THE RIPAT MANUAL

Rural Initiatives for Participatory Agricultural Transformation

How to mobilize smallholder farmers to form producer groups, to transfer new technologies to them, and to facilitate the graduation of these groups into producer associations

Praise for this book

‘This is an excellent, easy-to-follow, step-by-step guide on how organizations working with small-scale farmers should approach their task. This is a “must have” resource book for all extension and rural development practitioners, be they from government or from the NGO sector. For a long time in Tanzania there has not been any such a manual to guide extension work and this will certainly fill the gap.’

Professor Amon Z. Mattee, Department of Agricultural Education and Extension, Sokoine University of Agriculture, Morogoro, Tanzania

‘In Arumeru and Karatu districts I witnessed farmers using the RIPAT approach to substantially increase their productivity and incomes in banana production; to improve their levels of innovation, participation, and ownership of their projects; and hence to transform their lives. The approach also addressed the dependency syndrome of the farmers and reinforced their application of the most cherished principle of self-reliance in their own development.’

The Hon. Isidore Leka Shirima, the former Regional Commissioner of Arusha, Tanzania

The RIPAT manual

Rural Initiatives for Participatory Agricultural Transformation

Edited by
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RECODA & World Vision Tanzania

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This manual is the second version and still represents 'work in progress'. Comments and feedback from users are warmly welcomed and should be sent to:

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About the organizations behind the manual

RECODA

RECODA (Research, Community and Organizational Development Associates) is an NGO based in Tanzania. It was established in 2000 with the aim of bridging the technology gap in development through research, consultancy, capacity-building, and facilitation of community-based projects. In the beginning, RECODA's main activity was consultancy work carried out for various development organizations. Since 2006, RECODA's main activity has been to develop the RIPAT approach. RECODA has three departments:

1) *The Community Economic Development Program,* which organizes the various RIPAT projects and any other projects implemented by RECODA
2) *The RECODA Academy Program*, which offers tailor-made courses for rural economic development facilitators to start new RIPAT-like projects and to work on the spreading of development ideas in general
3) *The Monitoring and Quality Control Program,* which is responsible for continuous quality checks and for monitoring the implementation of RIPAT projects.

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World Vision Tanzania

World Vision Tanzania (WVT) is a Christian development, relief, and advocacy organization dedicated to working with children, families, and communities to overcome poverty and injustice. WVT begins with mindset change, teaching Empowered World View as an alternative to fatalism and dependency. Next, we organize savings and producer groups as forums for generating income and addressing issues of health, nutrition, water, sanitation, hygiene (WASH), and education. The aim is to restore hope to children by an empowerment approach, fostering resilient livelihoods so parents can feed, nurture, and educate their children, building up a new generation that does not rely on charity. The main strategic aspiration of the organization in Tanzania is for families to achieve an adequate livelihood so that parents and care-givers can provide well for their children. All WV Tanzania's Area Programs lead with this component.

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The Rockwool Foundation

The Danish-based ROCKWOOL Foundation was established in 1981. The Foundation is an impartial, financially self-supporting institution which engages in activities for the public good.

The Foundation focuses on two main areas of activity:

1) Independent socio-economic research. The aims of this research are to improve the knowledge base for, and the quality of, the public debate, and the decision making process.
2) Practical interventions, carried out with the purposes of generating knowledge and of developing models for lasting and sustainable improvements. The development projects have a strong focus on innovation, documentation, and the spreading of best practice.

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Interventions

About the principal authors

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Dominick E. Ringo is the Executive Director of RECODA, where he has worked for 13 years. He has a Diploma in crop production (1988), a BSc in general agriculture from Sokoine University (1994), and an MSc in environmental systems analysis and monitoring from ITC, the International Institute for Aerospace Survey and Earth Sciences in the Netherlands, with a specialization in soil degradation and management (1999). Formerly, he worked under the Ministry of Agriculture in Tanzania as a research officer in the Soil Science Department at Uyole (Southern Highland zone) and then Selian (Northern zone) Agricultural Research Institutes. Under the Ministry of Agriculture, he dealt with research in soil fertility management, soil survey, agro-forestry, farming systems, and conservation agriculture. He also served as an agricultural training field officer in crop production at MATI-Uyole. At RECODA, he has worked as a consultant in agricultural project design, implementation, and evaluation; in organizational capacity-building; in policy analysis; and in advocacy. He has contributed to the design of RIPAT and supervises its implementation. He authored a case study publication entitled *Conservation agriculture as practised in Tanzania: Karatu district* in 2007, and was a contributor to the book *Conservation agriculture: A manual for farmers and extension workers in Africa.*

Catherine W. Maguzu worked at RECODA for 12 years as a consultant, senior advisor, and Program Director. In 2015 she established herself as an independent consultant. Catherine played an instrumental role in the design, implementation, and evaluation of the RIPAT project series and other similar economic development and agricultural projects when she worked at RECODA. She holds a BA in community development (1999) and a Master's degree in community economics development (MCED, 2011). Formerly, she worked for four years as a health and nutrition coordinator for five districts in Kenya under a food security initiative. Catherine has more than 15 years' experience as a development consultant in training, organization development, socio-economic research, project management, and community development. She authored a case study publication entitled *Conservation agriculture as practised in Tanzania: Arumeru district* in 2007 and was a contributor to the book *Conservation agriculture: A manual for farmers and extension workers in Africa*.

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governmental organization, RUDECT (Dar es Salaam), as a project officer with responsibility for project management in environmental and natural resources projects. She then joined RECODA as a community economic development manager, participating in the design and implementation of the RIPAT project series. She has 25 years of experience in agricultural business development, project management, training, and development consultancy.

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Contents

Foreword

The development of RIPAT

RIPAT (Rural Initiatives for Participatory Agricultural Transformation) was originally developed, implemented, and refined in a partnership between the ROCKWOOL Foundation and the Tanzanian NGO RECODA through a six year learning-by-doing process. The Danish NGO PULS was also an important partner during the initial phases of the concept development. The full history of RIPAT is available at www.RIPAT.org and in the first edition of *The RIPAT manual*.

The vast majority of the world's poor, particularly those in Africa and Asia, live in rural areas, and most of them depend on agriculture for their livelihoods. Unfortunately, rural agriculture in the developing countries continues to be characterized by low productivity, primarily as a result of limited access to water, land, financial services, technology inputs, and markets. Sub-Saharan Africa remains the world's most food-insecure region in spite of its abundant agricultural potential.

Given the projected population increase for this region and the consequent demand for food that there will be, agriculture will certainly continue to be crucial for rural food security and economic development. The need to dramatically improve agricultural production techniques among rural smallholder farmers is evident – particularly because agricultural development is known to be powerful in reducing poverty. However, 'one size fits all' agricultural extension methods that rely on imposing centrally-based technology solutions have too often failed to produce results. In an attempt to contribute towards overcoming this problem, the flexible agricultural extension approach known as RIPAT has been developed over the period since 2006 through a series of projects in northern Tanzania. The intention was to develop an approach that empowers farmers by presenting them with options from among already developed technologies that can help them to progress out of poverty and hunger through their own efforts and choices.

The objective of the ROCKWOOL Foundation has been to develop and document the RIPAT approach, to analyse its impact, and to make the approach available for use by other organizations. A comprehensive research-based evaluation and documentation exercise was therefore carried out in collaboration with external researchers. This resulted in the publication of two books that were launched at a press conference held in March 2013 in Dar es Salaam, hosted jointly by the ROCKWOOL Foundation and the Royal Danish Embassy in Tanzania.

The book *Farmers' Choice – Evaluating an approach to agricultural technology adoption in Tanzania* presents documentation of the impact of RIPAT as well as studies of its implementation, the context of the project, and the adaptation of the technologies offered to the needs of adopting farmers. The present book, *The RIPAT manual*, describes step by step how a project should be implemented in order to obtain the same results, for the benefit of other organisations wishing to apply the model. Both publications can be downloaded from the website www.RIPAT.org.

The future of RIPAT

Now that the task of developing and documenting RIPAT and analyzing its impact has been completed, the ROCKWOOL Foundation hopes to see other organizations adopt and apply the approach in development interventions. Since the launch of RIPAT in 2013 a number of

development organizations have used the approach. One of the organizations that soon showed an interest in RIPAT was World Vision Tanzania (WVT).

Since 2014, RECODA and WVT have jointly implemented RIPAT in a number of villages in northern Tanzania on a trial basis to see whether RIPAT complies with the overall WVT strategy for promoting resilient livelihoods among impoverished families, promoting wellbeing among children as a result. Fortunately, the outcomes from RIPAT as implemented by WVT have been convincing, leading to upscaling of the project in 2015 and 2016.

This fruitful collaboration has continued, with the result that WVT in 2016 decided to adopt the RIPAT approach as a central tool for developing resilient production groups and farmer associations as a part of the WVT livelihood development strategy. Moreover, WVT and RECODA agreed in 2016 to be partners in the future application and development of the RIPAT approach. This second edition of *The RIPAT manual* has been prepared with input from WVT's extensive experience in livelihood development. In particular, Part 4 on how to facilitate the graduation of RIPAT producer groups into farmer associations is primarily based on WVT's experience in that field.

This is an updated version of the original RIPAT manual. It has been prepared to facilitate the successful application of RIPAT by development organizations in general. However, the terminology used in the present version has been harmonized with that used by WVT. In addition, it is more focused than the previous version on ensuring that the food and nutrition security that follows a RIPAT project improves the wellbeing of children.

It is the hope of the principal authors and of the organizations listed below that this publication will contribute to the advancement of small-scale farming in developing countries.

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Elin Schmidt,
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How to use this manual

Target group

This manual has been prepared for use by development organizations and local governments that wish to implement RIPAT (or RIPAT-like projects), and in particular for the use of the group facilitators and extension officers who work on the projects. The group facilitators are the people in direct contact with the participating farmers. Their work is to organize farmers into producer groups, teach and train them in new farming technologies, and facilitate participatory learning. Local government extension officers working with farmers should also be trained so that they can apply the RIPAT concept.

Cooperation with local government

A RIPAT project involves formalized collaboration with local government authorities, village leaders, and agricultural extension officers. This is to ensure support for and local ownership of the development intervention, and to promote continuation of the project and further spreading to the wider community after the end of the intervention. An important part of this manual is therefore focused on guiding the implementing organization (IO) in these areas. So far, RIPAT has mainly been implemented in Tanzania, and the manual therefore uses examples that are specific to a Tanzanian context in terms of government administrative structures and the local infrastructure in general. However, the manual is also intended to be applicable for IOs working in other developing countries, where the setup may be somewhat different; we believe that it should not be too difficult to adapt the manual accordingly.

Guidance on an approach – not on specific farming technologies

This manual is not a guide on how to implement specific agricultural technologies; rather, it is a step-by-step guide to RIPAT as an approach, i.e. the steps to be taken in starting an agriculturally-based help to self-help project – establishing and organizing groups, and thereby developing group members' capacity to emerge from poverty and food insecurity.

The smallholder farmers in the project will move forward step by step with hope, improved life skills, technical skills, and saving skills, and graduate from subsistence farming to membership of producer groups that may eventually become producer associations for marketing and enterprise development. Subsistence farmers will thereby have the opportunity of gradually climbing the ladder of economic development to sustainable self-reliance. In the WV 'graduation approach' households develop from being 'Ultra-poor' (lacking the means of subsistence) through 'Extremely poor' (unable to meet basic needs), 'Poor' (cannot meet all basic necessities) and 'Transient poor' (occasionally falling below the poverty line), and to finally reach 'Sustainable economic wellbeing', where households are capable of providing well for their children.

The starting point for a project is not the introduction of technologies but the sensitization of farm communities and individuals to the possibility of taking charge of their own development and emerging from poverty and food insecurity by their own efforts, and the mobilization of communities and individuals for the achievement of this goal. The participants are provided with an opportunity to see the big picture, realizing the possibility of unlocking the potential within themselves and of utilizing locally available technologies to achieve a better future. The new technologies introduced as part of the project will help them to do this, but only after they have decided that this is what they want and are willing to do.

Supplementing the guide with other manuals and handbooks

Agriculture: The specific farming technologies included in a given RIPAT project depend on the farming system and agro-ecological environment in the targeted area. A situation analysis is necessary, and this precedes the decision as to what technologies are to be included in a particular area. RIPAT projects normally include several improved crop and livestock technologies in the 'basket of options' (BO) to provide farmers with a choice and to promote diversity and resilience.

This manual is therefore not a stand-alone resource book. The IO should combine this general manual with detailed technical manuals for specific technologies available from other sources. Many good technical training manuals on improved farming practices and the other subjects mentioned are available, and several can be downloaded from the Internet free of charge.

Other areas: A RIPAT project organizes small-scale farmers into (potentially permanent) producer groups. As well as providing a starting point for agricultural development, these groups can work to provide access to other areas of importance in development. Investment in social capital (confidence, trust, and positive attitude) can be promoted in parallel with the transfer of agricultural technologies and the development of value chains. The IO or other organization(s) working in the targeted area has the opportunity to work with these groups and families so that they can experience a better life situation with respect to other important areas, such as child protection, nutrition, advancement of their interests, peace, and stability, as relevant. A wealth of good material is available from WV and other organizations that can help the IO in addressing other social and economic needs among the group members. Such work might include:

- Enabling group members to acquire an 'Empowered World View 'using the WV teaching curriculum
- Empowering group members who are carers for children with knowledge and skills on child nutrition, children's health, and providing protection and care for children, using, for example, the WV '7-11 Strategy for maternal and child health'
- Facilitating the acquisition of advocacy skills using the WV 'Citizen Voice and Action' approach
- Linking groups and members with micro-finance institutions such as the Vision Fund
- Training the group in savings and loans using the VSLA model
- Using Literacy Boost models to enhance functional literacy.

In Appendix 3 we have provided a list of some of the manuals which might be found useful.

Structure

This manual is divided into five parts.

Part 1: The main elements and impact of RIPAT

This section gives the background to the RIPAT approach and describes its main elements, including information about where, for whom, and when it is appropriate to use it. The section not only outlines the main elements and characteristics of the approach but also describes how its implementation has been documented, including measurement of its impact on small-scale farmers and most particularly on children.

Part 2: How to plan and start a RIPAT project

This section describes how a RIPAT project should be organized, including the roles of the main actors. It also sets out the steps to be taken during the preparation of a RIPAT project: these include researching the targeted communities and preparing a relevant 'basket of options' for the targeted farmers. Finally, it explains the processes of sensitizing communities to the need for change and of mobilizing farmers to form producer groups.

Part 3: How to work with RIPAT groups

This section provides guidance on how to function as a group facilitator (GF) in general when working with groups of farmers. It sets out the steps for organizing the groups, for ensuring good leadership, and for developing a sound group constitution. It describes how group activities and the learning process can be facilitated over the project period. Finally, it provides guidance on how the learning process can be anchored in the communities by training lead farmers, as well as on how to promote the spread of technologies.

Part 4: How to facilitate the graduation of RIPAT producer groups into producer associations

This section guides the IO and the group facilitator in how to organize the RIPAT producer groups and subsequently to facilitate their graduation into producer associations.

Part 5: How to monitor activities and carry out quality control

This section proved tools for monitoring key parameters and guidance on how to include quality control measures throughout project implementation. The monitoring information is provided by the groups and is collected by the IO staff, whereas the information used for quality control is collected by third-party quality controllers to ensure impartiality.

Part 1:

The main elements and impact of RIPAT

By

Vesterager, J.M., Ringo, D.E., Maguzu, C. W., and Ng'ang'a, J.N.

CHAPTER 1: An introduction to RIPAT and its main elements, and to its impact

Introduction

RIPAT (Rural Initiatives for Participatory Agricultural Transformation) is a participatory extension approach that aims to close the agricultural technology gap as a means of improving livelihoods and self-support among rural small-scale farmers. A typical RIPAT project targets eight to ten villages. At least two groups are established in each village, each group being made up of 25-30 farmers selected from the 'lower middle class' in the community. RIPAT transfers a 'basket' of agricultural technology options, including various crops and livestock, to these groups in a way that allows for joint, experiential, participatory learning. Each individual farmer chooses which options to adopt on his or her own farm and agrees to help three other farmers outside the group to do the same. The project relies on close collaboration with village leaders and local government authorities to ensure not only immediate and sustainable adoption of the technologies among the RIPAT farmer groups, but also subsequent adoption by non-RIPAT farmers in the local communities.

The RIPAT approach is founded on three cornerstones:

1. Creation of a vision of a better future through the careful *sensitization* of communities to the potential for change and the *mobilization* of farmers to take charge of their own development; RIPAT seeks to challenge negative and destructive mindsets, and to enable communities to look forward to a fruitful and productive future.[1]
2. Establishment of farmer/producer groups with good leadership to enable the transfer of appropriate agricultural technologies through participatory demonstrations and reflective learning techniques, and ultimately the establishment of producer association to leverage marketing skills and opportunities.
3. Close collaboration with local government authorities, village leaders, and government agricultural extension officers to ensure the project sustainability and further spreading to the wider community.

RIPAT – a combination of top-down and bottom-up approaches for technology transfer

Agricultural extension has long been seen as key to enhancing agricultural development by improving the delivery of information, inputs and new technologies to farmers. Two rather different approaches have dominated in the past: Training and Visiting, and Farmer Field Schools.

The Training and Visiting (T&V) programme was a way of organizing ministry-based extension. It was basically vertical, one-way communication for transferring information to farmers. The flow of information was:

> Researchers develop the 'right' technology.

[1] These concepts are discussed further in WVT's Empowered World View curriculum. See Appendix 3.

> Extension agents transfer the message.
> Preselected master farmers take the message and adopt it.
> The wider community sees and copies.

The main role of the extension agents was to teach and train the master farmers. It was assumed that these master farmers would adopt the blanket recommendations and extension messages, and that other farmers in the communities would copy from them. However, the impact of the T&V method has been disappointing in much of Africa (Anderson *et al.,* 2006; Gutam, 2000).

In Africa, soil, climate, and socio-economic conditions can vary enormously over just short distances. Consequently, the most suitable farming methods and technologies vary from village to village and even from plot to plot. Therefore, the 'one size fits all' type of recommendations promoted by the T&V method often failed to benefit farmers.

The fundamentals of the Farmer Field School (FFS) concept are applied in a RIPAT project, albeit in a modified form. The RIPAT approach is largely a combination of elements of the 'top-down' and 'bottom-up' approaches. The following are among the key differences between the RIPAT and FFS approaches:

Farmer Field Schools	**RIPAT**
• Situation analysis is not compulsory	• Situation analysis is important to identify gaps and potentials
• Separate groups	• Clusters of interlinked groups
• Group(s) facilitated over one season	• Groups facilitated over 2-4 seasons
• One technology	• Basket of options (choice)
• Farmers learn from experimenting and sharing (bottom-up approach)	• Farmers learn from *teaching*, experimenting, and sharing (bottom-up and top-down approaches)
• The Group Facilitator takes a 'back seat' role	• The Group Facilitator takes a more active role
• No formalized dissemination/ spreading model	• Formalized dissemination/ spreading via Lead Farmers and Extension Officers

- In RIPAT, the topics for learning are largely pre-defined, not decided exclusively by the individual groups. The basket of options that is made available to the groups is made up of a number of improved technologies. It is designed during the project preparation phase through the situation analysis and is hence based on combined input from farmers (bottom–up input) and technical experts (top–down input).In contrast, a FFS curriculum typically focuses on only one topic (e.g. integrated pest management, animal husbandry, soil and water management, conservation agriculture, or a specific crop).
- The RIPAT approach includes training and teaching. The basket of options is largely composed of new technologies previously unknown to the farmers in the project. To enable the farmers to fully understand the concepts and underlying principles associated with these technologies, teaching (top–down training) is combined with hands-on practical, adult, reflective learning (bottom–up learning). This procedure ensures that the new technologies are modified by local knowledge and are thus moulded to local

conditions. The RIPAT Group Facilitator guides the farmers in carrying out the demonstrations and trials, but the farmers do the practical work themselves. Thus, in RIPAT, the facilitator takes more of a more active role in the technology transfer than in the FFS approach – but even so, he/she is never the leader of the group.

- A RIPAT project runs over 2-4 growing seasons/agricultural cycles, whereas a FFS project typically runs only for one. Due to the relatively large range of technologies in the basket of options, one season/cycle is not sufficient to ensure that farmers gain adequate knowledge and capacity to master them. Moreover, since a RIPAT project aims to establish permanent and robust groups with good leadership, more time is required for training the groups in leadership skills, in working with a group constitution, and in keeping group accounts.
- The RIPAT approach includes a formalized strategy for the dissemination of technologies to non-RIPAT farmers in the communities and for spreading the technologies to neighbouring villages by establishing new groups through the effort of the best farmers in the groups – called lead farmers (LFs) – and Extension Officers (EOs).

For further reading on the FFS concept see Braun and Duveskog, 2008, and Gallagher *et al*., 2006.

Where, for whom and when to use RIPAT

In principle, the RIPAT approach should be applicable in most agriculturally-based communities. However, it has been found through experience that it works best in areas and with people that have the characteristics described below.

The RIPAT approach works best in areas

- *where farmers live relatively close to one another* – Scattered households with long distances from homes to the group plot can make it difficult for some farmers to attend group meetings on a weekly basis.
- *with relatively good conditions for agriculture* – Areas with very harsh, dry climatic conditions and poor opportunities for rainwater harvesting and/or irrigation are very challenging
- *where the population is settled* – The participating farmers must be permanently resident and have crop and livestock production as a part of their livelihood.

The RIPAT approach works best for people

- *with access to land* – People need to be able to practise what they learn at the group demonstration plot on their own farms. Landless people will not fit well into the programme
- *who are willing to work* – Poverty alleviation requires a strong will and persistence to bring about change
- *with a cooperative mindset* – Participants must be willing to collaborate in a group, learn from their peers, and share ideas and information.

The detailed selection criteria are described in Chapter 4, Step 4. The group members should preferably be drawn from the same socioeconomic level. It is not advisable that the richest

farmers in the village are included; they tend to be less motivated for group work. The implementation of the selection criteria will in any case normally mean that the richest farmers are excluded.

Timing is a key element in agriculturally-based projects. In areas with a monsoon climate (dry and wet seasons), it is best to start a RIPAT project some 2-3 months before the rainy season sets in and intensive agricultural activities begin. This gives the project staff ample time to organize the groups, teach the first lessons, and prepare land for the group activities. It also encourages and motivates the group and the community if at the end of the wet season there is visible evidence of the project activities in the form of a harvest. Hence, a project should not operate for too long before hands-on activities commence and tangible results can be expected.

Key elements and characteristics of the RIPAT approach

1. *Ownership by participants and authorities*
   Full ownership of the project by the communities and farmers concerned is promoted through careful sensitization of the communities to the potential for change and through the mobilization of farmers to take charge of their own development. A 'yes we can' attitude is promoted from the outset and throughout the project in order to encourage participants and to prepare them for change. The acceptance by farmers of the idea that they will have to pay for inputs, the use of livestock solidarity chains, and the obligation placed on farmers to redistribute planting materials to others in the village all promote a sense of project ownership and of a help to self-help concept, and these factors also increase the cost effectiveness of the project. Training of lead farmers (LFs) and the involvement of the village government and the agricultural extension officers all promote the spreading to other farmers.

2. *The group*
   All knowledge, technologies, and inputs are channelled through the group, which forms the platform for training and information-sharing. The groups become a vehicle for economic development in the targeted village. Each group consists of 25-30 individuals, all from different households, who have common interests. In learning and trying out something new, it is often useful to work together with other people who are in the same situation as oneself. This generates a feeling of group strength and courage. The groups meet weekly during the first year for training and for the practical sessions, and they are led by democratically-elected leaders whose role is to organize and lead group activities and to act as stewards for group property. Leadership skills are developed; groups come to understand better the qualities of a leader, and this knowledge is also used to help them select leaders in other contexts. Groups are trained and helped in working, solving problems, and making decisions together. Training in group dynamics promotes a sense of unity and cooperation, and group members learn to work together in harmony. It is intended that groups should stimulate development within their village, and even outside. They are trained in how to develop a voice and negotiating ability in the community, and undertake advocacy work in their village on behalf of their members.

3. *The group field*
   The group field is the classroom and the centre for learning. The group members acquire the plot(s) for demonstration, and learn by doing the practical hands-on

exercises under the guidance of the facilitator. Farmers discover, discuss, analyse, and make decisions in connection with each technology, and they compare traditional practices with the improved technologies promoted. The curriculum follows the natural cycle for each technology step-by-step. The curriculum for a specific technology is complete when the farmers have undertaken all the practical sessions during the production cycle. The inclusion of perennial crops and livestock technologies in the basket of options requires that facilitation takes place over periods longer than one year. Once a year the entire community is invited to visit the group field.

A RIPAT group in action

4. *Situation analysis*
   A thorough analysis of the situation in an area is a prerequisite for offering suitable development initiatives. Since RIPAT focuses on agriculture, it is especially important to have an in-depth understanding of current farming practices, of seasons with their main activities, and of the local soil, water, and climate conditions, in order to identify appropriate solutions. Information is gathered by visiting villages and holding focus-group discussions with farmers and individual interviews with village leaders, agricultural extension officers, and other key informants.

5. *Basket of options*
   On the basis of the situation analysis and hence of input from both farmers and experts, a suitable basket of options is designed which includes a variety of technologies that are

believed to improve the food and nutrition security and poverty situation. The use of locally available resources is emphasized in the selection of technologies. Farmers decide for themselves what technologies are relevant for them to implement in their own fields. A number of points concerning each technology are presented and discussed with the farmers, including economic analyses, in order to help the farmers choose the most viable options from the selection offered.

6. *Teaching, training and facilitation*
   RIPAT includes the transfer of knowledge from competent facilitators to farmers. New technical knowledge is added to the farmers' existing knowledge. In order to bridge the technology gap, the group facilitator (GF) facilitates farmers' learning and understanding. Training is usually both theoretical and practical. First, the GF teaches the group about the technical principles of, and the basic science behind, the steps in implementing a given technique. Then he/she guides the farmers through the practical steps, thus giving them understanding and skills. The farmers' experience is used in conjunction with the explanations given of the scientific principles behind each practice, and any lack of knowledge on the farmers' part is remedied during the training. Problems and challenges are tackled as they arise during the natural agricultural cycle; farmers learn to make management decisions, and where necessary, technologies are adapted to suit the local conditions.

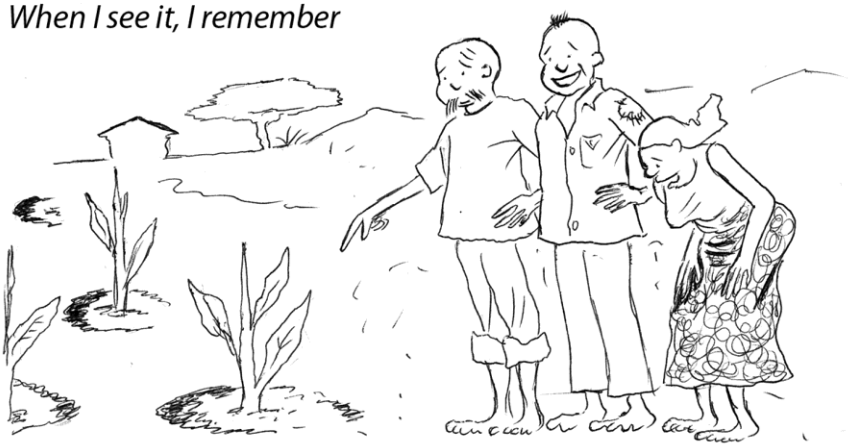
7. *The implementing organization*
   The implementing organization (IO) has detailed knowledge of the local project setting, and has responsibility for ensuring good collaboration and coordination with local government institutions – especially with extension officers (EOs) and any other organizations working in the area. The IO ensures quality group facilitation and timely availability of project inputs (seeds, tools, animals, etc.).

8. *Independent monitoring and quality control*
   A RIPAT project should include the involvement of an independent body that will carry out continuous quality control, in order to check whether the standards laid down in the plan are being achieved in practice. However, group members, project managers, and the IO should also carry out monitoring and evaluation in order to learn of, reflect on, and act upon any discrepancies between goals and achievements with regard to the activities implemented.

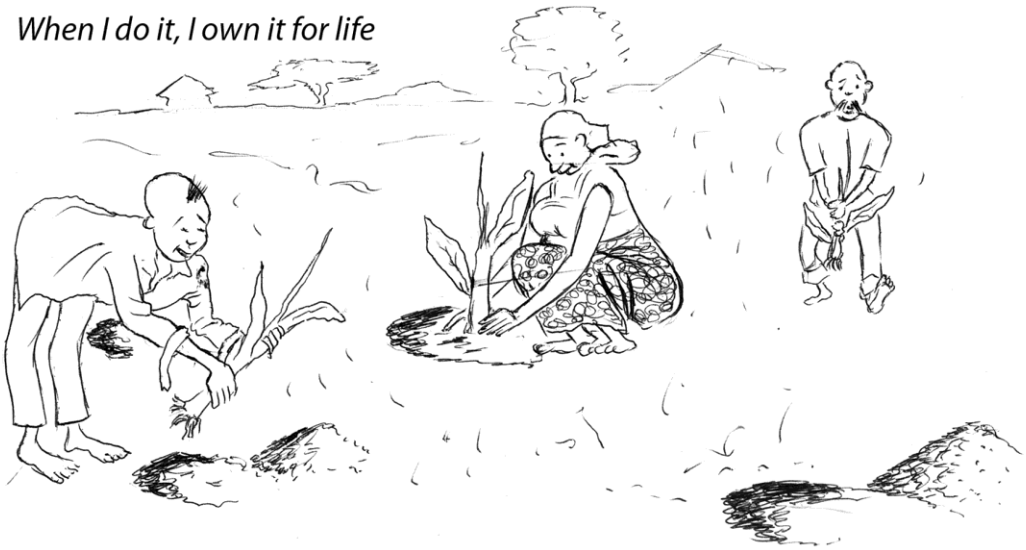
9. *The RIPAT name and logo*
   The RIPAT name should only be used for projects that are implemented in accordance with this manual. All RIPAT projects must include the monitoring and quality control processes outlined in Chapter 7 to ensure a high standard of implementation. Implementing organisations applying the stipulated quality control can use the RIPAT name and logo.

When I hear, I forget

When I see it, I remember



When I do it, I own it for life



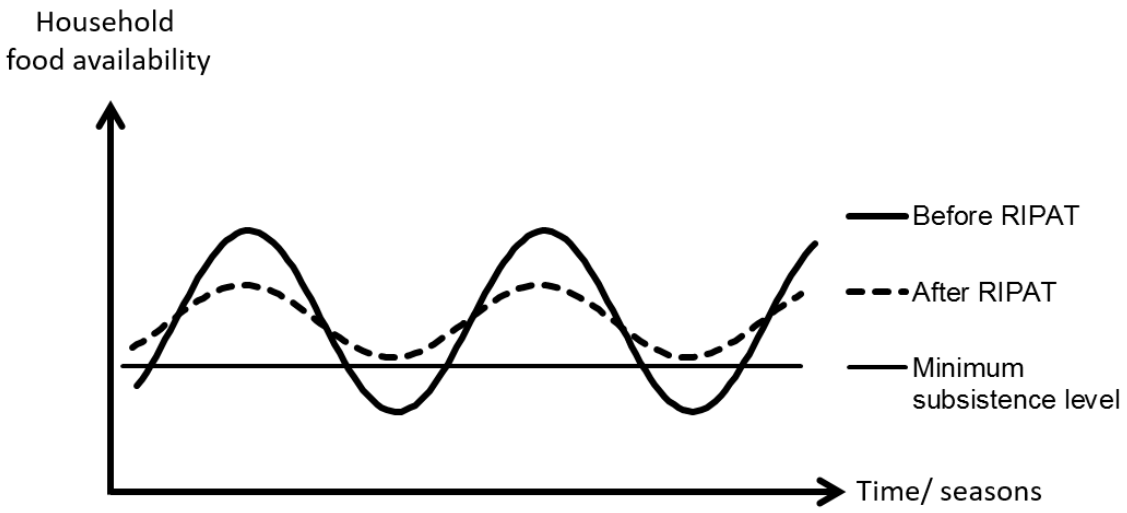
The impact of RIPAT

The approach has been studied through a research-based evaluation using qualitative and quantitative methods (Lilleør and Lund-Sørensen, 2013). Analysis of data based on interviews with more than 2,000 households (data collected one year after project closure) shows that, on average, households that participated in RIPAT – in comparison with similar households that did not – are significantly more likely:

- to be cultivating the improved crops or breeding the improved livestock varieties promoted in the basket of options – the most popular option being the new banana varieties, adopted by more than 60% of RIPAT farmers;
- to be food secure in the lean season, when RIPAT farmers are 25 percentage point less likely to experience hunger;
- to be eating meat and eggs on a weekly basis;
- to have well-nourished children; there is a 27 percentage point reduction in prevalence of stunted growth among children below 5 years of age (reduced from around 53% to 26%).

The team of researchers (economists, agricultural scientists, and anthropologists) point to several possible mechanisms that could explain the positive results for food security and nutrition. These included:

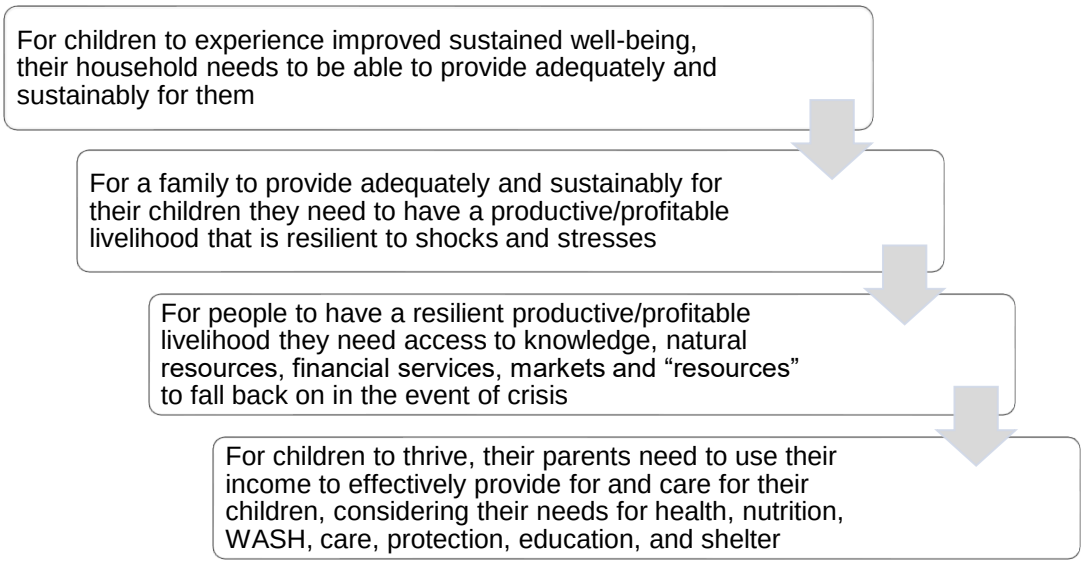
- The new flexible extension approach used in RIPAT gave farmers a *choice* regarding a range of agricultural technologies (basket of options) and a *voice* regarding how to they wanted to organize themselves. This led to the sustained adoption of the new farming technologies.
- Belonging to a strong farmers' group contributed to an increased sense of empowerment, especially among the female farmers – which in turn gave the women a stronger say within their families in matters concerning agricultural production and household food security.
- The technologies in the basket of options enhanced the smoothing of production and consumption over the course of the year. Instead of improving, for example, maize production, which only provides one harvest in a year, RIPAT promoted a variety of technologies such as improved bananas that produce bunches during the entire year; milking goats that produce milk during the entire year; poultry which produce eggs on a daily basis; etc. In this way the lean or hungry season became less marked among RIPAT households. This factor, combined with the empowerment of women, is likely to have translated into better nutrition among children, especially among those below the age of 5 years.
- The establishment of savings groups (VSLAs) and the promotion of water harvesting and drought-resistant crops are also likely to have contributed to food and nutrition resilience.



Schematic illustration of the smoothing effect across seasons subsequent to the introduction of RIPAT.

Theory of change

With around 40% of children in sub-Saharan Africa being stunted, there is an urgent need for interventions that lead to increased household food and nutrition security. As explained above, the basket of options in a RIPAT project should therefore be designed with a nutritional focus and must take into account the important factors and dynamics in the household that prevent or promote food and nutrition security – particularly among children. Children are too often left behind even when households and communities progress out of poverty. According to World Vision's child wellbeing aspirations, improved livelihood must mean that parents are able to provide better for their children. The illustration below explains how this should be achieved.



(From WVT's Improved and Resilient Livelihoods Strategy for Smallholder Farmers, 2016-2020).

Empowered world view and mindset change

The first step towards change is when people become empowered through growing confidence in their own ability to make a positive impact on the world around them. A mindset of dependency can hinder communities from recognizing their potential and seeing the possibilities for a better future. In a RIPAT project it is important to empower the group members to take full charge of their own lives socially and economically, so that parents and care-givers among the group members become enabled and mobilized to provide well for their children. The Empowered World View approach aims to unlock creative freedom, resourcefulness, and personal responsibility. In RIPAT, small-scale farmers are supported to move out of poverty. This is achieved by helping them to build a culture of savings, by enabling producer groups to access new knowledge and capital to invest in farming systems, and by linking farmers to markets for their produce. As a result, parents and care-givers become empowered to protect their children and to meet their needs for food security, health and education.

World Vision engages with farmers through an Empowered World View approach to help them discover their value, creativity, potential, power, responsibility, accountability, and purpose. As a faith-based organization, World Vision has particular expertise in mobilizing local pastors, imams, and other spiritual leaders in communities to participate and engage in the facilitation of an empowering mindset change that challenges harmful traditional beliefs and dependency on resources external to the community. A RIPAT project should be open to people of all ethnic and religious affiliations in any targeted areas and should not put pressure on people to participate in religious practices.

Citizen Voice and Action

As the farmers in the groups gradually gain confidence and self-esteem, and consequently take charge of their efforts, they come to understand the factors existing in their communities that either inhibit or could promote development and improvement in general. As the groups become stronger they are facilitated through World Vision’s Citizen Voice and Action (CVA) model to engage in constructive dialogue with government leaders to advocate for the needs of their communities. This process strengthens the relationship between communities and government with the ultimate goal of improved government services such as health, education and child protection.

Part 2:

How to plan and start a RIPAT project

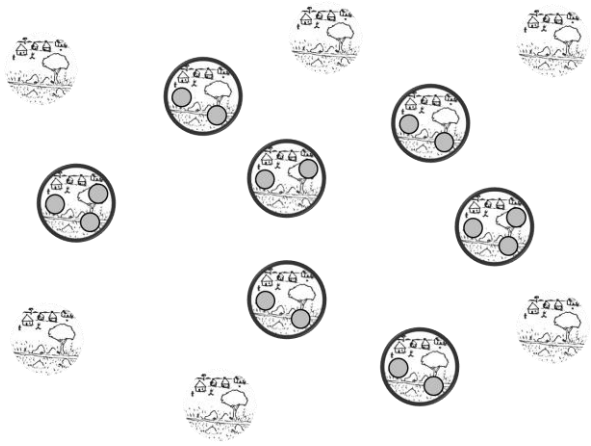
By

Vesterager, J.M., Ringo, D.E., Maguzu, C. W., and Ng'ang'a, J.N.

CHAPTER 2: The organization of a RIPAT project and the roles of the main actors

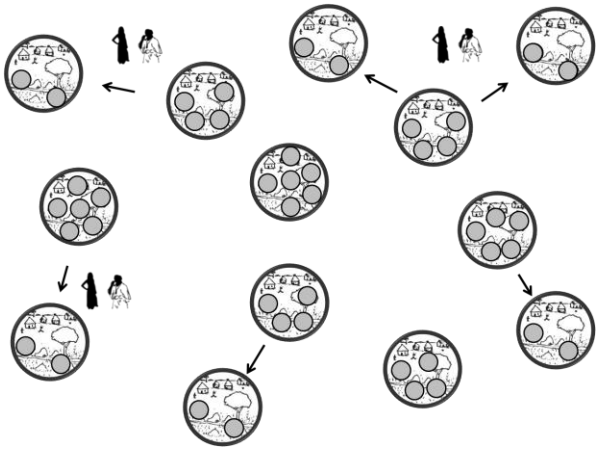
A RIPAT project is typically divided into two phases: RIPAT Start and RIPAT Spreading.

