?
   1. Decision is made by the project facilitator
   2. The chairperson decides and informs the other group members
   3. The group members hold a discussion/consultation and decide together
   4. Others specify?
24. If your group had to make a decision how to allocate a large some of funds, who would be involved in making the decision?
   1. Group leaders
   2. Some group members
   3. Every group members

25. How would you rate the level of cooperation among group members?
   1. Very high
   2. High
   3. Low

26. Give reasons for you answer?
   …………………………………………………………………………………………………
   ……………………………………………………………………………………………

27. Suppose you were in deep financial crisis and you needed some money so urgently who would you go to for help?
   1. Any of the group members
   2. Other family member
   3. Neighbour
   4. Project staff
   5. Others (specify)

28. If you had a problem related to your agricultural enterprise/farming, who would you go to for assistance?
   1. One of the group members
   2. Family member
   3. Neighbour
   4. Project Staff
   5. Other (specify)

29. Can you give details for your answer (i.e. specify the service or org.)?
   …………………………………………………………………………………………………
   ……………………………………………………………………………………………

   Knowledge and understanding of PM&E

30. What do you understand by the following terms
   1. Monitoring?
      ……………………………………………………………………………………………
      ……………………………………………………………………………………………
   2. Evaluation?
      ……………………………………………………………………………………………
      ……………………………………………………………………………………………

31. Why do you think it is important to monitor and evaluate?
Method being used for M&E of individual/group activities

32. Do you monitor the activities of your project?
   1. Yes
   2. No

33. If yes, how do participate in monitoring these activities?

34. Who is responsible for monitoring your project?
   1. Every member individually
   2. The secretary and chairperson
   3. The group does it together
   4. Monitoring committee
   5. Others (specify)

35. What are the indicators being monitored?

36. Do you keep records of the important activities of your farm?
   1. Yes
   2. No

37. What type of records do you keep?

38. How do you use the information that you keep in the records?

Information sharing and Reflection

39. Do you share the information that you collect with group members?
   1. Yes
   2. No

40. If yes, how is information from your records shared to other members and theirs to you?
41. Does the group organize forums/meetings for sharing the information on group activities e.g. on attendance to meetings and activities, management of funds, new plans, achievements, challenges e.t.c.
   1. Yes
   2. No

42. If yes, how often?
   1. Once a week
   2. Fortnightly
   3. Monthly
   4. Quarterly
   5. Half yearly
   6. Yearly
   7. Other (specify)

43. Are there decisions that have been made as a result of holding reflection meetings?
   1. Yes
   2. No

44. If yes, can you give examples of such decisions?

45. Have you ever used the information gathered by you or the group to make decision on what kind of technology to adopt or not adopt?
   1. Yes
   2. No

46. If yes, what technologies have you adopted or not adopted due to your monitored information

47. In last 3 years, has the commitment of project staff in fulfilling joint work plans, increased, decreased or remained the same?
   1. Increased
   2. Remained the same
   3. Decreased

48. Give reasons for your answer?

49. Have you ever participated in meetings with project staff to in order to give feedback on how the project is progressing?
   1. Yes
2. No

50. If yes, how often
   1. Fortnightly
   2. Monthly
   3. Quarterly
   4. Half yearly
   5. Other (specify)

51. Have you ever participated in meetings with project staff in order to receive feedback on how the project is progressing?
   1. Yes
   2. No

52. If yes, how often
   1. Fortnightly
   2. Monthly
   3. Quarterly
   4. Half yearly
   5. Others (specify)

53. If you felt that the project was not being implemented in the right way, what would you do?
   ……………………………………………………………………………………………………………………………
   ……………………………………………………………………………………………………………………………
   ……………………………………………………………………………………………………………………………

   ……………………………………………………………………………………………………………………………
Appendix II: Farmers’ Group Questionnaire

The role of CD- PM&E in empowering groups and improving their decision making

<table>
<thead>
<tr>
<th>Name of the Group:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Membership: No. Women:</td>
</tr>
<tr>
<td>Type of Group:</td>
</tr>
<tr>
<td>Project:</td>
</tr>
<tr>
<td>District:</td>
</tr>
<tr>
<td>Village:</td>
</tr>
<tr>
<td>Interviewer:</td>
</tr>
<tr>
<td>Date:</td>
</tr>
</tbody>
</table>

