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Empowering Communities through Participatory Monitoring and Evaluation in Tororo district

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Abstract The Community Based Participatory Monitoring and Evaluation (CB-PME) tool empowers poor local farming communities to improve their livelihoods. While this process is people centred, it draws on local people's capacities, while giving the end users of a technology a voice. The experience of the Katamata farmers' group in Tororo district using PM&E is given in this paper. This group have embarked on a commercial groundnut production enterprise to improve their livelihoods. They decided to monitor one and three year-prioritized objectives for this enterprise. The three year objectives were based on the improvement of the farmers' livelihoods and included having food security, with a marketed surplus, creating an awareness of HIV/AIDS, and individual commercial production, while the one year objectives dealt with the improvement in agricultural production. Some short term objectives have been achieved. The farmers have selected the best variety for commercial groundnut production. They have since reflected on these objectives and indicators with the monitoring and evaluation committee from their group whose main function is to collect , synthesize, store and report information to the group, community and visitors. This participatory process has empowered farmers to make production and marketing decisions on their enterprises and social lives with the ultimate goal of improving their livelihoods.

Key words: Evaluation, indicators, monitoring, monitoring committee, participatory, reflection, tools

Résumé L'instrument de l'évaluation et de suivie participative par la communauté de base donne plein pouvoir aux communautés des agriculteurs à améliorer leur condition de vie. Même si le processus est centré sur les individus, il s'appuie sur la capacité de la population locale, en même temps donne aux utilisateurs de la technologie une voix. L'expérience des fermiers de Katamita dans le district de Tororo utilisent le PM et E et est donne dans cet article. Ce groupe a embarqué dans la production commerciale d'arachide en vue d'améliorer leur survie. Ils ont décidé de suivre l'un des objectifs prioritaires pour les trois années de cette entreprise. Les objectifs de trois ans étaient basés sur l'amélioration des modes de vie des fermiers et inclure la sécurité alimentaire, avec un surplus du marché, créant une sensibilisation sur le SIDA/HIV, et la production individuelle, alors que l'objectif d'une année a centré sur l'amélioration de la production agricole. Quelques objectifs à court terme ont étaient atteints. Les fermiers ont sélectionné les meilleures variétés pour une production commerciale de l'arachide. Ils ont réfléchi sur les objectifs et indicateurs avec le comité d'évaluation et de suivie de leur groupe dont la fonction principale est de collectionner, synthétiser, stocker, et rapporter l'information aux groupes, communautés et visiteurs. Le processus participatif a donné du poids aux fermiers dans la prise des décisions sur la production et la commercialisation de leurs entreprises et de la vie sociales avec l'objectif principal d'améliorer leur survie.

Mots clés : Evaluation, indicateurs, suivie, comite de suivie, participation, réflexion, instruments

Introduction

Monitoring and evaluation (M&E) is necessary for any developmental project and activities. It provides feedback to ensure that activities are managed adaptively. Conventional approaches to monitoring and evaluation entail being conducted by external experts, with predetermined indicators of success, for accountability purposes. The participatory approach to monitoring and evaluation (PM&E) involves the participation of the local stakeholders in the design, collection, analysis and utilisation of M&E information such as indicators to measure change (Cramb and Purcell, 2001). Tracking changes in these indicators enables the direct beneficiaries to make decisions on how to adjust their activities. For this reason, community based PM&E has often been appreciated as a tool that 'empowers' local communities to initiate, control and take corrective action, is 'cost-effective', 'more accurate', 'more relevant', etc (Guijt *et al*., 1998). From the project implementation perspective, other benefits of PM&E include internal learning, understanding and working better with communities to improve their livelihood.

Ultimately, PM&E can be used for involving local people in assessing progress, impacts, and achievements of the project, project management and planning, institutional learning through continued self reflection and improved decision-making capacity, understanding and negotiating stakeholders perspectives by adapting objectives, indicators and tools to make them more accessible and relevant to local people and finally for public accountability through the enhancement of information flow and the provision of feedback at different levels (within groups, community, project managers, between farmers and R&D systems).

PM&E is a methodological frontier; hence different projects and organizations have used different methodologies. In an effort for farmers and scientists to

work together to effectively develop forage technologies, (Cramb and Purcell, 2001), established the baseline situation, decided what were the 'issues' requiring monitoring and evaluation, selected key indicators, tested methods for obtaining information, analyzing and presenting information, and assessed the usefulness of the information for decisions.