Phase 1: RIPAT Start



RIPAT Start forms the foundation when a RIPAT intervention is started in a new project area. The total project period is 2-4 years. A cluster of 10-20 villages is identified in the area, of which typically half are selected for the RIPAT Start project. At least two groups are established in each of the targeted villages, each group consisting of 25-30 farmers. A 'basket of options' of improved farming methods and technologies is presented to the farmers through participatory demonstrations and reflective learning techniques at the group field. Group facilitation sessions are held weekly in the first year of the project and later bi-weekly or monthly. The participating households convey their new knowledge to their neighbours and peers in the village, and also assist these neighbours and peers by providing seeds and planting materials. The best farmers in the groups (lead farmers) play an important role in the dissemination of agricultural technologies to the wider communities and in the spreading of the group concept to other villages in the next phase.

Phase 2: RIPAT Spreading



The 2-4 year RIPAT Start phase is followed by a 1-year RIPAT Spreading phase. This is a very cost-effective means of reaching more farmers in the targeted villages and farmers in the adjacent villages. The lead farmers (LFs) from phase 1 work together with the government agricultural extension officers (EOs) to start new groups. The group facilitators from the IO mentor, supervise, and support the work. Thus, the spreading process is not carried out by the IO staff but by the LFs and EOs residing in the community. The LFs are typically provided with a bicycle and a small amount of money in compensation for their time for each day they mentor the new groups during the spreading phase, since they are working on behalf of the IO or the EOs. On the basis of their RIPAT experience, some of the best LFs become para-professional EOs after the spreading phase. Some are hired on a task-by-task basis by other IOs, by groups of farmers, or by individual farmers to facilitate the adoption of the new technologies they have mastered. The IO may continue organizing the RIPAT producer groups, facilitating their graduation into producer associations (see Chapter 6).

Project organization

WV operates Area Programs (APs). These are each run in a distinct geographical area. WV works in partnership with local stakeholders on programmes in multiple sectors over a time period of often 10-15 years. WV staff are permanently stationed in the AP area; some will be involved in implementing the RIPAT projects, and additional project staff may be recruited from outside. Below we present a typical organizational setup which works well for most IOs.

As explained above, a typical RIPAT Start project targets 5-10 villages. At least two groups, but preferably more, are established in each village. In the example below we use 8 villages and 2 groups per villages, which gives a total of 16 groups in this particular RIPAT Start project. The IO may implement several RIPAT projects simultaneously, perhaps with staggered starting dates. Each project has a designated Project Manager (PM) and a team of two or three group facilitators (GFs). The PM and the GFs train the groups. Initially there will be three GFs, but later the number may be reduced to two. The GFs employed by the IO should preferably have complementary technical and pedagogical competencies so that they can work as a team in facilitating the various project elements. Hence, a group will typically be visited by several facilitators over the project period to ensure that all elements related to group dynamics, capacity building, and farming technologies are thoroughly covered. Figure 2.1 shows a typical organizational chart.

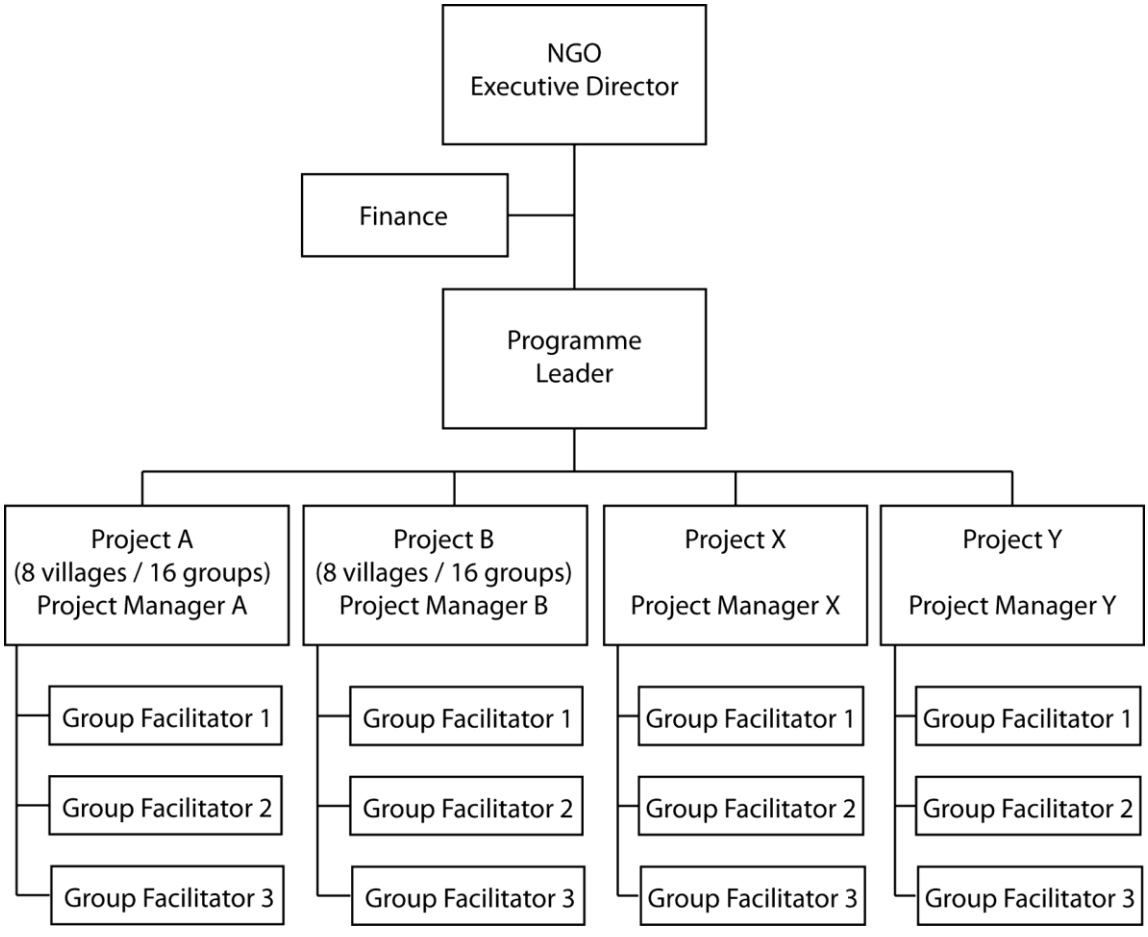


Figure 2.1 Typical organizational chart for a small / medium-size NGO

Roles and responsibilities

Executive Director

Apart from acting as the overall leader of the IO, and hence being the person ultimately responsible for the employees and project activities, the Executive Director (ED) must constantly take time to nurture the organization's relationship with the local government authorities in the districts where the organization's RIPAT projects operate.

The ED must seek to influence the policies adopted by high-level government staff by keeping policy-makers and technical staff informed about the progress of RIPAT. This work largely takes the form of explaining about RIPAT in important forums such as district and regional consultative committees and district councils, organizing field visits, and inviting representatives of local authorities to RIPAT events and meetings. These activities should be supplementary to the local advocacy work carried out by the Programme Leader (PL), the PM, and the GFs.

Programme Leader

The Programme Leader (PL) has overall responsibility for the RIPAT project(s). An important task for the PL is to educate and guide the PMs and the GFs so that they can provide quality training to the groups. Furthermore, the PL has the task of monitoring the progress of all the projects and the work of the PMs and GFs, upgrading their competencies as necessary, and dismissing any personnel who are not performing well. The PL is fully responsible for the logistics of the procurement of project inputs (seeds, tools, animals), for allocating GFs with the right knowledge to the different assignments, and for planning the visits and training sessions in all the groups in the project. He/she conducts training and regular staff meetings with the PMs, is responsible for the development and administration of project policies, and ensures that all grant requirements are met in a timely manner.

Project Managers

The PM has the overall day-to-day responsibility for project support and training for the 16 groups in the eight villages. He/she functions as the site manager if the project is operated from a local branch office. The PM coordinates the work of the GFs who have been assigned to the project. He/she supervises project activities and personnel, conducts regular (weekly) meetings with the GFs, prepares project reports to the PL, administers the local project budget covering, for example, travel and meetings, ensures daily feedback sessions on fieldwork, and liaises with the PL on potential villages for spreading the RIPAT approach, working closely with the local government and extension officers. The PM should also have capacity in other sectors of relevance to development in the targeted area. Implementation may be outsourced to government agencies or other development agencies with greater capacity and specific expertise, e.g. training in child nutrition, natural resource management, high-nutrient crops, food processing and utilization, value chain development, etc.

Group facilitators

The group facilitators (GFs) are the people in direct contact with the participating farmers. Their work is to teach about and give practical training in new farming technologies, and to facilitate participatory learning by the members of the groups established for the project. It is difficult to provide a clear profile of a GF. Having the right personality and attitude is often more important than the person's educational background and level of qualifications. Some GFs may have university degrees; some may be recruited from development organizations or from the

government extension service. Typically, a GF should have a diploma in a relevant field of development such as extension, social sciences, agriculture, or rural development. A GF needs both technical and pedagogical skills, and should have experience in working with people in rural areas and a passion for promoting rural development through help to self-help.

- *Technical*. Since RIPAT provides farmers with a basket of options, the groups need training in the application of several technologies covering both livestock and agriculture. The RIPAT project also includes training in group leadership, management of group funds, and usually group microfinance. One person may not have expertise in all of these fields, and therefore the team of GFs and the PM will typically need to complement one another in their facilitation of the groups in a RIPAT project; they can even outsource missing expertise from within the IO. However, there should always be an agronomist among the team members in a project. Each group will typically be visited by various GFs and the PM over the project period to ensure that all subjects are appropriately covered.
- *Pedagogical.* A GF should not only be a technically competent person but should also have good pedagogical skills. This will enable him or her to create an environment which is conducive to learning and the sharing of ideas, and where everyone feels welcome and important. The GF must be trained in adult learning and in preferred learning situations. It is also important that the GF understands group dynamics and can ensure that the groups grow and develop. The GF should be able to detect when the group is not at ease with a given activity and when there are potential conflicts in the group that need attention to prevent them breaking out. It is important for the GF to understand the characteristics of the culture in the area where the project is being implemented, and to know how to interact with different individuals in the communities.

Involving the local government system and extension officers

The government has the responsibility for creating an environment that is conducive to community development and that can facilitate project activities. Plans and policies will usually have been developed to combat poverty and food insecurity. Relevant structures and employees to work with rural communities will be in place in most districts. It should be made clear to the relevant government authorities that RIPAT works to *support* government efforts in this regard. The aim is to ensure the continuation of favourable economic development beyond the lifespan of the project.

The RIPAT project must work closely with the agricultural and livestock development officers at the district level. At village level, collaboration may differ from one village to another, depending on the availability of local government extension officers (EOs). In some areas there is an EO stationed in each village, but quite often there is only one EO available to cover an entire ward (typically consisting of two to four villages). The attitudes of EOs towards collaborating with RIPAT can vary between great interest and reluctance.

In principle, the EOs are mandated to work with villagers on all issues related to agricultural development. They should ‘extend’ new technologies and information to the farmers. However, quite often the EOs are not sufficiently trained in the new technologies, or their knowledge is out of date. And, as mentioned in the introduction, RIPAT involves a combination of ‘top-down’ and ‘bottom-up’ approaches for effectively bridging technology gaps – a concept with which the EOs may not be familiar. Since a RIPAT Start project does not normally cover all the households in a village, it is important to involve the EOs as much as possible in the intervention so that they can learn about the technologies and continue the intervention together with the project-educated lead farmers in the subsequent RIPAT Spreading phase to reach a critical mass of farmers in the community. For this reason, the EOs are invited to participate in the weekly

RIPAT group meetings as much as possible. But the project does not have any control over the daily work of the EOs, since they are responsible to the government authorities.

Typically, the EOs sit in at RIPAT group meetings, listening, learning, and contributing with their input when relevant. They do not have any say in the decisions of the group, since they are not group members. The EOs cannot give orders to the group. During project implementation, the group is trained and mentored by the GF – not by the EOs. Any direct involvement by an EO in the RIPAT groups should always be coordinated and agreed with the GF and/or the PM. But to avoid misunderstanding, the collaboration with local government must be well organized from the outset, with clear decision-making processes and lines of communication. It is also anticipated that the EOs will collaborate with the LFs in the spreading of RIPAT groups and technologies. The specific areas where EOs are involved in a RIPAT project are listed in Box 2.1.

Box 2.1 Specific areas involving the extension officers in RIPAT projects

- *Situation analysis*. The EOs at district level are involved in the selection of villages for RIPAT projects, and participate in the situation analysis as key informants and providers of secondary information.
- *Project launch*. The EOs are involved in the community sensitization and mobilization processes and participate in the formation of groups.
- *Follow-up activities*. The EOs participate in the group meetings and training sessions as much as possible, in order to learn. They are sometimes asked by the PM to follow up on specific project elements such as the progress of solidarity chains, farmer-to-farmer training, and technology spreading within the villages (farmers agree to train three other local farmers in what they have learned through the project).
- *Advisory services*. As a part of their general work, EOs provide agricultural advisory services in the villages; this work complements the promotion of improved farming techniques through the RIPAT project.
- *Scaling up after project completion*. Because they have learned and gained experience from RIPAT projects, it is expected that the EOs will lead the scaling up of interventions to non-RIPAT farmers and to other villages. This activity could be undertaken in collaboration with the RIPAT LFs.
- *Lobbying and advocacy.* The EOs are part of the government system as well as their local communities. They are aware of the shortcomings in the government systems and the need to address these. They can be trained to become very effective advocates for the communities where they work, especially after they have observed the project results achieved by the producer groups.

CHAPTER 3: Pre-project activities

There are several planning activities that must be completed before a RIPAT project can commence. It is aptly said that 'those who fail to plan – plan to fail'. The project must be well prepared to ensure that it is relevant and fully 'owned' by the targeted communities and the local government officials. The IO must therefore go through all the steps described in this chapter (see Table 3.1 for an overview). Ideally, GFs should take an active part in the project preparation activities, but sometimes they are only recruited and trained after project funding has been secured.

Implementation of RIPAT in a WV Area Programme
An AP can vary in size, content, and population, but the villages included in an AP are commonly within the same administration boundaries and usually have similar socio-economic and agro-ecological conditions. If WV is already running an AP in the particular area under consideration for a RIPAT project, then most or perhaps all of the information needed for planning RIPAT will be readily available. In such a case, new situation, problem, and stakeholder analyses may not be needed before the start-up of a RIPAT project. Otherwise, however, the planning steps listed below should be completed.

Step 1: Selection of a potential area

The first step in planning for a RIPAT project is to identify an area that is potentially well suited. Although the RIPAT approach is applicable in most agriculturally-based communities, certain conditions and environments are more conducive to success than others, as briefly mentioned in Chapter 1.

A target area for RIPAT should preferably have 10-20 villages within a reasonable distance of each other. Typically half of the villages will be directly involved in the RIPAT Start phase, i.e. the first 2- to 4-year implementation programme. However, neighbouring villages will be targeted through the subsequent RIPAT Spreading phase. This second phase is based primarily on the work of project LFs – the best farmers in each group – and of the government EOs. This inbuilt spreading concept is introduced in Chapter 1 and is further explained in Chapter 5, Step 9. At this stage, the IO should only keep in mind the need to identify a number of potential 'spreading villages' to be targeted after the RIPAT Start phase.

In the process of selecting an area, the IO should undertake a stakeholder analysis to identify and describe individuals, groups of people, institutions, or organizations that may have a significant interest in the success or failure of a RIPAT project.

Once a potential area has been identified, the next step is to meet with the appropriate government officials.

Step 2: Introductory meeting with local government officials

The introductory meeting with local government officials is aimed at establishing positive cooperation with the relevant government institutions by making sure that they are fully informed and that the project has their blessing, thus assuring active support for it.
During the meeting, introduce the concept of the project, confirm the suitability of the selected area, and seek the participation of the authorities in the situation analysis process and their assistance in listing villages appropriate for a RIPAT project.

Table 3.1 Overview of the steps involved in project preparation

Step	*1. Selection of potential target area*	*2. Introductory meeting with government officials*	*3. Situation analysis and draft design of basket of options*	*4. Project description and preparations*
Content	The IO makes a preliminary screening to identify an area appropriate for a RIPAT project	The IO meets with the district administration to • introduce the IO • introduce the RIPAT approach • discuss the target area and the main target group • discuss the role of the IO and local leaders, and discuss administration and coordination	The situation analysis team • visits selected target villages and carries out a participatory rural appraisal • prepares a problem tree to establish cause/effect relationships • designs an appropriate basket of options for the area	The IO • designs the project plan and budget in accordance with the requirements of the funding agent • prepares for project launch, including recruiting and training of PM and GFs and preparation of group training materials according to the agreed basket of options
Comments	The factors to keep in mind are • distances between households • agro ecology • culture and livelihood strategies	This may take more than one meeting and may involve regional and district officials	The situation analysis team normally consists of the PL, technical experts, and district representatives, including the local EO(s)	The specific design and format of the proposal should match donor requirements

The RIPAT Spreading phase should also be discussed with and understood by the local authorities, since the village and government authorities and particularly the extension system should play a crucial role in the continuation and spreading of RIPAT. Such expectations must be communicated and discussed from the very beginning, before any project activities are launched. This requires the involvement of the local government authorities (from the district down to the communities) in several meetings.

Meetings with the regional and district authorities

The IO is advised to first meet the regional authorities. This would be the Regional Administrative Secretary (RAS) and Regional Agricultural Adviser (RAA). Preferably, the RAA should participate in the first meeting with the district authorities.

At the district level it will be most appropriate to meet with the District Council Management Team (DCMT). The initial contacts would be the agricultural and livestock development officers at the district level. They will then introduce the IO to the District Executive Director (DED), who will arrange for a meeting with the DCMT.

The topics to be covered during the meeting should include the following:

- Introduction of the IO
- The purpose and goals of RIPAT, i.e. to alleviate poverty and increase household food security through the introduction of a basket of options suited to the agro-ecological conditions of the targeted villages (if they are already known), and the nature of the RIPAT approach
- The proposed area for implementation and for subsequent scaling up
- The roles of various players in the project, and expectations regarding outcomes
  - The working relationship between the IO and the district; the project will work closely with local government, and particularly with the ward and village EOs (see Box 2.1 on collaboration with EOs).
  - The Spreading phase, to be initiated after the completion of the RIPAT Start phase; it is expected that the LFs will work together with the EOs to pass on the knowledge and skills acquired from the project. This spreading (and the funding for it) may be the responsibility of the district.
- A situation analysis survey for the suggested villages, including dates and identification of persons responsible.

After the meeting with the DCMT and the IO, representatives should proceed to the office for agricultural and livestock development at the district level to gather more background data and to acquire a better understanding of the area, and of its conditions and problems. The district office normally has a database containing reports, maps, and other useful documents. If the district has conducted an ‘Opportunities and Obstacles to Development’ (O&OD) exercise in the villages there should be a wealth of information concerning the villagers and their plans for development activities.

The IO representatives meeting with the regional and district authorities to seek full collaboration and support

Step 3: Situation analysis and draft design of the basket of options

A thorough analysis of the situation is necessary. The problems and needs faced by the communities (both felt and perceived), including the relationship between causes and effects of these problems, must be analysed in a participatory manner before relevant solutions can be identified and activities can be planned. It is important to remember that in RIPAT, development is never done *for* communities or individuals, but is achieved *by* communities and individuals. Successful development requires that the IO works closely together with the targeted community to achieve what the community needs.

A participatory rural appraisal (PRA) team includes the IO, the district officials (including the EOs), and members of the local community. The selected villages are visited and information is gathered using various PRA tools (see Box 3.1). Challenges and opportunities are identified and information is gathered systematically for proper analysis. The seasonal calendar and the problem tree are also worked out at this stage in cooperation with the communities.

Box 3.1 Selected Participatory Rural Appraisal (PRA) tools

This box introduces some of the PRA tools which can be used during the situation analysis. For further information on PRA please refer to other manuals (see Appendix 8).

Focus-group discussions
… aim to collect general information, clarify details, or gather opinions, beliefs, and attitudes from a group of selected people (often 8-12) who represent different groupings in the community (e.g. women, men, young people, the elderly, etc.). Questions are asked in an interactive group setting where participants are free to talk with other group members.

Semi-structured interviews
… are used to obtain face-to-face information from individual community members or a small group. Some key informants are selected for their specialized knowledge or interests (e.g. community leaders, extension officers, teachers, local business people, and community development committees).

A transect walk
... is a structured walk or a series of walks through a selected area with local informants that permits observation of the area's environmental characteristics and/or the residents' main activities. This tool helps to provide information concerning the range of different conditions, problems, and opportunities in each of the areas.

An activity profile
... is an outline of the main activities undertaken by men and women in the household and in the community created in order to understand better who performs which tasks. Such information is helpful in the planning and scheduling of the project and in designing the basket of options – especially in terms of assigning tasks and responsibilities among group members.

A resource control profile
... is used to identify who in the household has access to / control of / ownership of the various household resources, and can be used for identifying the role that gender plays in control over resources.

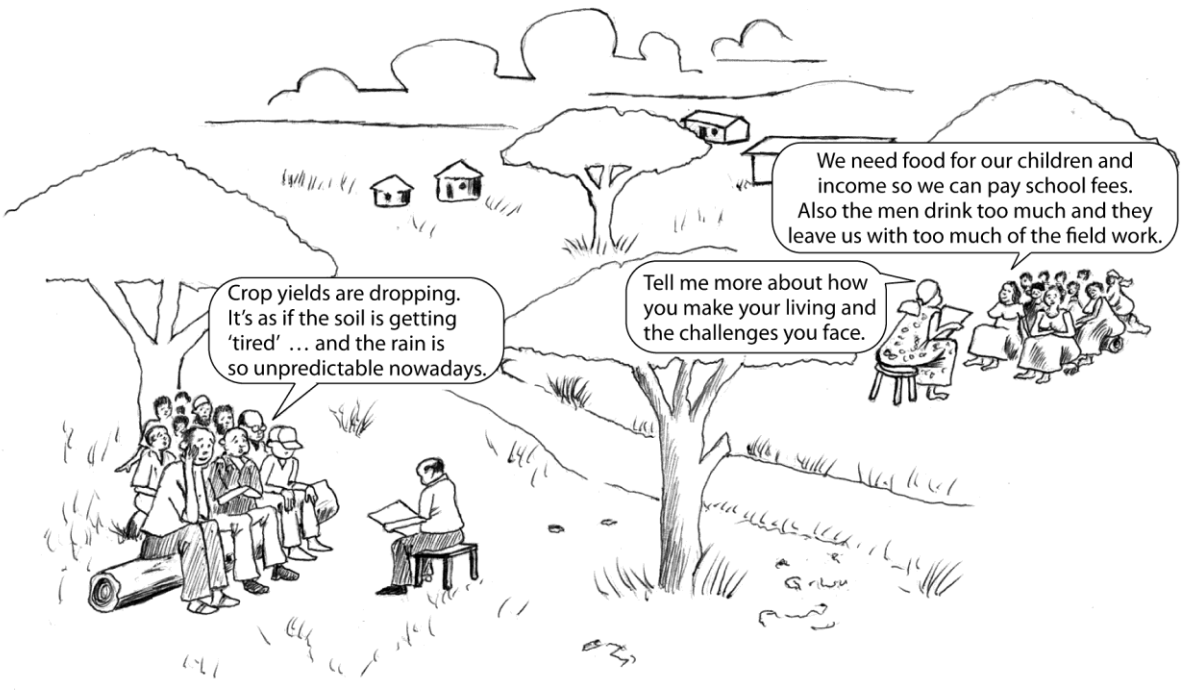
A seasonal calendar
… is used to establish regular cycles or patterns of activities and events within a community over 12 months, and helps to understand the seasonal changes in the livelihood system. A seasonal calendar can show the distribution of household labour, food availability/food gaps, flow of income, rainfall distribution, etc.

Pair-wise ranking
… is a tool that helps a group to compare and to order a long list of things against one another, for example a list of problems. Pair-wise ranking is most often used to determine priorities when there are many options to choose from.

Wealth ranking
… is a method of understanding relative wealth within a specific area or community. The key local grouping criteria or characteristics of the poor, the middle level or the rich in a society are determined through focus-group discussions or semi-structured interviews.

The information gathered is used to help in planning appropriate and relevant activities that the project should include in order to achieve its objectives. The focus group discussions should cover at least some of the following:

- Ask the group to define poverty, and to discuss whether poverty and food insecurity have improved or worsened over the past 10 to 20 years. Use indicators such as food production, months of hunger, household purchasing power, etc. Discuss in broad terms why the situation is as it is, and ask participants how they cope.
- Ask participants if they can recall earlier projects in their community. Ask them to describe the projects and their impact. Let the group members try to recall projects first, but you can also find information on earlier projects in the situation analysis report, where the full list should be provided.
- Discuss the point that development does not happen automatically just because a development organization comes to the village with a project. Development requires careful identification and mobilization of resources, and farmers' own efforts are the key to achieving the desired ends.
- Ask the group to outline what elements in their village and environment are hindering development. First let the group members try to explain. Factors might include (but not be limited to)
  - internal hindrances such as lack of funds, poor seed quality, low prices, etc.
  - external hindrances such as government price regulations, export restrictions, etc.
  - climate difficulties such as climate change, low or late rainfall, etc.
  - land difficulties such as decreasing soil fertility, insufficient irrigation possibilities, etc.



Focus-group discussions with women and men separately

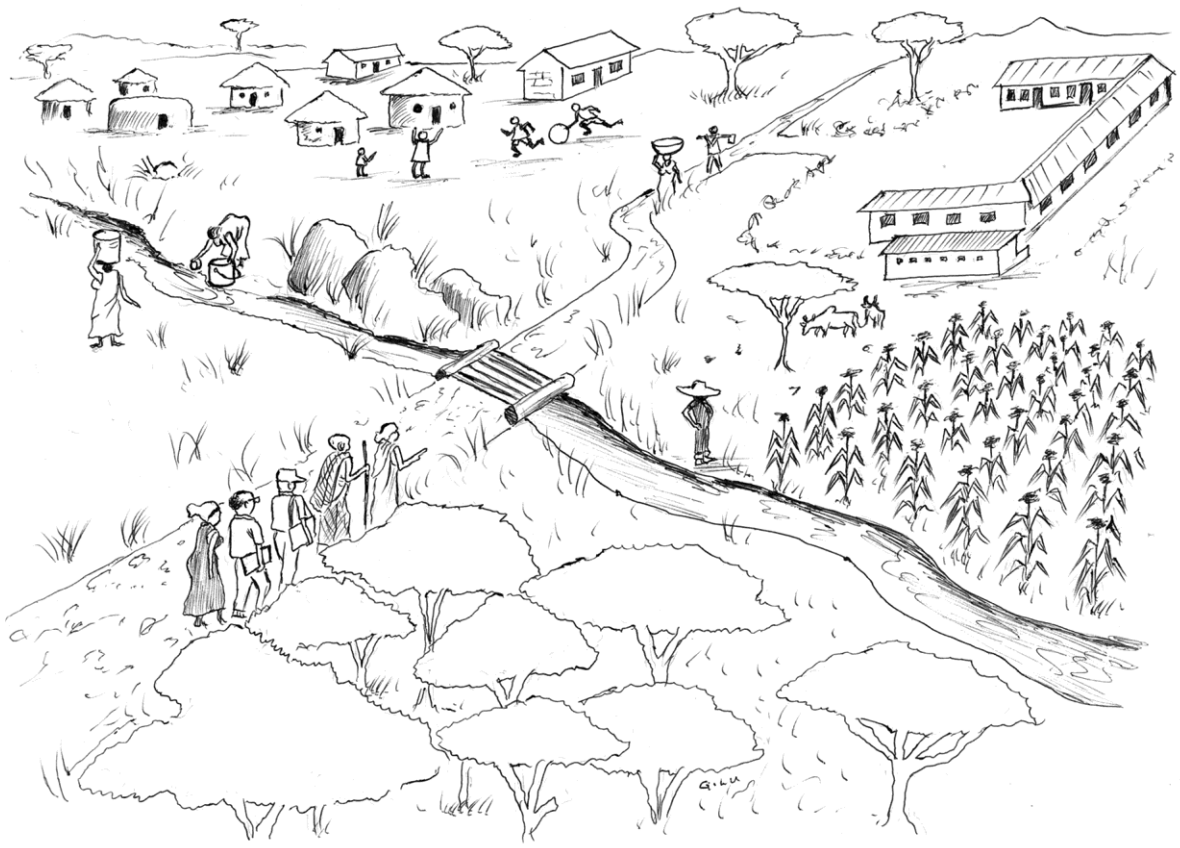
Avoid raising expectations during the planning process!

During the PRA process, it is crucial not to raise too many expectations in the communities. People may think that the IO will be providing easy solutions such as handing out free food or fertilizers to solve their immediate food security problems. Or they may think that the IO will just come up with a detailed project and tell them what to do.

It is important to make very clear that the purpose of the visits and the planning exercise is to gather information and to learn about the various means of livelihood in the community. At this point in time it is not even certain that a project will be approved for the particular village

Identifying a provisional basket of options (BO)

It is especially important that the PRA exercise results in a thorough understanding of current social indicators, of farming practices, and of the local soil, water, and climatic conditions. The identification of the BO is the initial step towards the project design and its components. The BO should reflect preferences and interest among the target group but should also be designed to address the needs of vulnerable groups such as children, pregnant women, the elderly, and the disabled. The BO must fit the local agro-ecology to maximise production and meet societal needs such as the nutrition of children. Marketing and value chains for each commodity must also be considered. This will provide the information required to identify an appropriate basket of options.



Transect walk during the situation analysis

In most of the RIPAT projects implemented so far, the baskets of options offered to project groups have been fairly comprehensive, with each including a variety of crop/livestock technologies that represent improvements on current practice (see Box 3.2).

Box 3.2 Baskets of options

The baskets of technology options offered to RIPAT groups and to individual farmers have typically been drawn from the following list.

1. Cultivation of improved varieties of banana using new cultivation techniques
2. Conservation agriculture, which promotes three basic principles: i) minimum soil disturbance, ii) keeping the soil covered, and iii) mixing and rotating crops, e.g. intercropping or rotating maize with legumes
3. Crop diversification and cropping stability, promoted by introducing improved varieties of cassava, sweet potatoes, and vegetables, using supplementary irrigation where possible
4. Post-harvesting technologies, i.e. food storage, processing, utilization, and marketing
5. Improved animal husbandry (cattle, goats, sheep, pigs, beekeeping, poultry) in terms of breeds kept, housing and feeding, and veterinary treatment
6. Multipurpose trees for fodder, shade, windbreaks, timber, firewood, soil fertility, erosion control, and food (fruit trees – avocado, citrus, and mango)
7. Soil and water conservation, including contour farming and rainwater harvesting techniques
8. Microfinance training primarily focused on using the village savings and loan association (VSLA) model

(See Appendix 3 for details of the techniques.)

The problems identified during the PRA are further analysed by making a 'problem tree' that makes visible and clarifies cause and effect relationships with regard to food security and agricultural development issues (see figure 3.1). A thorough problem analysis should involve a joint effort, with input from both farmers and technical experts. The situation analysis team identifies the real bottlenecks and underlying root problems related to food security and development.

A good problem analysis thus provides a sound foundation on which to develop a set of clear project objectives and project outputs, and is a useful tool for prioritizing the activities required. It is usually the case that small-scale farmers in rural areas face a long and varied list of problems with maintaining a livelihood.

On the basis of the information gathered and of the analysis, a suitable list for the basket of options – technologies and practices appropriate for the villages in the area that have the potential to improve local agriculture – is drafted. Thus, the basket of options is based on input from the farmers and technical experts in the situation analysis team.

Step 4: Project description and project preparations

The *project proposal* is the document which enables the IO to access funds for the project. Most donors have proposal formats and special guidelines that need to be followed. The project documents (proposal with logical framework, organizational chart, activity plan, and budget)

should guide the project implementation, and the proposal should therefore clearly define how the project will be implemented.

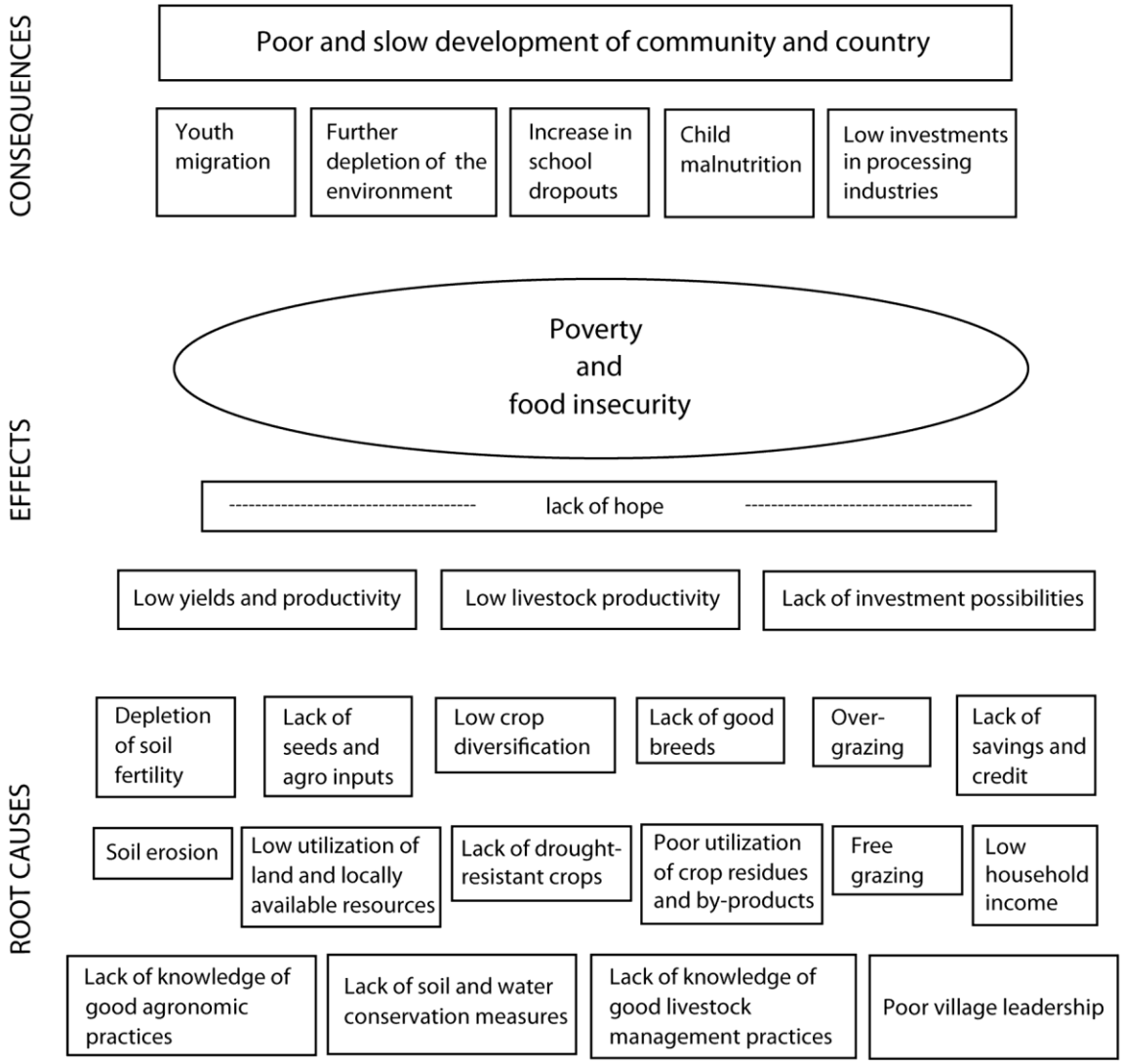


Figure 3.1 The problem tree describes in generic terms the causes and effects that the RIPAT project will address. The tree should be read from the bottom up.

Preparation of project activities

Once the project proposal has been submitted there are a range of activities that need to be undertaken prior to the commencement of the project:

Recruiting and training the group facilitators

Candidates for GF positions who have the necessary personal qualities may need training in technical skills related to the specific technologies offered in the basket of options. The GFs may also need training in how to strengthen the group's advocacy skills and in how to form a Producer Association. Some GFs may not have sufficient practical experience in facilitating adult learning, and will therefore need a theoretical and a practical course in RIPAT group facilitation. Other areas of training needed may include, for example, child protection and

nutrition, as well as some of the specific WV approaches listed in Appendix 3. The Vision Academy and the RECODA Academy offer tailor-made courses for such elements if required. In addition, it is preferable if new appointees, after their academy training, team up with a more experienced GF at the beginning to acquire practical knowledge.

The lack of hope often experienced in rural communities – people waiting for change to be brought from outside. A RIPAT project works to create a vision of a better future and to help farmers discover the often overlooked locally available resources (in this case, a supply of manure and a stream for irrigation) which can help them to escape from poverty through their own efforts.

Preparation of training materials and posters

Having identified the basket of options to be offered, the IO should start preparing training materials and posters for use by the GFs during the course of the programme. Technical papers on the various crop and livestock production systems and methods are available from various sources. Similarly, manuals on group dynamics and village savings associations are also available. Appendix 3 contains a list of some useful and easily accessible materials.

Posters showing the basket of options, the nutritive value of and other information about the various crops, and illustrations of technical aspects of the project such as the solidarity chains for animals, rules for how to pay for inputs and to pass on knowledge and planting materials to others in the community, etc., should be prepared for use at subsequent group meetings. The vision of a better household, depicting the possible future end result of the programme, should also be created with the BO in mind. Such a vision presents the possibility of gradually implementing the BO on one's own farm(s) and thus a route out of poverty.

CHAPTER 4: Initiating the project

Sensitizing and mobilizing the communities and establishing farmer producer groups

Once funding has been secured, the project is ready to be initiated. The RIPAT approach requires a joint effort. Ownership of the project by the participants, the government authorities (including the EOs) and the community leaders is crucial – not only for successful initial implementation, but also for spreading of the intervention to other villages in the district. Planning a start-up process that is inclusive and informative is vital to ensuring local support and good collaboration right from the outset, and calls for the involvement of the government offices from district level all the way down to the wards and the villages. It is important to follow correct protocol when involving government officials and community leaders. Table 4.1 below lays out the order in which the meetings should take place and the major issues to be covered. The PL and PM will take the primary lead in these steps; however, as far as possible the designated GFs should also participate. It is crucial to carry out these start-up project activities two or three months before commencement of actual project implementation. Agriculture-based projects must start on time and groups must be ready for action when the rains and planting season start.

Step 1: Meeting with the district officials at district headquarters

The IO should arrange for a meeting with the District Executive Director (DED) and the district level agricultural and livestock development officers. The object of the meeting is to inform the district that the planned project has been funded and to make a final agreement on the procedures for collaboration. Roles and responsibilities need to be defined and agreed to avoid any misunderstandings in the process of implementation, and for this reason a Memorandum of Understanding (MoU) should be written (see Appendix 4D).

The district should appoint a District Project Coordinator (DPC) who will be the main link for communication between the IO and the district authorities. At the meeting, the final list of the villages to be covered in the RIPAT Start phase will be agreed, as will a tentative list of the additional villages to be targeted in the subsequent RIPAT Spreading phase using LFs and EOs.

The district and ward officials are expected to participate actively in the Village Assembly (VA) – the big village meeting where the RIPAT project is presented to the entire community and farmers enrol in the project. The presence of government officials and their endorsement of the RIPAT project signal both the importance of the project and the official approval of RIPAT and the IO. Official approval helps to plant the first seeds of belief in the creation of a better future for the village.

Table 4.1 Overview of the steps involved in project start-up

Step	*1. Meeting with district authorities*	*2. Meeting with the Ward Development committee (WDC)*	*3. Village Assembly: Sensitization and mobilization process*	*4. Formation of groups*
Content	• Announce that the project has been funded • Introduce the Project Manager and staff • Confirm the selected villages • Recap on the implementation process • Agree on role of local administrators and leaders • Sign an MoU • Appoint a DPC	• Recap on the background to RIPAT and on implementation processes • Explain the need for WDC assistance when launching the project at the Village Assembly and in forming groups in the villages	• Introduce the IO and give a full explanation of the RIPAT project concept • Levelling of expectations, i.e. basket of options, payment for inputs, etc. • Ensure that everything is very clear, e.g. roles, expectations, and responsibilities • Identification of willing group members	• Describe step-by-step how RIPAT works • Make clear the expectation that participants will be good group members, and explain what this involves • Present the project activity schedule • Announce the date and place for the first group meeting
Comments	This meeting will involve the District Executive Director (DED) and the relevant member of the Council Management Team (CMT)		This open meeting is the foundation for successful group formation and good project start-up. It is chaired by the village leaders. Representatives from the WDC and district should play an active role	Attended only by people who have been selected and who have committed themselves to actively participating in the groups

If the District officials say that some villages in the targeted area are slow to respond or difficult to motivate, then such villages should not be included in the RIPAT Start phase. It will be better to wait and include them in the Spreading phase. The farmers in such villages are more likely to become motivated *after* they have seen the benefits that RIPAT brings. The more willing villages should be should be selected for the RIPAT Start phase and the less willing or more reluctant villages for the subsequent RIPAT Spreading phase.