I. Overview (history) of the Group

1. Which year was your group formed? ______
2. Is your group registered or not? ________ 1 = registered; 0 = not registered
3. If it is a registered group, which year was it registered? ________
4. What activities are you engaged in as a group under KARI/MOA?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Please tick</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimentation on soil fertility management options</td>
<td>1</td>
</tr>
<tr>
<td>Experimentation on food crops (Maize, Cassava, Cashew nuts)</td>
<td>2</td>
</tr>
<tr>
<td>Management of livestock enterprise</td>
<td>3</td>
</tr>
<tr>
<td>Producing tissue culture Bananas</td>
<td>4</td>
</tr>
<tr>
<td>Fodder/legumes experiments to improve milk production</td>
<td>5</td>
</tr>
<tr>
<td>Others (specify)</td>
<td>6</td>
</tr>
</tbody>
</table>

5. Do you have a constitution for the group?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. Do you have a document detailing all the objectives and activities of your group?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

7. What information does the document contain? (Please tick)

<table>
<thead>
<tr>
<th>Information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Objectives of the group</td>
<td></td>
</tr>
<tr>
<td>Rules and regulations</td>
<td></td>
</tr>
<tr>
<td>Key activities of the group</td>
<td></td>
</tr>
<tr>
<td>Time frame for achieving group objectives</td>
<td></td>
</tr>
<tr>
<td>Group financial formation</td>
<td></td>
</tr>
<tr>
<td>Group registration information</td>
<td></td>
</tr>
</tbody>
</table>

8. Is the document shared?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

9. If yes, how is it shared?

- Members have to ask to see it……………………………………………………..1
- All members are shown the document…………………………………………….2
- Information in the document is shared periodically by the secretary……………..3
- Other specify………………………………………………………………………4

II. Social capital and accountability

<table>
<thead>
<tr>
<th>Level of attendance</th>
<th>Reasons for the response</th>
</tr>
</thead>
<tbody>
<tr>
<td>All or most members attend</td>
<td></td>
</tr>
<tr>
<td>Some members attend</td>
<td></td>
</tr>
<tr>
<td>Very Few members attend</td>
<td></td>
</tr>
</tbody>
</table>
10. What is the level of attendance during group meetings?

11. What is the level of attendance during group activities?

12. If any member is consistently not attending group meetings what do you do?
   - Member pays penalty
   - The member is given a warning
   - Member is removed from group
   - Nothing happens
   - Other (specify)

13. If any member is consistently not attending group activities what do you do?
   - Member pays penalty
   - The member is given a warning
   - Member is removed from group
   - Nothing happens
   - Other (specify)

14. How well are you able to enforce the constitution?
   - Very well
   - Average
   - Not able

15. Give some examples?
### Group member’s knowledge of the group budget, resources and how resources are allocated?

<table>
<thead>
<tr>
<th>Which group members know</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only the committee</td>
<td>All members</td>
</tr>
</tbody>
</table>

16. Which members of the group know how much money the group has currently and the expenditures?

17. Which members of the group know how much was harvested from your group plot last season?

18. If funds were misused, which members of the group would know

19. If funds were misused, how would you know?

20. If funds are misused, what would you as a group do?
Group functioning

| 21. In the last 3 years, how do you think group members’ capacity to work well together has changed? | 1=Improved 2= No change 3= Not good |
|---|---|---|
| a) | b) | c) |

<table>
<thead>
<tr>
<th>22. How would you describe the level of trust in this group?</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>23. How would you describe the leadership in this group?</th>
</tr>
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<tbody>
<tr>
<td>a)</td>
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</table>

III. Characterizing PM&E process

Questions for groups that specifically developed a PM&E system:

24. When did you meet as a group to develop a system to monitor your project? (use the local name to describe monitoring)
   ……………………………………………………………………………………………
   ……………………………………………………………………………………………

25. How have you been using the monitoring system?

…………………………………………………………………………………………
…………………………………………………………………………………………

26. What are the benefits of this monitoring system?
   We have a clear vision of our objectives…………………………………………………1
   Improved our planning process for our projects……………………………………………2
   Enhanced participation of all groups………………………………………………….3
   There is transparency in the management of funds…………………………………..4
We know which members participate in group meetings…………………………….5
We know which members participate in group activities…………………………….6
We know how our project is progressing……………………………………………..7
We have been able to make timely adjustments to improve our project……………...8
Group members are now documenting………………………………………………..9
Other (specify) ………………………………………………………………………..

Questions for all groups:
27. How do you as a group monitor (use local name) your project progress?