The PM&E methodology used in this study is part of a wider program called the Enabling Rural Innovation (ERI) used by the International Centre for Tropical Agriculture (CIAT). ERI aims to strengthen social organization and entrepreneurial skills in rural communities, encouraging farmers to produce what they can market rather than market what they produce. This approach used four key approaches (Kaaria, 2005) the resource to consumption framework, which links resources to production and consumption; balancing market risk and food security, and the use of participatory approaches for research and development. This approach is currently being used in western, eastern, central Uganda and being scaled out to northern Uganda. It is also being used in east, central and southern Africa.

This study outlines the methodology used to determine the indicators for the success of the farmers' sustainable livelihoods, through PM&E of their groundnut enterprise and reviews the preliminary results of PM&E data.

Methodology

The study was conducted in Tororo district located in eastern Uganda. 82% of the land in this district is under agriculture, the main economic activity. Poor natural resource endowment has resulted into productivity declines, recurrent food shortages and famines. Tororo is the district with the highest proportion of its population being characterized as 'poorest' (36%), compared to Kabarole, Masaka, Pallisa, and Rakai districts (Appleton, 2001; Ravnborg, 2004).

Stakeholders were identified to start this process (Fig. 1). Africa 2000 Network (A2N), a community based development organization working with 100 groups in 5 districts in eastern Uganda was identified as an implementing partner. A2N promotes farmer institutional development and gender equity, collaborates with local NGO's to provide advisory services on sustainable agriculture and facilitates networking and information exchange among agriculture stakeholders in the district. A joint (CIAT & A2N) field visit was made to four farmer groups where discussions guided by a checklist were held to select the farmer group.

The Katamata (meaning 'let us try') group was selected. The group is comprises 21 members (10 females and 11 males) and was formed in 1997. It is located in