The DPC is responsible for calling for the WDC meeting and also for coordinating arrangements with regard to the date and time of the Village Assembly (VA) with the Village Chairman and the Village Executive Officer, who then call the VA. As far as possible the whole village community should attend the VA, since it is there that the group participants will be selected and enrolled in the project. It is important to ensure that the announcement includes clear information about the agenda and about the purpose of the meeting, i.e. the opportunity for farmers to enrol in an agricultural development project.

It is important to be in good time in planning the VA. The DPC should check that the village will not have just had another VA in the previous week or so. People may get tired of being called for too many meetings, and the turn-out rate may be disappointingly low in consequence. It might be a good idea to use cars with loudspeakers to announce the VA a few days before it happens and/or to arrange for SMS texts to be sent to the ten cell leaders.

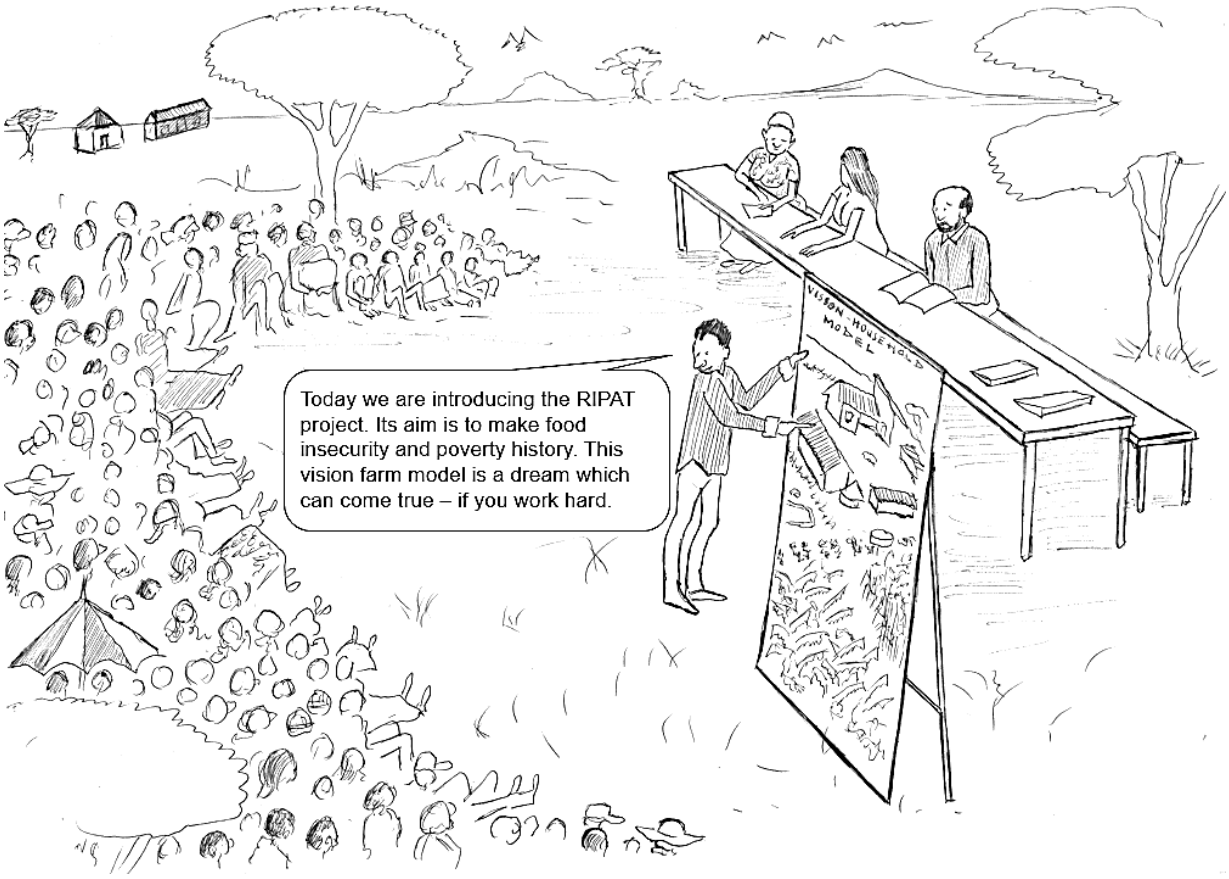
Step 2: Meeting with the Ward Development Committee at the ward headquarters

The next step is to meet with the Ward Development Committee (WDC) to inform all its members about the forthcoming RIPAT project. For many of the WDC members, this will be the first time they hear about RIPAT. Often this meeting takes place in the morning of the day of the Village Assembly.

The objective of the WDC meeting held prior to the Village Assembly is to ensure that the WDC members are familiar with the project objectives, the implementation procedures, and the form of collaboration and commitment that it is expected they will provide. The WDC is an important body; it has the mandate to plan and coordinate all development projects in the wards (a ward typically consists of two to four villages). Members of the WDC come from various backgrounds; they are ward councillors, ward leaders, village leaders, extension officers, technical staff from various departments, religious leaders, representatives of the political leadership, NGO representatives, and development stakeholders.

Step 3: Sensitization and mobilization of communities at the Village Assembly in each village

This meeting is an essential foundation for successful group formation and good project start-up. It is important that village leaders chair the Village Assembly and that representatives from the WDC and district participate actively. All possible efforts should be made to ensure that the majority of the households in the community attend the meeting, and it is important that the IO, the district, the ward, and the village leaders work together to ensure that the sensitization and mobilization processes are successful. Normally the event is held in a public place such as the local government offices, a school, or a church compound.



The RIPAT project is introduced to the community at the Village Assembly. The meeting is chaired by the village leaders, and the IO and the district, the ward and the village leaders all work together to ensure successful group formation and good project start-up.

Village Assembly

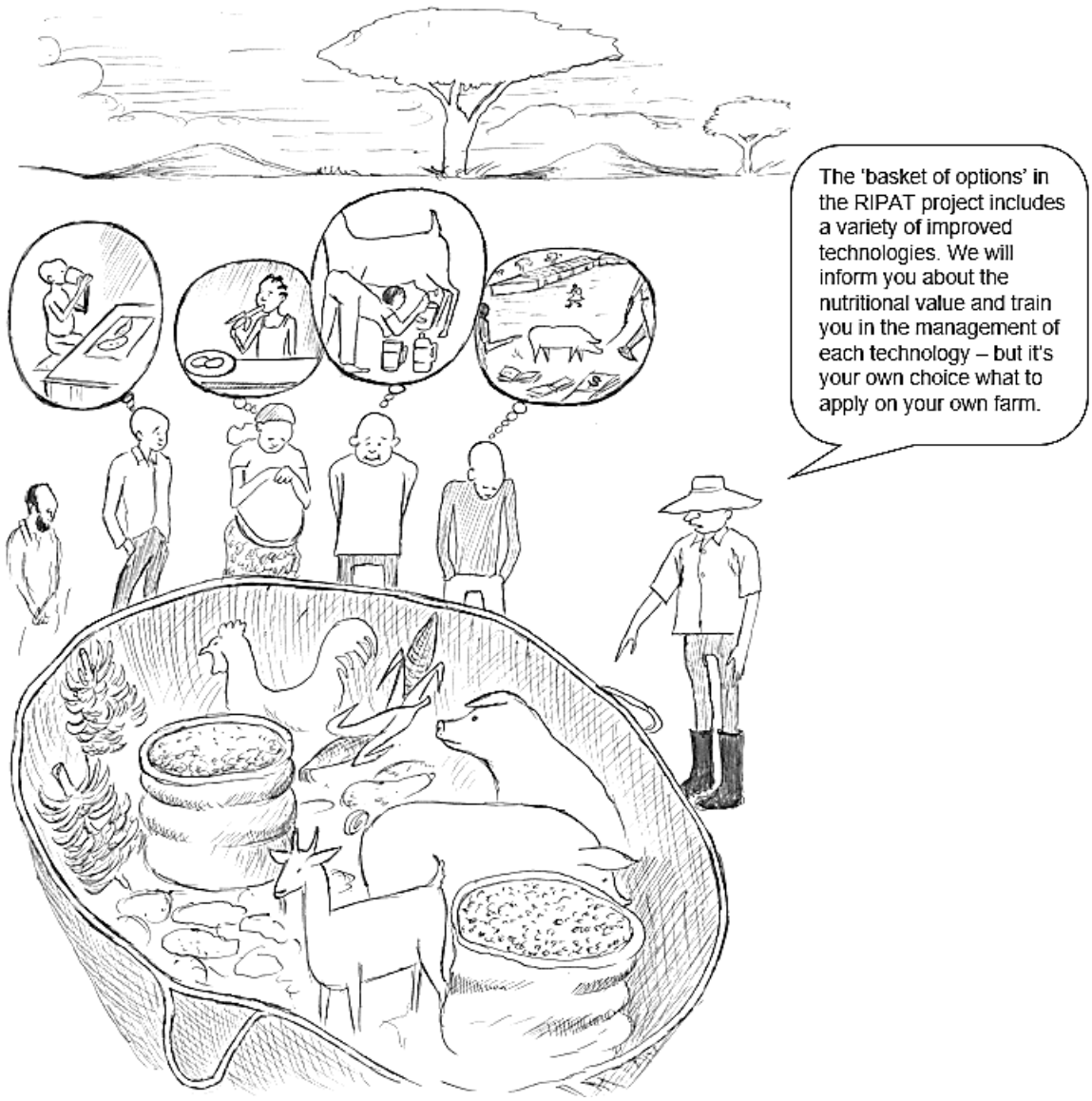
There are three objectives of this Village Assembly, namely:

1. to present the RIPAT project to the village leaders and the community in such a way that the participants get the right information and are fully aware of what is expected from them;
2. to promote a 'yes we can' spirit among the villagers and to create a vision of the desired end; and
3. to form two groups of 25-30 persons.

The ward leaders and the DPC (or a representative from the district) are expected to introduce the project and the IO to the audience. The creation of a vision of a better future through the careful sensitization of communities to the potential for change and the mobilization of farmers to take charge of their own development are fundamental to the success of the project. At this meeting, the poverty and food security situations in the village are analysed with the participation of those present. This is followed by a discussion of how the RIPAT project can help to rectify the situation through the participants' own efforts, despite any past failures that might have occurred with other projects. Bringing along one or two farmers from an earlier RIPAT project would be useful, as they could testify to the change in their livelihoods that RIPAT helped to achieve.

Belief in a better future is a prerequisite for getting development rolling. It is necessary that farmers should be able to visualize a successful outcome. The project elements and activities must be clearly explained, including the new farming technologies which will be provided in the basket of options, the system for paying for inputs (see Box 4.2), and the roles and responsibilities of the various stakeholders (the IO, participants, village leaders and EOs). It is very important that the meeting is interactive – lecturing should be avoided. RIPAT aims to avoid disruptive donor dependency, and therefore the project does not provide free gifts or handouts. If it is rumoured in a poor community that somebody has received money or gifts in kind from donors or from the government, people will put their energy into trying to obtain gifts, and stop or reduce their efforts to earn their own living.

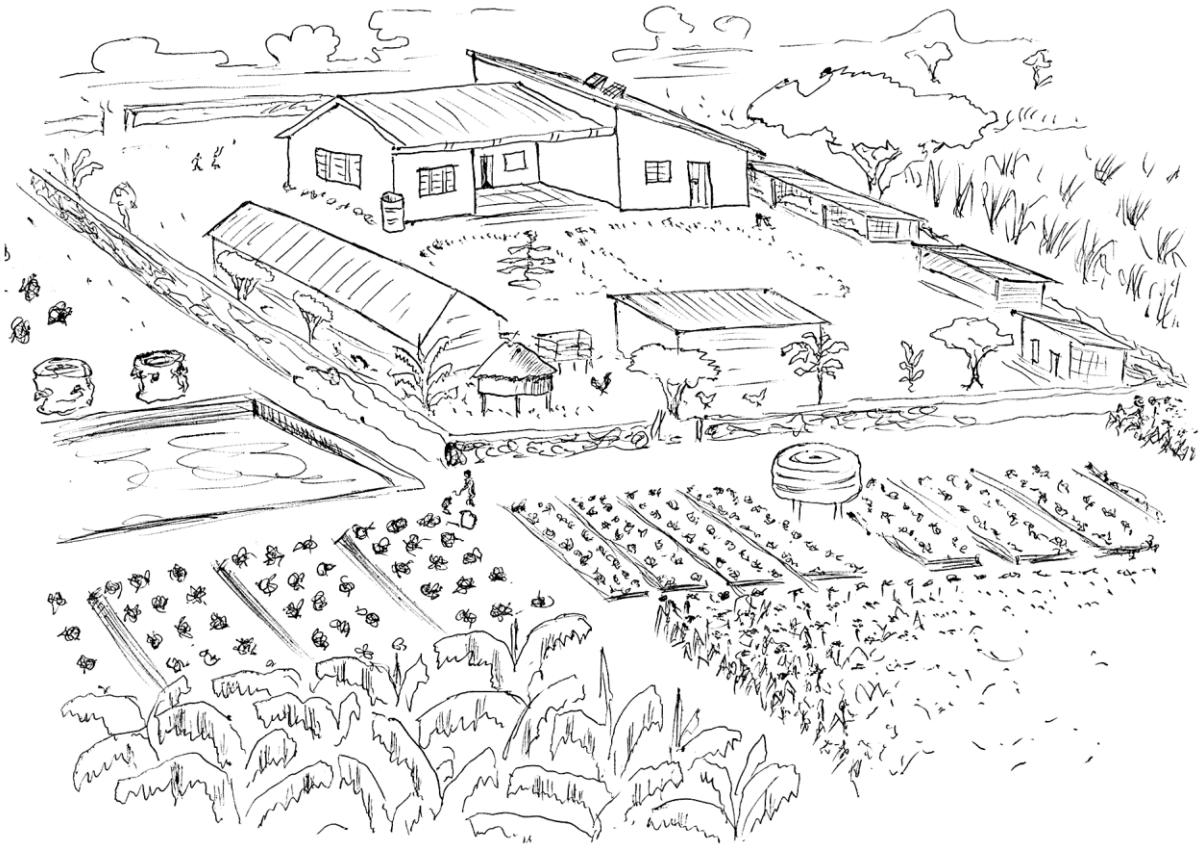
Extension officers are expected to engage in the Village Assembly meetings and in the community mobilization and sensitization processes to improve project acceptance, i.e. the feeling of ownership and spreading of the concepts introduced in their area of work.



The 'basket of options'

Box 4.3 provides a checklist for the meeting of the Village Assembly. An image of a 'vision farm' is also presented. Often farmers do not have a clear vision of what development is, and an illustration or an example can often help them to grasp the idea better. It should be made clear to the audience at the meeting that the stage of development represented by the vision farm model will not be reached within the 2-4 year project period – but the project will be a stepping stone in this direction.

The visioning process involves ongoing mentoring. The Empowered World View curriculum by WV works well to facilitate this process (see Appendix 3). It helps people discover their value, creativity, potential, power, responsibility, accountability and purpose. Positive thoughts are encouraged and a 'Yes we can' attitude is embraced to facilitate understanding of the future state (vision). However, it is important to be careful not to promise too much and create an expectation of great wealth within the project lifetime.



The Vision Farm poster

Box 4.2 Inputs

The groups will be provided with the inputs needed to try out and test the basket of options (i.e. improved seed varieties, tools and animals for breeding). For some inputs, the individual farmers pay the full cost to the IO in cash; for other inputs, payment is effected by passing on planting material or animal offspring to other farmers and to future RIPAT Spreading groups in the area. The overall principles are listed here, while more details are given in Chapter 5, Step 9.

Banana

Each group:
Receives e.g. 100 banana suckers free of charge and agrees to give back 100 suckers to the IO for use in the RIPAT Spreading groups

Individuals:
Each of the 20-30 individual group members receives e.g. 10 suckers. They agree to give back three times the number:

- 10 should be given back to the IO for use in future RIPAT Spreading groups
- 20 should be given to two other farmers in the village (friends/neighbours) outside the group. These two farmers are also trained in the improved cultivation methods

The same principle applies for sweet potato veins and any other crops for which vegetative propagation is used.

Seeds/other planting materials

Each group:
Receives seed free of charge for use at the group plot and agrees to give back same amount of seed to the IO for use in future RIPAT Spreading groups.

Individuals:

- can order suitable amounts (e.g. 1 kilo) of seeds for use at their own farm
- pay 25% of the cost immediately in cash to the IO and agree to give back twice the amount of seed received (e.g. 2 kg) after harvest
  - 1 kg should be given back the IO for use in future RIPAT Spreading groups
  - 1 kg should be allocated for other needy group members or other farmers in the village (friends/ neighbours); distribution of this seed is administered by the group's seed bank.

Goats, sheep, pigs:
Farmers pay for their animals by passing on the first female offspring to others in the group (in the case of goats and sheep, two: for pigs, five), following a predefined list. Pure-bred males and females of improved livestock strains are provided to the group.

The community in general should be encouraged to use the improved strain male animals for cross-breeding with their local stock, thus promoting further spreading of the improved breeds and a wider impact.

Box 4.3 Checklist for the meeting at the Village Assembly

1. Upon arrival, the WDC team, the DPC and the IO (the Programme Leader or the Project Manager – see Chapter 2) should hold a brief meeting with the Village Council to outline the RIPAT project and its procedures. Some of the members of the Village Council will have participated in the situation analysis during the preparatory stage, so it will not be very new to them.
2. The IO will outline the role and responsibilities that it is expected that the village leadership will undertake.
3. After introduction to the Village Council, the WDC team and the Village Council members will go to the venue for the Village Assembly.
4. The Village Chairperson should open the meeting and invite the DPC to address the audience.
5. The DPC should introduce the project to the villagers and invite the IO to outline the project in detail.
6. The IO representative should discuss some of the problems hindering development in the area that were identified during the situation analysis exercise.
7. Farmers from other completed RIPAT projects are invited to give their testimony.
8. The problems that farmers in the area face should be related to the RIPAT approach for ensuring food and nutrition security and poverty alleviation.
    - Farmers are asked simple, straightforward questions on development opportunities and obstacles to development in their village.
    - They are then asked for possible solutions which they think might help.
    - The answers given are used to help farmers to understand what they have been missing.
    - A presentation is made of how the RIPAT concept works:
        - basket of options – how it will affect food and nutrition security and access market
        - working in groups
        - paying for inputs
        - spreading and solidarity chains: RIPAT group members are ‘development ambassadors’ in the village and are each expected to train three others
        - further spreading and scaling up through the work of lead farmers and extension officers
9. The expected roles of each stakeholder are presented (emphasizing the roles of the local government and the community).
10. The PM should explain the importance of working in groups, and explain the group formation procedures and the selection criteria.
11. Sufficient time should be allowed for questions, and full answers should be given.

Step 4: Formation of RIPAT groups

It is important that the farmers are fully informed about the project before they enrol – only fully informed people can really commit themselves. The reasons for and the advantages of forming groups need to be explained: groups can make collective choices, build confidence, pool and share skills and knowledge, and advocate for their rights in the community. Groups improve the project efficiency in general if they can establish good leadership and cooperation.

Once everything is clear, the village leaders should, with assistance from the IO, facilitate the formation of two groups in the village. Each group should consist of 25-30 members. The village leadership will be responsible for recording the names of the members of the two groups. The selection process should follow the following principles.

Criteria for participant selection:

- Participation must be voluntary, and participants must be committed to the project.
- Participants should not be rich in terms of the wealth ranking in the village.
- Participants must be engaged in farming and have their own farm land available for putting the new methods into effect.
- Participants must be willing and able to share the new ideas with others, and to learn from others. This means that participants should be of good standing in the community.
- There should be equal numbers of men and women in the groups, or more women than men.
- Only one person per household, who must be over 18 years of age, may participate.
- Group members must come from the village and ideally should know one another in advance.

Following the formation of the two groups, the village leadership, PM, GF, and the selected group members will make arrangements for the first group meeting, which preferably should be in the following week.

Forming new groups or converting existing savings groups into producer groups? Lessons learned from earlier projects

RIPAT groups can also be formed from existing groups. Quite often NGOs (including WV) promote improved livelihood and resilience in communities by establishing savings groups (SGs) as the starting point. The Village Savings and Loan Association (VSLA) is a very popular model (see Chapter 5, Step 10 for details). It is well-known that saving improves resilience and is conducive to the development of sustainable livelihoods, so it is good to promote SGs as much as possible. However, it is important to acknowledge that people enrol in a VSLA because they have one interest in common, namely to save and borrow money. The members of existing VSLA groups may not be interested in doing agriculture together. Some VSLAs consist primarily of women, some of men, some of mixed genders. Some VSLA members may be elderly or handicapped and cannot do hard physical work, and for some of the VSLA members the main source of income is a small business or regular/ seasonal employment. Some members may even be landless. Since VSLAs can be so diverse it may not always be practical or possible to simply transform VSLAs into RIPAT producer groups.

Villagers who enrol in a RIPAT project should do so because they are specifically interested in agricultural development and committed to transforming their farming through learning the new agricultural techniques and methods that are made available via the project. A prerequisite for developing successful RIPAT producer groups is therefore that the farmers enrolled are fully committed to agriculture.

On the other hand, it is an advantage if the farmers who enrol in a RIPAT project have already learned how to save, and perhaps have accumulated capital which they can invest in further developing their farms. This will help them to put into practice the new ideas and technologies they learn in the RIPAT project.

Where possible and practicable, existing VSLAs in the targeted villages may enrol into the RIPAT project as groups and thus become RIPAT producer groups. However, in most cases VSLA members from existing groups enrol into RIPAT producer groups on an individual basis, and are helped in their agricultural production through the basket of options.

Part 3:

How to work with groups

By

Vesterager, J.M., Ringo, D.E., Maguzu, C. W., and Ng'ang'a, J.N.

CHAPTER 5: Implementation

This and the following chapter relate to the actual implementation of RIPAT project activities. The main people responsible for implementation and for training and coaching the project participants are the GFs and the PM. This chapter is addressed primarily to GFs and lists the steps that you, as a GF, will need to take in the implementation process. The implementation steps are presented here in chronological order to help you to develop an overview of the process. But in reality many of the project components and group facilitation activities take place at the same time, so some of the steps actually overlap. Before we come to the actual project start, however, we want to give an introduction to the stages the groups go through over the project lifespan and also a little advice on how to work as a GF.

Step 0: Your job as a group facilitator (GF)

The main activities in a RIPAT project concern the establishment of farmer groups with good leadership and the transfer of appropriate agricultural technologies to the groups. This transfer is achieved through participatory demonstrations using experimental and reflective learning techniques. As a GF you are the key person in this respect. You must collaborate closely with the village leaders and the agricultural extension officers (EOs) to ensure group ownership of the project, continuation of group activities after the project conclusion, and further spreading of the technologies to the wider community.

Your main task is to participate in the weekly meetings with the farmers in their groups. There is no exact formula for group facilitation, but your focus must be on helping the group of farmers to achieve their aims through discussion, encouragement, and support with planning and action. You will help to create a forum in which the group members both learn and develop new knowledge together.

You will also be organizing various training sessions for the group leaders, lead farmers, EOs, and ward and village leaders. During these sessions, experts may be invited to give training on other relevant subjects such as those described in Chapter 2, Step 4 that are important for community and household development and for the wellbeing of children.

Box 5.1 lists some practical advice on facilitating adult learning. Your role can be divided into three areas:

- Teacher and trainer for participatory learning
- Group mentor
- Linking, coordination, and communication

Teacher and trainer for participatory learning

It is important that the technologies in the basket of options are conveyed to the group of farmers in a relevant way, with the full involvement of the participants, but also that they are shaped to suit the local conditions in the farmers' own fields. You must be able to teach the farmers the new technologies and train them in a practical way to master the new methods.

You must be able to convey new information to the farmer groups, working both through theory and through practice. But equally importantly, you must be able to facilitate an adult learning process in which farmers experience, reflect upon, and share technologies, and adjust

these technologies to fit the conditions on their own farms. Rather than just solving problems on behalf of the group and individuals by supplying them with standard solutions through templates or recipes, you should provide new information, coach farmers in using it, guide their reflection, enable experience-sharing, and support group dynamics, consensus building, and good leadership. Box 5.1 provides some general advice on facilitating adult learning.

You will lead the group members through processes in which they learn to analyse their agro-ecosystem so that they can understand its underlying principles, and you will guide the farmers in the establishment of simple but good-quality field trials in which new crops and cultivation methods are demonstrated and systematically compared to traditional methods.

Group mentor

All knowledge, technologies, and inputs are channelled through the group, which thus forms the platform for training and information-sharing. The GF must therefore help the groups to organize themselves, to elect good leaders, and to plan their activities. Well-functioning groups are a prerequisite for success in a RIPAT project. But you must keep in mind that you are not the leader of the group – you are not even a group member. All decisions are made by the groups themselves. Your job is to facilitate the learning and decision-making processes.

Your visits to the group will be frequent (weekly) at the beginning of the project. Later, as the leadership capacity within the group and the ability of the group to make decisions and manage activities on their own increases, your assistance will gradually be reduced. After 2-4 years of project implementation, the individual group members graduate, and you will no longer be around to assist the groups. Therefore, your most important task is to help the groups to become self-reliant: to promote local ownership of the project, to provide ‘help to self-help’, and to ensure that the participants take full charge of their own development. Your role, therefore, gradually changes over time from initiating, to guiding and assisting, and finally to advising and mentoring.

Linking, coordination, and communication

You will help to ensure good coordination and communication between sister RIPAT groups in the project and with the village leaders and EOs. It is important that you have a clear understanding of the roles of the village leadership and the local extension staff (see Chapter 2, Box 2.1). You must also protect the groups from being dominated by powerful external bodies and individuals. RIPAT groups are trained in advocacy for their rights and interests in a local context, and you will help them in this learning process (Step 6 below).

The progress of the RIPAT groups must be reported to the village leaders and to the implementing organizations on a monthly basis. You will help the group collect and compile data on progress, and help the group leaders to monitor progress and write group reports (further described in Chapter 7). For further reading on group promotion we refer you to FAO (1994).

Be aware of conflicts

Conflicts are a normal part of group life. Some conflicts may in fact be productive, because they provide an opportunity for (needed) change. Some conflicts may help the group to face up to difficult situations and find solutions. But other conflicts may be harmful, causing only confusion, anger, hurt feelings, and bad decisions, and may even lead to the break-up of groups.

Box 5.1 General advice on how to facilitate adult learning

This box lists some general advice on how to facilitate adult learning, and suggests how these points can be applied in a RIPAT context.[1]

Adults prefer learning situations which:

Are practical and problem-centred
Therefore in RIPAT provide overviews and practical examples to link theory and practice, and help the group members to plan for the application of the new technologies on their own farms. Focus on practicalities and keep theory to a minimum. Remember that 'experience is the best teacher'.

Promote positive self-esteem
Therefore in RIPAT you should build individual and group successes incrementally by including low-risk activities, and help the participants to become effective and confident through guided hands-on group work. Start with small successes that can lead to bigger ones. Try to remove poverty from participants' way of thinking and from their self-image, and create a 'yes we can' environment and positive mindset. Make them feel that 'this is our project'.

Integrate new ideas with existing knowledge
Therefore in RIPAT you should help the group members to recall and contribute what they already know from past experience. Include local knowledge and practices wherever relevant in the training and field trials, and allow for input and sharing as much as possible. Move from the known to the less familiar or the unknown. Arrange visits to the fields of the individual farmers in the group, and thereby give them a chance to share their personal successes and lessons learned with the rest of the group. Be prepared for the possible need for group members to unlearn old/traditional habits and practices.

Show respect for the learner
Therefore in RIPAT take into account the physical needs of the participants, e.g. comfortable seating in the shade and breaks as relevant. Acknowledge individual contributions. Don't 'talk down' to the group or to individuals. Be careful with your choice of words in order to avoid creating a negative atmosphere. Don't waste the group members' time: be well prepared when you come, and arrive in good time.

Allow choice and self-direction
Therefore in RIPAT focus activities around the expressed needs of the group. Individuals decide for themselves what to adopt and what to reject from the basket of options demonstrated to them. Allow time for planning their next steps. Don't try to dictate solutions to the farmers' problems. Add any technical knowledge that is lacking and facilitate good decision-making in the groups and among individual farmers so that they arrive at appropriate conclusions.

Some other good advice:

Appearance
Make sure you are presentable when visiting the groups and the villages. Avoid being either overdressed or underdressed. Dress and make-up should be appropriate according to the

local setting and culture.

Introduce yourself
Tell the group members at the outset who you are and what they should expect from you, and what you expect from them.

Language
Be careful in your use of language. Don't use the language of the city in the villages. Make the farmers feel that you are one of them.

1 Based on experience from the RIPAT projects and inspiration from 'Principles of adult learning' (www.pent.ca.gov/trn/principlesadultlearning.pdf), which is adapted from John Goodlad's writing.

The important thing is to help the groups to manage and to capitalize on productive conflicts (constructive criticism) and to avoid harmful conflicts, or to tackle them quickly and effectively if they do emerge.

Ensuring reasonable homogeneity among group members can reduce conflict. Members with similar socioeconomic backgrounds are more likely to trust each other and to accept joint responsibility for their activities. Very powerful individuals, for example traders or large-scale farmers, might want to dominate the group and/or use it for their own benefit, for example to buy and sell in bulk, to offer unfavourable loans, or to convince group members to work for them. Ensuring that the groups have a good constitution and by-laws that are followed as a guide by the members will help to avoid internal conflicts and make the rights and responsibilities of each member clear.

Group dynamics and stages over the course of the project

It is not a simple task to establish strong producer groups. The process takes time and often involves recognizable phases as groups develop from being a collection of strangers or acquaintances to gradually becoming united with a shared goal. The authors have found that Bruce Tuckman's Forming, Storming, Norming, Performing and Adjourning model is useful for better understanding the dynamics when groups develop, and this in turn will help you as a GF be more efficient when facilitating the groups. The ideas below are based on RIPAT experiences and elements drawn from Tuckman (1965).

In the **forming** stage the group members get to know one another, exchange some personal information, and make new friends; however, this is done cautiously. The group also gets the opportunity to discover how each member of the team works as an individual, perceives conflicts, and pursues resolution of conflicts. At this stage, the need to be accepted and to depend on one another is high. The vision is not owned by the group yet. The group has no history and no established norms, and unfamiliarity is therefore high. These factors form a basis for discussion.

How the GF (and, once elected, the group leader) should help:

- Explain clearly the purpose of the group and make expectations realistic
- Coordinate – especially the first meeting

- Guide the group to understand the need for a constitution, the election of leaders, and the selection of a field plot; also guide the group in deciding on days for meetings and where to conduct the meetings
- Help members feel that they belong, and keep the group together.

In the **storming** stage, the group gradually becomes organized. The GFs should have the capacity to deal with rivalry and competition surges among group members; such problems can ultimately lead to the development of groups within the group. Flexibility in relating to one another is paramount. Group members have to accommodate other members' feelings, attitudes, and contributions for the sake of the group's survival. The GF guides the group in developing their own conflict resolution system. The group constitution is developed in a participatory manner to emphasize the objectives of the group and the roles and responsibilities of members and leaders. This stage can be awkward, unpleasant, and even painful to any members of the team who are sensitive to conflict. Some groups will never develop past this stage; however, disagreements within the group can make members stronger, increase their listening skills, make them more versatile, and make them better able to work effectively as a team. Tolerance of each group member and their differences should be emphasized.

How the GF and the group leader should help:

- Encourage participation
- Assist the group in defining roles and responsibilities
- Mediate and resolve initial conflicts.

In the **norming** stage, the group members are more united. The purpose of the group is well defined and norms have been established. This means the group members know what is expected from them and have learned the behaviour culture in the group. Giving feedback is an integral part of the group procedures, both among individual members and from and to the group leadership. The groups within the group that may have existed during the storming stage merge gradually into one cohesive group. Group members engage with one another in a free manner, correcting one another constructively, and tasks are approached with an open mind. In this stage, all group members take on the responsibility and have the ambition to work for the success of the group's goals.

How the GF (and, once elected, the group leader) should help:

- Facilitate the (re)election process of permanent leaders
- Promote teamwork, sharing, and good relationships
- Help the group to feel that they are on the right track.

The **performing** stage is marked by group members' increased ability to influence the decision-making process. This is the most productive stage of the development of a group. Members know they can rely on one another, and are confident of their own ability to implement tasks and achieve results. There is a lot of commitment, problem-solving activity, volunteerism, unity, and overall group development. The group training, both theoretical and practical (field plots), is

replicated at the individual level. The GF is still a key person in the group facilitation but the group will make most of the necessary decisions on their own. Long-standing groups may go through these cycles many times as they react to changing circumstances. A change to a weaker leadership may cause the group to revert to storming as the new people challenge the existing norms and dynamics of the team.

How the GF and the group leader should help:

- Treat the group as being a mature one, and encourage members to feel that this is the case
- Encourage the development of problem-solving mechanisms
- Let task achievement guide the group
- Promote teamwork, sharing, and good relationships within the group
- Make the group feel that they are performing well.

The final stage is **adjourning,** which is characterized by the winding up of tasks that have engaged the members all along, this contributing to their continued cohesive association. Frequently, RIPAT groups stay together for years after facilitation has stopped, though some groups decide to dissolve after graduation. The GF should assist in finishing the group both in terms of final tasks to be completed and the winding up of the cohesive relationships existing within the group. Some members may be reluctant to let go of the relationships built up and the recognition they have attained within the group. However, pride in the achievement of goals at the individual and the group levels may help to overcome the apprehension associated with ending the group. The adjourning stage may be the end of membership for some members and a new start for others in reorganizing and adopting new goals, including reorganization as a producer association. It is extremely important to understand the needs of those members leaving the group, and to perform the administrative tasks associated with this process and of distributing the funds to which they are entitled. The members continuing with the group are also involved in calculating the financial worth of the group and the shares of individuals, as well as the price of admission to the group for newcomers.

How the GF and the group leader should help

- Help the group to celebrate its success
- Facilitate the process of some groups dissolving and others reorganizing (some members leaving and others joining)
- Reorganize groups into producer associations if required (see Part 2, Chapter 6).

Getting started with the training

The two or more groups in each village were established at the Village Assembly, and now is the time for you to meet with each of them as a group for the first time. It is important to have cohesive groups from the beginning, so the training in group dynamics, constitution writing, and

leadership qualities is given priority very early on.

Some issues need to be covered before the actual training in the basket of options can begin in the group. Goals and expectations are made clear during the early meetings, and group members are given some assignments to do while they wait for the actual agricultural intervention to start. Without cohesive groups, the training in new agricultural techniques will not be effective. Either the groups will disintegrate altogether, or many people will drop out before the end of the first year of the project. Facilitating good group cohesion is therefore important from day one.

Ideally, the group would be fully organized, with leaders and a completed group constitution, *before* beginning any agricultural activities. However, it is extremely important that such group decisions are not rushed, but that the groups are given ample time to really understand the concept of good leadership and the roles and responsibilities of leaders and group members. The groups also need time and good facilitation to develop a good group constitution which is grounded in what the groups want to accomplish and in the opportunities offered by the project. Such a process can take several months to complete, and requires good help from you. Be prepared for the formation of stable groups to take at least 3 months, and often 6 months. But remember that once this has been achieved, it pays off, because having strong groups will almost certainly lead to having a successful project.

Step 1: The familiarization process: the first meeting with the group

The object of this step is for the group to get to know you as the GF and for you to get to know the group members. It is of the utmost importance that the group members are fully aware that you are neither the leader nor a member of the group. Your role as a GF is to support and guide the group in the development process.

Since the group members are all from the same village, they may be acquainted with each other, although they may not know each other well. You should facilitate the introduction process, but it would be desirable that the village chairperson and the Project Manager are also present during the group's first meeting. The familiarization process can be carried out in a variety of ways. Here are some practical exercises that you can use:

- Stand in a circle. The GF hands a ball of twine to one participant, who is asked to introduce someone in the group that he/she knows (how the person is known to him/her, what farming the person does, etc.). The first participant holds on to the end of the twine and passes the ball to the person whom he/she has introduced. The member who receives the ball introduces another participant with some background information, holding on to the string and passing the ball to the person whom he/she introduces. This exercise creates a 'web' that shows how the group members are all connected through each other. The connections sometimes get very amusing and creative, and rewinding the ball of twine can show you a thing or two about how manageable your group is! (adapted from Groeneweg et al., 2006).
- Tell the group members to introduce each other by introducing one person they think they know best, giving the person's name, saying what he/she cultivates at home, and providing a little other information about the person. This gives a sense of togetherness and eliminates the sense of strangeness between group members. Alternatively, you can

ask the group members to sit in a circle; give them five minutes to interview each other in pairs, and afterwards each person introduces his or her partner to the group.

There are several similar group dynamic exercises available in other manuals – see Appendix 3.

Step 2: Analysing problems and possibilities and making expectations realistic

As mentioned earlier, the most important and demanding part of a RIPAT project is the community mobilization and the initial stages of the group formation. You may often find that quite a number of farmers have enrolled just to investigate how they personally may benefit from the project in terms of hand-outs and quick-fix assistance, and perhaps even through exploiting their peers. This is the time when you as a GF must maintain the right attitude and have the patience to answer questions -- even perhaps some awkward ones -- and to explain again the nature of the RIPAT approach. You need to be firm, to present facts and case stories to the group members, and to explain clearly how the basket of options has been designed in relation to the root causes of poverty identified in this particular area. Often farmers will have participated in other projects which have failed, so it is important that you explain what makes this project different.

During this initial stage of the project, it is particularly important to develop and encourage a 'yes we can' spirit in the group. When the group first comes together, the members may still not be fully sure of what to expect, and of whether their expectations can be fulfilled. During the Village Assembly, the 'yes we can' spirit was started. It is important to maintain this spirit and further develop it in the group, and to help the members see opportunities where previously they

saw only impossibilities. Belief in a better future is the best way of getting development rolling.

A good starting point for this training will be to apply elements of the Empowered World View curriculum; [2] this aims to help people discover their value, creativity, potential, power, responsibility, accountability, and purpose.

Although the RIPAT concept, and the roles and responsibilities in RIPAT, were presented at the Village Assembly before farmers enrolled, it is a good idea to ensure that expectations are realistic. This is to avoid disappointments and early drop-out among the participants. In particular, the project concept of paying for inputs must be fully understood and accepted by the group members (see Chapter 4, Box 4.2). In the beginning some of the group members may decide to drop out when they realize that they will not be receiving any free gifts, but rather that they will be expected to work hard to obtain a better livelihood. You should accept such early drop-outs without being discouraged, and allow other villagers to replace the members who have left the group. You will sometimes find that some of the most critical voices in the villages end up as very enthusiastic adopters of the technologies promoted when they have seen the benefits. Details of how group constitutions can be designed to cater for the possible admission of new members during the course of the project implementation can be found under Step 4 below.

Step 2a: General discussion of the situation in the community

This exercise aims at creating a good understanding among the group members of the logic behind the selected basket of options that will be made available to them through the project. It also provides an opportunity to understand how the BO is expected to contribute to poverty alleviation. Understanding the problems is a prerequisite to identifying and understanding good solutions.

For any change to take place, it is important that the farmers understand why they are where they are and how they can change their situation. The highlights from the completed situation analysis results should be presented and discussed with the groups. The main tools to be used are the problem tree and the seasonal calendar.

Discuss the problem tree

The generic problem tree provided in Chapter 3 (Figure 3.1) may provide you with inspiration. However, the more specific problem tree developed during the project preparation and situation analysis, which has been designed to fit the area setting and which forms the basis for the basket of options, can also be used in this general discussion. It is useful to have that problem tree available on a poster.