28. What type of data do you collect?


29. Is there a monitoring committee charged specifically with the responsibility for collecting information in the group?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
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</table>

30. If yes, what is the number and gender of committee members?

<table>
<thead>
<tr>
<th>Total number</th>
<th>No. of females</th>
<th>No. of males</th>
</tr>
</thead>
</table>

31. If yes, what are their roles and responsibilities?

Monitor group member’s activities.................................................1
Collect information on all the activities.....................................2
Analyze the information collected.............................................3
Organize meetings to share information collected.....................4
32. Can group members access the records kept at any time?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
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<tbody>
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</table>

33. How many people in the group keep records of their activities?

- All group members…………………………………………………..1
- Some group members………………………………………………..2
- Only committee members……………………………………………3
- Very few group members……………………………………………4

34. Did the project facilitator train the group members on how to keep records?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
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</table>

IV. Information sharing and reflection within the group

35. How does your the group share information/records kept?

- ………………………………………………………………………………………………………
- ………………………………………………………………………………………………………

36. Does group organize specific meetings to share and reflect on information collected?

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<thead>
<tr>
<th>Yes</th>
<th>No</th>
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</table>

37. If yes, how often?

- Once a week during group meetings.......................1
- Monthly.........................................................2
- At the end of the season.................................3
- At the end of the year.................................4
- Other (specify).............................................5
38. How often does the group meet to reflect on progress of the project?

Do not meet to discuss progress of the project…………..1
Once a week during group meetings……………………..2
Monthly……………………………………………………3
At the end of the season………………………………….4
At the end of the year…………………………………….5
Other (specify)…………………………………………...6

39. If a problem related to the project implementation is identified during such a meeting, how is it addressed? Give specific examples?

40. Do you use the information you collect for making decisions on project matters? Give examples

41. Are there project activities that have been changed as a result of the information collected?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
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</table>

42. In the last 3 reflection meetings, what was discussed and what decisions were made by the group?

<table>
<thead>
<tr>
<th>Reflection meetings</th>
<th>What was then going well</th>
<th>What was then not well</th>
<th>What decisions were made</th>
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</table>
43. If yes, give examples? (List of activities adjusted as a result of feedback from PM&E information)

44. Have you ever used your monitoring information to make decisions on what technology to adopt or not adopt?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
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</table>

45. If yes, give examples? (List of technologies adopted or not adopted as a result of monitoring information)

a)

b)

c)

V. Feedback to project staff and other organizations/ Accountability of service providers

46. How were you as a group involved in formulating this project?

We identified our key priorities and objectives............................1
We discussed key activities with project staff............................2
We were not involved.............................................................3
Other (specify)........................................................................4

47. Do you usually have meetings with project staff to give feedback on how the project is progressing?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
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</table>
48. If yes, how often?
   Once a week during group meetings..............................1
   Monthly.................................................................2
   At the end of the season............................................3
   At the end of the year...............................................4
   Other (specify).........................................................5

49. Do you usually have meetings with project staff to explain how you want the project to proceed?
   Yes
   No

50. Are there project activities that have been changed as a result of these meetings with project staff? (List of activities adjusted as a result of feedback to project staff)
   a)
   b)
   c)

51. What is your perception on how committed project staff are to the joint work plans?
   Very committed.....................................................1
   Committed...........................................................2
   Not committed......................................................3

52. Reasons for your answer
   ................................................................................
   ................................................................................

53. If any of the following happened what would you do?
   Project staff coming late to meetings and activities
You are unhappy with how the project is implemented

Project staff do not keep their appointments to come to project activities

You do not like some of the activities of the project

You feel you are not benefiting from the project

Capacity to seek additional services

<table>
<thead>
<tr>
<th>1=Yes</th>
<th>2=No</th>
<th>Give reasons for your answer</th>
</tr>
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<tbody>
<tr>
<td>54. In the past 12 months, have you as a group requested for any additional services from the project staff or other organizations to meet your group objectives?</td>
<td></td>
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</tr>
<tr>
<td>55. Have you approached other organizations, besides KARI and MOA, to help you achieve your goals better?</td>
<td></td>
<td></td>
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<tr>
<td>56. Do you think this project would continue to operate in a similar way if the involvement of staff were to end this month?</td>
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</table>

**Achievements, benefits and lessons learned**

57. What are the major achievements/benefits and lesson learned from this project?

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**Appendix III**

**CHECKLIST FOR MINISTRY OF AGRICULTURE FRONTLINE STAFF**
1. When did you start working with the groups that designed PM&E systems?
2. Were you involved in training these groups on how to establish PM&E systems at community level?
3. If yes, explain?
4. Have you been trained in PM&E?
5. If yes, who trained you and when?
6. How do you collaborate with KARI staff in supporting farmer groups that have PM&E systems within your jurisdiction?
7. In your own assessment, do you think that PM&E systems play an important role in empowering groups?
8. Please explain your answer?
9. What are the major challenges you have faced so far in implementing these community based PM&E systems?
Appendix IV: Map of Kenya showing Case Study Districts (Kwale, Mombasa, Kilifi and Malindi)