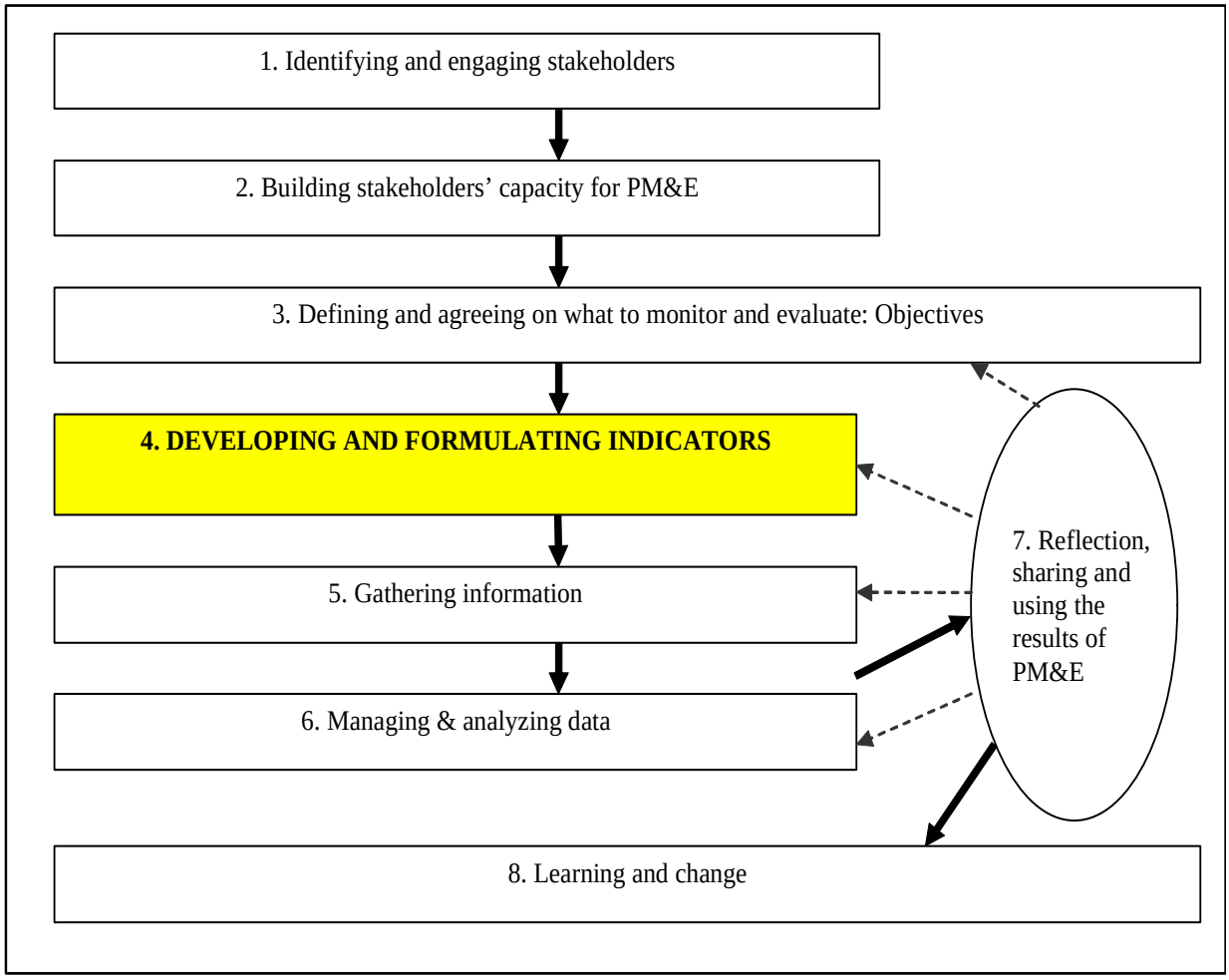

Figure 1. The key steps in the development and implementation of a PM&E.

Kayoro parish of Osukuru sub-county of Tororo district. The farmers conducted a number of activities (Table 1) before they began the enterprise development phase.

The group members were shown a comparison graphic (Germann *et al.*,) and asked to interpret it, leading to a discussion and interpretation of monitoring in Luganda, Kiswahili, Japadhola and Ateso. The farmers were separated into two groups were then asked to draw two graphics showing a comparison of monitoring and the absence monitoring as applied to their enterprises. The farmers were guided to focus on the groundnut enterprise, and brainstormed on their future achievements for this enterprise. They categorized and prioritized short term (1 year), and long term (3 years) objectives. The group was desegregated by gender to generate differences in results and to reduce group sizes in order to encourage participation by all members. The list of indicators defined by the farmers was prioritized to 2 indicators for each objective. These indicators were desegregated by gender to extract any differences in the indicators. To facilitate the extraction of indicators, the current situation for each of these indicators was also listed before prioritization.

The monitoring group was selected by the Katamata group members by selecting four female members to add to the experimental committee. The Ateso interpretation "Aruanar" meaning follow up was selected to name the monitoring group. Within the Aruanari group, 5 teams were paired based on gender, literacy, and distance between homesteads, level of co-operation. The functions of the Aruanari group were to collect monitoring and evaluation information and data, keep records of the group activities in the record books, report to the group and visitors about information and data collected, store information of the Aruanari group. The tools for data collection were developed by the farmers and were guided by the indicators. Each team determined the frequency of data collection for each objective, and decided on how to collect this data.

Results and discussion

The short term group objectives and indicators. All the prioritized one year indicators were production oriented (Table 2). Farmers were interested in selecting the best groundnut and bean varieties and soil fertility treatments in preparation for the enterprise development phase.

They would also multiply seed for individual group members' seed security. To facilitate learning and service provision, partnerships and exposure visits were required. Differences in preference by gender were shown in the prioritized one year objectives, the male farmers considered exposure visits to be the most important objective, while the female farmers thought that owning a spray pump was the most important objective.

The farmers had identified the best varieties and soil fertility treatments. Serenut 4 (a pink, small seeded variety) was found to be the highest yielding ground nut variety with up to between 300-350kg from between 0.25 - 0.5 acres. In the soil fertility experiment, Kankwatsa *et al.*, (2004) reported that there was no significant difference in yield of groundnuts for the different soil fertility treatments during the two seasons (2003B and 2004A).The farmers

Table 1. Background and activities of the Katamata group.