It is important for the group to identify their current situation – its causes, effects, and consequences – with the problem tree. Discuss why group members have failed to achieve food and nutrition security and alleviate poverty, focussing more on the causes and effects, and in particular on the elements in the RIPAT project. Let the farmers list their ideas about the causes of poverty first. You should highlight issues they may have overlooked, and go into more detail where relevant. If the farmers say that soil fertility is poor, you can go even further and discuss

[2] WVTs Empowered World View curriculum, see Appendix 3

the root causes of low soil fertility – and its consequences. Make it a very participatory session focused on identifying concrete problems and obstacles to development. Turn the problems into objectives, using the same structure. The problem statements (negatives) are turned into statements of objectives (positives).

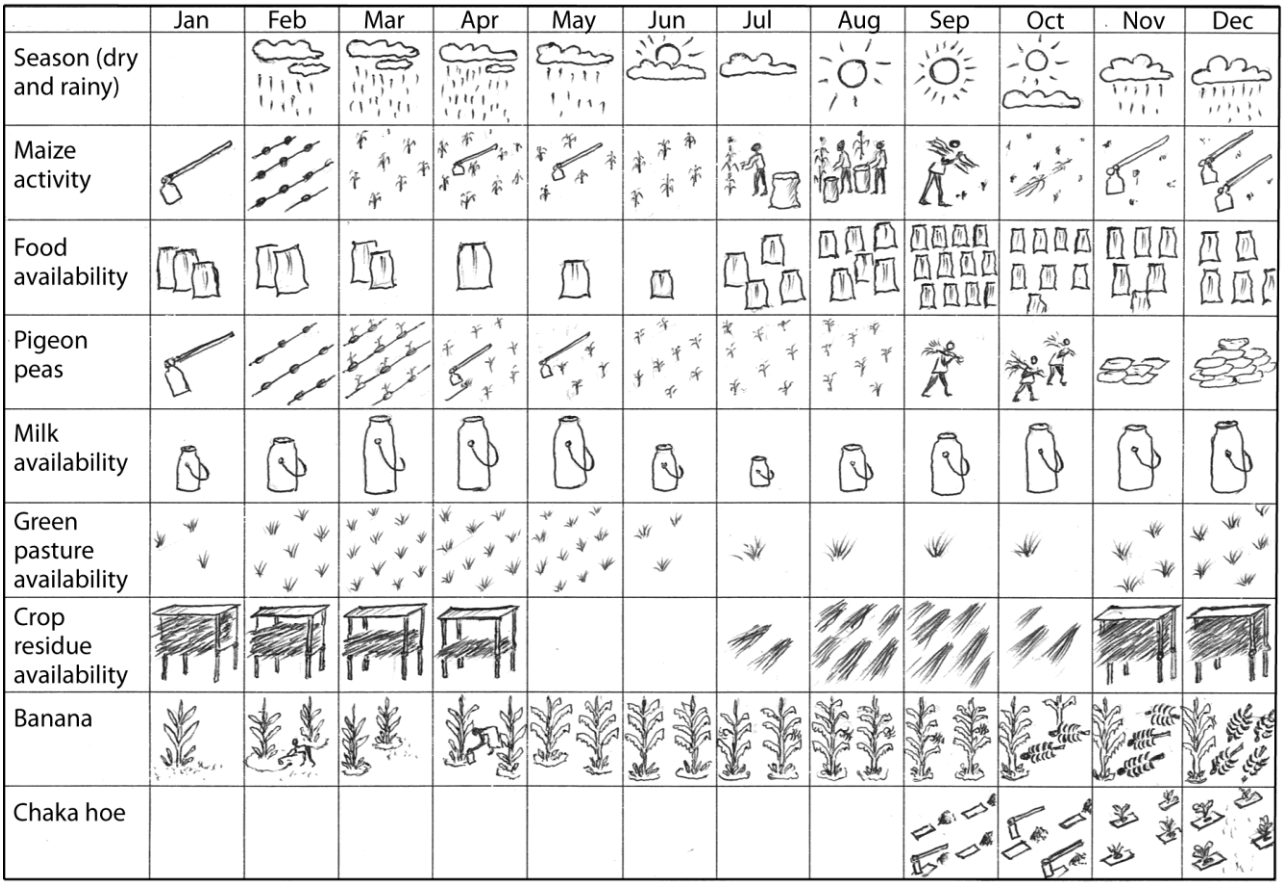
Example: If the farmers include 'poor soil fertility' in their list of problems then this statement should be discussed in a positive way and rephrased as 'improved soil fertility' as an objective. Guide farmers in the discussion of improving soil fertility through techniques that include manure application, the use of compost, and crop rotation with legumes; the use of mineral fertilizers should also be discussed as an alternative solution. If the farmers include 'poor child nutrition' in the problem tree, then this statement should be discussed and rephrased as 'improving child nutrition' as an objective. Help and guide the farmers in identifying approaches and locally available resources that could be used to achieve that objective, e.g. by identifying crops with high nutrition value that can be grown and explaining the reasons for not growing such crops at the moment. Also discuss the potential advantages of including poultry and milking goats in their farming system. Let the farmers list their ideas and the reasons for them first. Then you can highlight ideas they may have overlooked. Locally available resources include not just physical things found in the fields and surrounding areas, but also the time that can be used in the fields and the human resources available.

Discuss the seasonal calendar

It is important for the farmers to have an overview of their seasonal calendar, in order to understand both their current practices and how the basket of options can fit into the farming system. Understanding the seasonal calendar which was prepared during the situation analysis is important for being able to select the right technology and the right timing, and to take into account other factors that influence production. RIPAT projects have been very successful in introducing banana cultivation, even in villages where nobody was growing bananas because they did not think banana production was suitable for their area. The same is true for orange-fleshed sweet potatoes. In such cases it is important to spend time with the farmers and help them to understand how a given new crop can fit into the cropping calendar in the area in question.

These are the important steps:

- The group members sit together to discuss the yearly seasonal calendar; they discuss the weather patterns in the months of the year.
- Charts of rainfall, temperatures, and other patterns that are relevant to farm production are discussed.
- Other important factors, such as diseases and pest occurrences, are noted according to the months of the year in which they typically occur.
- Natural occurrences such as an increase in the number of butterflies are also noted.
- All these factors are analysed in terms of how they relate to and affect farm productivity.
- The farmers are advised to take advantage of the positive factors and to take measures to combat the adverse factors. The farmers should also note how their seasonal calendar will change with the introduction of the RIPAT project technologies (crops and livestock) available in the basket of options.



Step 2b: Identify locally-available resources

RIPAT aims to utilize locally-available resources as far as possible to achieve the desired objectives, i.e. to promote the economic development of group members' farms. RIPAT projects involve the integration of agricultural crops and livestock production, and consequently the farmers will need to look for resources related to both livestock and crops on their farms. Farmers should identify factors that limit production, and use critical analysis techniques to come up with viable solutions suitable for their farms/village.

The resources locally available in a community are often overlooked. You should help the group to identify, understand, and value the various resources they have at hand. This exercise is done in a whole-group discussion session using a flip chart. It may also be a good idea to ask the group members to identify locally available resources on their farms and in the community in general as homework and preparation. You can ask them questions such as:

- What resources do we have from people?

  … labour, knowledge, skills – these may be from group members' own households or available from the community in general (teachers, extension officers, medical staff, etc.)

- What resources do we have from our natural environment?

  … land, water, sunlight, plants, animals – these may include rivers, ponds, groundwater, runoff water, shallow wells, animal manure, animal traction, etc.

- What resources do we have from our social network?

  … these may include local culture and traditions; village leadership and by-laws; church, mosque; friends, relatives, and extended family; etc.

- What resources do we have from our infrastructure and services?

  … these may include access to banks, local microfinance facilities, buildings, roads, irrigation systems, tools, transport, etc.

Often rural communities are poor in terms of money and physical infrastructure, but they may be rich in terms of natural, human, and social resources. Try to help to eliminate poverty from the farmers' way of thinking, and help group members to see opportunities and to visualize a better future. Ask them to think about

- the kinds of resources that are utilized and those that are under- or unutilized
- the kinds of resources the community/group/households lack
- the kinds of changes that would bring about better living conditions

Step 2c: Give a brief outline of the RIPAT project

You should provide a brief explanation of the RIPAT project and the role and contribution of each member. This should explain clearly the process of implementing RIPAT in the village. The details of the basket of options should be explained, including the concept of receiving the inputs on a payment basis, etc. It is important that the farmers understand the main details of each option. Keep in mind that only fully informed people can fully commit themselves.

Remind the group of how the basket of options is designed to addresses the specific problems identified in their community, in particular seasonal food and nutrition insecurity. When farmers acquire the capacity to produce, for example, improved bananas, which produce bunches over the course of the year; milking goats that can produce milk during the entire year; poultry that produce eggs on a daily basis; etc., then families will be much less vulnerable during the lean or hungry season and will be in a better position to take good care of their children. The inclusion of such technologies can enhance production and consumption smoothing over the course of the year (see Chapter 1).

Ask each member to express their expectations of the RIPAT project. This is a good opportunity for correcting misunderstandings and unrealistic expectations.

Step 3: Election of group leaders

It may take quite some time before a group is ready to elect the people they want as their leaders. It also requires time for a group to work out a good constitution. There is no problem in that. Be diplomatic, and do not rush the process or impose decisions. Good leadership is one of the most important factors in ensuring a productive development process, and ample time must be given to identify the best leadership candidates. However, in order to allow the group to get started as early as possible on the agricultural activities, some *temporary* leaders should be elected to head the group for the first three months, before conducting a real group election. Remember that the group members may already be acquainted with each other, but they may not know each other well (see Step 0 above). It is good to allow the group members some time to get to know each other better so that they can identify and check out the best possible candidates before making their final choices. During the first three months the temporary leaders will lead the group in the following activities:

- finding appropriate group plots
- establishing a group constitution and by-laws
- adopting a group name and slogan
- ensuring good attendance at meetings and activities, and making sure that the agreed by-laws and resolutions are followed.

The temporary leadership will also act as the link between the group and the IO and GF.

The process of electing the temporary leaders includes a general discussion of the qualities and responsibilities of good leaders. Let the group members define from their experience what a good leader is and why it is necessary to have leaders. Thereafter, you can discuss why the group needs to elect three leaders, namely a chairperson, a secretary, and a treasurer. Some of the roles the leaders should play are listed in Table 5.1.

It is best if the village leaders are present to oversee the process of electing the leaders, including the process of electing temporary leaders for the first three months. An example of how to organize an election procedure using a secret ballot is given in Appendix 1.

The election of the temporary leaders should be concluded by announcing the date for the main election. After election, the temporary leaders should take up their roles immediately. The first and most important role is ensuring that the group progresses and develops from the first day on. Remember that you as a GF only assist and mentor the group in the selection of leaders and in making wise decisions.

Leadership training is an important part of the RIPAT programme. Once the permanent group leaders have been elected, more in-depth leadership training will be carried out at the quarterly coordination meeting where all the group leaders from the groups in the project meet (further described in Step 11 below).

Step 4: Preparing a group constitution

Since RIPAT aims to create groups whose members can work together smoothly and fruitfully, it is important to help the group to prepare a good group constitution. First, you need to create a good understanding of what a constitution is, and why it is needed. Some of the questions and answers in Table 5.2 may help you with this.

Table 5.1 Qualities and responsibilities of group leaders

Qualities to look for	*Responsibilities*
	Group chairperson
• Knows how to read and write • Must not be a selfish person • Friendly; approachable for any group member; treats everyone equally • Accepts criticism/challenges from others • Encourages group participation • Works to empower members to solve problems themselves • Creative, strong, and courageous – not reluctant to do his/her work • Honest and respected • Good at planning in advance (forecasting things) • Willing to work extra hours • Willing to undergo extra training	• To call the meetings to order • To announce the agenda and lead discussions • To ensure that the meetings follow proper procedures and that the constitution is followed and respected • To maintain discipline and levy fines as needed • To facilitate discussions and to ensure that everyone's views are listened to • To resolve conflicts • To represent the group to outsiders and non-members, including local government officials • To act as steward for the group's resources.
	Group secretary
• Able to read well and to write neatly • Good with numbers • Honest and respected • Willing to work extra hours • Willing to undergo extra training	• To arrange the time and place for meetings and give notice of them • To take the minutes of meetings • To read out the minutes of the previous meeting • To keep all group records • To write letters and reports on behalf of the group • To assist and support the chairperson in keeping order at meetings • To work together with the chairperson in ensuring that the group constitution is followed
	Group treasurer
• Good with numbers • Able to read well and to write neatly • Honest and respected • Willing to work extra hours • Willing to undergo extra training	• To keep all the financial records of the group • To keep records of individual financial transactions • To keep records of group and sub-group assets • To keep records of group and sub-group assets • To prepare financial reports • To maintain the group bank account • To read the financial report to the group when necessary • To advise the group on the best ways to use its funds

Table 5.2 Understanding group constitutions

Questions	*Answers*
What is a group constitution	A set of agreed rules that defines how the group will function.
Does your group need a constitution?	Yes, as a guide for the group members. It can help to minimize conflict and help the group to make better decisions.
Is the constitution meant for others?	No, just for the group members.
Who should agree about the constitution?	The group members themselves. However, some of the articles of the constitution are mandatory for a RIPAT project.
What should be the process for drawing up the constitution?	It should be based on discussions about the group's needs and problems. These discussions take place at meetings for all group members. You should inform the group at least one week in advance that the constitution will be discussed at the next meeting. The constitution or any change to it should be agreed by at least a two-thirds majority.
When should the constitution be drawn up?	The group should draw up and approve the basic constitution within the first few weeks of the RIPAT project starting. This basic constitution may be expanded or amended during the project period.
Who should keep the constitution and where should it be kept?	The group secretary will keep the constitution together with the group record books, and a copy will be given to the village chairperson and to anybody who wants it.

Remember to take the template for a group constitution with you when you start your work of supporting the group in formulating their constitution. The template can be found in Appendix 2. Some of the articles are mandatory for a RIPAT project; these appear *in italics*. You are responsible for ensuring that rules are clearly communicated to group members at the outset, and are understood by them.

The items to be included in drawing up the group constitution are summarized in Table 5.3.

Table 5.3 Drawing up the group constitution	
Item	*Issues to be discussed and included*
1. Name of group	The group should select a unique group name that will be their identity. The name may be in either the native language or Swahili. It may denote the values, virtues, or qualities to which the group aspires.
2. Contacts	The location of the group – if possible its address.
3. Meaning of the name	The chosen name should be explained to enable all to understand its meaning and to feel ownership of it.
4. Catchphrase of the group	The group should also select a catchphrase, motto, or slogan that will guide their development work.
5. Area of operation for group activities	This defines where exactly the group will operate in terms of region, district, ward(s), village(s), and possibly sub- village(s).
6. Group patron	The constitution should indicate the group's patron. Normally the village government representative is automatically the patron.
7. Overall goal	*The objective of the RIPAT group is to secure improved livelihoods and greater self-support for its members and in particular for carers of children among the members.* *RIPAT group members are to assist other people in the area outside the group with inputs and advice to help them make similar improvements in their livelihoods.*
Specific objective(s)	In addition to this overall goal the group members themselves should formulate one or two specific objectives in their own words.
8. Membership 8.1. Obligations of group members	*In RIPAT, all participating farmers are responsible for training three other non-RIPAT farmers in the community in what they have learned and adopted themselves. If, for example, banana is adopted as a crop by a farmer, the farmer must also pass on three times the number of banana suckers received to other non-RIPAT farmers; and for livestock such as goat and pigs, the farmer must pass on the first female offspring to other farmers in the group as specified in the solidarity chain agreement with the IO.* The group should discuss and add other main obligations of group members. These should include participation in group plot activities, finishing tasks on time, contributing time and money, etc.

Item	*Issues to be discussed and included*
8.2. Procedures for terminating membership and receiving new members into the group within the project period	a) Members joining If a new person requests to join the group within the project period, the group should agree about the entrance fee the person should pay. This fee must be approved by at least two-thirds of the group members. b) Expelling a member The group should decide on the circumstances that might give rise to the need to expel a member from the group and how many members should vote for the expulsion in any such case that arises. c) *Members leaving* *Should an individual group member decide to leave the group within the project period, that person will not receive any of the accumulated group wealth and assets. The member must clear his/her account and pay any outstanding amounts for the inputs received (seeds, tools, animals, etc.) to the IO.*
8.3. Termination of the group within the project period	*Should the group be dissolved by the IO or by its own decision within the project period, all tools and equipment received free of charge must be returned to the IO. Individual members should clear their accounts in accordance with paragraph 8.2.c.*
8.4. Sharing of group profits within the project period	*During the project implementation period, no dividends from group earnings can be paid out to members.*
9. Leadership elections	*Elections of leaders must be democratic, and voting must be by secret ballot (see Appendix 1 for the voting procedure). At the start of the project, temporary leaders are elected for a period of three months. After three months, new leaders are elected. Any of the temporary leaders may be re-elected if the group members deem them worthy, but using the full democratic procedures laid down in Appendix 1. New elections should be held every 12 months. The group should decide for how many terms an individual should be allowed to continue in a leadership post.*
9.1. Roles of leaders	The responsibilities of the group chairperson include: • To call the meeting to order • To announce the agenda and lead discussions • To ensure that the meetings follow proper procedures and that the constitution is followed and respected • The maintain discipline and levy fines as needed • To facilitate discussions and to ensure that everyone's views are listened to • To resolve conflicts

Item	*Issues to be discussed and included*
9.1. Continued	• To represent the group to outsiders and non-members, including local government officials • To act as steward for the group's resources The responsibilities of the group secretary include: • To arrange the time and place for meetings and give notice of them • To take the minutes of meetings • To read out the minutes of the previous meeting • To keep all group records • To write letters and reports on behalf of the group • To assist and support the chairperson in keeping order at meetings • To work together with the chairperson in ensuring that the group constitution is followed The responsibilities of the group treasurer include: • To keep all the financial records of the group • To keep records of individual financial transactions • To keep records of group assets • To prepare financial reports • To maintain the group bank account • To read the financial report to the group when necessary • To advise the group on the best ways to use their funds
9.2. Group sub-committees	The group will establish sub-committees according to the agricultural technologies adopted by the group members. Each sub-committee elects a leader, who reports to the group chairperson. The role of the sub-committee members is to follow up on technologies, the sales of produce, and the fulfilment of commitments to make payments for inputs, including payments made through the solidarity chain.
10. Main activities of the group and meeting schedule	The group should define the kinds of activities they will undertake (from the basket of options) and agree on the place, time, and weekday for the group's regular meetings and project activities.
11. Disciplinary sanctions against group members	The group should define whether penalties should be in the form of fines, and if so how much these should be; and if not, what other sanctions there should be. Disciplinary sanctions might be imposed, for example, for coming late to or not attending a group meeting, or for not attending group activities as announced by the leaders.

Item	*Issues to be discussed and included*
12. Amendments to the constitution	*The constitution can be amended at any time if two-thirds of the members agree. The italicized paragraphs can be changed by a two-thirds majority vote after the end of the project and after payment has been made to members leaving in accordance with paragraph 16.*
13. Group accounts: Income and expenditure	*At the project start, the group will set up a group account for the group funds. The group account is managed by the elected chairman, secretary, and treasurer. They are responsible for filling out the cash book and for drawing up a monthly balance sheet. Group income and expenses should be clearly recorded in the accounts. The accounts are reported monthly to the group and quarterly to the IO for monitoring. Group income comes from the sale of products, from fines, and from membership fees in the event that the group has decided to charge for membership.* *During the project period, group funds can be put into a bank or a local SACCO approved by the IO, or used for expanding group activities. After two years, the group can invest in real estate if two-thirds of the members and the IO agree. The IO's agreement will depend on the group having* • *a good attendance record* • *good leadership, and a record of having followed their constitution* • *regular income and good record-keeping.*
14. Termination of the group, or individuals leaving the group, upon project completion	*At the end of a RIPAT project period, a statement of accounts must be prepared. On the date of project completion, all outstanding accounts and debts should be cleared. The group can either be liquidated as described in paragraph 15 or it can continue as a cooperative after those who want to leave have received payment of their share of the funds in accordance with paragraph 16*
15. Liquidation of the group assets and liabilities	*Liquidation of the group assets will take place upon project completion (normally after three years) if more than two- thirds of the members vote for this.* *If the IO has provided tools/equipment free of charge to the group during the project period (e.g. rippers, sprayers, diggers, and small tools) these must be returned to the IO. No payment will be made by the IO for returned tools.*

Item	*Issues to be discussed and included*
15. *Continued*	*The group assets will be disposed of and the money realized will be distributed among the group members. Group assets are the following:* *a) The cash in the group account* *b) Any group fields established on rented land (normally a five-year contract). The field will if possible be rented out for the remaining time, e.g. a two-year contract period, to whoever will pay the highest price* *c) Any land owned by the group. Such land must be sold at the highest price obtainable* *d) Other assets.* *The cash realized from items a–d will be divided evenly among the group members, e.g. 1/30 share per member if there are 30 group members, at the time of project completion.*
16. Payment of members leaving the group if the group decides to continue as a cooperative after the end of the project	*Individual group members may wish to leave the group on graduation and continue to implement what they have learned on their own farms, or in other groups. A group member who leaves will get two-thirds of his/her share of the accumulated wealth of the group. The group's wealth is calculated as a total of the following:* *a) The cash in the group account (according to the account statement)* *b) The estimated net value of the group field(s), whether rented or owned by the group; in the case of a rented field, the value is in the remaining years of the lease. The value will be assessed by the group themselves. If the group cannot agree unanimously on a value and if a group member demands it, the IO will arrange for an assessment of the value by an independent third-party expert. The cost of this valuation will be covered by the group* *c) The value of other assets as estimated by the group. If unanimous agreement is not reached, the procedure above must be used* *d) Group debt, which must be deducted from the assets.* Example: In a group of 30 members, 5 members wish to leave after graduation, whereas the remaining 25 want to continue as a cooperative. The payments to the members leaving are calculated as follows. Cash in the group account (according to the account statement): TZS 500,000 Income from the group field (sale/renting out for the remainder of the lease): TZS 1,000,000 Other assets: TZS 500,000 *Total group wealth: TZS 2,000,000*

Item	*Issues to be discussed and included*
16. *Continued*	Two-thirds of the accumulated wealth will form the basis for calculating the shares. Each leaving group member will thus receive: 2,000,000 x 2/3 x 1/30 = TZS 44,44. Hence, the group will have to pay out 5 x 44,444 = TZS 222,222. This is to be paid no later than 60 days after written requests have been given to the chairman by the group members leaving. (If less than two-thirds of the members had wanted to continue as a cooperative, the group assets would have been liquidated, and all 30 members would in this theoretical case have received 2,000,000 / 30 = TZS 66,666)
17. New members joining the cooperative after the end of the RIPAT project	New members may be enrolled in the group with the approval of two-thirds of the remaining members. An entry fee must be agreed in such a case. The amount could be, for example, the full value of the share acquired (TZS 66,666 in the example above, if nothing has been paid out to group members leaving).

Step 5: Developing group cohesiveness and strength – a parallel activity throughout the project period

As mentioned in Chapter 1, the group is a core element in RIPAT. Working together in groups has many advantages – but it can also represent a challenge. Groups are made up of all kinds of people, and every member is unique and has a different character. They come from different backgrounds, are of different ages, and have differing resources of knowledge and experience. Just as a child is born and grows, so it is with a group – it will develop and change. It is important that you help the groups to understand the stages of group development and how the different characters and personalities of the group members may differ.

A few types of personality can be found in nearly all groups. Discuss the personality types listed below, and ask each group member to think about what personality he/she most resembles! They do not have to announce their conclusion openly; it is enough that people are aware of how their personalities can contribute positively or negatively to group development. Such awareness is very important for developing group strength.

- Complainers: People who rarely find anything good in other people's views and decisions and are quick to complain
- Know-it-alls: People who are always convinced their views are right and often persuade others to follow them, sometimes creating division within the group
- Quiet members: People who rarely share their opinions and do not want to take any responsibility or make decisions
- Positive members: People who carefully consider ideas before reaching their own view or opinion. They join in discussion and share in decision-making. These people are usually the committed centre of a group

- Traditionalists: People who dislike change or taking risks with anything new
- Bridge-builders: People who like others to feel at peace with each other and happy with decisions made. They are willing to take time to sort out disagreements

(Carter, 2003: p 24)

Animals are traditionally considered to have various 'personalities', and so they can also be used in a discussion of human character. A useful activity in the group is for members to discuss the 'personalities' of the animals below, and each to think about which one they most closely resemble.

- Donkey: is obstinate and will not change its mind once it has decided not to do something
- Lion: uses its power and strength to fight until it gets what it wants
- Rabbit: runs away as soon as it faces a problem or a challenge from someone else
- Cat: wants to be pitied
- Peacock: wants to be admired for its grace and beauty
- Chameleon: never settled; changes opinion all the time
- Tortoise: stays quite or silent without contributing any ideas to a discussion

Group dynamics exercises

The purpose of group dynamics exercises is to make the group feel that each individual member is vital to the wellbeing of the group and to the achievement of the project's overall objectives and the group's aspirations. There are several exercises or games that can be used to illustrate various aspects of working as a group and the requirements of leadership.

An example is provided below.

Exercise: The strength of being a group

Exercise	*Observation*
• Bring with you a big bunch of sticks less than 1 cm in diameter. • Give one stick to a group member and tell the person to break it (no problem). • Pass on two sticks to another person and ask him or her to hold them together and break them. • Continue in this way, each time adding an extra stick. • Eventually the bunch will be too thick for anyone to break.	• The benefit of being a group when tough issues have to be resolved or threats withstood: • If you stand alone, or if there are only a few of you, you may fail or break • When you are united and stand together, you are strong.

There are several other exercises in group dynamics that may be practised during the early stages of the project. Whenever you feel there is a need to illustrate an issue related to the group's cohesiveness, or something you would like to emphasize through a similar exercise, then do not hesitate to do so. Such exercises need not take more than half an hour. See Appendix 3 for instructions for such exercises.

Step 6: Strengthening the group's advocacy skills

RIPAT empowers groups by training them in advocacy. The WV curriculum 'Citizen Voice and Action' provides guidance on how communities can be empowered to advocate for development and to directly address the need for the reform of policies and practices that prolong poverty and perhaps injustice in the places where they live. The groups should be trained to monitor government performance. The groups members should present a united front, and the groups in the same village should ideally stand together in order to have a collective voice in addressing issues relevant for the overall development and wellbeing of the local community – including its children.

Examples of how RIPAT groups can employ advocacy are listed below.

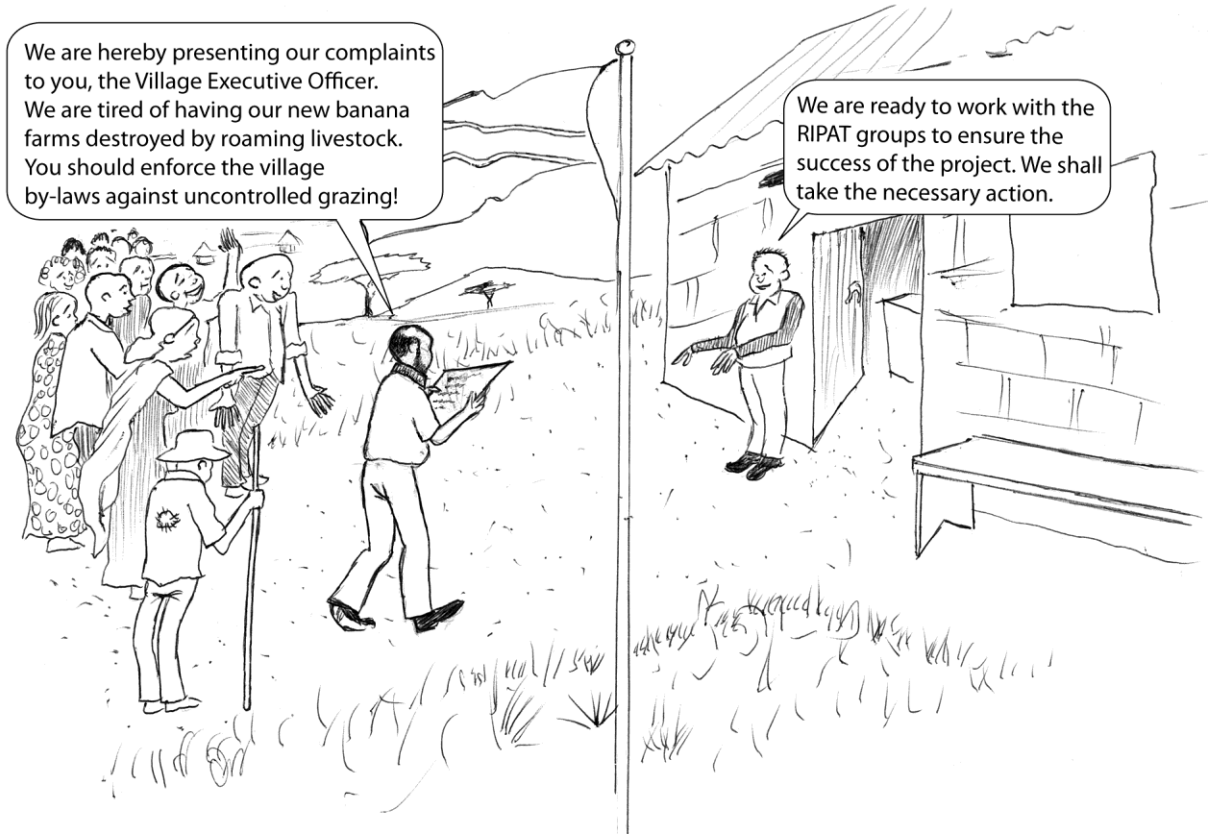
Advocating for the enforcement of by-laws related to agriculture

It can be a great disadvantage to RIPAT groups and other farmers if local by-laws are not enforced, in particular by-laws against uncontrolled animal grazing in the village. In many villages, it is a common practice that after harvesting the maize crop, livestock are allowed to graze freely in the fields. (Maize is one of the most important food crops and occupies a large proportion of the cultivated land in many parts of Africa.) However, this practice of free grazing can be very harmful for the introduction of certain new crops and technologies, such as long duration or perennial crops, or the practice of conservation agriculture with permanent soil coverage (cover crops and mulch). For example, problems arose in some villages when a RIPAT project had introduced intercropping with long duration pigeon peas. This pigeon pea variety has a longer growing season than maize, but the villagers still let their livestock graze freely as soon as the maize was harvested, resulting in the destruction of the pigeon peas. Other farmers adopted banana – a perennial crop which has green leaves throughout the year. RIPAT farmers had trouble keeping the freely grazing cows and goats away from their new banana fields. If not carefully dealt with, problems such as these can turn a very good project into a complete fiasco! This is also one of the reasons why it is of the utmost importance to collaborate closely with the village authorities.

In many villages in Tanzania by-laws against uncontrolled grazing are in fact in place – but they are quite often not enforced by the authorities. When an individual farmer complains about violations of this by-law, he/she may not be heard. But when several RIPAT groups totalling perhaps 100 people jointly approach the village government and request them to enforce the existing by-law against free grazing, they have a much greater chance of being heard!

Steps you should take to help the group are:

- Encourage the group leaders to obtain a copy of their village by-laws for the group
- Assist the group to study and understand the by-laws. The group leaders should then appeal to the village council to enforce these by-laws where this will help to solve problems, and/or advocate for the revision of the village by-laws if the existing ones are not adequate
- Encourage the group to refer to the by-laws in the Village Assembly and emphasize the need for enforcement
- Remind the group leader to emphasize the use of by-laws during the coordination meetings and ensure that village leaders promise to follow up on the enforcement of such by-laws.



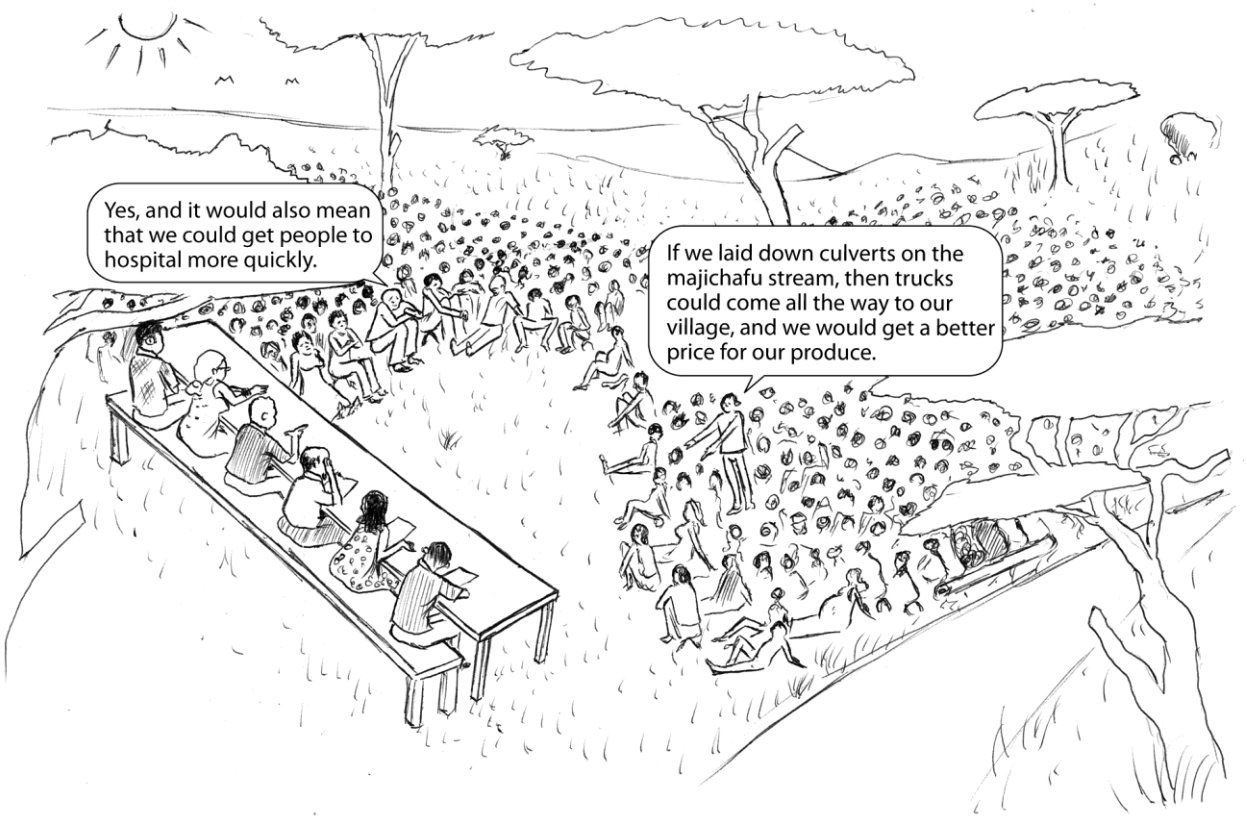
Promoting village development plans

The village has a development agenda which is discussed during the Village Assembly and village sub-committee meetings. The RIPAT group can influence this plan and promote its adoption.

Steps you should take to help the group are:

- Help the group to understand what their village development plan is and what financial resources have been allocated for it
- Help the group to obtain and understand their ward and district development plans and to push for the implementation of these
- On the basis of the impact that has been seen from RIPAT activities, the group leaders should advocate for the inclusion of some of the RIPAT development activities in the village development plans
- Ensure that village, ward and district development plans are discussed at the quarterly meetings (see step 11 below).

Example: If there is a water project planned, the group can advocate for it to be implemented quickly so that they get water for irrigation and livestock.



Advocacy activities to assist spreading

RIPAT projects have a strategy of disseminating RIPAT interventions to other people in the village and to neighbouring villages using the RIPAT Spreading model, as explained in Chapter 2**.**

Through your training and facilitation, the groups should press for platforms for transferring the knowledge they have gained through RIPAT. One such platform could be the allocation of time during the regular village assemblies for the group leaders and lead farmers to speak. Another platform could be provided through special meetings such as Farmer Field Days. You should ensure that the extension officers are actively involved in the dissemination process.

Other advocacy activities

The wellbeing of children is a vital goal of WV. Ultimately, the improved services resulting from the groups' advocacy activities should help to improve child wellbeing. The WV 'Child Protection and Advocacy' model should also be used to help communities to ensure that their children are protected from abuse and neglect (see Appendix 3). You should encourage the groups to participate actively in village meetings where village development plans are being discussed.

Step 7: Selecting the group field

The group field is one of the key elements of RIPAT. Helping the groups to find suitable land for group activities is hence a crucial step which should be carried out after the group has met a few times, has understood and confirmed the basket of agricultural technology options in the project, and has elected their temporary leaders. Remember that some of the new technologies available will be completely unknown to the farmers, so they will need your help in the selection of a field which can provide adequate conditions for learning.

The technologies introduced in the basket of options should of course be appropriate for the general soil, water, and climate conditions of the targeted area – conditions that can vary enormously in Africa even over short distances. The most suitable farming methods and technologies may vary from village to village and even from field to field. Special care must therefore be taken to ensure that the demonstration plot is suitable for the crops selected for demonstration. Listed below are some of the factors that need to be considered when selecting the group field for demonstration and testing:

- Environmental conditions: The most important thing is to ensure that soil, water, and climate conditions are suitable for the intended crops/technologies. Ideally all crops should be cultivated (tests, demonstrations, seed production) by the group at a single group field. But in practice this is often not possible. Crops have specific soil and water requirements, and it is important to ensure an adequate match between crop type and field. Groups typically establish banana at one site with access to irrigation or harvesting of run-off water and with shelter from the wind, whereas conservation agriculture is often demonstrated at another plot somewhere else in the village.
- Accessibility: The site should preferably be located in a central place that provides both easy access for the group members and good visibility for the project. Members of the community are invited to visit the group field and see project progress once a year on Field Days (see Step 12 below).
- Security: The group field(s) must be safe from roaming animals (livestock) and thieves in order to avoid damage to or destruction of the group farm. It is best if the plot is located near to the home of a group member.
- Field size: The size of the field should be at least one acre to ensure that groups have sufficient land for the study of the various technologies and for seed multiplication. A large field can also allow for the expansion of group activities and can help the group to earn income from selling produce from the field.
- Homogeneous soil fertility conditions: Since a part of the field will be laid out for field trials, it is important to have an area with consistent soil conditions to enable good comparisons between the technologies tested (see Step 8 below).

Banana is a perennial crop. It requires good water availability. It is fairly labour-intensive to establish, but if well maintained, the plants can continue to produce fruit for many years. Therefore if a RIPAT project includes e.g. banana, it is important that the group have the banana field at their disposal for at least a five-year period, and preferably longer (see Box 5.2, Selected case histories). The fact that RIPAT groups typically continue working together after project completion (i.e. after three years) further underlines the need for ensuring a long-term lease for the banana field.

If a RIPAT project includes technologies such as conservation agriculture, rainwater harvesting, and crop diversification, then it is possible to demonstrate these technologies on fields with 'average' or 'ordinary' conditions for the area. The cultivation of maize, legumes, and tuber crops is less demanding with regard to soil and water conditions than the cultivation of banana, and most fields in a village will be all right for this purpose. The contract for this plot does not need to be longer than the project period (three years).

When selecting a piece of land for the group field, the group should decide whether they want to use:

- communal land, including unutilized land belonging to a local institution (e.g. a school), or
- privately owned land (which could belong to a member of the group).

The best option should be carefully considered *in each case*, as no standard recommendations can be given. The most important points are to ensure that the field provides an adequate environment for the intended crops, especially banana and other crops with special soil/water requirements, and that the group members understand the high value a banana field may represent when it is to be returned to the owner. In villages where the government has suitable land at its disposal, the IO can help to convince the village government to make some of the land available to the group by making this a precondition for supporting the project. But remember, at the end of the day it is the group themselves that should decide on the best option. Some groups have strong reservations about using communal land – and they should not be forced or manipulated to opt for such a solution. Your job as a GF is to help the group to make the best possible decision for their particular situation.

Experience with RIPAT projects has shown that both options can work well (see the examples in Box 5.2), but in most cases groups prefer to rent privately-owned land. The main reasons for this are that the village government often does not have suitable land, and that even when it does have land, village government bureaucracy can sometimes still be an obstacle.

It is important that the terms and conditions for the lease are clearly stipulated in a contract, whoever owns the land. A template contract is provided in Appendix 4A. The IO must double-check the appropriateness of the group's choice and ensure that an acceptable contract is signed by the group leaders and the land owner. The contract should also be co-signed by the village authorities and by the IO, and a copy kept at the village government office.

From RIPAT experience

If the group field is provided by one of the group members and the field is to be planted with banana, it may not be necessary to pay any rent to the land owner. After the completed project the owner will have a well-established and productive banana field at his disposal for years to come. This increase in the value of the land represents the payment for using it. If on the other hand the field is acquired for the testing and demonstration of annual crops, then it is fair that the group pays an annual fee to the land owner for the leasing period. It also needs to be emphasized that if the field is rented from a group member, this person should take part in all the field work on equal terms with the other group members. Being the owner of the group field does not give the person special privileges.

Box 5.2 Selected case histories

Some case histories regarding group fields are outlined below, illustrating some pros and cons of both renting options.

Groups using communal land

a) A RIPAT group was able to acquire a suitable one-acre plot of village communal land for learning purposes for as long as the land was not needed by the village. The group did not experience any problems and the banana plantation did well. Being located near the school, the plot was accessible and could be seen by many people. However, the group did face the risk that the village government would need the land for other purposes at short notice. If this happened, the group would have to give up the plot.

b) Another RIPAT group had been allocated communal land and had signed a contract with the village government authorities. A woman claimed that the plot had been given to her by the village government, and she uprooted the bananas planted by the group. The issue was beyond the ability of the village government to resolve and was taken to court – but the group and the IO (RECODA) gave up the idea of using the plot because the court kept postponing the hearings. The IO could not afford to waste this valuable time, and the group had to start their search for a field anew.

Groups using privately owned land

a) One group established a banana demonstration farm on one of the group member's farms and had a five-year contract for the land. The group members used the farm to learn how to cultivate banana and also to obtain planting materials for their farms and for others who needed suckers. Since it is quite an investment to establish a banana field, the group negotiated a two-year extension with the owner (total 7 years) before giving the land back. The group had made very good returns from the farm by then.

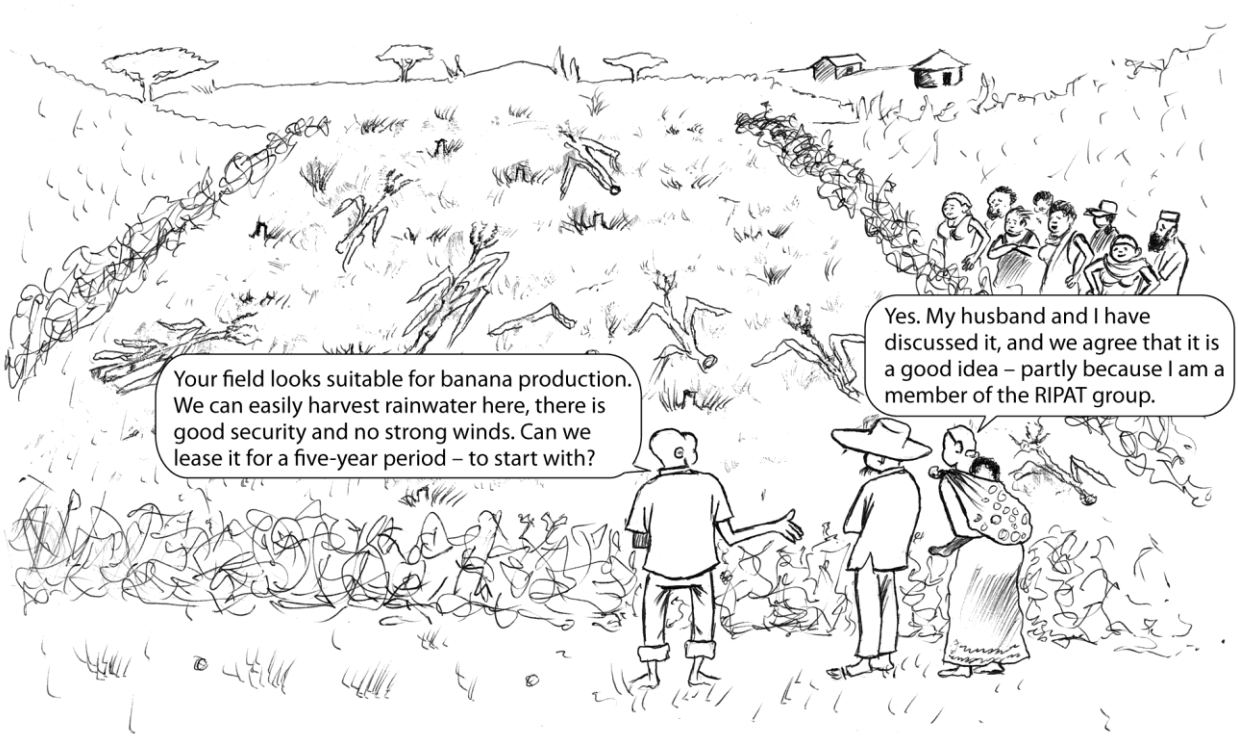
b) Another group likewise established a banana demonstration farm on one of the group member's farms and had a five-year contract for the land. During the project period, the group was able to sell bananas and suckers and make a good profit. From the profit the group purchased a one-acre farm in their village where they opened another banana farm, this time not for learning purposes but for commercial exploitation

Steps in identifying and selecting a group field

- Make sure the group understands the important factors to consider (mentioned above), especially the agro-ecological requirements of the crops selected.
- Discuss with the groups the pros and cons of the two options: i) renting a field from a private farmer in the village (preferably a group member), or ii) obtaining communal land, possibly unutilized land belonging to a local institution (e.g. a school).
- If both options are acceptable you can divide the group into three sub-groups, each of around 10 people. Each sub-group is given the 'homework' task of looking for suitable

fields in the village before the next meeting:

- If communal land is a good option, and the village government has already promised the IO to provide land for the project, you should approach the village leadership together with the elected group leaders to discuss the way this might be done. The first group should thus look for communal land, with the assistance of the village leadership.
- The second group can look for land owned by group members.
- The third group can look for land owned by other farmers in the village.



- At the next group meeting, the potential fields are physically inspected by the entire group with your assistance, and the suitability of the land is discussed in each case.
- Once the group has made its choice, the group leaders draw up a contract for leasing the field (under your guidance). The contract should be agreed by the group. You and the PM must double-check the appropriateness of their choice and ensure that an acceptable contract is signed by the group leaders and the land owner. A contract form is provided in Appendix 4A. The contract is also co-signed by the village authorities and by the IO, and a copy is kept at the village government office. The group pays for the lease at normal market rates out of group funds.

Once the group is well established and has started implementing agricultural activities on the group field(s) a RIPAT signboard can be set up at a central place in the village. This provides visibility for the project and the group activities. The wording on the signboard could be something like the following:

Step 8: Undertaking comparative studies – a parallel activity throughout the entire project period

Background

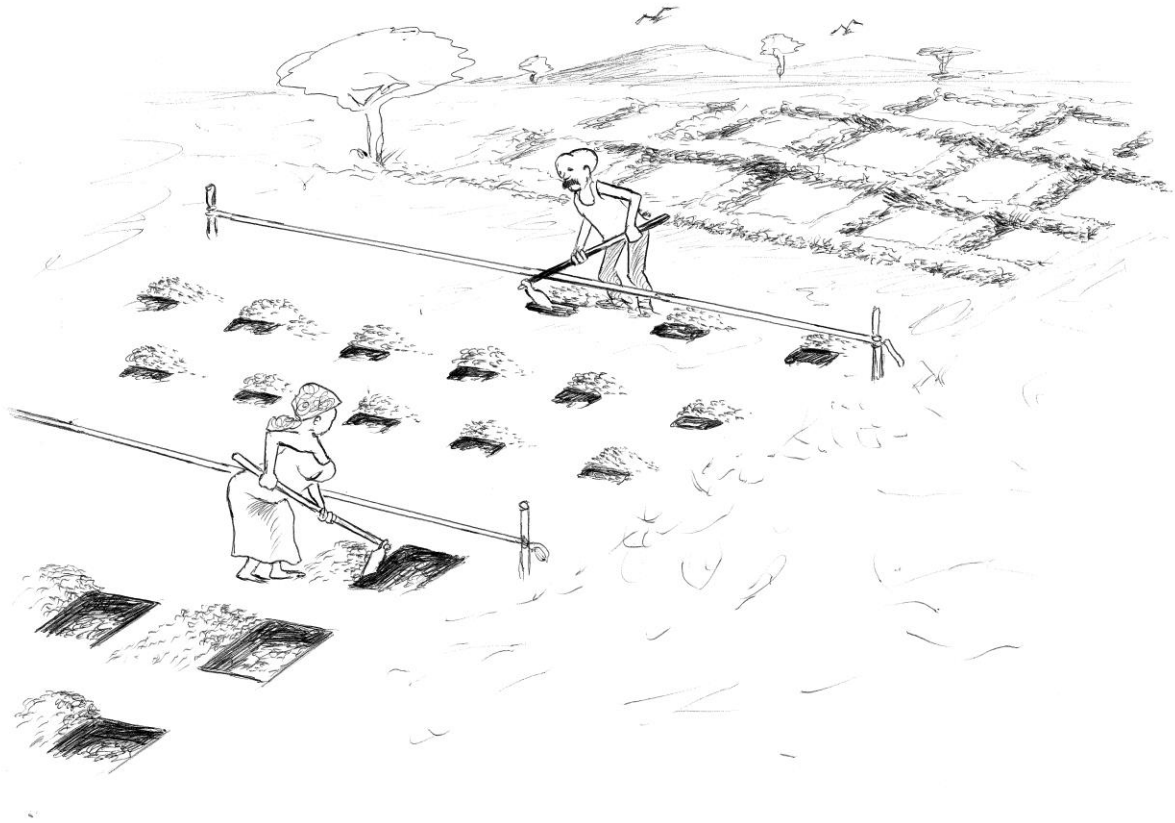
After (an) adequate group field(s) has/have been acquired, the agricultural activities can begin. Remember that the group plot of around one acre is used for several purposes. As has already been mentioned, RIPAT groups often have two demonstration fields: one used for banana (or perennial crops), and one for conservation agriculture and annual crops. A part of the field for annual crops may be used for simple demonstration and multiplication of seeds and/or planting materials (legume seeds, cassava and sweet potato cuttings), without any systematic trial comparisons. Another area may be for more controlled trials, comparing selected technologies or crops in a systematic manner.

The entire group field, including the trials section, is for learning – trying out the new technologies hands on (tools, crops); comparing selected methods and technologies; and observing outcomes over the course of the trials. The use of systematic trials can be extremely informative and good for learning, *provided* the trials are conducted with care! If a field trial is not well planned and managed, it can end up teaching you nothing – or, in the worst case, it can mislead you. There are certain things you need to be very cautious about if the field is to be a good 'teacher'. Remember that all the work on the field trial is done by the farmers themselves – not by you. But you must guide them closely throughout the process.

If farmers see a benefit from a technology, then they will adopt the method, and others in the community will follow suit. If poor implementation of a new technology results in failure, the message conveyed will be that the new technology is no use, even if it would have been successful if implemented correctly. This could happen if, for example, a group had acquired an inadequate group plot, perhaps establishing a banana plantation on a plot with high wind and no possibility for irrigation or rainwater harvesting. It could also happen if you were not careful with timing, for example planting or applying fertilizers too late. You *must* ensure that the agro-inputs (seeds, seedlings, tools, manure, and relevant agrochemicals) are available on time. You are responsible for ensuring that the demonstration plot provides a good learning place.

As already mentioned, soil, water, and climate conditions can vary enormously over just short distances. Consequently, it cannot be assumed that 'one size fits all' and that a technology that works in one place will work everywhere. The methods and technologies demonstrated should allow farmers to experience and reflect upon them, and then to adjust the methods to local

conditions, in order to minimize the risk of failure. Ideally, the group training will enable farmers to acquire the competencies necessary to continue with small-scale experimentation on their own farms.



The group field has multiple purposes. For example, part of it may be used for trying out improved banana cultivation, part of it for practising conservation agriculture, part for controlled field trials, and some for multiplying improved planting materials (e.g. pigeon pea, cassava, lablab, sweet potato).

Establishing and managing field trials

The exact layout of the plot obviously depends on the specific technologies to be tested and demonstrated. Farmers must learn to determine the factors that affect production, but the number of potentially 'interesting' agronomic practices that could be studied in a RIPAT project is usually much greater than the number that is manageable in a group trial (see Box 5.3). So you need to explain the most relevant factors for the basket of options available, and to discuss and agree with the farmers which factors to study and compare in the trial. This could for example compare varieties of new crops, e.g. orange-fleshed sweet potato, that may vary in yield as well as the colour, texture, and starch content of the roots (see Figure 5.1).

Homogeneous soil conditions

The use of a replication trial improves the level of reliability of the results. You will not get exactly the same results from two plots receiving the same treatment. Plots are never 100% identical, and that leads to 'background' variation. The most important cause of background variation between plots is varying soil fertility or soil moisture content over the experimental

area. Therefore the area on the group field which is allocated for the comparative field trials should be as homogeneous as possible in these respects.

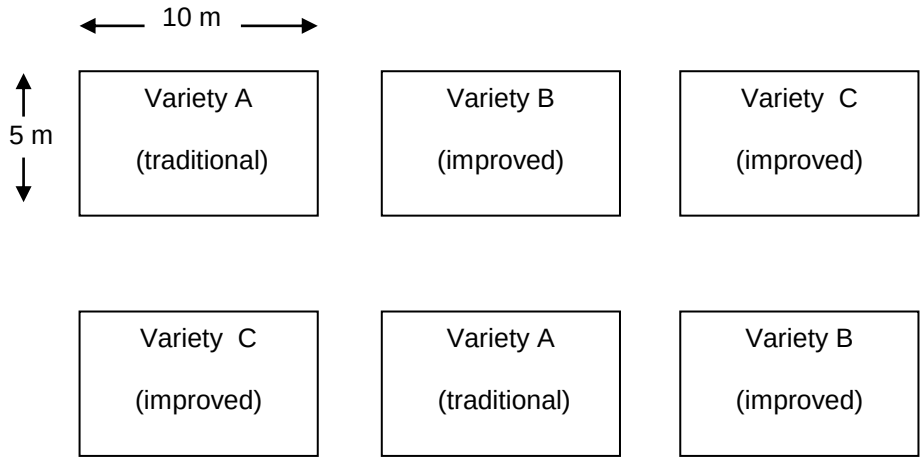


Figure 5.1 Example of a trial layout

Variation in soil fertility or soil moisture is in fact easiest to detect during the growing seasons in fields planted with an unfertilized cereal crop, e.g. maize. The variation in soil fertility will be clearly reflected in the performance (e.g. height, colour) of the standing crop. But since a RIPAT project is typically started during the dry season (when the fields are harvested and bare), you will have to rely largely on information from the landowner. Ask him/her about the conditions in the field and ask him/her to identify areas that are particular fertile or unfertile, and areas where the crop normally is very even.

Also try to get information on the cropping history of the field, including the use of manure and mineral fertilizers. The area with the most even conditions should be allocated for the field trial area.

Box 5.3 Typical agronomic factors for comparison

There are many agronomic factors that can be interesting to compare in simple trials. It is not possible to study all of them in a typical RIPAT project. The following is given for inspiration.

- Land preparation practices
- Improved planting materials (varieties), optimal planting rate, spacing
- Weed and pest management (e.g. mulch, cover crop, pesticides)
- Soil and water conservation practices (e.g. contour farming, cover crops, mulch, tied ridging, nine-seeded hole technique, collecting run-off water)
- Restoring soil fertility and soil organic matter
  - organic fertilizers (e.g. cow, goat, or poultry manure, compost, crop residues, green manure)
  - crop rotation (cereal/ legume, cereal/ tubers, mixed cropping)
  - legumes as cover crops

Plot size

For experiments involving large plants such as maize and cassava, the area for harvest should be no less than 40 m^2. But for crops such as rice, wheat, small pulses, etc., the harvested area can be smaller.

All else being equal

Regardless of what technologies are being tested in the field trial, it is important to do a thorough job. To enable comparisons to be made and a clear understanding of the effects of the treatment to be obtained, everything except for the treatment must be kept the same. Hence, if the soil preparation method is the factor being compared in the trials, all the other factors must remain the same. All plots should be planted on the same day, at the same planting depth, with the same seed variety, and the same planting density. All plots should receive the same amount of manure or mineral fertilizer and should be weeded on the same days, and so on. If you do not ensure that conditions and activities are identical – except for the treatment being studied – you will not be able to compare the outcomes on the various trial plots. Then the trial may teach you nothing – or, worse, it may teach you something that is completely incorrect!

You can also establish field trials where you *combine* various best practices in one plot, and compare this plot to traditional practice in another plot. However, the disadvantage is that farmers cannot distinguish which factors contribute to the overall improvement. Farmers may wonder and disagree on why the maize under improved cultivation is doing better than the maize under traditional cultivation. Is it because of the seed variety? The tillage method? Or the manure/fertilizer application? However, for showing the potential or added effect of the overall 'best practices', it can be good to also include such a plot (see Figure 5.2).

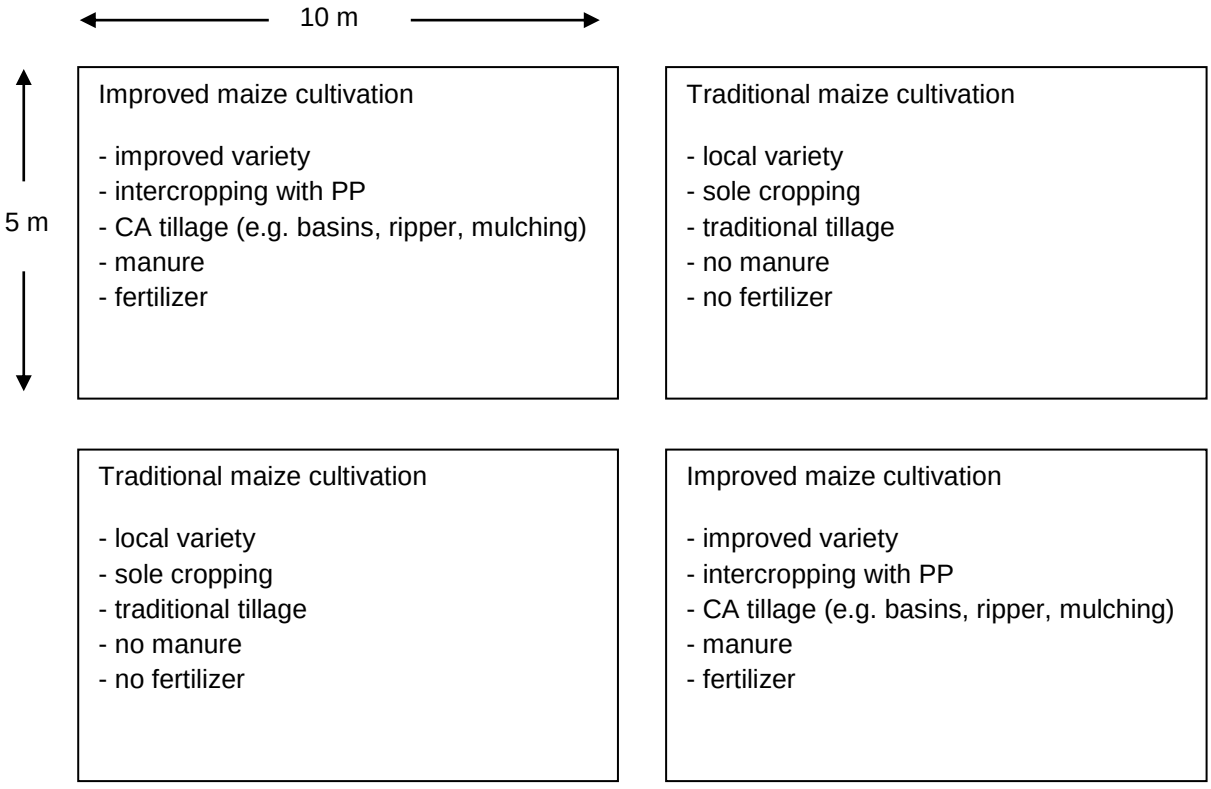


Figure 5.2 Comparing combined 'best practices' with traditional cultivation

Learning from and comparing outcomes of the trials

Throughout the growing period, the trial plots are monitored closely and analysed by the farmers, under your guidance. Farmers tend to blame low productivity on factors that are outside their control, such as drought and flood. But through the field trial observations, the farmers get to understand and learn about factors that are *within* their control – factors that can improve production.

Example of factors you can study in the trials:

- germination rate and plant development in general
- colour, plant height, nutrient deficiencies
- pest attack and weed infestation
- water stress
- water infiltration/water run-off during rains
- production – crop yield, but also quantity and quality of crop residues and by-products
- labour requirements

Such observations are recorded as frequently as is relevant by the farmers themselves at the group meetings. Sometimes it can be good to divide the group into subgroups for this data collection. You must help the farmers to learn to interpret the observations in order to make proper decisions. Be careful not to destroy the validity of the trial by allowing too much 'traffic' inside the plots.

At the end of the trials, you must facilitate a general discussion on the advantages and disadvantages of the various technologies tested. One good tool is pair-wise ranking, which the groups can use to decide on the best treatment.

Multiplication of planting materials

Apart from the use of the demonstration plots as a learning centre, the plots are also used for production of planting materials for the group members and other interested farmers in the village. Such planting materials might include banana suckers, legume seeds, sweet potato and cassava cuttings, etc. Some of the technologies that are introduced in the villages are new, and therefore the seeds and planting materials may not be available locally. Producing these on the demonstration plots eases the shortage of planting materials and seeds in the area. Farmers therefore also have to learn how to select the best seeds/planting materials and how to preserve them. Selling the planting materials to other villagers is a source of income for the group, but this can only be done after all the group members have taken the amounts they need.

Step 9: Establishing sub-committees and selecting lead farmers

Formation of sub-committees

The formation of sub-committees is an integral part of the RIPAT training. Group tasks are allocated to subcommittees representing several technologies according to the basket of options agreed upon as described below.

Once the group has acquired an adequate group field, the members are ready to be trained

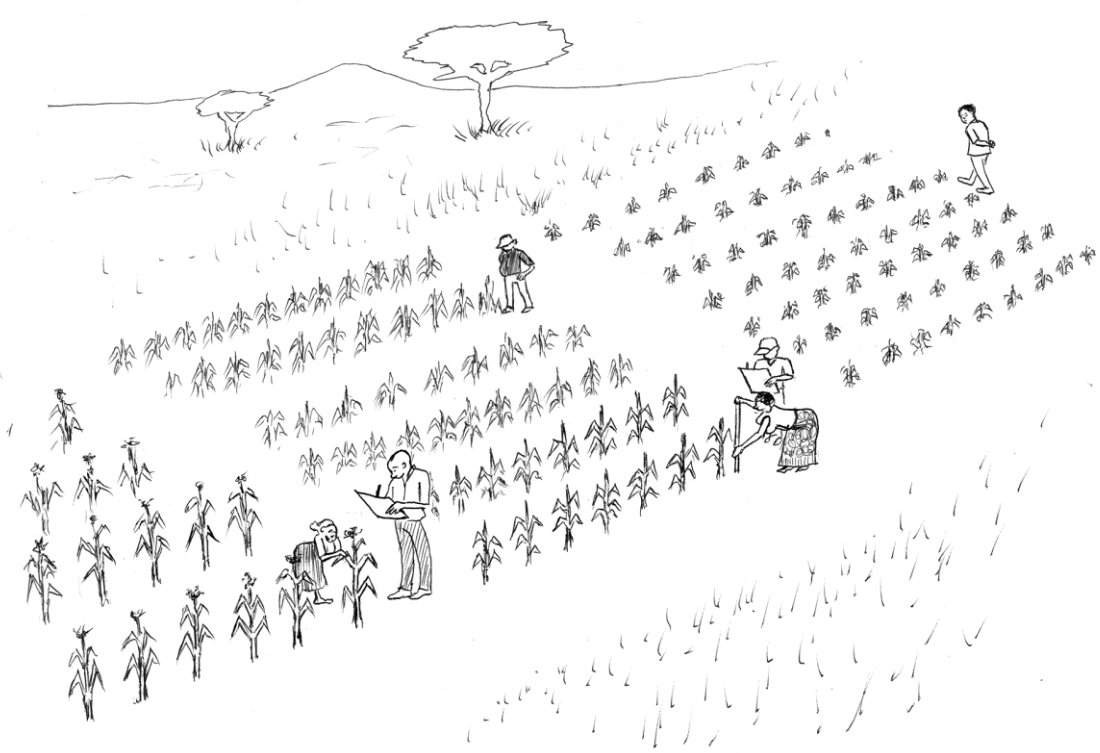
in specific technologies. Box 5.4 shows a generic list of topics that must be covered for each crop introduced, and in Appendix 3 there is a list of some technical manuals for hands-on implementation of various crop/livestock technologies. Most of the training is practical, i.e. learning by doing. But prior to the actual establishment of, for example, a banana demonstration field, you must provide the group members with necessary background theory for them to understand the underlying principles of the crop or technology.

After the initial training sessions, the sub-committees are formed, each consisting of four or five farmers with a special interest in the technology in question (see Box 5.6). They work as a kind of back-up group and have special responsibilities with regard to practical work with a crop or type of livestock. They also have special responsibilities for monitoring the adoption of technologies among their group peers. Some examples of sub-committees are provided below. Forming such sub-committees saves time and is a way of distributing responsibilities, since not all group members need to be involved in all activities.

One subcommittee is formed for each main technology adopted in the group, e.g. banana, conservation agriculture, and livestock. Because the group members usually know one another by this time they are able to select the members themselves. However, it is a good idea for you to follow up on their choice of sub-committee members. Each sub-committee selects a leader who reports to the group chairman.

The sub-committee members are responsible for following up on the technology at the group plot (where relevant), and they visit individual group members on a regular basis and to record progress on adoption – e.g. how many banana stools have been planted, or how many offspring have been produced from the new animal breed. They present reports to the group at the next meeting. These reports are important, as they form the basis for follow-up and for monitoring overall project progress (see Part 5).

The specific responsibilities of the individual sub-committees are described below. Remember that they are always under your supervision in performing their tasks.



Box 5.4 Crops

The elements below should be covered for each crop introduced in a series of training sessions. The GF has the responsibility of ensuring that all relevant topics are covered in a timely manner.

- Why this type of improved/new crop has been selected for inclusion in the basket of options, i.e. advantages/disadvantages, including risk analysis, production cost, profitability analysis, labour requirements, and use of locally available resources
- Solidarity chain (see below)
- Principles of crop production
- Environmental requirements (temperature, water, soil)
- Varieties
- Land preparation
- Selection of seeds/planting materials
- Planting
- Weeding
- Fertilization
- Rotation/intercropping
- Pests and diseases
- Harvesting
- Post-harvesting (storage, processing, usage) and preservation of planting materials
- Marketing and value chain

These subjects are covered in a series of group training sessions over the growing period. Before the actual establishment of the group field, the first seven topics (to 'selection of seeds') should be covered in theoretical terms.

Solidarity chain

In RIPAT, there is a general 'solidarity chain' principle – all participating farmers are responsible for training three others in the community in what they have learned and adopted themselves. The group members are obligated to pass on seeds and planting materials to other community members (see Box 4.2).

Box 5.5 Livestock

The elements below should be covered for each livestock technology introduced (e.g. improved breeds of goats, sheep, pigs, and poultry) in a series of training sessions. The GF has the responsibility of ensuring that all relevant topics are covered in a timely manner.

- Why this type of improved breed of livestock has been selected for inclusion in the basket of options, i.e. advantages/disadvantages, including risk analysis, production cost, profitability analysis, labour requirements, and use of locally available resources
- Solidarity chain (except for poultry), see below
- Principles of production
- Feeding
- Housing
- Breeds and breeding
- Disease and pest control (including vaccination)
- Production (e.g. meat versus milk, eggs versus meat, etc.)
- Storage, processing, usage
- Marketing and value chain

These subjects are covered in group training sessions over the three-year period. Before the initial improved breeding stock is supplied to the group, the basic aspects of the first five topics (to 'Housing') should be covered in theoretical terms.

Livestock solidarity chain (for e.g. improved breeds of milking goats, sheep, pigs)

Each group is supplied with five purebred females and two purebred males as initial breeding stock. The group decides among themselves on the five group members who will host the initial breeding stock. The group prepares a list with the sequence of members to receive offspring – the 'solidarity chain'. In the case of goats and sheep, the first two female offspring produced must be passed on to other group members according to this predefined list. After two female offspring have been passed on, the mother animal becomes the property of the group member concerned.

In order to qualify to receive either the initial breeding stock or the offspring, a group member must first prove his/her motivation and preparedness, i.e. he/she must have completed constructing adequate housing, have established a feeding system, planted fodder, etc. Checking of this is managed by the sub-committee (see Box 5.6 below).

In the case of pigs, again five purebred females and two purebred males are supplied to each group as initial breeding stock, but due to the larger litter size of pigs as compared to goats and sheep, each farmer is required to pass on the first five female offspring to the next person on the list.

A specific 'solidarity chain' contract is signed between the group and the IO regarding these terms. There is a template in Appendix 4B.

Box 5.6 Example of sub-committees and responsibilities

The Banana Sub-committee takes the lead in:

- crop husbandry on the group banana field and any banana trials established
- ensuring the group tools for banana cultivation are in the right place and in good condition
- harvesting and selling of banana suckers and banana bunches from the group field
- helping other farmers in the village to lay out a banana field (although any other competent member can do this)
- making follow up visits to group members:
  - collecting data on individual adoptions (number of holes, stools planted, successes, and challenges)
  - reminding group members about the payment agreement for inputs – i.e. through distribution of suckers to other farmers in the village (see Box 4.2)

The Orange-fleshed sweet potatoes (OFSP) Sub-committee takes the lead in:

- managing the OFSP plot and any trials established
- ensuring the group tools are in the right place and in good condition (hoes, sprayer, tunnel etc.)
- taking the lead in preserving planting materials (cuttings) during the dry season (in tunnels) and of distributing planting materials to other group members
- selling the surplus produce from the OFSP plot
- food processing and food utilization, especially with regard to the value for children, the elderly, or people living with HIV/ Aids in accessing vitamin A
- making follow up visits to other group members:
  - collecting data on individual adoptions (number of farmers planting OFSP, successes, and problems)
  - reminding group members about the payment agreement for inputs (see Box 4.2)

The Livestock Sub-committee takes the lead in:

- preparing the solidarity chain (the predefined list for distribution of female offspring)
- checking that the next person on the list meets the requirements before receiving a female offspring (has constructed adequate housing, established a feeding system, planted fodder, etc.)
- making follow-up visits to the group members:
  - collecting data on the number and sex of offspring; the number of female offspring distributed through the solidarity chain; and adoption of technologies (housing, feeding, veterinary practices, successes, and problems)
- monitoring outbreaks of diseases and pests (also reporting to the EO on this matter)
- organizing a breeding programme (exchange of males between groups to avoid inbreeding)
- reminding group members about the payment agreement, e.g. for cock birds (see Box 4.2)

The Livestock Sub-committee often consists of the five group members provided with the initial stock of male and female breeding animals.

Selection of lead farmers (LFs)

The best farmers in a RIPAT project are identified by the group members themselves, and LFs selected from among them. LFs must have demonstrated their abilities as agro-entrepreneurs and shown that they will be able to successfully manage one or more of the new technologies made available through the RIPAT project. LFs must be able to pass on knowledge of a specific technology to other farmers. The main role of the LFs is to be good examples and to help spread the knowledge gained from the project to other individual farmers, and later on to other groups within the same village or to groups and/or individual farmers in other villages.

Two types of LFs are selected:

- Technology LFs
- Spreading LFs

Technology LFs

These are selected from among the group members who have demonstrated that they perform well as farmers, being proactive in the specific technology concerned (early adopters, resourceful, successful agents for spreading the technology, respected). Each group chooses one person per technology. Frequently, the LFs are selected from among the sub-committee members – but the group can select anyone they feel will be the best for the task. After selection, the technology LFs from the groups in a RIPAT project are taken for a three- to five-day training session where they receive intensive theoretical and practical education in the technology concerned, as well as pedagogical training on how to train others. Each LF will thereafter function as a paraprofessional and have the role of providing technical support to the group members and to the entire community/village. Normally the EOs are also included in this intensive training.

The Lead Farmers are given titles according to their area of expertise, for example:

- Banana LF
- Vegetable LF
- Poultry LF

Spreading LFs

The Spreading LFs are selected when the project is halfway through. Their main role is to spearhead the establishment of new groups within and outside their villages following the RIPAT Spreading model (see Chapter 2). They should have successfully implemented at least one technology and should have the ability to facilitate, persuade/mobilize, and train other farmers. Frequently they are selected from among the technology LFs, but the group is free to choose any of its members. After selection, these Spreading LFs undergo intensive training, for example at the Vision Academy and/or the RECODA Academy, together with the EOs.

Criteria for selecting a spreading LF:

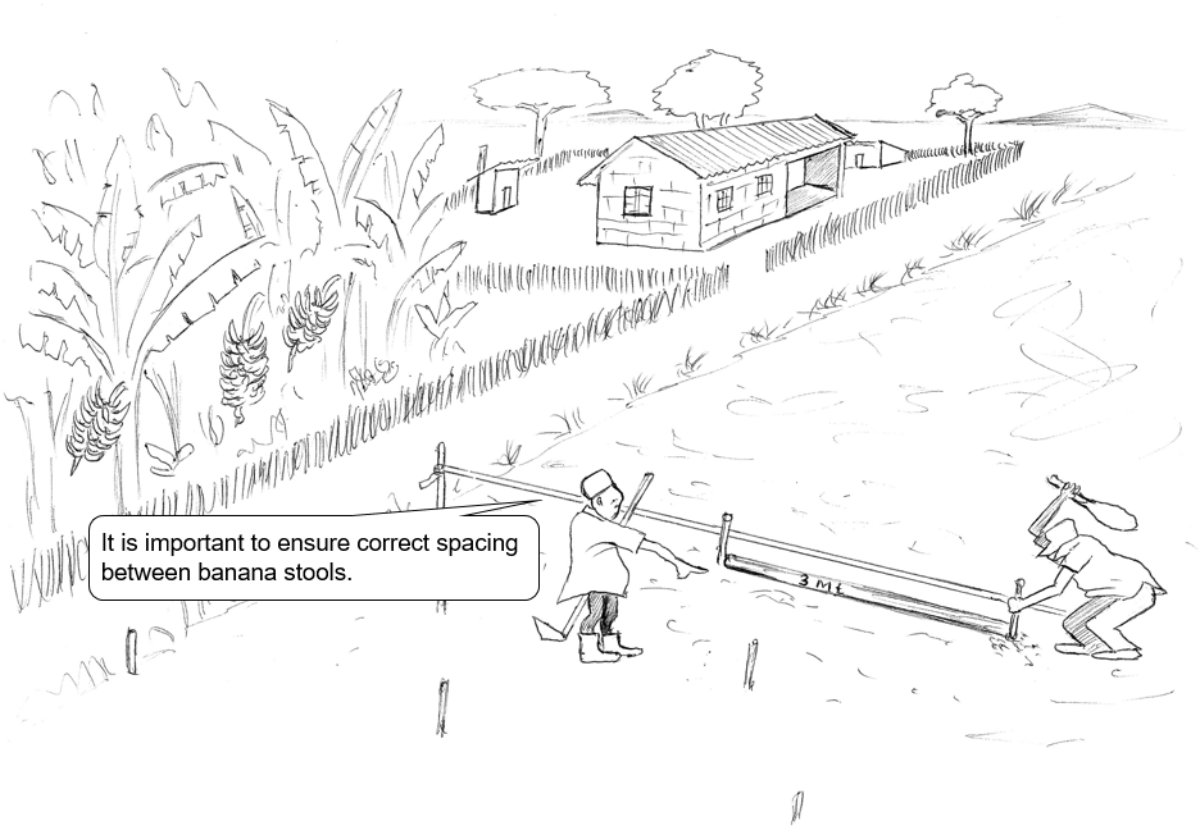
- is an active group member who attends all group meetings and activities in accordance with the group constitution and by-laws
- has good understanding of the whole concept of RIPAT and has practised it as much as possible

- is competent in the technologies that have been adopted and has implemented them well
- has the ability to teach and train others (to pass on knowledge to others in a way they can understand)
- is able to read and write
- should be respected by the group members and by the villagers at large, and be of good standing in the community

The group members should carry out the selection process themselves – but under your supervision. Since the Spreading LFs are crucial for the project sustainability, and since the project invests substantial resources in training them further, it is important that you double-check their qualifications and attitudes. It is best if the group identifies the four best candidates in the group. The final selection of the two candidates takes place as follows:

- You assess the candidates' performance by visiting their individual farms and inspecting their implementation of the technologies
- You conduct a written theory test
- You conduct individual interviews

Based on the results, you and the group chairman make the final selection.



A lead farmer assisting a fellow farmer in laying out a banana plot

Step 10: Record-keeping and financial management – a parallel activity throughout the entire project period

Throughout the entire project period the group is trained in various areas in order to empower them as a group. You have already trained them in basic leadership when they learned about qualities of leaders, and you have helped them in preparing a group constitution. Other group empowerment training activities include record-keeping and financial management. There are several topics that will be covered during the project, including farming as a business, record-keeping and bookkeeping, and savings and credit schemes. These are described briefly below. For details, we refer you to other manuals.

Farming as a business

The overall purposes of this training are to improve group members' understanding of how to optimize profit, and to assist them in making the transformation from subsistence to commercial farming. The training focuses on the following topics:

- Selection of crops/livestock or projects
- Decision-making in farming
- Minimizing production costs
- Maximizing the use of available resources
- Utilizing the value chain for a given technology
- Accessing loans to expand the farming business and to acquire assets.

A part of the training related to the basket of options is to help farmers to compare present technologies with improved technologies in terms of efficiency, labour requirements, and cash profit. The choice of crop should not be based on tradition alone, but on the basis of optimizing financial return.

Reducing vulnerability and promoting resilience

RIPAT also tries to reduce farmers' vulnerability to shocks by promoting crop diversification, e.g. by encouraging farmers to grow some very resilient crops such as cassava, lablab, pigeon peas etc., and by using water conservation methods. For a subsistence farmer who experiences hunger at least periodically, the best technology may not be one that produces the highest profit in the best year with good rains, but one that produces an acceptable yield in the worst year. Hence, helping farmers to consider both optimization of profits and reduction in vulnerability is important. The farmer not only needs to earn enough from the field and livestock to cover the costs of food, clothing, school fees, medical expenses, etc., but must also be careful to spread risk.

Table 5.4 shows an example comparing the production of maize and banana (together with some other crop) on one acre of land. In the example, the farmer would make TZS 1,493,000 – 865,000 = 628,000 more in profit for the first year if bananas were planted on the land instead of maize, even though considerably more money would have to be invested.

In subsequent years, there will be no costs of digging holes, mixing manure, or buying and planting seedlings, though other costs such as de-suckering, weeding, and replanting of lablab may arise. This means that the profit in subsequent years will be considerably higher.

Moreover, the farmer's profit would be considerably higher in the first year if the labour was provided by him/her. In this example, the banana field provides an opportunity for self-employment, allowing the farmer to earn a salary by investing his/her work in establishing a banana plantation. Most of the establishment workload occurs during the dry season, when there is little other work to be done on the farm.

Table 5.4 Comparison between maize and bananas on one acre with regard to expenses and income (in TZS)

		EXPENDITURE			
Maize			*Banana*		
Ploughing		30,000	Layout		20,000
Harrowing		30,000	Digging holes		675,000
Sowing		30,000	Manure mixing		450,000
Fertilizer 1			Planting		100,000
Fertilizer 2			Seedlings		540,000
Seeds		120,000	Lablab		12,000
Pigeon peas		30,000	1st weeding		50,000
1st weeding		60,000	2nd weeding		20,000
2nd weeding		60,000	Desuckering		900,000
Harvesting		80,000			
Transport and packing materials		15,000			
Total expenditure per year		455,000	Total expenditure in 1st year		2,767,000
		INCOME			
Maize			*Banana*		
Maize bags harvested	20		Banana bunches Harvested	450	
Price per bag	50,000		Price per bunch	8,000	
Total income from maize		1,000,000	Total income from bananas		3,600,000
Pigeon peas bags harvested	4		Suckers harvested	900	
Price per bag	80,000		Price per sucker	600	
Total income from pigeon peas		320,000	Total income from suckers		540,000
			Lablab bags harvested	1	
			Price per bag	120,000	
			Total income from lablab		120,000
Total sales		1,320,000	Total sales		4,260,000
Minus total expenditure		455,000	Minus total expenditure		2,767,000
Overall profit		*865,000*	*Overall profit*		*1,493,000*

If the farmer does not hire labour but digs the holes him/herself and mixes the manure for bananas during the dry season, the difference in income between maize and bananas would be as follows:

Total expenses for bananas as shown in Table 5.4	TZS 2,767,000
Minus the costs for digging holes and mixing manure	TZS 1,125,000
Revised total expenses	*TZS 1,642,000*

The farmer's total profit would then be (TZS 4,260,000 – 1,642,000) = TZS 2,618,000, which is 1,753,000 greater than for maize.