Characteristic	Activity
Katamata group objectives	To reduce poverty in the community To introduce and promote income generating activities which will enable group members to sustain their livelihoods To unite members and enable them help one another To promote of gender awareness; and to promote tree planting.
Participatory Rural Appraisal (PRA)	The group prioritised cassava as a food crop, while beans and groundnuts were prioritized as cash crops.
Participatory Market Research (PMR)	Selection of the Market Research Committee (MRC) from the group to determine the market and the market requirements, for prioritized enterprise crops at local markets, shops, grain stores, restaurants, & hotels, and to collect and synthesize market information and to feed it back to the group. Upon the synthesis and discussion of market results, a facilitator guided cost benefit analysis was conducted to strengthen the enterprise selection. The potential research questions raised by farmers led to the farmer participatory research.
Farmer Participatory Research (FPR)	The group completed two seasons of bean and groundnut experimentation to determine the best soil fertility treatment and improved groundnut and bean varieties suited to the local management and production conditions.NABE 2 and NABE 12C were well suited for the short rains and long rains respectively. Farmers however did not grow beans during the enterprise development phase because the crops were damaged by excessive hot dry spells and hailstones in 2 consecutive seasons. This sequence of events led to the discontinuation of commercial bean production. Serenut 4 had the highest yields. For the soil fertility management treatments (groundnuts), compost manure had the highest yields. The best technology combination for the better yield was compost + not sprayed + Red beauty (Kankwatsa *et al.*, 2004).

identified the best soil fertility treatment to be the control in the 2004A season. The control also produced net benefits of around 300,000 Uganda Shillings in the costs benefit analysis.

The spray pump has not been purchased however; the farmers have been using one that was easy accessed from a neighbouring farmer. The farmers planted groundnuts between April and May 2005 and 10 individuals sprayed the crop two weeks with Dudu-fenos 440. Timely spraying of the crop was achieved in this case.

No visit had been made to any market outside Tororo and Uganda for market information; however, exposure visits were made by 4 individuals to three markets within Tororo in the 2004/5 season. Serenut 3 had the highest price at the Tamata one stop centre, while Kabonge, Red beauty and Serenut 2 ranged in price between 1000 and 1500 shillings/kg. The Katamata group become a member of the One Stop Centre, where members had a higher bargaining power.

Six predominantly local partners regularly visit the group to provide agriculture and social services. These networks and associations provide an enabling environment for the scale out of technologies and the free flow of information to the group from institutions providing this support. Katamata has also conducted at least 3 field days (one of which the group paid a journalist from Rock Mambo Radio a local FM station to cover the event.) to share experiences on the group activities. The group would need two more partners to meet the target set for their first indicator. A2N provided a loan of 1,744,000 Uganda Shillings in March of 2005, which was used for production purposes.

The long term objectives ad indicators. The primary long term objective was food security throughout the year. Seed security, group cohesion, and social issues like gender and HIV/AIDS were prioritized objective in the long term. The baseline situation for the food security issue (collected

Table 2. The one year objectives and indicators.

Prioritized outcomes	Prioritized indicators	Information to collect
1. Purchasing a spray pump	1. Spraying pump in place 2. Timely spraying Type of chemical sprayed Number of times sprayed date of spraying Condition of sprayer when returned	Name of user, Date pump was borrowed Date pump was returned
2. Exposure visits for market information outside Tororo and Uganda	1. Names and number of outside markets identified 2. Number of exposure visits made to the markets	Date, Number of people who visited the market names of people who visited the market Number of markets visited what was found commodity / price Number of exposure visits
3. Good partners with many organizations	1. 8 Partnerships with Organizations 2. # of loans and grants to the group	Number of partners, # of visits from partners- Where partners are from Names of the partners Nature of work of the partners Purpose of the visit for the partners (Information partners are bringing) Benefits from partners (e.g. Loans, inputs, training) Quantity of benefits partners are giving group
4. We should have enough seeds for commercial farming and for home use	1. Individuals planting 40 Kg of improved seeds 2. Selling seeds to other farmers	Date, Date of planting seed Size of field Amount of improved seed planted Variety of seed planted Quantity of seed harvested Number of people planting 40 kg Quantity of seed sold Number of farmers sold to Place of sale Price/kilo Total value of sale
5. Identify the best varieties and soil fertility treatments	1. Identification of the best variety and soil fertility improvement technologies 2. When members plant selected varieties in large fields	Name of the best variety Name of the best soil fertility treatment Practice for the best variety Maturity period, Yield of the best variety Acreage under the best variety

nine months earlier) was given by the women as food lasts for three months only, while the men reported that there are 0 granaries in homesteads and if present they are empty, they eat 2 unbalanced meals a day, resulting in poor health and poor performance by children. Food insecurity exacerbate into a complexity of social problems like fewer visitors in the home, little or no celebrations, no surplus to sell, divorce and quarrels, spread of HIV/AIDS, selling of daughters etc. Data collected from the PM&E exercise showed that Cassava is eaten by all members of households; the group was able to experiment on, evaluate and are currently planting the cassava varieties NASE 10, 11 and 12 as part of the food security initiative. Other foods eaten include maize, sorghum, and millet. While nine members eat over 4 varieties of foods with both plant and animal based proteins, 4 households ate animal based proteins. Predominantly 2 meals comprising carbohydrates and proteins are eaten. Only three farmers had granaries while eight of the thirteen farmers were selling millet maize cassava and groundnuts.