Such examples can be eye-openers for farmers. However, it is not recommended that farmers establish one acre of banana all in one go. They should try out the technology on a small scale first, and expand if they see a benefit. Your job is to inform them not only about the possibilities, but also about potential problems.

Table 5.5 shows how farmers can plan their crop production and cash requirements during the season. The expenditure is listed according to the month in which it is expected to occur.

Table 5.5 Production costs for one acre of maize

Cost	*Month*					*Total TZS*
	1	*2*	*3*	*4*	*5*	
Ploughing	30,000					30,000
Harrowing	30,000					30,000
Planting		30,000				30,000
Seeds		120,000				120,000
Fertilizer 1						
Fertilizer 2						
1st weeding		60,000				60,000
Pigeon peas intercrop		30,000				30,000
2nd weeding			60,000			60,000
Pesticides (1)						
Pesticides (2)						
Harvesting				80,000		80,000
Packing material				5,000		5,000
Transport charges					10,000	10,000
Total costs	*60,000*	*240,000*	*60,000*	*85,000*	*10,000*	*455,000*

Production planning
Expected income: = expected yield **times** anticipated crop price **minus** total expenditure
Production analysis
Realized income: = actual yield **times** actual crop price **minus** actual total expenditures

Record-keeping and bookkeeping

Record-keeping will help farmers to better understand, analyse, and compare production, income, expenses, and profit from their farm activities. In any business, including farming, it is important to keep track of all activities, including production, income from sales, and expenses related to production. Without such data it is not possible to identify which activities provide

good income or a lot of food, and to select the activities that are good for sustaining the household. Simple data can help farmers to make informed decisions concerning which activities to invest in. The data collected should, however, be kept as simple as possible, so that farmers with a low level of literacy are able to understand the information.

When the group begins its activities, it is necessary to start keeping records. The records the groups should keep, and for which training will be required, are as follows:

- Group activities such as land preparation (planting, weeding, harvesting), marketing and sale of produce, and acquisition of inputs
- Agreements and decisions, such as contracts for land, contracts with the IO on repayment for inputs, solidarity chains, etc.
- Assets such as tools, whether provided by the project or acquired through any investment the group makes
- Group accounts, including income from members' contributions/fees and from sales, and expenses.

It is of the utmost importance for a group that all members know what profits are accrued from their activities, and the amount of any losses. This will provide a sound basis for making decisions. For any groups which are not doing well, the data will provide information on where problems lie, helping the groups to decide what steps need to be taken.

The groups should use the following books to keep their financial records:

- Payment voucher book
- Receipt voucher book
- Sales and purchases day book

From these books, the groups will be able to understand when and how they have used their money. The books also enable the groups to prepare the following:

- The cash book, which is used to record all cash received and cash paid out by the business
- The sales and purchases day book, which is used to record all sales on credit and all purchases on credit
- The balance sheet, which is prepared from the cash book and the sales and purchases day book after a chosen period, preferably of three to six months

Steps

- On commencement of training and practical activities, financial transactions begin.
- Very early in the project, the groups are trained in the principles of financial management, including the understanding of figures in the payment voucher and receipt voucher books.
- From these records, the group leaders fill in the cashbook at the end of every month, and make a balance sheet every three months.
- A simple income and expenditure statement should be prepared and presented to the group members on a monthly basis.

The group leaders (i.e. chairpersons, secretaries, and particularly the treasurers) should receive additional training by the IO so they are fully conversant with the bookkeeping principles. Your responsibility will be to assist the group treasurers and to provide short refresher courses for the

groups when deemed necessary.

In addition, the group secretaries will receive special training from the IO. The training will cover issues relating to their duties, namely taking minutes of meetings, keeping attendance records, filling in contract forms, etc. As a facilitator you will support and advise the group secretary as and when required.

Accessing savings and loan opportunities

Lack of capital frequently prevents farmers from expanding and improving their businesses. Farmers may have all other necessities in place, such as available land and labour, and even knowledge and good ideas. However, lack of cash to buy tools and inputs often prevents them from implementing their plans. Below we describe two possibilities which can help farmers to get access to capital.

a) Promoting savings and loan activities in the groups

The majority of rural small farmers have virtually no possibility of saving money in banks. The banks are often far away, and the terms offered may not be friendly for farmers with limited savings. There are, however, other methods groups can use for saving and borrowing money. The village savings and loan association (VSLA) concept has been included in the basket of options in RIPAT projects, and it has proved to be very popular among and beneficial to farmers. The method enables even poor farmers to save enough money to buy useful items for the household and to make business investments.

The VSLA concept in brief

The VSLA group (often comprising 15-30 members) meets on a weekly basis to pool members' surplus money in a fund from which members can also borrow. The groups receive training in managing their funds, drawing up a constitution and electing a board. The VSLA runs in cycles of about one year. Thereafter the accumulated savings and profits are distributed among the members according to how much they have saved, and a new cycle is started. *All the funds come from the members themselves* – hence no external capital is involved. The members save by buying 'shares' in the VSLA. The members decide on the price of a share. Every week each member buys shares for the agreed amount. Any member is allowed to borrow from the VSLA. Typically, a member is allowed to borrow three times the amount of money he/she has saved.
The interest rate to be charged on loans, the maturity dates of the loans, and the length of each operating cycle is decided by the VSLA members. When a cycle is complete, the members receive their savings along with their shares of the interest earned on the loans.

The group is provided with a cash box with three padlocks, which ensures that no single person can access the cash. Transactions can only be carried out when all the group members are present, which ensures transparency and mutual trust. Records are kept in the individual members' passbooks using stamps that even illiterate people can easily count. All outstanding balances on loans are certified by the members who are sitting next to the borrower at the meetings.

When to include VSLA in a RIPAT project

The VSLA can be introduced at any time during the project cycle. It can be chosen as one of the first 'technology options' available to the groups; alternatively, it can be introduced at a later stage, when farmers have started to earn money from the new farming technologies that have been introduced. It may even be possible to convert existing savings groups into RIPAT

producer groups, as discussed in Chapter 4 Step 4.

If time allows, it is recommended to start the VSLA as early as possible in new RIPAT groups. The savings and loan scheme will help farmers to access capital to expand their farming businesses. In some cases entrepreneurship skills should be trained concurrently with the VSLA concept.

It is important to realize that farmers are busy people – especially during the growing season – and the IO must be careful not to overburden the group with too many activities at one time. The scheduling of activities over the project period must be thoroughly thought through during the detailed project planning phase.

Keep the funds separate

Joining the VSLA should be an option for the group members, not a compulsory activity which all members are required to engage in. Those who want to join (at least 15 people) will form a sub-group. They will receive special training in the VSLA concept and will draw up a separate constitution, electing a separate leadership for the VSLA group activities.

Experience has shown that most of the RIPAT group members will wish to enrol in the VSLA scheme. Some groups elect the same persons as leaders for the VSLA as for the RIPAT group; others elect new leaders for this activity. However, it is of the utmost importance that there is a clear separation between the VSLA capital (based on individual savings) and the RIPAT group account (based on income from the common group enterprise, e.g. from sales of banana and other produce from the group fields).

It is important that the GFs are thoroughly trained in the VSLA concept before offering the training modules to the RIPAT groups. Details of the VSLA concept and the practical step-by-step guide for implementation can be downloaded at the website www.vsla.net.

b) Linking groups with formal micro finance institutions

A VSLA will not be able to provide a sufficient amount of capital to satisfy the needs of the most entrepreneurial farmers or of a RIPAT group. Sometimes the members of a RIPAT group decide to start an agro business together, which may require a sizable amount of capital during the start-up phase. In fact, it has happened that several RIPAT groups have bought land together and have started to produce banana as a joint enterprise. In such a case it will be advantageous if the group can get access to formal microfinance institutions.

Vision Fund (VF) and other micro finance institutions enable farmers to turn business ideas and opportunities into successful enterprises. Vision Fund provides microfinance in three main areas:

1) Small amounts of money (microloans) are loaned out, especially to people who do not have any measurable credit history, assets to secure a loan, and access to conventional financial services. Such loans are used for various purposes. In RIPAT these could include, for example, purchasing seed, animals, or animal feed; constructing animal sheds; and buying irrigation kits. Microloans enable farmers to establish a reliable basis for their sources of income and thus an adequate livelihood.

2) Savings programmes are instituted; these contribute to the reduction of vulnerability among farmers in the event of unplanned occurrences, including various types of disaster or misfortune.

3) Micro-insurance is made available. This can help in times of trouble; for farmers, this is mainly when there is a crop failure mainly due to inadequate rainfall or a natural disaster.

> When a failed harvest affects many members of the community it is vital that support can be given to sustain the community during difficult times and help them get back on their feet.[3]

The groups will need to meet the requirements of the VF quality check for microloans. In most cases, WVT will be working with VF to facilitate the groups in accessing loans. Alternatively, the group may form a relationship with another MFI.

Step 11: Group-to-group learning exchange and leadership training

Group-to-group learning exchange is mainly carried out through quarterly project coordination meetings, but the Field Days (Step 12 below) also provide a forum for this.

Quarterly coordination meeting

The quarterly meetings can be held at village, ward, or project level. At these meetings, issues and ideas that need action from the village leaders or local government are discussed; requests are formulated and passed on to the relevant authorities. The EOs contribute their thoughts and observations for the benefit of all the RIPAT groups in the project.

The IO should evaluate the best model for having effective quarterly meetings. The main determining factor will be number of groups established in the RIPAT project. Other factors that should guide such a decision include the proximity of the villages to one another, the logistics entailed, and the homogeneity of the area.

The following is an example of the determination of the number of participants where the quarterly meetings are held at ward level. In Tanzania, a ward typically consists of 2-4 villages. For this example, let us assume that there are three villages in a ward; four groups have been established in each village. The three leaders of each group should participate, that is the chairperson, the secretary, and the treasurer. The number of these participants will hence be 3 x 4 x 3 = 36. In addition, two village leaders per village should participate; 3 x 2 = 12.

The EOs affiliated to the project (perhaps 2 in the ward), and the project coordinator appointed by the district (DPC) should also participate. In total the number of participants for this quarterly meeting will thus be 36+12+2+1 = 51 participants.

The group leaders usually elect a chairperson and secretary for this forum, with roles as described below.

The group leader forum chairperson:

- Chairs the meetings
- Visits all the groups to monitor their development
- Provides conflict mediation within the groups and between groups
- Promotes the project among village leaders in general

[3] http://www.visionfundmedia.org/eReader/brochure/offline/download.pdf

- Advises the PM or IO on any matters pertaining to the project/community

The group leader forum secretary

- Takes the minutes of the meetings and writes a report
- Sends out any necessary information to the groups
- Receives project reports from the various villages

The quarterly coordination meetings have the purposes described below.

For participants to share experiences and lessons learned, and to inform each other about project progress, achievements, and challenges faced

The leaders of each group give a short report on the achievements of the group, including data on adoption of the technologies and reports on challenges faced. They explain how challenges have been tackled and what lessons have been learned from the activities implemented during that quarter, and they report on any innovations, adaptations, etc. Participants learn through such sharing, and can then share what they have learned with their group members. Groups may also share information on marketing and pricing of commodities, and can decide to sell their commodities together. Towards the end of the project, the forum may consider formalizing an inter-group organization.

To ensure good contact with and continued support and understanding of the project among village leaders and government institutions

The groups need the support of their village leaderships, and their activities may need protection. By keeping track of the progress of the project on a quarterly basis, the village leaders are in a position to take any necessary steps, including the promotion of further spreading in the village, the enforcement of by-laws, etc. The inclusion of the village leaders in the quarterly meetings facilitates advocacy efforts by the group leaders. This is also a good forum to discuss the ward and village development plans.

To oversee resolution of any conflict between and amongst group members

Sometimes misunderstandings arise between group members, or between group members and villagers; and sometimes cases of destruction of group property are reported. If such conflicts are not resolved by the group members locally, the quarterly coordination meeting can pass a resolution and identify representatives to follow up on the case. It can also happen that group members misuse group property and refuse to pay for the damage, for example, and in such cases external mediation may be required.

To coordinate activities with government extension officers

The EOs know about government plans and policies, including such things as government support available to farmers. They are thus able to advise farmers. Furthermore, the EOs can also help with the spreading of technologies to other farmers in and outside the project villages.

To prepare for the formation of an inter-group organization

The RIPAT approach provides the possibility of forming an inter-group organization called a Producer Association which will continue with the activities after project closure. The quarterly meetings provide a suitable basis for starting this process (see Chapter 6).

To undertake advocacy activities

In this forum the group leaders have the chance to advocate on behalf of the group members and argue for their cases. The group leaders should be facilitated to identify the promises that the government has made to them, and can be empowered to speak up to ensure that the government fulfils those promises. Advocacy themes could for example include:

- by-law enforcement
- promoting village, ward, and district development plans
- promoting the spreading of RIPAT to neighbouring villages via district funds and the government extension system
- improvement of infrastructure such as roads, irrigation canals, and village markets
- child care, nutrition, and protection

Preparations and agenda

During the project period, the PM and the group leader forum chairperson call the quarterly coordination meetings. Notice of the meeting should be sent by letter to all expected participants at least one month in advance.

Since the groups are expected to present reports during the meeting, the PM should circulate the format for the reports according to the information that is required to be shared and discusse*d in that quarter* (Box 5.7).

Box 5.7 Format for group reporting at a quarterly meeting

1. Group status
   - change in membership
   - attendance rate
2. Status since last meeting
   - planned activities
   - achievements for each intervention
   - any visitors to the group or special events
3. Challenges and possible solutions
4. Lessons learned/success stories
5. Plans for the next quarter

The basic agenda for the quarterly coordination meeting should be as follows:

1. Registration of attendance
2. Welcoming remarks and recap of the discussions at the last meeting by group leader forum chairperson
3. Objectives and expected outcomes of the meeting (PM)
4. Group reports and discussions

(Secretaries from each group present their reports, with a short discussion after each presentation on progress and any difficulties hindering progress. The village chairperson and EO from the village concerned are expected to comment after each group's presentation. The participants brainstorm solutions to the challenges that have been experienced and devise strategies for the future.)

5. Summing up of discussions (PM)
6. Comments by the DPC
7. Guidance on the way forward (PM)
8. Close

Be careful that the meetings do not continue for so long that participants get tired and lose concentration. If that happens too many times there is a risk that participants will become frustrated and impatient, and consequently will lose interest. Some may start to skip meetings, or arrive late and leave early. It is important that the meetings are well planned and the topics discussed are relevant, so that everyone feels that participating is important. Here are a few factors the group leader forum chair-person should keep in mind:

- Keep the meeting focused and ensure that everyone sticks to the agenda. Don't be afraid to interrupt a person who speaks for too long or diverges from the point under discussion – but if you do have to interrupt, try to maintain a positive atmosphere nevertheless
- Plan in advance the time that the meeting should end, and do your very best to keep to it
- Limit the number of agenda items
- Keep in mind the overall aims of the meeting as described above. Anything not relevant to those aims should be discussed elsewhere.

Leadership training for village and group leaders

The quarterly coordination meetings are also used to provide leadership training. Topics that are covered in this training include leadership skills, conflict resolution, problem solving, and financial skills. The PL or the PM should conduct the training.

Objectives of the training:

- To enhance unity and harmony among the group and village leaders in executing the project, and to ensure that they understand how they can contribute to its success
- To increase knowledge of good governance and thus to foster development
- To ensure understanding of existing by-laws and their enforcement in the village concerned. A typical example of such by-laws and their enforcement might be by-laws against free grazing, as explained in Step 6 in this chapter.

Step 12: Field Days and graduation

Field Days are annual exhibition days where the various project technologies in the basket of options are displayed to the village and to guests from the surrounding area. In the last year of the project, the Field Day is combined with a graduation ceremony where people from several villages come together in one village to celebrate the project outcome and mark the occasion of group members' graduation. Depending on the size of the area targeted, the Field Days can be organized at project, ward, or village level.

Objectives

- To orientate the community, local government, and other institutions on the various interventions implemented and knowledge acquired by RIPAT groups as they display and share their experiences
- To exchange experiences between RIPAT group members and other farmers, government officials, extension workers, and other visitors

Steps

The Field Days are usually held on the days on which the groups normally meet. It is easy to arrange them, and no costs are incurred by the project. The main steps are listed below.

1. The groups form a Field Day Committee to plan the event. It should be held at a time of the year when the effects of the various improved technologies are visible.
2. The communities of the entire village and perhaps also of neighbouring villages are invited for the event, including the village and ward leaders in particular.
3. Display stalls are made (using locally available resources) and used to display different products accrued from the project interventions. The group members explain how they have arrived at their results.
4. On the Field Day, the guests visit the RIPAT group fields and inspect the various demonstration plots. If possible, visits are also arranged to some individual farmers' plots.
5. Entertainments such as singing, drama/comedy, and poems are also performed. These should have a message that will motivate others to adopt the improved technologies. In Africa, it is aptly said that if you want to hide facts, just write them in a book; but if you want to present facts to people, then put them in songs, drama, or dances.
6. The group leaders and the village leaders explain the purpose of the Field Day, and the group members are given a chance to talk about what they have learned, and to explain how others can benefit from the project.
7. The EO also explains the interventions.
8. Finally, the village leaders conclude the meeting, encouraging the community to adopt RIPAT interventions.

Graduation Day

In the last year of the project, the Field Day takes the form of the project Graduation Day, which brings together many groups. If possible it will be advantageous to include several, and perhaps all, of the villages included in the project. Graduation Day is held to celebrate the successes achieved during the implementation of the RIPAT project. It should be organized by the IO in conjunction with all the group leaders.

Many stakeholders are invited, including government leaders (at regional, district, and ward levels), and development stakeholders in the area such as NGOs, civil society organizations, faith-based organizations, and community members from the targeted and neighbouring villages. It is a big event which is often attended by around 1,000 people. It sums up all that has been achieved during the three-year project period and expresses the desire for further dissemination of the project technologies under the leadership of the community and local government. Farmers are awarded certificates of participation; these are normally co-signed by the district authorities.

Selection of the best farmers, to be awarded prizes

The best-performing farmers in each of the improved technologies are selected, with the participation of group members in the process, for the award of a prize on Graduation Day. The selection process starts when the Graduation Day is announced some six months in advance. The criteria for each improved technology are outlined by the PM and the GFs and are passed on to the group members (see examples in Box 5.8).

The group members may suggest amendments to the criteria on the basis of their own analyses. Following the discussions, each group nominates individuals within their group who fit the criteria. The suitability of each suggested individual is discussed until one or two people remain.

Once all groups have nominated their candidates, the GFs and/or the PM visit each candidate's farm to assess the quality of the implementation before making the final decision.

Important steps

The most important steps in association with Graduation Day are listed below.

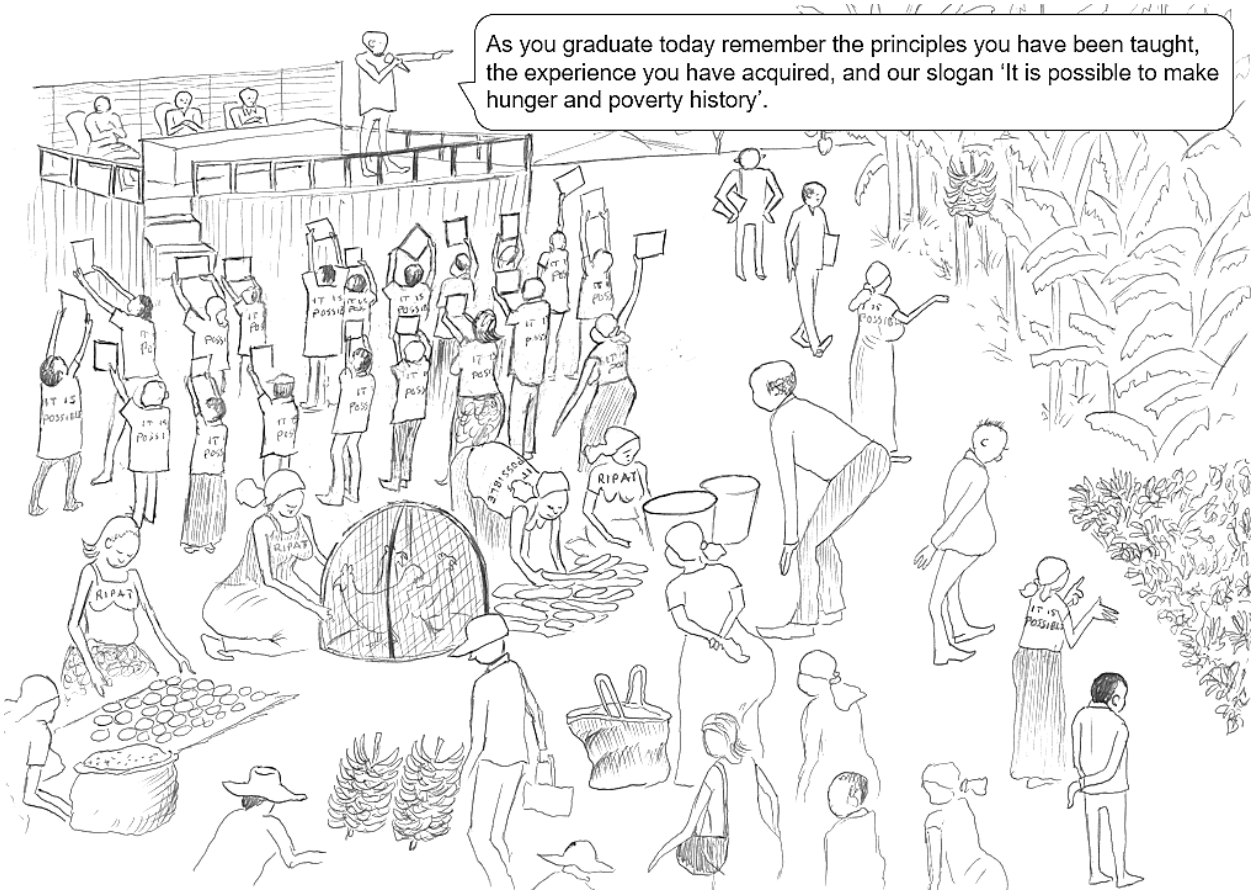
1. The planning of the Graduation Day is started during the last quarterly coordination meeting, but the date is announced six months in advance to the groups by the PM. The leaders of the groups in a RIPAT project elect a Graduation Committee under the group leader forum chairperson.
2. The role of the graduation committee includes:
    a) Deciding the programme for the day. Each group decides what activities they will participate in. The groups prepare entertainments (with lessons based on the project) for the day, including poems, dramas, songs, traditional dances, speeches, posters, testimony statements, and exhibitions.
    b) Preparing a speech for the day to be given on behalf of the group members. The speech explains the successes experienced and the challenges faced by the farmers, and requests the government to continue supporting the project interventions.
    c) Identifying products from the farms to be showcased and sold. These products could include eggs, sweet potatoes, bananas, cassava, etc.
    d) Coordinating contributions from group members to the cost of the day's meals. A budget is prepared, and each group member contributes an agreed amount of money for the food and drinks to be consumed on the actual day.
    e) Advising the IO on the best group farm to host the occasion.
3. The PM and the Graduation Committee decide on the venue for the graduation ceremony and announce this information to the groups.
4. The procedures for groups to close their accounts and clear any outstanding debts to the IO in accordance with their group constitutions should be announced to the groups by the GFs.
5. The best farmers (to be given prizes) in each of the technology areas are selected (see below).
6. The guest of honour (typically the District Commissioner) is invited at least one month before the event, while other important guests are invited no later than two weeks before the Graduation Day. Normally the guest of honour is well acquainted with the project – but if he/she is a new/recently-appointed person in the area, he/she may wish to visit the project a few days before the graduation in order to get a better understanding of the

project interventions and its successes. When inviting the guest of honour, it is advisable not only to brief him/her on the objectives and results of RIPAT, but also to highlight some of the topics that would be desirable to have included in his or her speech on the Graduation Day.

These topics could be:

- reinforcement of village by-laws
- conservation of the environment
- collaboration of extension officers with RIPAT participants and Lead Farmers
- spreading of the technologies to non-RIPAT villages
- encouraging farmers to continue to use the technologies they learned about through RIPAT

7. The PM and the graduation committee organize a route for visiting technology implementations in the various villages (group fields and individual fields). This will show the government officials and guests the technologies implemented by the project.
8. On Graduation Day, the guest of honour and visitors visit the selected sites and then proceed to the graduation ceremony site.



Box 5.8 Examples of best farmer awards and criteria used

Best banana farmer

- Number of stools planted, vigour
- Planted using correct spacing, clean field, mulched
- Maintained at three stems per stool
- Use of good rainwater harvesting methods
- The farmer has trained at least three other non-RIPAT farmers and given them planting materials (banana suckers) for technology diffusion

Best goat/pig/sheep keeper

- Appropriate animal housing (easy to clean, spacious, good ventilation, safe)
- Number of animals of improved breeds, pure-bred/cross-bred
- Proper feeding (vegetation, maize husks)
- Pest and disease control – deworming
- Record-keeping

Best poultry keeper

- Appropriate chicken sheds (easy to clean, spacious, good ventilation, safe)
- Number of chickens of improved breeds, pure-bred/cross-bred
- Disease and pest control – vaccination according to schedule
- Good records of production and sales
- Feeding – semi-intensively fed, supplementary feeding, not full free range

Best OFSP farmer

- Number of rows planted according to variety (no mixing of varieties), vigour
- Planted using correct spacing, clean field
- Correct procedures for the management of the crop followed, including weeding, covering the roots with soil, etc.
- Use of good rainwater harvesting methods
- The farmer has trained at least three other non-RIPAT farmers and given them planting materials for technology diffusion
- Has experience in preserving planting materials for the next season

Overall best farmer in project

- Has implemented several technologies, all well implemented in accordance with the training, and has utilized locally-available resources
- Is developing a Vision Farm

Best RIPAT group

- Good attendance record
- Follows the constitution
- Acts on the instructions and advice of the IO
- Has adopted the selected technologies
- Has managed the group field(s) well

Part 4:

How to facilitate the graduation of RIPAT producer groups into producer associations

By

Charles, M., Chagu, C.
- with input from Ringo, D.E., Maguzu, C. W., and Ng'ang'a, J.N.

CHAPTER 6: Forming a village-based producer association

Introduction

After graduation, there is an opportunity for the groups to continue by conversion into Producer Associations (PAs). In this chapter, the PGs referred to are mostly the graduated RIPAT groups, but the formation of a PA may also include other groups existing in the villages. It is expected that the RIPAT groups will now have developed sufficient knowhow and capacity to maintain an adequate level of production and that the members are willing to collectively and actively market their produce in order to maximize profits. A Producer Group (PG) is defined as a group of farmers or other people (e.g. smallholders or livestock keepers), usually numbering between 10 and 30; the members produce individually or collectively using improved agricultural practices and they have voluntarily agreed to establish some value chains in response to market demand. A Producer Association (PA) is defined as a confederation of several PGs (between 5 and 30 PGs) in a defined geographical location established not only to achieve economies of scale but also to increase the members' collective bargaining power. Forming a PA helps farmers to determine the selling price instead of the buyers dictating the price; moreover, services, costs, capacity building, transport and inputs are shared effectively in order to exploit economies of scale.

As a Group Facilitator (GF) you should inform the PGs in the village about this possibility of graduating into a PA. This chapter explains the process entailed in establishing a PA and how it governs itself sustainably. For those PG members who do not want to join the PA, the group constitution defines the procedure regarding individual members who do not want to continue (see Table 5.3, Items 15 and 16). You should be able to mentor, guide and assist in the process.

As a GF, your new role will cover two levels of facilitation:

- Facilitating the initial stages of establishing the PA to ensure growth and development through managing group dynamics and organizing the democratic election of leaders and members of subcommittees
- Occasional facilitation for those PGs that do not join PAs.

You will ensure continuous capacity building in the PA leading to deeper understanding of the value chains of specific crops, especially in the areas of production, quality control and marketing. The steps outlined here will guide you and the Project Manager (PM) in the process of forming, mentoring and monitoring a PA.

Mapping of the number of existing PGs and their stages of development

A PA should be formed by a minimum of 5 and a maximum of 30 PGs, each group being comprised of usually 10-30 members. A RIPAT project may start with two PGs per village, but the Lead Farmers (LFs) and extension officers (EOs) should consider forming five or more groups per village within the project lifespan through the inbuilt spreading mechanism (see Chapter 2). However, if a village has more than 30 eligible PGs, it is a good idea to consider forming a second PA, because a very large one will be difficult to manage, while an association with less than five groups will have very few participants to take on leadership roles and provide the members of subcommittees.

Together with the PM, you should profile the existing PGs and determine their stages of development to identify the ones that are suitable to join the PA. To facilitate this identification, the following screening tools/criteria are used:

- Leaders are in place after being elected democratically
- The PG constitution is in place and functional
- The PG sub-committee(s) are in place and executing their expected roles
- The PG has one (or more) market-led value chain prioritized (preliminarily); 60% of the members are already producing the commodity from the basket of options which is to be earmarked for local value chain development (produced and marketed jointly)
- The PG attendance rate has been above 60% over the previous 6 months
- The PG has an active VSLA with at least 60% of members participating
- The PG is minimally monitored and is ready to contribute to the operation of a PA
- The PG has a harmonious relationship with the local government of its area
- The PG is registered
- The PG keeps group records accurately and effectively (production and sales records).

In most instances, a PA can work effectively with no more than three value chains. A value chain subcommittee should be established for each of the value chains (see step 5 below). Several factors should be considered when selecting the value chains. These are listed in Table 6.1.

Table 6.1: Factors to consider when selecting the value chain / technology for the PA

	Criteria
Profitability	• Selling price at market • Required cost (including amount of labour, seeds, fertilizers, pesticides, etc.) • Estimated profit for producer • 'Quick-win' or long-term benefit?
Production	• Confidence in quality to sell at market • Confidence in producing enough quantity to make a profit • Grown in the project area • Potential for labour-intensive technology • Potential outreach • Environmental sustainability
Producers	• Present integration of the poor into the market (What are they producing/selling? Employment?) • Low barriers for entry for the poor (capital, knowledge) • Involvement of a large number of people • Social inclusion
Demand	• Sufficient market demand • Potential growth of demand in future

Risk	• Little or no risk to food security by focusing on the crop • Not requiring excessive physical labour or travel far from home
Added advantages	• Importance in food security (perennial or drought-tolerant crop) and nutrition (dealing with hidden hunger – stunting); among the crops prioritized by the government

Adapted from the WV Training module for market facilitators and market agents, 2016

Step 1: Aggregating the PGs into PAs

After assessing the PGs and the crop/technologies for local value chain development, you as GF should ensure that the following steps are carried out.

- You should organize and conduct an orientation and feedback meeting with all the PGs in a public (village) meeting in the presence of the village leaders, the EO and the District Project Coordinator (DPC). The community/meeting is informed of which PGs are joining together to form a PA at that time/stage and which ones are not but are potential candidates for future PA membership.
- For qualified PGs, you should guide the group members to outline challenges that they face in terms of production and sale of products, and explain how the formation of a PA will facilitate solving the challenges outlined.
- The village government should lead the process of identifying willing members from the qualified PGs to form a PA. A list is produced, and this defines the total number of PGs to be included.
- You should organize a meeting with the leaders of all the qualified PGs – at least the chairperson, secretary and treasurer from each PG at the village level – to elect interim PA leaders. See Appendix 1 concerning election procedure; see also the instructions on how to create a group constitution in Chapter 5.
- You and the PA leaders should jointly be proactive in promoting an environment conducive to learning and establishing the PA constitution, carrying out the initial filtering process in the selection of value chains, and later overseeing the formation of the PA subcommittees after a period of thorough capacity building.
- The PA leaders should play an active role in identifying one or more collection centres for aggregating produce. Proper consideration should be given to the costs that may be incurred in making available the storage facility, i.e. for rent, fumigation and security. The PA can gradually start investing towards owning a storage facility.

Step 2: Stakeholder analysis

Stakeholders are individuals or institutions that may – directly or indirectly, positively or negatively – affect or be affected by a project or programme (in this case, the establishment of a PA). You should prompt the PA to conduct a first stakeholder analysis and facilitate the process. Thereafter the PA should be able to conduct stakeholder analyses on their own as the need arises. The

exercise allows the PA to consider the important human and social capital resources required to improve its planning and implementation activities.

Steps in conducting a stakeholder analysis

- *Identify your stakeholders* – In collaboration with the PA leadership you should map out all active and potential stakeholders, followed by a thorough discussion of their importance and their roles/influences in meeting the PA vision.
- *Prioritize your stakeholders* – The stakeholders are then prioritized in terms of their influence and importance. **Influential** stakeholders have power over the PA or the management of the PA, for example, decision-makers and financers. **Important** stakeholders are those who have power over the PA enterprise implementation or outcomes, for example opinion leaders, knowledge-centred resources, like-minded organizations, etc.

Table 6.2 An example of a simple tool that can be used in conducting a stakeholder analysis

Name	Role	Why they are important	Current Attitude	What we would like them to do?	Key messages	How (tactics)	When	Who
Mr John	Farmer	Influential at a political level. Farmer opinion leader	Does not understand our project	Advocate for our project to other farmers	There are benefits to him in working with us	Invite to project field day	15th March	Bariki
Olorien cereal traders	Cereal buyer	They are a competitor	May feel threatened by the PA's existence	We are ready to work with them	Together we give farmers a better market	Meet them in their office	June	PA leaders

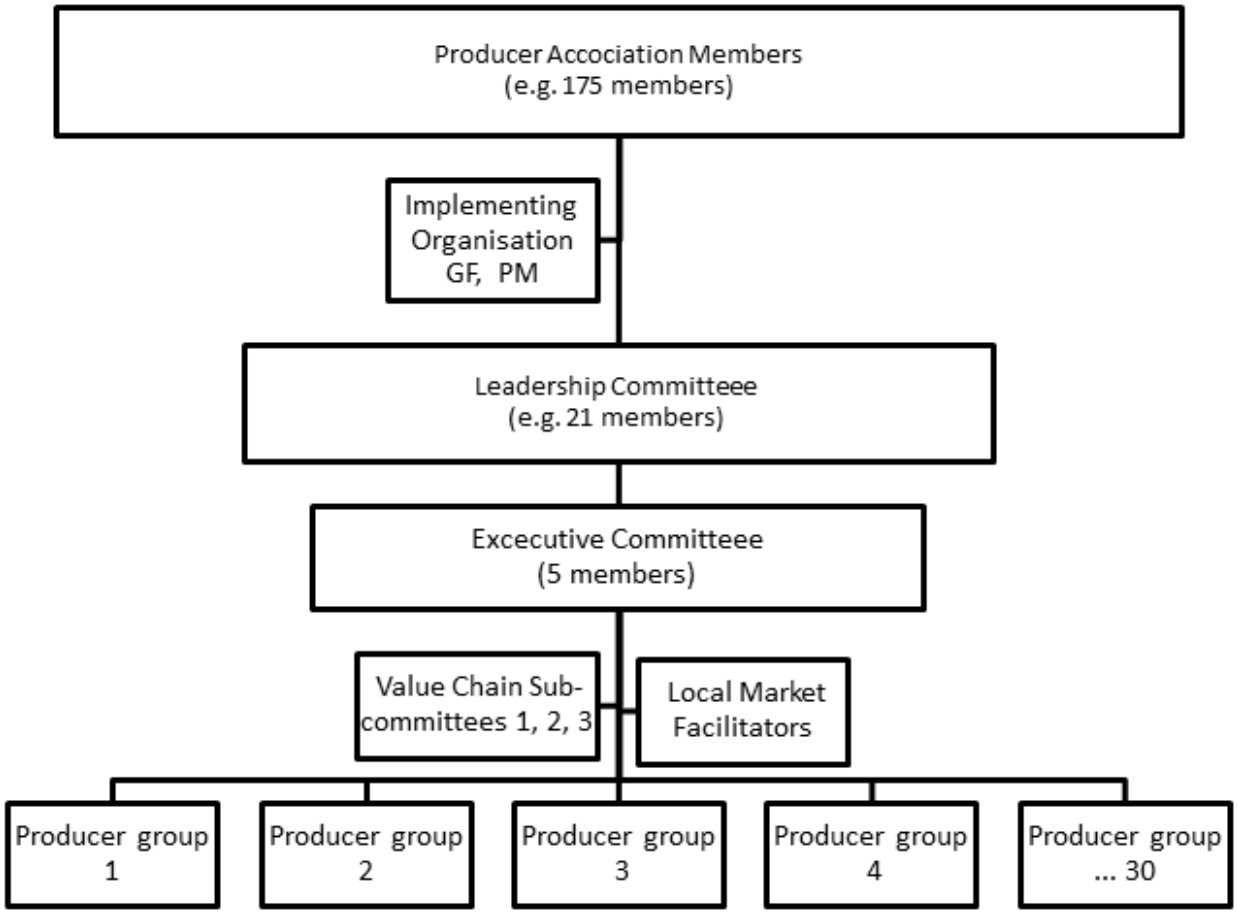
Adapted from Kennon et al. 2009.

- *Understand and manage your stakeholders* – Determine their attitudes to the PA team and any risks associated with their involvement, and find out how risks can be minimized.
- *Set goals and identify the costs of stakeholder analyses* – Members then map out their tasks. Responsibilities and deadlines are shared in order to attain the intended goals.
- *Evaluation and revision* – Stakeholder analysis is carried out on a regular basis to find out if there any new stakeholders, new interests of existing ones, or even lack of interest on the part of stakeholders. Such information guides your work and later the local market facilitator (LMF) in how the PA facilitation should continue.

THE ORGANIZATION OF A PRODUCER ASSOCIATION

Governance structure of a Producer Association

The highest authority in a PA is its members. Twice a year all the PA members will be called to the General Assembly. The PA is governed through an Executive Committee composed of five members: Chairperson, Assistant Chairperson, Secretary, Assistant Secretary, and Accountant. The Executive Committee is elected by a Leadership Committee composed of three leaders from each of the PGs. For example, if a PA has seven PGs with a membership of approximately 25 per PG then the entire PA membership comprises 7*25=175 members. Each PG selects three leaders to represent them in the leadership committee (7*3=21 members). The 21-member leadership committee democratically elects the five members of the Executive Committee.



PA Activities

Day-to-day activities of the PA are administered and supervised by the five members of the Executive Committee under the leadership of the Chairperson. An activity calendar is prepared and endorsed by the members wherein all key PA events and activities are blocked, in such as weekly, monthly, quarterly, semi-annual and annual meetings, farm preparation, input distribution, planting, weeding, harvesting, processing, product collection and selling.

Collection centres may be organized at the PG level, or the PGs can collect and transport produce to a PA collection centre. Alternatively, farmers may opt to transport their individual produce directly to the PA collection centre, especially when the PA has a large area for storage. Factors to consider regarding the choice of a good collection centre include distance from the farmers, security, amount of production at the PG level, and the capacity of the storage centre. The PA should determine which methodology is easiest and most cost effective for the PGs.

Frequency of meetings of the PA

The Executive Committee should meet at least once per quarter to discuss:

- progress of the groups
- seasonal calendar in relation to market demand
- strategies for how to utilize opportunities and network with other stakeholders.

Prior to each meeting, the value chain subcommittees should meet and prepare their reports highlighting activities carried out, successes, challenges, recommendations and future plans. Since in most cases the association will have more than one value chain, the value chain sub-committees should meet at least once a month to discuss the business (activities) calendar for their specific areas. This calendar should dictate the frequency of the meetings. You or the PM from the IO should meet the committees frequently in the first year and reduce the frequency in the subsequent years.

The quarterly meetings are held at village level. The main participants include the PA leadership, GF, DPC, patron (see item 6 of in table 5.3; the government representative could be from the agriculture or community development department, whose role is to oversee and provide technical advice to the PA), village chairperson and the Village Extension Officer (VEO).

Schedule of meetings of the PA:

- The general assembly for the PA members should be held twice a year
- An emergency general assembly can be called at any time if it is very necessary.

Schedule of meetings of the PG:

- Meet once per week during the high season. Producer groups which are also savings groups can take an advantage of the weekly savings group meeting, discussing issues related to the value chain after the normal proceedings of the savings group
- Emergency meetings may also be called at any time.

PA and availability of extension services

The IO should work together with the PA to ensure that quality is maintained and that affordable agro-inputs are available on a sustainable basis. The role of the IO should not be the provision of inputs but to help the PA to discover the availability of the agro-inputs required, preferably through a village-based input supply system. The involvement of government extension staff working closely with Lead Farmers (LFs) and the district cooperative office should be clearly stipulated in the MoU between the district and the IO (see template, Appendix 4d). As the PA grows and develops towards a fully-fledged entity it should consider employing permanent staff, in particular a finance officer.

Step 4: PA capacity building

The IO, in collaboration with other stakeholders, should take over responsibility for carrying out various capacity-building initiatives for the PA leadership, the value chain subcommittees and the PA in general.

The roles of the IO include:

- drafting of the PA constitution to ensure good governance, a sustainable agro-business enterprise and a socially responsible focus on children and other vulnerable groups (see group constitution template in Chapter 5, table 5.3)
- providing continued capacity-building opportunities to PA members and leaders as relevant (see the section entitled 'How to use this manual', with the list of other subjects to include as relevant in training)
- facilitating market links with other business partners, e.g. marketers, input suppliers, private companies, training providers and farm equipment suppliers
- mentoring and informative visits to other successful producer associations and groups
- use of the PA and PG platforms for the continuous process of mindset transformation.

Leadership capacity development

The training sessions may be conducted by you, the GF, the PM from the IO, extension officers, other relevant organizations or the trained community-based personnel located in most villages. The IO should coordinate the availability of the trainers at the initial stages and gradually give way to the PA in continuing the stakeholder relationship. Training is facilitated at two levels, namely the PA leadership and the producer group levels.

a) PA Leadership training

A variety of topics should be prepared to introduce the leaders to areas that go beyond the selected value chains. The training package should reflect the sample below in Table 6.3.

Table 6.3 Leadership training packages

	Package 1	Package 2	Package 3	Package 4
1	Introduction to agri-business	Leadership and management of a PA	Business Facilitation and negotiation skills	Access to credit
2	An exploration of the challenges facing smallholder farmers in the targeted area	PA value chain subcommittees (roles and responsibilities)	Data monitoring, management and record-keeping	PAs and environment management
3	Strengths, weaknesses and opportunities of the targeted smallholder farmers	Challenges facing producer groups in developing countries	Participatory formation of a PA constitution	Development of a participatory action plan

4	Theories of power through unity	The role of a leader in overcoming PA/PG challenges	Challenges in implementing a PA constitution	PAs and advocacy, e.g. using the 'Citizen Voice and Action' model
5	Group dynamics and strong group formation; stages of group development	Conflict resolution	Obtaining authorization for PAs	Other cross cutting subjects such as PAs and gender sensitivity, empowered world view, children's rights, etc
6	RIPAT as an approach to sustainable agri-businesses	Stakeholder engagement/analysis	Mobilization of resources for the effective running of the PA.	
7		Quality assurance		

b) PG group training

As a GF you should continue to train the qualified producer groups as relevant to build up their capacity on an organizational level and also in the technical skills related to the agreed value chains. Most subjects will already have been covered, as outlined in Chapter 5, but there may be a need for additional supplementary training.

Step 5: Value chain subcommittees and their roles

The committees

The PA establishes and elects value chain subcommittees for further training and monitoring of its activities. The value chain subcommittee should be formed according to the associations' interest in specific crop value chains, e.g. onions (spices), sweet potatoes (tuber crops), banana, rice and pulses. An association should have not less than three committees. Each PG selects a representative member for each committee. They are responsible for the further training and monitoring of the producer groups. GFs should facilitate the election process in the PG.

The criteria for selecting committee members include:

- Good group attendance record
- Active participation in the group farm activities
- Indication of continuing production of the value chain crop/item
- Ability to sell
- Willingness and ability to train others

Roles of the value chain subcommittees

The subcommittees are mandated with a wide variety of responsibilities. That is why the election process should be very democratic, purposeful and thorough. The subcommittees are expected to perform the following tasks:

- To coordinate crop production by considering what, when and how much to produce. PA members are encouraged to plant, manage and harvest in a timely manner in relation to market demand
- To coordinate the availability of adequate inputs and technical expertise, and to identify the appropriate collection centre for each PG
- To conduct market surveys, identify potential buyers and form links with buyers and markets in order to obtain the best prices. This can be done either by mobile phone or by inviting buyers to participate in a stakeholders' forum where PA members and other key stakeholders (input suppliers, processors, transporters, etc.) meet and build mutually beneficial working relationships.
- To network with other PA members in order to gain market bargaining power and to share experience.
- To conduct quality control and quality assurance processes for produce from the PGs. The subcommittees should also organize data concerning what is produced and at what level of quality, in accordance with market demand.
- To take the lead in conciliation in the event of any misunderstanding or dispute between members/groups.
- To encourage group members to adapt and use all relevant technologies for the improvement of the groups, for example through the formation of radio listening groups and through the use of phones for financial transactions and as a medium for accessing production and market information.
- Campaigning, lobbying and advocacy on issues related to the PA's activities.

Step 6: The local market facilitator (LMF)

A key element in the RIPAT Producer Association model is the Local Market Facilitator (LMF). LMFs are community volunteers, selected from amongst value chain subcommittee members. You should facilitate the selection of the LMF. Once the LMF is fully operational your involvement will gradual decline. LMFs are appointed with the main aim of connecting PGs with markets. They can be described as development specialists who have been specifically trained or have the skills to meet the market linkage needs of their particular location. They facilitate dialogue between buyers and farmers. They mediate the flow of information. However, they should not be middlemen.

Criteria for choosing LMFs

Potential LMFs should have demonstrated their ability in managing the economic transactions in a PG, for example by leading discussions, market search, record keeping, displaying bargaining power, etc. LMFs should:

- have the ability to facilitate and monitor 5-10 PGs
- be available to monitor PGs and to identify markets
- have a broad understanding of the local areas
- reside within the community

- possess literacy and communication skills
- have adequate basic knowledge about markets
- possess mentoring skills
- be trusted by and acceptable to the community
- be members of PGs
- be model farmers
- exhibit a high level of commitment
- be willing to share.

The names of the selected candidates are forwarded to the PA subcommittees.

The role of LMFs

LMFs are expected to identify viable opportunities for forming new PAs, establish PAs and mentor them. The specific task of the LMFs is to support the PGs. This should be by:

- assessing the local economy
- meeting with potential new buyers: the members of the PA Executive Committee should be available to accompany the LMF on some of the visits
- carrying out in-depth value chain analyses and meetings with players throughout the market chain to gather critical market information
- identifying solutions to issues such as transport, financing, contractual imperatives, quality, processing, packaging, etc. that might hinder successful linkages
- prioritizing opportunities and promoting collaboration and empowerment
- building collective technical capacity in agricultural techniques, adding value (processing), etc.
- planning initiatives with PAs such as building linkages with input suppliers and buyers for the PA's products
- following up at the PG level on the up-scaling of value chains/technologies and the training of three community members.

An LMF may initially work with a small number of PAs (i.e. 5-10), but over time they will scale up the methodology to other villages and regions within the project area. Most likely lead farmers (at PGs) will progress to become LMFs. This is a voluntary position: however, the PG members and the IO should find a means of motivating the LMF. The PA supports the LMF with financial contributions, which are sourced from members' contributions.

The LMFs also identify markets for the association members.The LMF carries out a market survey with the PGs. Note that an LMF is not a market broker and should not adopt the standpoint of a market broker. The tool below is used to assess the status of the market with the PG members.

The market tool used is as follows.
The following questions can be printed out and given as a questionnaire to producer groups.
(Tick the appropriate answers □)

1. How do you interact with buyers?
   - Face to face
   - Through an intermediary (collector/broker)
   - OTHER (specify)

2. How often do you meet buyers to discuss business-related matters and exchange new information?
   - Daily
   - Once a week
   - At least once a month
   - OTHER (specify)

3. What information do you get from buyers?
   - Market trends
   - Market requirements/demands (quality and quantity)
   - OTHER (specify)

4. Is this information easily available? If NO, why not?

5. What other sources of information do you have (e.g. for markets, new technologies, etc.)
   - BDS providers
   - Extension services
   - Media
   - NGOs and development agencies
   - OTHERS (specify)

6. Which of these sources is most important? Rank all the sources you have in order of importance.

7. What is the relationship between you and your buyers?
   - Formal contract
   - On-spot
   - Verbal agreement
   - Buyers dictate the terms
   - Equal relationship
   - Not satisfied

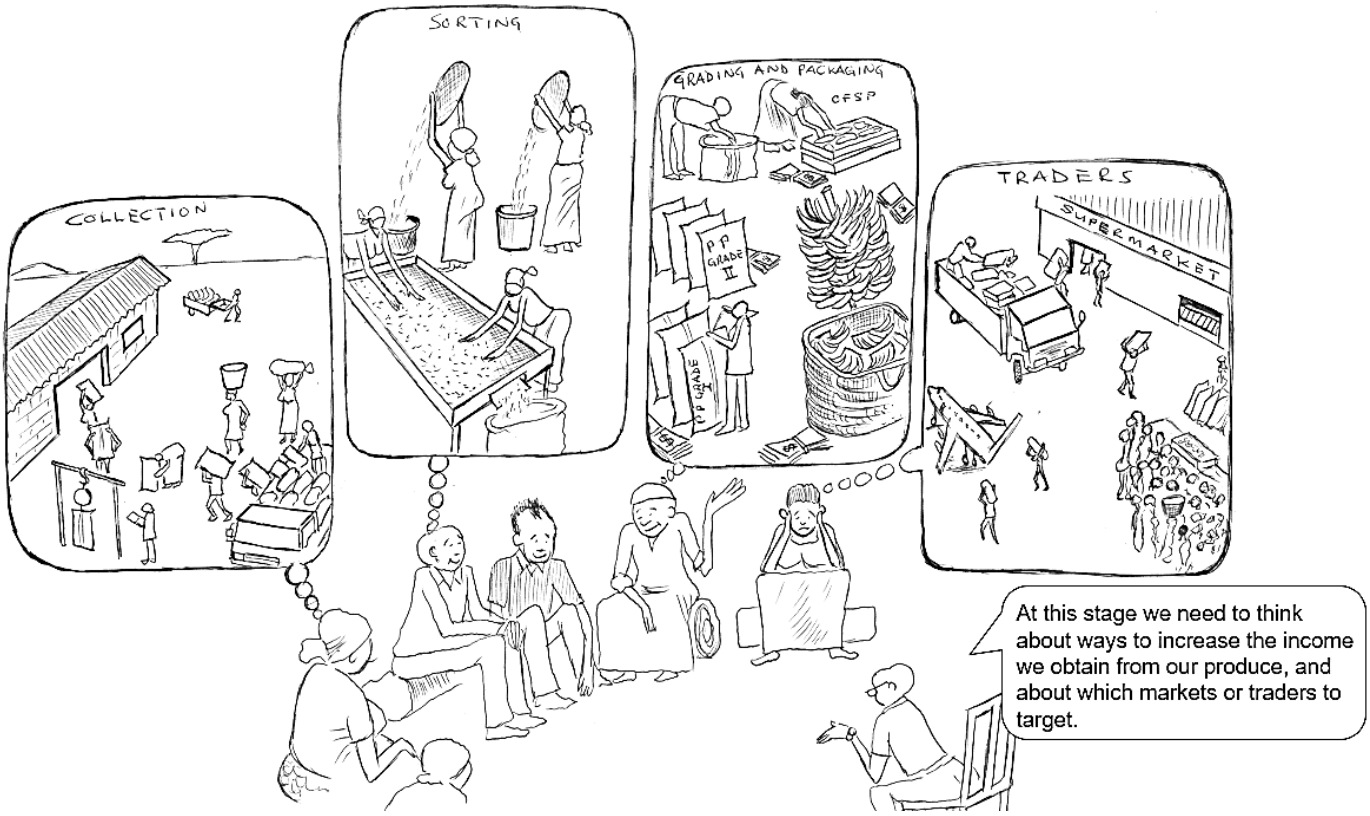
8. How long does it take to fulfil the orders of your buyers? (days between order and delivery)
   - 1-3 days
   - 1 week
   - 2 weeks
   - More (specify)

9. Does your buyer provide you with certain services? Yes/No
   - Loan
   - Training
   - OTHERS (specify)

10. Where do your buyers come from?
    - Locality
    - Region
    - OTHER (specify)

Interacting with the market

Through its committees and the LMF, the PA will link the PGs to buyers and markets (local, regional and international). The PA collects commodities/produce for bulking, sorting and grading before selling it collectively to buyers. Physical collection centres are established and coordinated by the PA; here goods are received, quality-checked, weighed and recorded by the PG leaders before being handed over to the PA and recorded on the PA Goods Received Note.



Step 7: Financial skills and management of PA documents

Sources of funds in a PA

The PA should be sustainable in all its activities. Producer groups contribute a certain amount of money or resources as agreed during the general meeting and detailed in the PA's constitution. Other methods of financing include PA income-generating activities such as farming and owning and operating machines and warehouses. The PA can also approach financial institutions to obtain loans for the furtherance of its agro-business.

The PA is responsible for tracking of various transactions and activities and keeping records of these for its PG members. Such records might include:

- profiles (PG registration certificate, number of members and genders, value chain commodities, individual/group production units)
- PG membership compliance to PA rules (annual fee and other financial contributions as per the constitution)
- inventories (office, furniture, storage facilities, processing units)
- PA meeting minutes and attendance register
- Goods Received Notes, i.e. product specifications and amounts received from PGs
- Goods Issued Notes, i.e. collectively purchased and dispatched inputs to PGs
- Sales records, i.e. commodities and amounts, indicating unit prices
- markets (local, regional, international) and buyers with their contacts

- PA financial expenditures and audit reports.

The Treasurer is the custodian of these documents. The PA should have a bank account with four signatories: two from the Executive Committee (the Chairperson and the Secretary) and two from the subcommittees. This is a 'two to sign' system.

For accountability purposes, monthly and quarterly financial reports should be prepared. During the quarterly meetings, the Treasurer should share the financial report on income and expenditure. The PA leaders are also expected to share the financial report during the general assembly.

Step 8: PA open days and exchange visits

Producer Associations will host open days at the village or ward level once a year. An open day is a participatory forum where other institutions, private practitioners, NGOs, input suppliers and buyers are invited to exhibit their products alongside those of the PA. The entire village or ward is also invited to participate. The aim is to have an avenue for

- creating awareness of the importance of the PA and its membership
- marketing PA products
- networking and stakeholder engagement
- advocacy to the government and other relevant institutions.

Learning visits are also important, especially during market survey trips, national farmers' day, and other exhibition forums.

The PM, GF and the LMF will together guide the PA on the following agenda for open days:

- Selection of the guest of honour
- Financial contributions from members to support the purchase of food and T-shirts and for other relevant activities
- Identification of and invitations to other exhibitors
- Award ceremony for the best individual members in displaying exemplary performance in the development of a value chain; in the first year the IO will sponsor the awards, but in subsequent years the PA and other stakeholders, including the government, will provide the awards
- Preparation of songs and poems with relevant messages for the audience.

Step 9: Monitoring

Monitoring of the PA should be done by the GF, the patron, and the LMF. The *PA Maturity Index in table 6.4* can be used as a monitoring tool for PA growth stage.

Table 6.4 The PA Maturity Index			
PA	*Formation stage*	*Leaders elected democratically and in place*	
		Producer Association subcommittees in place and capacity building activities carried out	
		Producer Association meetings held at least once per quarter	
		Potential value chain prioritized	
		PA constitution under development	
	Growth stage	*PA constitution in place and functional*	
		Farmers gradually organized to prioritize selected value chains in accordance with market demand	
		PA members gradually getting out to search for markets for their produce	
		PA members starting networking with other stakeholders such as input suppliers, buyers, etc	
		PA subcommittee meetings held to formulate strategies and present their plans	
		Awareness growing as to how the PGs contribute to the operation of the PA	
		PA adopting several creative innovations such as water pans, bee-keeping, drip irrigation, savings groups, etc	
		PA influencing PGs to take care of orphans and vulnerable children	
		Ongoing capacity-building in entrepreneurship for the PGs	
	Maturity stage	*PA starts selling members' produce collectively.*	
		PA engaged in market search through the market and value addition subcommittee	
		PGs contribute willingly to the PA's operations	
		PA is registered	
		PA is accessing inputs sustainably	
		PA adopting several creative innovations such as water pans, bee-keeping, drip irrigation, savings groups, etc	
		PA requires minimum support to operate	
		PA has achieved better understanding of entrepreneurship	
		PA influencing PGs to take care of orphans and vulnerable children	
		An active LMF has been selected.	

Table continues on the following page.

PA	*Graduation stage*	*PA is registered and has an account.*	
		PA is organizing collective marketing independently; farmers selling regularly to reliable buyers	
		PA is independently connecting and networking with other stakeholders	
		PA is making significant efforts to prompt PGs to care for orphans and vulnerable children	
		Organic scaling up of several innovations and businesses is in progress	
		PA has started taking collective community responsibilities, e.g. helping Most Vulnerable Children (MVCs), carrying out community work, etc.	
		PA meets regularly in accordance with the constitution	
		All committees fully functional	
		PA is operating independently of IO support	
		PA is in the processes of registering as a company	
		Excellent understanding of entrepreneurship evident	

Step 10: Phasing out of the IO

The monitoring will indicate when PAs are at the graduation stage. Best practices should be documented and shared among the stakeholders. The GF should facilitate the phasing out of the IO. At this point the LMF should have the capacities of a good GF and excellent facilitation and negotiation skills.

References;

Valence Twagizihirwe, Kwikiriza Jackson, Clifford Chagu, 2016. *Training module for market facilitator and market agent*. Economic development project for local producer groups in Rwanda.

Kennon N., Howden P. and Hartley M. (2009). Who really matters? A stakeholder analysis tool Department of Primary Industries. *Extension Farming Systems Journal* vol 5 no. 2.

Part 5:

How to monitor group performance and carry out quality control

By

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CHAPTER 7: Monitoring and quality control

Monitoring should be a part of any development intervention, in order to document the implementation process and to ensure a proper mechanism for reflection and action. Monitoring is the periodic checking of progress in order to assess whether the standards and targets formulated in the implementation plan are being achieved in practice. The information collected is used for purposes of management and decision-making as well as for facilitating a continuous learning process. Having timely and relevant information on project progress, both positive and negative, enables people at all levels of the project, i.e. the groups, the PM/GFs, and the IO leadership, to make informed decisions which can help to solve problems in the implementation process (Box 6.1).

Box 6.1 The power of measuring results[1]

- If you do not measure results, you cannot tell success from failure.
- If you cannot see success, you cannot reward it.
- If you cannot reward success, you are probably rewarding failure.
- If you cannot see success, you cannot learn from it.
- If you cannot recognize failure, you cannot correct it.
- If you can demonstrate results, you can win public support.

[1] Osborne and Gaebler (1992)

Collecting and analysing information takes up time and resources, and one should therefore be careful not to collect more information than necessary. The authors have aimed at designing a system which is simple and practical.

The day-to-day monitoring by the group members and leaders and by the IO staff is important. But one should be aware that IO staff collecting information related to the quality of their own work cannot be impartial – they may have an interest in making the project look better than is really the case. It is difficult for anyone to be fully objective about the standard of his or her own performance. The knowledge that the work is subject to third-party quality control will in itself help to mitigate any intentional or unintentional bias in the data collection and in the interpretation of analyses.

Monitoring versus quality control

In RIPAT a distinction is made between monitoring and quality control. The information related to monitoring is collected during project implementation by the sub-committee members, the group leaders, and the PMs/GFs, whereas the information used for quality control is collected by quality controllers (QCs). To ensure impartiality, the QCs should not be involved in the project implementation.

The quality control should ideally be carried out by a separate organization that has successfully implemented RIPAT or RIPAT-like projects (for example, RECODA in Arusha (www.recodatz.org) or World Vision Tanzania), or (less optimally) by a separate department

within the IO which is neither involved in the implementation nor in close contact with the implementation staff.

The monitoring and quality control must be well planned and structured in order to capture the relevant information at the right time. Below, we provide some tools for both data collection processes. First, we describe the monitoring activities.

Systematic monitoring

In this section we provide an example of how the groups and the GFs/PM can monitor activities over the project period, and can closely follow the status and progress of the group.

It is important to create ownership of the monitoring activities among the groups. In facilitating this activity, the GFs should stress that monitoring is certainly not just a task they have to do to please the IO or the donor, but that the information is for their own benefit – for the group to discuss and utilize in planning their activities. The group members must be involved in assessing the progress of the group, and should discuss any need for necessary remedial action based on the information gathered. Monitoring should also be relevant to the ultimate goal of the IO. In WV children are the main focus, and their needs should be deliberately targeted by the technologies introduced.

At the quarterly coordination meetings, the three group leaders are expected to provide a report on the group progress to all the other group leaders and to the village leaders, including information concerning group attendance rate, adoption of technologies among the individual group members, and progress on the group field(s) (see Step 11 in Chapter 5). This group report is prepared on the basis of the group's own monitoring activities, which are closely supervised by the GF.

Information on the group level

The group has a book in which the secretary records group data. The group secretary should keep track of the attendance rate and of group membership, including dropouts and newcomers. (Dropouts are members who have left the group for any reason, e.g. death, moving, personal reasons, or expelled for failure to contribute in accordance with the constitution.) At each group meeting, the attendance of each individual group member is registered in the book, and the attendance rate is calculated.

X: Number of members present at the group meeting today

Y: Number of active members in the group (members who are considered by the group to be members, as of today). This is not just the number of people present during today's group meeting, as some may be absent for important reasons.

Attendance rate at the meeting: (X/Y * 100) = _____%

The average monthly and quarterly attendance rates are calculated from these data. The progress at the group field(s), e.g. the number of banana stools planted and the number of bunches harvested, should be recorded in the same way as information from individual farms (see the examples of sheets for data collection).

Group facilitation quality

Monitoring and recording the quality of the group facilitation is an important task, but also a rather sensitive one. It should be done by the groups themselves. Naturally the GFs cannot be involved in recording the evaluations of their own work; the GFs must instruct the group leaders on *how* to register these data, but the data should not be available for the GFs to see. Apart from the group leaders, only the Programme Leader (PL) at the IO and the third-party QCs (see below) should have access to the book containing the information on the GF performance.

As explained earlier in this manual, RIPAT groups normally meet weekly, though during very busy periods they may meet twice per week. At the beginning of the project, the GFs are scheduled to visit the groups weekly, but later on in the project, as the group matures, the GF is not required so often. After each group meeting, the three group leaders note the following information in their book, or on separate sheets provided by the IO:

1. Was the GF scheduled to come today?
   ☐ yes
   ☐ no (if no – go to question 8)
2. Did he/she come?
   ☐ yes – came on time
   ☐ yes – but arrived late (if delayed by more than half an hour)
   ☐ no, he/she did not come
3. If the GF was present:
   Name of today's GF_____
4. Number of hours with group: _____hrs
5. Did he/she recap the last session? ☐ yes
   ☐ no
6. The presentation of today's subject was
   ☐ very clear/understandable
   ☐ fairly clear/understandable
   ☐ not clear/understandable
7. Did he/she set an assignment and/or indicate the next topic to be covered or step to be taken?
   ☐ yes☐ no
8. Was the local EO present at today's meeting?
   ☐ yes
   ☐ no

The group leaders should be prepared to show this information to the QCs and the PL at the IO, but not to the GFs/PM (see section B below).

Information on adoption

The monitoring of the adoption of the improved farming methods among the individual farmers is done periodically over the project period. The data are collected by the members of the sub-committees, working under close supervision by the GF (see Chapter 5, Box 5.6). A separate sheet should be used for each technology to capture the most essential information (Table 6.1). The examples below of data collection sheets are not blueprints which can fit into any RIPAT project; they are examples which must be adjusted to the individual RIPAT project.

Table 6.1 An example of when to collect adoption data from groups and individuals over the three-year project period

The information on the adoption of the specific technologies is recorded on specific, appropriately-named sheets as shown in the plan, e.g. GB, B, CA, C, L1, L2.

Monitoring plan

	Year 1				Year 2				Year 3			
Activity	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Group field(s), e.g. banana, conservation agriculture, seed multiplication		GB		GB		GB		GB		GB		GB
Individual farmers Banana	B	B		B		B		B		B		B
Conservation Agriculture	CA		CA		CA		CA		CA		CA	
Crops such as cassava, sweet potato, lablab, pigeon peas	C	C		C		C		C		C		C
Livestock (e.g. improved breed of goats L1)	L1		L1		L1		L1		L1		L1	
Poultry	L2		L2		L2		L2		L2		L2	

Examples of [B] and [L1] sheets are shown in Tables 6.2 and 6.3. Other sheets ([CA], [L2], [C]) are provided in Appendix 4E. The information on the sheets is collected at the group meeting by the sub-committee members for the particular technology, working under the close supervision of the GFs. The sub-committee members and the GFs also make visits to individual group members for general supervision and follow-up, and also to make spot checks on the self-reported data submitted by the group members concerned.

Table 6.2 Banana [B] monitoring sheet (adoption by individual group members)

Name of village …… Name of group …….. Quarter ……..							
	Name of group member	No. of improved variety banana suckers received from the project	No. of improved variety banana stools established on own farm	No. of holes prepared on own farm but not yet planted	No. of suckers given to others (non-RIPAT farmers)	No. of other farmers provided with suckers	No. of bunches harvested on own farm
1							
2							
3							
4							
5							
…							
30							
Total							

Table 6.3 Goats [L1] monitoring sheet (adoption by individual group members)

		Name of group		Quarter.....
	Name of group member	Has the farmer constructed an improved type of goat shed? (Yes/No)	Has the farmer received female offspring of an improved strain of goat from the solidarity chain? (Yes/No)	Is the farmer using the zero grazing production method? (Yes/No)
1				
2				
3				
4				
5				
…				
30				
Total				

Quality control

Below we provide a structure for including third-party quality control in a RIPAT project. The third-party quality control is carried out by experienced and independent Quality Controllers (QCs). Their role is somewhat like that of an auditor – making spot checks to ensure that the records reflect reality. The QC does not check all the elements of the project, only the key issues regarded as crucial for evaluating whether the implementation is according to RIPAT standards. The sheets below are divided into:

1. Information collected from each of the 16 groups in the project
2. Information collected on the project level

The QCs visit the groups at fixed intervals to collect key information on project progress using the check-lists below.

Information on the group level

A large part of the information will be provided by the three group leaders, who keep the information on attendance, progress on group activities, and adoption of technologies by individual members in the group book and/or on simple data sheets (as explained above in the section on monitoring). The QC collects the summarized data from the groups, e.g. average attendances over the period and number of farmers adopting the various technologies in the basket of options. However, the QC should also make a few spot checks at the farms of randomly-selected group members in order to verify the self-reported data on adoption. The QC should also interview the group leaders and the PM/GFs, and collect other information from the IO as necessary.

The QC checks the group book and extracts the information on the GFs' facilitation, then makes an overall judgment of their work as being adequate or not adequate. In the latter case, follow-up will be necessary.

For the GFs' facilitation to be characterized as 'adequate', the GFs should:

- always visit the groups as promised/scheduled
- not be late for more than one out of four group visits
- always make a recap of the last session and indicate what will be covered next
- not have the facilitation evaluated as 'not clear/understandable' at any time

Information on the project level

This information is primarily obtained by the QCs from the PM, who keeps attendance records of group leaders, village leaders, EOs, and the DPC when they participate in the quarterly coordination meetings, as well as other information on the project level.

How to use the information

Ideally the answers should be 'yes' to all the 'yes/no' questions in the questionnaires below used in the seven quality checks over the three-year project period. If an answer is 'no', the QC collects information on why the particular activity or project status was not up to the standard required or as expected, and notes down the explanations in his/her notebook.

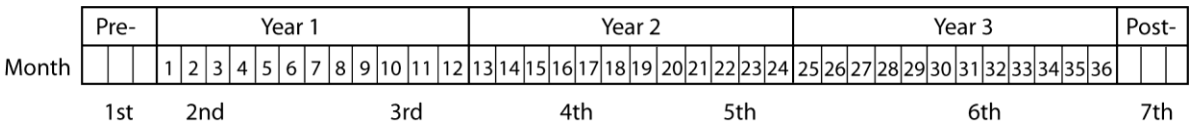
After each quality control visit, the QC reports back to the IO. The questions that have 'no' answers recorded by the QC are highlighted, and possible corrective action is discussed with the IO. At the next monitoring visit, the OC should follow up on the corrective actions made by the IO.

If, for example, the average group attendance rate over the period has been below 70%, and the GFs' facilitation is evaluated as 'not adequate', then the QC should ask the group leaders about possible reasons and note these down. However, the QC should not provide any advice or give orders to either the group leaders or the GFs/PM. The QC's job is to provide a full, objective report together with a record of all observations to the PL at the IO, and to discuss appropriate action with the IO for following up on problems and on lessons learned.

The three-year project implementation period includes a recommended total of seven quality control visits, and the QC will record the information using a number of questionnaires.

The timeline for the seven scheduled quality checks over the three-year project period is as follows:

Before project launch, the QC must check that the project preparation has been of good quality and that the process has involved farmers, experts, and the local government authorities (LGAs). The project should be well described in the appropriate documents, and the collaboration with the district authorities – including how the EOs will be involved – should be defined in an MoU.



The way in which each of the seven quality checks should be carried out, and the information to be collected, is summarized in the forms below. These QC forms could be in the form of hard copies but will preferably be in electronic form.

1st quality check: Before project launch
(only collected on project level (for all groups)

When: Before the project is launched

How: The QC interviews the PL/PM, scrutinizes documents such as meeting minutes, situation reports, PD, logical framework approach(LFA), DIP, MoU, etc.

Project name …….
QC's name: …….

1. District representative participated in the situation analysis (visited at least 50% of the assessed villages)	☐ yes ☐ no
2. EOs participated in the situation analysis (visited at least 50% of the assessed villages)	☐ yes ☐ no
3. PAP meeting conducted (to agree on BO)	☐ yes ☐ no
4. PAP meeting involved experts, LGA, EOs (at least two of the three)	☐ yes ☐ no
5. DPC appointed	☐ yes ☐ no
6. MoU signed between District & IO on collaboration, incl. involvement of EO	☐ yes ☐ no
7. PD, LFA, DIP available (should all be available)	☐ yes ☐ no
8. The GFs appointed to the project are trained in the RIPAT approach and have passed the test	☐ yes ☐ no

2nd quality check
Information collected from each group

When: 2-3 months after project start

QC's name: …….	Project name ……. Group name ……. Date ……..

1. Group member statistics:
   Number of members enrolled in project at group formation:
   Number of men ___ Number of women ___
   Total ___
2. Active members
   Number of men ___ Number of women ___
   Total ___
3. Number of children < 5 years old in targeted HH ___
4. Number of children > 5 years old in targeted HH ___
5. Number of drop-outs since project start ___
6. Number of newcomers since project start ___
7. Average attendance record over period % ___

Specific issues

8. The VA involved all LGAs (district, ward, and village) ☐ yes ☐ no
9. Adequate selection criteria applied at VA as per the RIPAT manual ☐ yes ☐ no
10. Contract between group and IO on attendance rate, repayments, and solidarity chain in place ☐ yes ☐ no
11. The three temporary (3 months) leaders elected ☐ yes ☐ no
12. Secret ballot used as per the RIPAT manual ☐ yes ☐ no
13. Formulation of group constitution in progress ☐ yes ☐ no
14. Obligatory rules in the constitution as per the RIPAT manual have been communicated ☐ yes ☐ no
15. The group has acquired a group field or group fields ☐ yes ☐ no
16. The group fields are considered adequate for the BO ☐ yes ☐ no
17. A contract has been signed between land owner and group, and a copy has been lodged at the village government office ☐ yes ☐ no
18. The group has acquired a copy of the village by-laws ☐ yes ☐ no
19. The quality of the group facilitation over the reporting period has been ☐ adequate ☐ not adequate (follow-up needed)
20. Number of times the EO has visited the group over the reporting period ____

From the group monitoring sheets kept by the group secretary (e.g. [B] or [L1]), the QC collects the following information (as relevant for the BO and the timeline of the project). These data function as the baseline for recording technology adoption by individuals.

21. Technology 1: Number of farmers practising ___
22. Technology 2: Number of farmers practising ___
23. Technology 3: Number of farmers practising ___
24. Technology 4: Number of farmers practising ___
25. …..

3rd quality check
Information collected from each group

When: 9-10 months after project start

QC's name: …….	Project name …….. Group name …… Date ……..

1. Active members (as of today, see definition):
   Number of men ___
   Number of women ___
   Total ___
2. Number of drop-outs since last QC visit ___
3. Number of newcomers since last QC visit ___
4. Average attendance record over period % ___

5. Group constitution completed ☐ yes ☐ no
6. Group has acquired a copy of the village by-laws ☐ yes ☐ no
7. Village by-laws have been discussed at group meetings ☐ yes ☐ no
8. The three permanent leaders have been elected ☐ yes ☐ no
9. Secret ballot used as per the RIPAT manual ☐ yes ☐ no
10. The village authorities were present during the election process ☐ yes ☐ no
11. Chairman: temporary re-elected ☐ new person elected ☐
12. Secretary: temporary re-elected ☐ new person elected ☐
13. Treasurer: temporary re-elected ☐ new person elected ☐

Group Activities (as relevant to specific BO):

14. Solidarity chain for animals has started
    (group has identified host farmers, animals provided to group) ☐ yes ☐ no
15. The group has established sub-committees related to the BO ☐ yes ☐ no
16. Number of sub-committees established in the group ___
17. Input for individual farmers has been supplied as per individual
    request (e.g. seeds, planting materials, agro-inputs, cock birds) ☐ yes ☐ no
18. The input arrived at an appropriate time
    (allowing for timely planting/application, etc.) ☐ yes ☐ no
19. Farmers have paid the first part of the cost up front as per agreement ☐ yes ☐ no
20. Trials have been established at group demonstration farm(s) ☐ yes ☐ no

21. The quality of the group facilitation over the reporting period has been
    ☐ adequate
    ☐ not adequate (follow-up needed)
22. Number of times the EO has visited the group over the reporting period ____

From the group monitoring sheets kept by the group secretary (e.g. [B] or [L1] the QC collects the following information (as relevant for the BO and the time line of the project).

23. Technology 1: Number of farmers practising ___
24. Technology 2: Number of farmers practising ___
25. Technology 3: Number of farmers practising ___
26. Technology 4: Number of farmers practising ___
27. ……

Group plot

28. For the main technologies on group plot, e.g. banana:
    Number of banana stools ___
    Number of bunches harvested ___
29. ….

II) Information on quarterly meeting

Quarterly project coordination meetings:

1. The quarterly coordination meetings have been held ☐ yes ☐ no
2. The average attendance rate of group leaders (%) ___
3. The average attendance rate of village leaders (%) ___
4. The average attendance rate of EOs ___
5. The average attendance rate of the DPC ___
6. Training of the group leaders in financial management was carried out at least once ☐ yes ☐ no

4th quality check
Information collected from each group

When: 15-16 months after project start

QC's name: …….	Project name ……. Group name ……. Date ……..

1. Active members (as of today, see definition):
   Number of men ___
   Number of women ___
   Total ___
2. Number of drop-outs since last QC visit ___
3. Number of newcomers since last QC visit ___
4. Average attendance record over period % ___

5. Technical LFs have been identified by the group members ☐ yes ☐ no
6. Number of LFs identified in the group ____
7. Number of children benefiting from BO ____

8. The quality of the group facilitation over the reporting period has been
   ☐ adequate
   ☐ not adequate (follow-up needed)
9. Number of times the EO has visited the group over the reporting period ___

From the group monitoring sheets kept by the group secretary (e.g. [B] or [L1]), the QC collects the following information (as relevant for the BO and the timeline of the project).

10. Technology 1: Number of farmers practising ___
11. Technology 2: Number of farmers practising ___
12. Technology 3: Number of farmers practising ___
13. Technology 4: Number of farmers practising ___
14. ……..

Group plot

15. (For the main technology on group plot, e.g. banana):
    - number of banana stools ___
    - number of bunches harvested ___
16. ……..

II) Information on quarterly meeting

Quarterly project coordination meetings:

1.	The quarterly coordination meetings have been held	☐ yes ☐ no
2.	The average attendance rate of group leaders (%)	___
3.	The average attendance rate of village leaders (%)	___
4.	The average attendance rate of EOs	___
5.	The average attendance rate of the DPC	___
6.	Training the group leaders in financial management carried out	☐ yes ☐ no

Other issues on project level

7.	The technical LFs have received additional training (normally 3-4 days' specific training for all LFs in the project)	☐ yes ☐ no
8.	The EOs have been trained (together with the technical LFs)	☐ yes ☐ no
9.	First Field Day has taken place	☐ yes ☐ no

5th quality check
Information collected from each group

When: 21-22 months after project start

QC's name: …….	Project name …….
	Group name ……
	Date ……..

1. Active members (as of today, see definition):
   Number of men ___
   Number of women ___
   Total ___
2. Number of drop-outs since last QC visit ___
3. Number of newcomers since last QC visit ___
4. Average attendance record over period % ___

5. Has the group made any changes to the group constitution? ☐ yes ☐ no
6. Election procedure for group leaders carried out ☐ yes ☐ no
7. Secret ballot used as per RIPAT manual ☐ yes ☐ no
8. The village authorities were present during election process ☐ yes ☐ no
9. Chairman: re-elected ☐ new person elected ☐
10. Secretary: re-elected ☐ new person elected ☐
11. Treasurer: re-elected ☐ new person elected ☐

12. The quality of the group facilitation over the reporting period has been
    ☐ adequate
    ☐ not adequate (follow-up needed)
13. Number of times the EO has visited the group over the reporting period ___

From the group monitoring sheets kept by the group secretary (e.g. [B] or [L1]), the QC collects the following information (as relevant for the BO and the timeline of the project).

14. Technology 1: Number of farmers practising ___
15. Technology 2: Number of farmers practising ___
16. Technology 3: Number of farmers practising ___
17. Technology 4: Number of farmers practising ___

Group plot

18. For main technologies on group plot, e.g. banana:
    – number of banana stools ___
    – number of bunches harvested ___
19. …….

II) Information on quarterly meeting

Quarterly project coordination meetings:

1.	The quarterly coordination meetings have been held	☐ yes ☐ no
2.	The average attendance rate of group leaders (%)	___
3.	The average attendance rate of village leaders (%)	___
4.	The average attendance rate of EOs	___
5.	The average attendance rate of the DPC	___
6.	Training the group leaders in financial management carried out	☐ yes ☐ no
7.	Advocacy efforts made	☐ yes ☐ no

6th quality check
Information collected from each group

When: 30-31 months after project start

QC's name: …….	Project name …….
	Group name …….
	Date ……..

1. Active members (as of today, see definition):
   Number of men ___
   Number of women ___
   Total ___
2. Number of drop-outs since last QC visit ___
3. Number of newcomers since last QC visit ___
4. Average attendance record over period % ___
5. Number of children represented in the group ___
6. Number of youths in the group ___

7. Spreading LFs have been identified by the group members ☐ yes ☐ no
8. Number of spreading LFs selected in the group ____
9. Election procedure for group leaders carried out ☐ yes ☐ no
10. Secret ballot used as per RIPAT manual ☐ yes ☐ no
11. The village authorities were present during the election process ☐ yes ☐ no
12. Chairman: re-elected ☐ new person elected ☐
13. Secretary: re-elected ☐ new person elected ☐
14. Treasurer: re-elected ☐ new person elected ☐

15. The quality of the group facilitation over the reporting period has been
    ☐ adequate
    ☐ not adequate (follow-up needed)
16. Number of times the EO has visited the group over the reporting period ____

From the group monitoring sheets kept by the group secretary (e.g. [B] or [L1]), the QC collects the following information (as relevant for the BO and the timeline of the project).

Individual

17. Technology 1: Number of farmers practising ___
18. Technology 2: Number of farmers practising ___
19. Technology 3: Number of farmers practising ___
20. Technology 4: Number of farmers practising ___
21. …….

<u>Group plot</u>

22. For the main technologies on group plot, e.g. banana:
    - number of banana stools ___
    - number of bunches harvested ___
23. …….