The baseline situation showed a ratio of 3:1 women and men respectively had gone for voluntary testing counselling (VCT) and training. The group membership has dropped as a result of incapability to participate in group activities due to sickness. However, Plan International and TASO have actively involved the women group members of the group in activities of the post test club where tested members are facilitated to sensitize other village members and communities about HIV/AIDS. Although this information was confidential (and could not be presented in this paper), the members provided information freely about their HIV/AIDS status. An increase in VCT from the baseline had been registered

Table 3. The three year objectives and indicators.

Prioritized objectives	Prioritized indicators	Information to collect
1. we shall produce and have enough food in the granary to last throughout the year	1. When we have enough food and sell 2. No more buying food from markets and shops	Date, Name of farmer Number of kilos for sale Number of kilos for consumption Number of granaries in the homestead Crop type/ variety Number of meals a day Composition of meals
2. All group members to test for HIV/AIDS Create awareness and change behaviour	1. Continue creating awareness & members knowing more about HIV/AIDS 2. All members in the group have tested	Date of testing, # of women and men testing Prevention methods Names of people testing Number of trainings on HIV/AIDS Place where tested Number of times tested Testing facilitated by which organization Name of the councilor
3. Each member must be able to cultivate individually on commercial basis and have enough produce for sale.	1. Members selling collectively 2. Improved household incomes	Date, Number of acres Time of garden preparation Time of planting, weeding, harvesting Time of drying and sorting Household income before commercial production Household income Quantity produced Quantity stored
4. Katamata group will continue to grow strong and to work together	1. More savings in the bank 2. Training other farmers in modern agriculture	Number of new member registering Number of meetings Attendance lists Number of group gardens Number of members saving with the group Number of visitors visiting the group Number of TOT's in the group, # of groups trained Date of registration of the new members
5. Group members shall work towards improved gender relations		Number of women and men in Katamata group Number of women and men in each committee Decision making Distribution of resources in the home Gender resources Activities of men and women

where 7 male members had been tested in 2004. The number of times tested ranged from 0 to 4 times.

Farmers were individually growing groundnuts for commercial purposes (Fig. 2). The PMR established that there was a high market demand for large red groundnuts. Hence the farmers embarked on experimentation to determine which of the red varieties was best suited to their local management and production conditions. Despite Serenut 4 (Pink seed) being the highest yielding variety, the farmers planted a range of pink and red seeds such as Kabonge (over 250 kg), Serenut 2, Serenut 3, and Serenut 4, hence spreading their risks.

Men make decisions on the education of the children, sale of the produce in the home, management of conflicts, and the distribution of household chores and own livestock, bicycles, and trees. One household reported that men in the home also own money earned from the sale of produce. Women are decision makers on the food consumption, and own household property and food. One of the households was female headed where she was responsible for all the chores, decisions in the home. The Plan for Modernization of Agriculture notes that in Uganda, women lag behind men in terms of education and income earnings, that women have limited economic opportunities due to their societal roles and responsibilities, that intra-household benefit sharing from the sale of produce often does not favor women.

In a study by Ravnborg *et al.*, 2004, Tororo district stood out as having the largest proportion (39%) of households characterized by inequitable gender relations, characterized by the equality of relations between husband and wife. The same study noted that whereas particularly in Tororo and Kabarole, but also in Pallisa, gender relations are much more likely to be inequitable in the poorest households than in the less poor and better-off households, and thus further aggravating the situation of women in the poorest households because of the payment of bride price and the high levels of polygamy characteristic of eastern Uganda.

No information was collected on the group strengthening objective partly because the farmers have not yet enforced the payment of the membership fee and the group has not had any new member.

Success and challenges of PM&E. The PMA emphasizes the consultation and participation of poor farmers in order to design, implement and monitor the most appropriate and feasible public sector interventions. This also applies to the private sector as well. Poverty is defined by poor people as more than just the lack of incomes; it is also the lack of the means to satisfy basic, social needs, as well as a feeling of powerlessness to break out of the cycle of poverty and insecurity of person and property. The farmers' prioritized long term goals as being food secure, engaging in income generation, and improvement in the social related factors, all critical to the satisfaction of the basic needs of these farmers while simultaneously increasing farmers' incomes through agricultural production.

This exercise was conducted in June 2004 with the Katamata group and visited 9 months later to evaluate progress. The information had not been recorded in the farmers PM&E books, however, this information was still fresh in the farmers minds or recorded else where. This showed that the farmers were in fact capable of keeping track.

PM&E has been documented to be more time-consuming and expensive than traditional monitoring and evaluation approaches. In this case, some of the information was not collected because the team members were not able to go to each of the individual member's home to collect this information due to resource restriction; furthermore some information was cumbersome and bulky to collect. Information was collected from some members

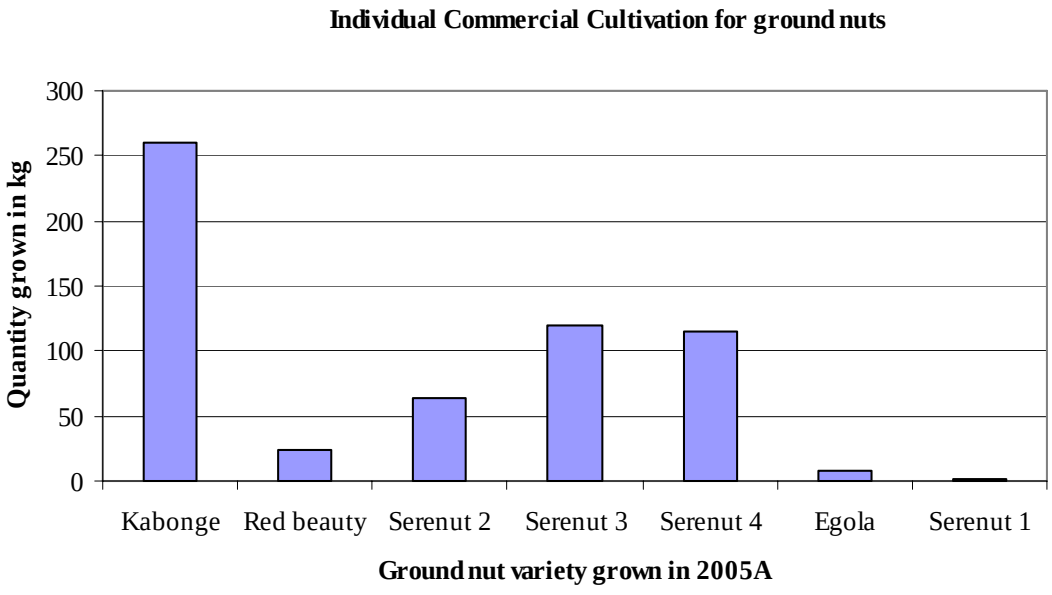

Figure 2. Individual commercial cultivation for ground nuts.

and not others. Some members of the Aruanari group took the opportunity to collect this information while the farmers group had meeting to ease their work. All the above irregularities could be ironed out with regular reflection with group members. While the learning and change and managing data aspects have been inadequately covered in this paper, valuable lessons have been learnt from managing data collection.

The one year objectives could easily be achieved because they were more concrete and tangible. One short term indicator had already been achieved. The three year indicators would need to be collected and analyzed over time to see the results.

While most of the critical information was gathered to improve agricultural production and farmers livelihoods, the major challenge is to analyze it with the farmer group so that it is easily understood by the farmers. Some of the information gathered was quite sensitive information and could not be presented in this paper; it is of benefit to the group however it cannot be presented elsewhere.

Conclusion

The improvement in agricultural production achieved from the one year objectives would lead to the improvement in the farmers' livelihoods as indicated by the farmers' 3 year objectives as agreed by the farmers. Farmers are capable of monitoring and evaluating their own projects if their capacities have been adequately built. The major challenge is the time factor in the systematization of this information. The Aruanari group has been able to reflect on the information that has been collected only once. This reflection availed the members with the opportunity to evaluate whether they are achieving their objectives. PM&E can be time consuming, difficult to systematize and generates huge quantities of data, therefore can be done at group level in order to be scaled out to other groups, group networks and communities to ensure community based PM&E in this case.

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