II) Information on quarterly meeting

Quarterly project coordination meetings:

1.	The quarterly coordination meetings have been held	☐ yes ☐ no
2.	The average attendance rate of group leaders (%)	___
3.	The average attendance rate of village leaders (%)	___
4.	The average attendance rate of EOs	___
5.	The average attendance rate of the DPC	___
6.	Training the group leaders on financial management was carried out	☐ yes ☐ no

Other issues on project level

7.	Date for graduation has been announced to the groups	☐ yes ☐ no
8.	The spreading LFs have received additional training (normally 1 week of specific training)	☐ yes ☐ no
9.	Were the EOs been trained together with the spreading LFs?	☐ yes ☐ no
10.	Spreading villages have been identified for up-scaling by LFs and EOs	☐ yes ☐ no
11.	Are there any advocacy issues that have been addressed?	☐ yes ☐ no

7th quality check (final)
Information collected from each group

When: 1-2 months after project completion

QC's name: …….	Project name …….. Group name ……. Date ……..

1. Did the group decide to continue working together as a group ☐ yes ☐ no
   If yes > proceed with question 2.
   If no > go to question 6

Group continues

2. Active members (as of today, see definition):
   Number of men ___
   Number of women ___
   Total ___
3. Average attendance record over period % ___
4. Number of group members who has left the group upon graduation ___
5. Did the leaving group members receive their share of the group wealth as per the RIPAT manual (group constitution)? ☐ yes ☐ no

Group has stopped

6. Was the group dissolution decided with a 2/3 majority or more? ☐ yes ☐ no
7. Statement of accounts drawn up ☐ yes ☐ no
8. Has the cash realized been distributed among group members as per the RIPAT manual/group constitution? ☐ yes ☐ no

From the group monitoring sheets kept by the group secretary (e.g. [B] or [L1]), the QC collects the following information (as relevant for the BO and the time line of the project).

9. Technology 1: Number of farmers practising ___
10. Technology 2: Number of farmers practising ___
11. Technology 3: Number of farmers practising ___
12. Technology 4: Number of farmers practising ___
13. …….

Group plot

14. For the ain technologies on the group plot, e.g. banana:
    Number of banana stools ___
    Number of bunches harvested ___
15. …….

II) Information on quarterly meeting

Quarterly project coordination meetings:

Has the group taken any steps towards formalizing an inter-group organization? ☐ yes ☐ no

Appendices

By

Vesterager, J.M., Ringo, D.E., Maguzu, C. W., and Ng'ang'a, J.N.

APPENDIX 1: Election procedure

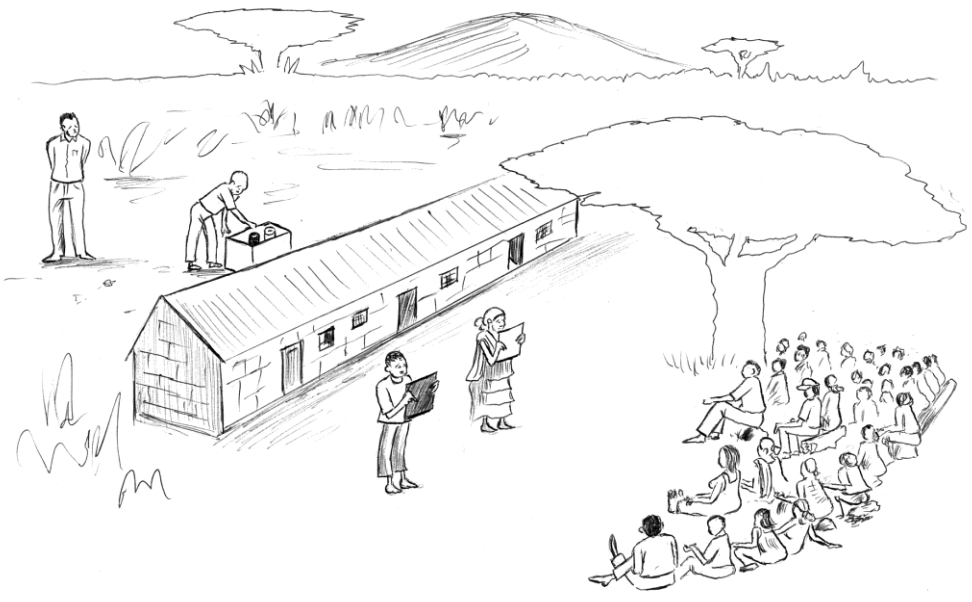
The GF prepares the members for the election and explains the procedure. For elections with two candidates, he/she brings a cardboard box, washers, and two tins (e.g. empty paint tins) to the group meeting. (For elections with more candidates, see below.) One tin is painted white and one is painted black. The tins must have a lid with a slit large enough to allow the washers to pass through (like a moneybox). The GF also brings two matching cards, one black and one white. At the meeting, each member is provided with one small washer.

The two candidates are each given one of the cards. The matching tins are placed in the cardboard box behind a screen (or inside a building) some distance from the gathering, and sheltered from the view of members and passers-by. Each person goes in turn behind the screen (or into the building) and, hidden from the other members but under the eye of the GF, deposits the washer in the tin of his/her choice. The tins are placed in the bottom of the cardboard box, so that no one – not even the GF – can detect which tin the washer is deposited in.

When all of the members have voted, the GF counts out the votes in front of the members by removing the washers from each tin. He/she ensures that no additional washers have been put into the tins – the total should equal the number of members voting. The candidate with the most votes is the winner. The procedure is repeated for each of the three posts.

At the end of the elections, the GF announces the names of the three elected leaders and that they are elected for one year from that time. A year later, the same election procedures will be applied. The leaders may be re-elected, or they may be replaced by others using the same democratic election procedure.

This example is based on an election with two candidates for each position. If there are three candidates, then the GF should include an additional tin and an additional card of a different colour.



Note: This appendix is adapted from the VSLA manual.

VSLA (no date) *Village savings and loan associations (VSLAs). Field officer training guide*, Version 1.03, Solingen: VSL Associates. Available from Hugh Allen: hugh@vsla.net

APPENDIX 2: Template for drawing up a group constitution

Some of the articles should be mandatory for a RIPAT project; these appear *in italic*.

Item	*Issues to be discussed and included*
1. Name of group	
2. Contacts	
3. Meaning of the name	
4. Catchphrase of the group	
5. Area of operation for group activities	
6. Group patron	
7. Overall goal Specific objective(s)	*The objective of the RIPAT group is to secure improved livelihoods and greater self-support for its members and in particular for carers of children among the members.* *RIPAT group members are to assist other people in the area outside the group with inputs and advice to help them make similar improvements in their livelihoods.* _____ _____ _____ _____
8. Membership 8.1. Obligations of group members	*In RIPAT, all participating farmers are responsible for training three other non-RIPAT farmers in the community in what they have learned and adopted themselves. If, for example, banana is adopted as a crop by a farmer, the farmer must also pass on three times the number of banana suckers received to other non-RIPAT farmers; and for livestock such as goats and pigs, the farmer must pass on the first female offspring to other farmers in the group as specified in the solidarity chain agreement with the IO.* Other obligations: _____ _____ _____ _____ _____ _____

Item	*Issues to be discussed and included*
8.2. Procedures for terminating membership and receiving new members into the group within the project period	a) Members joining:_____ _____ _____ _____ b) Expelling a member: _____ _____ _____ _____ c) *Members leaving* *Should an individual group member decide to leave the group within the project period, that person will not receive any of the accumulated group wealth and assets. The member must clear his/her account and pay any outstanding amounts for the inputs received (seeds, tools, animals, etc.) to the IO.*
8.3. Termination of the group within the project period	*Should the group be dissolved by the IO, or by its own decision within the project period, all tools and equipment received free of charge must be returned to the IO. Individual members should clear their accounts in accordance with paragraph 8.2.c.*
8.4. Sharing of group profits within the project period	*During the project implementation period, no dividends from group earnings can be paid out to members.*
9. Leadership elections	*Elections of leaders must be democratic, and voting must be by secret ballot (see Appendix 1 for the voting procedure). At the start of the project, temporary leaders are elected for a period of three months. After three months, new leaders are elected. Any of the temporary leaders may be re-elected if the group members deem them worthy, but using the full democratic procedures laid down in Appendix 1. New elections should be held every 12 months. The group should decide for how many terms an individual should be allowed to continue in a leadership post.*
9.1. Roles of leaders	The responsibilities of the group chairperson include: • To call the meeting to order • To announce the agenda and lead discussions • To ensure that the meetings follow proper procedures and that the constitution is followed and respected • The maintain discipline and levy fines as needed • To facilitate discussions and to ensure that everyone's views are listened to • To resolve conflicts

Item	*Issues to be discussed and included*
9.1. Continued	• To represent the group to outsiders and non-members, including local government officials • To act as steward for the group's resources _____ _____ _____ The responsibilities of the group secretary include: • To arrange the time and place for meetings and give notice of them • To take the minutes of meetings • To read out the minutes of the previous meeting • To keep all group records • To write letters and reports on behalf of the group • To assist and support the chairperson in keeping order at meetings • To work together with the chairperson in ensuring that the group constitution is followed _____ _____ _____ The responsibilities of the group treasurer include: • To keep all the financial records of the group • To keep records of individual financial transactions • To keep records of group assets • To prepare financial reports • To maintain the group bank account • To read the financial report to the group when necessary • To advise the group on the best ways to use their funds _____ _____ _____
9.2. Group sub-committees	The group will establish sub-committees according to the agricultural technologies adopted by the group members. Each sub-committee elects a leader, who reports to the group chairperson. The role of the sub-committee members is to follow up on technologies, the sales of produce, and the fulfilment of commitments to make payments for inputs, including payments made through the solidarity chain. Sub-committees: _____ _____ _____ _____ _____ _____

Item	*Issues to be discussed and included*
10. Main activities of the group and meeting schedule	Main activities: _____ _____ _____ _____ Place and time for meetings: _____ _____ _____ _____ _____
11. Disciplinary sanctions against group members	Penalties/fines: _____ _____ _____ _____
12. Amendments to the constitution	*The constitution can be amended at any time if two-thirds of the members agree. The italicized paragraphs can be changed by a two-thirds majority vote after the end of the project and after payment has been made to members leaving in accordance with paragraph 16.*
13. Group accounts: Income and expenditure	*At the project start, the group will set up a group account for the group funds. The group account is managed by the elected chairman, secretary, and treasurer. They are responsible for filling out the cash book and for drawing up a monthly balance sheet. Group income and expenses should be clearly recorded in the accounts. The accounts are reported monthly to the group and quarterly to the IO for monitoring. Group income comes from the sale of products, from fines, and from membership fees in the event that the group has decided to charge for membership.* *During the project period, group funds can be put into a bank or a local SACCO approved by the IO, or used for expanding group activities. After two years, the group can invest in real estate if two-thirds of the members and the IO agree. The IO's agreement will depend on the group having* • *a good attendance record* • *good leadership, and a record of having followed their constitution* • *regular income and good record-keeping*
14. Termination of the group, or individuals leaving the group, upon project completion	*At the end of a RIPAT project period, a statement of accounts must be prepared. On the date of project completion, all outstanding accounts and debts should be cleared. The group can either be liquidated as described in paragraph 15 or it can continue as a cooperative after those who want to leave have received payment of their share of the funds in accordance with paragraph 16.*

Item	*Issues to be discussed and included*
15. Liquidation of the group assets and liabilities	*Liquidation of the group assets will take place upon project completion (normally after three years) if more than two- thirds of the members vote for this.* *If the IO has provided tools/equipment free of charge to the group during the project period (e.g. rippers, sprayers, diggers, and small tools) these must be returned to the IO. No payment will be made by the IO for returned tools.* *The group assets will be disposed of and the money realized will be distributed among the group members. Group assets are the following:* *e) The cash in the group account* *f) Any group fields established on rented land (normally a five-year contract). The field will if possible be rented out for the remaining time, e.g. a two-year contract period, to whoever will pay the highest price* *g) Any land owned by the group. Such land must be sold at the highest price obtainable* *h) Other assets* *The cash realized from items a–d will be divided evenly among the group members, e.g. 1/30 share per member if there are 30 group members, at the time of project completion.*
16. Payment of members leaving the group if the group decides to continue as a cooperative after the end of the project	*Individual group members may wish to leave the group on graduation and continue to implement what they have learned on their own farms, or in other groups. A group member who leaves will get two-thirds of his/her share of the accumulated wealth of the group. The group's wealth is calculated as a total of the following:* *a) The cash in the group account (according to the account statement)* *b) The estimated net value of the group field(s), whether rented or owned by the group; in the case of a rented field, the value is in the remaining years of the lease. The value will be assessed by the group themselves. If the group cannot agree unanimously on a value and if a group member demands it, the IO will arrange for an assessment of the value by an independent third-party expert. The cost of this valuation will be covered by the group* *c) The value of other assets as estimated by the group. If unanimous agreement is not reached, the procedure above must be used* *d) Group debt, which must be deducted from the assets*

Item	*Issues to be discussed and included*
16. *Continued*	Example: In a group of 30 members, 5 members wish to leave after graduation, whereas the remaining 25 want to continue as a cooperative. The payments to the members leaving are calculated as follows. Cash in the group account (according to the account statement): TZS 500,000 Income from the group field (sale/renting out for the remainder of the lease): TZS 1,000,000 Other assets: TZS 500,000 *Total group wealth:* *TZS 2,000,000* Two-thirds of the accumulated wealth will form the basis for calculating the shares. Each leaving group member will thus receive: 2,000,000 x 2/3 x 1/30 = TZS 44,444. Hence, the group will have to pay out 5 x 44,444 = TZS 222,220. This is to be paid no later than 60 days after written requests have been given to the chairman by the group members leaving. (If less than two-thirds of the members had wanted to continue as a cooperative, the group assets would have been liquidated, and all 30 members would in this theoretical case have received 2,000,000 / 30 = TZS 66,666)
17. New members joining the cooperative after the end of the RIPAT project	Fees/ conditions: _____ _____ _____ _____ _____ _____

APPENDIX 3: Technical manuals and resources

The present manual is not a stand-alone resource book. The implementing organization should use this RIPAT manual with together with detailed technical manuals for the specific agricultural technologies and activities to be included in a specific RIPAT project. Below is a list of some of the resources which might be useful.

Available from:

Ministry of Agriculture Food Security and Cooperatives, Dar es Salaam, Tanzania

Kanyeka, E., Kamala, R., Kasuga, R. (2007) *Improved agricultural technologies recommended in Tanzania*. Dar es Salaam: Department of Research and Training, Ministry of Agriculture Food Security and Cooperatives

Available from:

World Vision (http://www.wvi.org/**)**

- Citizen voice and action: 'Project model'; 'Field guide'
- Child protection advocacy: 'Project model'; 'Theory of change'
- Local value chain development: 'Project model'
- 'Literacy boost: Creating strong literacy foundations for early grade learners'
- '7-11 Field guide, A start-up guide to implement the World Vision health strategy. 7 Core Interventions for the mother; 11 core interventions for the child'.
- 'Involving grandmothers to promote child nutrition, health and development'

Empowered World View:

Muvengi, Daniel (2016). 'Towards a Biblically empowered world view programming approach: The World Vision Tanzania experience case study', *Interdisciplinary journal of best practices in global development:* Vol. 2, Article 3. Available at: http://knowledge.e.southern.edu/ijbpgd/vol2/iss1/3

Available from:

Village Savings and Loan Associates

The *VSL programme guide for field officers* and the *VSL programme guide for village agents* are available for free download at http://vsla.net/home

Available from:

Sustainet E.A.

Some simplified technical manuals are available for free download at: http://www.sustainetea.org/downloads.html

For example

- *Dairy goat improvements*
- *Soil and water conservation*
- *Conservation agriculture*
- *Integrated agriculture system*
- *Nine-seeded hole technique*

Available from:

FAO (Food and Agriculture Organization of the United Nations)

Better Farming Series – for example:

- *Sheep and goat breeding* – Better Farming Series 12
- *Keeping chickens* – Better Farming Series 13
- *Roots and tubers* – Better Farming Series 16
- *Bananas* – Better Farming Series 18
- *Use of cassava and sweet potatoes in animal feeding* – Better Farming Series 46

Other resources from FAO include, for example,

- *Conservation agriculture. A manual for farmers and extension workers in Africa.*
- *A study guide for farmer field schools and community-based study groups. Soil and water conservation with a focus on water harvesting and soil moisture retention. Parts 1 and 2*
- *Nutrition Handbook for Community Mobilisers (FAO doc)*

Available from:

The Conservation Farming Unit in Zambia http://conservationagriculture.org

Some examples:

- *A guide for farmers: Conversion from ox ploughing to min-till ripping using the Magoye Ripper*.
- *The practice of conventional and conservation Agriculture in East and Southern Africa*.
- *Hoe CF – Land preparation and basal dressing*.

Available from:

Agromesia – Knowledge sharing for sustainable agricultural development

Agrodok – Popular series of 44 books on small-scale sustainable agriculture available at: http://www.agromisa.org/

For example:

- *Cultivation of soya and other legumes*
- *Goat keeping in the tropics / Pig keeping in the tropics*
- *Protection of stored grains and pulses*
- *Small-scale chicken production*
- *Soil fertility management*
- *Water harvesting and soil moisture retention*

Available from:

http://www.sustainableagriculturetraining.org/
Group Dynamics for Farmer Field School

Others:
On child nutrition.
Where there is no doctor: Chapter 11 nutrition: What to eat to be healthy
http://www.usadojo.com/pdf-files/where-no-doc-pdfs/no-doc-chapter-11.pdf

APPENDIX 4: Templates

Appendix 4a: Contract form for renting a group field

[IO logo]

CONTRACT FORM FOR RENTING A GROUP FIELD

Date…….

Village……..

Ward…….

District……..

Name of the group…….

We, the three leaders of the above-mentioned RIPAT group, on behalf of our fellow group members, hereby rent a field from ……..…on the conditions below:

The field will be used for RIPAT activities. The field size is …….acres. It is located in ……..village and……sub-village. This contract is for …..years (at least five years if the field is to be used for banana). The rent will be TZS…… per year. This contract may be renewed by agreement with the owner of the field. The field shall be used for agricultural activities only (demonstration, seed multiplication, crop production, etc.). The group will be responsible for the security and management of the field for the entire contract period. The owner of the field is not permitted to use the field for any purpose until the contract period ends and the field is given back to him/her. After the contract ends, any plantation on the field will become the property of the owner of the field. Within the project period, the lease of the field (with the standing crop) can be transferred to a third party for continued agricultural activities.

This contract is signed by:

1. Owner of the field

Name…….. Signature……. Date….....

2. Group chairperson

Name…….. Signature……. Date….....

3. Group secretary

Name…….. Signature……. Date….....

4. Group treasurer

Name…….. Signature……. Date….....

5. Witness

Name…….. Signature……. Date….....

6. Village chairperson and/or village executive officer

Name…….. Signature……. Date….....

7. Implementing organization

Name…….. Signature……. Date….....

Appendix 4b: Contract form regarding solidarity chain for animals

This contract applies to each group member who receives an animal from the initial stock of the improved breed. For group members receiving offspring of the initial stock, the group will prepare a simple contract between the group member and the group leaders.

[IO logo]

CONTRACT FORM REGARDING SOLIDARITY CHAIN FOR ANIMALS BETWEEN THE IMPLEMENTING ORGANIZATION AND THE GROUP LEADERS

Date……

Village……..

Ward……..

District……..

Name of the group…….

We, the three leaders of the above-mentioned RIPAT group, declare that we have received, on behalf of our fellow group members, two males and five females of …..….. (type) free of charge from…….…… ……...…(IO)

The two males and five females are supplied to the group as initial breeding stock. Offspring will be re-distributed among group members using a 'solidarity chain'. Only after having distributed ……female offspring to fellow group members will the female animal initially received become the property of the group member receiving it.

The following rules will apply:

1. Before receiving a female animal (whether initial breeding stock or offspring), the group member must have constructed housing for the animals according to project standards.
2. The first …… female offspring must be given to fellow group members as designated by the group to be next in the solidarity chain. The original female animal received will remain the property of the group until the obligation has been fulfilled.

3. Members of the solidarity chain are required to report to the group on request on the condition of the animal(s) they have received and the status of the breeding programme. They are responsible for looking after the animal(s) at their own expense, including providing veterinary treatment. If an animal is lost or dies and the cause is established to be carelessness on the part of the solidarity chain member concerned, that person is required to replace the animal at his or her own expense, or pay the value of the animal to the group.

The following seven group members have been selected by the group to receive the initial stock of animals of the improved breed.

Group members receiving females

Name…….. Signature……. Date…....

Name…….. Signature……. Date…....

Name…….. Signature……. Date…....

Name…….. Signature……. Date…....

Name…….. Signature……. Date…....

Group members receiving males:

Name…….. Signature……. Date…....

Name…….. Signature……. Date…....

Group leaders:

Group chairperson

Name…….. Signature……. Date…....

Group secretary

Name…….. Signature……. Date…....

Group treasurer

Name…….. Signature……. Date…....

Village chairperson and/or village executive officer:

Name…….. Signature……. Date…....

Implementing organization

Name…….. Signature……. Date…....

Appendix 4c: Contract form for tools/equipment

[IO logo]

CONTRACT FORM FOR TOOLS/EQUIPMENT BETWEEN THE IMPLEMENTING ORGANIZATION AND THE GROUP LEADERS

Date…….

Village……..

Ward…….

District……..

Name of the group……..

We, the three leaders of the above-mentioned RIPAT group, declare that we have received on behalf of our fellow group members the following tools/ equipment: ……
……..……..…..
……..…..
……..…….free of charge from ……(IO).

The following rules will apply:

1. The group will be responsible for caring for the equipment and carrying out routine maintenance, and will select one or more people to look after the equipment.
2. The group leaders will ensure that the equipment will be made available equally to all group members.
3. If the group is dissolved before the end of the planned 3-year project period, the equipment must be returned to the Implementing Organization (IO). No payment will be made by the IO for returned equipment.
4. After 3 years, when the project ends and if the group continues as a cooperative, the equipment will remain available for use by the group and its members.
5. After 3 years, when the project ends and if the group decides to stop after graduation, the tools/equipment should be returned to the Implementing Organization (IO). No payment will be made by the IO for returned equipment.

This contract is signed by:

1. Group chairperson

Name…….. Signature……. Date…....

2. Group secretary

Name…….. Signature……. Date…....

3. Group treasurer

Name…….. Signature……. Date…....

4. Village chairperson and/or village executive officer

Name…….. Signature……. Date…....

5. Implementing organization

Name…….. Signature……. Date…....

Appendix 4d: Template for a memorandum of understanding

[IO logo] [District logo]

MEMORANDUM OF UNDERSTANDING (MoU)

between

_____ [insert name of IO]

and

_____ [insert name of District]

This MoU defines the general terms on which the signatory agencies or organizations will cooperate and, as such, does not constitute any financial obligation that will serve as a basis for expenditures.

1. PURPOSE & SCOPE

The purpose of this MoU is to clearly identify the roles and responsibilities of each party as they relate to the implementation of the RIPAT project.

RIPAT is an economic development intervention that aims to close the agricultural technology gap as a means of improving livelihoods and self-support among impoverished small-scale farmers in Tanzania.

For the farm families who participate directly in a RIPAT project, the objective is to improve the small-scale farming systems and hence to increase food security in the household and alleviate poverty – first for a limited number of farmers, but later through facilitated spreading to the wider community.

The present RIPAT project will target the following villages:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

…

x. _____

Two groups of farmers will be established in each village, each group being made up of 25-30 farmers.

A situation analysis has been completed in close collaboration with the District authorities, and this culminated in the development of the RIPAT project which is now ready to be launched. A project action plan for the specific area/villages has been developed with the participation of district representatives, and this includes a well-designed 'basket' of improved agricultural technology options which will be made available to the planned …… RIPAT groups over the project period.

The Implementing Organization (IO) expects that at the end of the project the district representatives – particularly the agricultural Extension Officers (EOs) – will take over responsibility for supervising the established groups and for continued spreading and scaling up so as to benefit the wider community.

2. RESPONSIBILITIES

A. The IO will:

1. in close collaboration with the local government authorities, i) carefully sensitize the communities to the potential for change and mobilize farmers to take charge of their own development, and ii) select farmers and establish …. farmer groups (two per village)
2. build good group leadership and build up the capacity of the group to enable the transfer of appropriate agricultural technologies through participatory demonstrations using experimental and reflective learning techniques
4. provide the required agro-inputs, tools/equipment, and group facilitation to the targeted farmers in accordance with the project proposal
5. integrate the RIPAT spreading component in the project by selecting and building up the capacity of lead farmers (LFs) and building up the capacity of government EOs
6. provide reports to the District on a quarterly basis and coordinate with the District Project Coordinator (DPC) for the RIPAT throughout the implementation.

B. The District Authorities will:

1. support the implementation of the project by identifying a RIPAT DPC who will be the point of communication at the district level. He/she should be available to participate in the quarterly project coordination meetings and to provide support and guidance
2. if necessary, assist in the enforcement of village by-laws that will support the sustainability of interventions
3. ensure that the RIPAT DPC and the government EOs participate in the ward and village meetings during the sensitization/mobilization process, including the Village Assembly in each village at which the group formation procedure is carried out
4. ensure that the EOs participate as much as possible in the weekly meetings of the RIPAT farmer groups, make follow-up visits to the groups when needed, and assist the lead farmers (LFs) in their task of spreading technologies to non-RIPAT households in the targeted communities
5. ensure that the EOs and the RIPAT DPC participate in the quarterly coordination meetings involving all ….groups
6. ensure that the EOs participate in the scaling up component, i.e. that they are trained together with project LFs in how to spread the improved technologies to additional villages.

3. PERIOD AND TERMINATION OF THIS AGREEMENT

A. The project period for this agreement is dd.mm.yyyy to dd.mm.yyyy

B. This agreement may be terminated by either party by written notice to the other party at least 30 days in advance of the effective date of the termination.

DATE AND SIGNATURES

On behalf of the Implementing Organization	On behalf of the District Authorities
_____	_____
Name	Name
Title	Title

Appendix 4e: Extra monitoring sheets for adoption data in groups

Monitoring sheet (adoption by individual group members)

Example: Poultry [L2]

S/N	Name of group member	No. of improved cock birds received from project	Has constructed a poultry house of improved design (1=yes, 0=no)	Uses vaccination (1=yes, 0=no)	Uses improved feed (1=yes, 0=no)
1					
2					
3					
4					
5					
…					
35					
total					

Monitoring sheet (adoption by individual group members)

Example: Crops [C]

S/N	Name of group member	Cultivating improved varieties of cassava (1=Yes, 0=No)	Cultivating improved varieties of sweet potato (1=Yes, 0=No)	Cultivating improved varieties of lablab (1=Yes, 0=No)	Cultivating improved varieties of pigeon pea (1=Yes, 0=No)	Cultivating improved varieties of maize (1=Yes, 0=No)
1						
2						
3						
4						
5						
…						
35						
Total						

APPENDIX 5: Acronyms and abbreviations

AP	area program
BO	basket of options
CA	conservation agriculture
DCMT	District Council Management Team
DED	District Executive Director
DIP	detailed implementation plan
DPC	District Project Coordinator
ED	Executive Director at the IO
EO	extension officer (agriculture)
FAO	Food and Agriculture Organization of the United Nations
FFS	Farmer Field School
GF	group facilitator
IO	implementing organization
LF	lead farmer
LFA	logical framework approach
LGA	local government authority
MoU	memorandum of understanding
NGO	non-governmental organization
PD	project document
PL	Programme Leader at the IO
PM	Project Manager at the IO
PRA	Participatory Rural Appraisal
QC	quality controller
RA	RECODA Academy
RAA	regional agricultural adviser
RAS	regional administrative secretary
RECODA	Research, Community and Organizational Development Associates
RIPAT	Rural Initiatives for Participatory Agricultural Transformation
SG	Savings Group
SACCO	Savings and Credit Cooperative
T&V	Training & Visiting
VA	Village Assembly
VSLA	village savings and loan association
WDC	Ward Development Committee
WVT	World Vision Tanzania

APPENDIX 6: Glossary

Key Concepts and agricultural terms in RIPAT

Concepts

Area Program An AP is a distinct geographical area where WV in partnership with local stakeholders work together over a time frame of often 10-15 years to improve the wellbeing of children through programmes involving multiple factors.

Capacity-building The process through which individuals, organizations and societies obtain, strengthen, and maintain their abilities to set and achieve their own development objectives over time.

Dryland farming Farming on non-irrigated land. Success is based on rainfall, moisture-conserving tillage, and drought-resistant crops.

Empowerment A gradual process through which people gain in self-confidence and feel more able to choose their own priorities and way forward.

Extension In this manual, extension is understood as a government service designed to 'extend' research-based knowledge and relevant technologies to the rural sector in order to improve the lives of farmers.

Facilitation Helping a group of people to achieve their aims through discussion, encouragement and support with planning and action.

Group dynamics The interactions that influence the attitudes and behaviour of people when they are grouped with others. Group dynamics concerns how groups form, their structure, their procedures, and how they function. It is often helpful for improving group dynamics to introduce games and exercises into group discussion.

Lead farmer Lead farmers (LFs) are individuals who, during the implementation period, have been identified as people who have developed as social entrepreneurs and agents for change. They are successful farmers from within the group who have grasped the knowledge provided through RIPAT training and have successfully implemented at least one RIPAT-facilitated technology.

Logical framework approach (LFA) A management tool used to improve the design of interventions, most often at the project level. It involves identifying strategic elements (inputs, outputs, outcomes, and impact) and their causal relationships, indicators, and the assumptions or risks that may influence success and failure. It thus facilitates planning, execution, and evaluation of a development intervention.

Local Market Facilitator (LMF) is a community representative trained to promote connections to markets by building up relationships, understanding markets, collecting and sharing market information, coordinating producers, etc.

Local Value Chain Development (LVCD) uses the value chain approach in a participatory way, helping vulnerable producers and farmers to analyse markets, gain information, build relationships, and act collectively to overcome market barriers and increase profits.

Mobilization Actions intended to encourage people to come together so as to support a certain idea, aimed at achieving a certain goal. It is also defined as an exciting process of

encouraging and supporting communities to analyse their own situations and to take steps to work together to make changes for the better.

Monitoring Periodic checking of progress to find out whether the standards and targets laid down in the plan are being achieved in practice. The information is used for the purpose of management and decision-making.

Objective tree A diagrammatic representation of the situation in the future once problems have been remedied, following a problem analysis, and showing a means-to-ends relationship.

Ownership When local people take control of and accept responsibility for issues that affect their own development.

Participatory rural appraisal (PRA) An approach which aims to incorporate the knowledge and opinions of rural people in the planning and management of development projects and programmes.

Problem analysis A structured investigation of the negative aspects of a situation in order to establish causes and their effects.

Problem tree A diagrammatic representation of a negative situation, showing a cause-effect relationship.

Producer Association (PA) is a confederation of several Producer Groups (between 5 and 30 PGs) in a defined geographical location (in most cases, within a village administrative boundary) established not only to achieve economies of scale but also to increase the members' collective bargaining power.

Producer Group (PG) is a group of farmers or other people (e.g. smallholders or livestock keepers) numbering between 10 and 30 who have voluntarily agreed to establish some value chains in response to market demand.

Sensitization An attempt to make oneself or others aware of and responsive to certain ideas, events, situations, or phenomena; creating an awareness of the present situation in order to encourage positive change in the future and readiness to act.

Solidarity chains In RIPAT, two types of solidarity chain are used. 1) Animal (goats, sheep and pigs). Each group is supplied with purebred female and male animals as initial improved breeding stock. Members pass on the first female offspring to others in the group in accordance with a list worked out by the group. Only after having passed on the female offspring to the next person on the list will the first female animal become the property of the group member receiving it. 2) Banana. Each farmer who adopts the improved banana technology is expected to give three times the number of banana suckers received through the project to other interested farmers in the community and to train them in improved cultivation techniques.

Sustainability The continuation of benefits from a development intervention after primary development assistance has been concluded; the probability of continued long-term benefits.

Target group The specific individuals or organizations for whose benefit the development intervention is undertaken.

Technology gap The gap between the farm production that is achieved with the agricultural technologies currently being used by farmers and the production that could be achieved. The farmers need access to better, currently-available technologies and to acquire the capacity to adjust them to local conditions. The gap is caused both by lack of knowledge of techniques and training in their use, and by lack of access to equipment and agricultural inputs for implementing better technologies.

Agricultural terms

Agro-pastoralism Dependence by households on a mix of agriculture and livestock herding for their livelihood.

Annual crop A crop that grows for only one season (or year) before dying, in contrast to a perennial crop, which grows for more than one season.

Banana (improved varieties in RIPAT) The improved banana varieties Grand Nain, Paaz, Chines, Williams, and Lakatan were tested and demonstrated for RIPAT. In some areas the local/indigenous variety Mshale was used for comparison. These improved banana varieties were selected and imported by the Tanzania Banana Coordinator for higher levels of production, food security, and sales, including exports. The improved banana varieties can be used for both cooking (plantain) and fruit, and have a wide range of tolerance of drought, lodging, and diseases.

Banana 'stools' Suckers spring up around the stem of the main plant forming a clump called a 'stool', the oldest sucker replacing the main plant when it fruits and dies; this process of succession continues indefinitely.

Banana suckers Offshoots taken from the base of the mother plant. Bananas are propagated (production of more plants) from suckers (or tissue culture). If the suckers are not removed they will compete with the mother plant and reduce yield.

Chaka hoe (Zambian) The 'chaka hoe' is promoted in conservation agriculture for reduced tillage as an alternative to the traditional hand hoe. It is used to till only the spots where seeds are to be placed, making permanent planting basins. It is a heavy hoe with an extra strong and long blade and a long handle that can be swung to reduce effort, thus making possible the preparation of basins in the dry season when soils can be hard. The basins are 20 cm deep and 30 cm long, and are spaced at 70 cm intervals along the row. The rows are 90 cm apart. Each year the basins are re-dug in exactly the same places as the year before.

Conservation agriculture (CA) In the RIPAT context, an agricultural method based on three principles that aims to produce high crop yields while reducing production costs, maintaining soil fertility, and conserving water. These principles are: 1) disturb the soil as little as possible (reduce tillage using chaka hoes or ripper), 2) keep the soil covered as much as possible (apply mulch and or cover crops), and 3) use inter-cropping and crop rotation.

Cover crops Crops used to cover and protect the soil surface in order to decrease erosion and shade the ground. A fast-growing plant should be used, usually a legume. In RIPAT the legumes lablab and mucuna are promoted as cover crops.

Crop rotation The growing of different crops, in recurring succession, on the same land, in order to preserve the productive capacity of the soil (avoiding depleting the soil of nutrients, and controlling weeds, diseases, and pests).

Intercropping Growing two or more crops in the same field at the same time, either mixed together or in rows or strips, e.g. pigeon pea and maize intercropping.

Legume Plants that are notable for their ability to fix atmospheric nitrogen biologically and their ability to improve soil fertility through nitrogen acquisition. They are important components in crop rotation and intercropping. The comparatively high protein content in the seeds and foliage makes legumes desirable for livestock and human consumption. In RIPAT, various legumes have been promoted, including lablab, mucuna, pigeon pea, soya bean, and cowpeas.

Mulch A layer of dead plant material such as dried grass, leaves, straw, and crop residues, left to cover the ground with the objectives of protecting the soil from erosion, aiding infiltration of rain water (reducing runoff), conserving moisture (reducing evaporation), and reducing the growth of weeds.

Perennial crop A crop that grows more or less indefinitely from year to year (e.g. banana).

Ripper An implement promoted in conservation agriculture for reduced tillage as an alternative to the traditional ox-drawn mouldboard plough. It consists of a frame with a long tine attached to it for breaking up compacted soil and hard pans and for making planting furrows. The ripped lines, usually spaced 75–90 cm apart, are dug as far as possible in the same places every year, with the soil in between remaining undisturbed.

Root crops A group of plants belonging to various families with tubers on the underground stems or the side roots. They are important staple foods in many tropical regions, being grown for starch. Root crops are primarily propagated from tubers and cuttings (parts of the stems). In RIPAT, improved varieties of sweet potatoes and cassava are promoted, particularly the latter, due to its ability to yield under very harsh climate and soil conditions and to work as a famine reserve crop.

Runoff The proportion of the rainfall on an area that does not enter the soil and is discharged or 'lost' from the area via stream channels and waterways.

Tied ridges Small dams made of earth at regular intervals in the furrows in order to trap rainwater and prevent it from flowing along the contour (a water conservation method).

Water conservation The protection, development, and efficient management of water resources for beneficial purposes. In RIPAT, improved agricultural practices are promoted to reduce water loss through surface runoff (e.g. using tied ridges, contour farming) and evaporation (e.g. using mulch).

Tanzanian government administrative structures

Region Tanzania is divided into 30 regions, each consisting of a number of districts

District There are 130 districts in Tanzania, each consisting of a number of wards

Ward There are more than 700 wards in Tanzania. Typically a ward consists of two to four villages.

Village leaders

In this manual, the term 'village leaders' refers to two key individuals

- The village chairperson, who is elected by the community members
- The village executive officer, who is employed by the government

APPENDIX 7: Banana cultivation in the RIPAT projects

Why?

Banana is one of the crops identified by RECODA as having considerable potential for food security, income, and environmental improvement. It offers a number of advantages compared with other crops. For example, 1) it is both a food and a cash crop and can give fruit throughout the year; 2) it provides employment all year round – unlike annual crops such as maize, which has very seasonal labour requirements; 3) it provides higher food production per area per year (the unit return) compared with maize and many other crops; 4) it fits very well with crop-livestock integration, where animals provide manure and the banana by-products are used for animal feed; 5) it is a perennial crop, which improves production stability over the years in areas that have a large variation in rainfall; and 6) it improves the environment by providing permanent soil coverage.

Where?

In general, bananas will produce good yields under well-distributed rainfall conditions of 1,200 mm per year, at altitudes up to 1,800 metres above sea level. Soils should preferably be fertile, deep (2 metres), and not affected by salt (a pH value between 5 and 8). Banana is often (wrongly) described as a crop that can grow only under good rainfall conditions and/or with irrigation. Although high yields will be attained only under the optimal soil, water, and climate conditions, some varieties are more tolerant of drought and will withstand long dry seasons in a monsoon climate.

The opportunity to promote improved banana varieties in the RIPAT projects was the result of research carried out at the Selian Agricultural Research Institute (SARI) in Arusha on new varieties brought to Tanzania as tissue cultures. Based on the initial good results at SARI, RECODA decided to conduct a pilot project to further test the potential under farm conditions. The pilot project was undertaken in two areas: in an area with relatively high potential, with good rainfall conditions and the possibility of supplementary irrigation; and in an area with low potential, with poor rainfall conditions and where farmers practise solely dryland farming. These two areas later became the RIPAT 1 and RIPAT 2 areas respectively. The pilot project revealed that the new banana varieties produced very well in the RIPAT 1 area, and that they could even be cultivated in the dry and harsh RIPAT 2 area. Through the RIPAT experience, it was further learned that under dryland farming conditions it is crucial to select adequate sites, i.e. lower-lying plots with windbreaks and the possibility for harvesting run-off water. Moreover, reducing the plant density, increasing the size of the planting hole, and applying higher levels of manure combined with mulching further improved the success of banana cultivation under dry conditions. It was found that, when cultivated using agronomically sound practices, banana is less vulnerable to dry spells than annual crops such as maize.

How?

It is quite labour intensive to establish a banana plantation. Using the generally recommended spacing of 3 metres between rows and 3 metres between the plants within the rows, around 450 holes should be prepared per acre. A planting hole should be approximately 90 cm deep and 90 cm wide (approximately 0.6 cubic metres). When digging the holes, the upper layer of soil (45 cm) must be separated from the bottom layer. After finishing the digging, the upper soil should

be well mixed with 5–10 buckets of farmyard manure or compost and then returned to the hole.

Bananas can be planted throughout the rainy season; however, they should grow vigorously and without water stress during the first four to six months after planting. Therefore, planting should not be done during the last month of the rainy season. The planting material (suckers) must come from a healthy, disease- and pest-free plantation. The use of banana seedlings produced from tissue culture is recommended, but these are not yet available in Tanzania. In addition to the above, farmers need to learn techniques for 1) removing suckers and preparing good planting materials; 2) avoiding and managing pests and diseases; 3) applying supplementary manure and fertilizer and irrigating (if possible); 4) harvesting, processing, and marketing the fruit.

APPENDIX 8: References and further reading

In writing this manual, the authors have drawn inspiration from other manuals and documents. The most important documents are listed below and are recommended for further reading. A more comprehensive list of references is provided in the companion volume, *Farmers' choice: Evaluating an approach to agricultural technology adoption in Tanzania* (Lilleør and Lund-Sørensen, 2013).

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THE RIPAT MANUAL

Sub-Saharan Africa remains the world's most food-insecure region in spite of its abundant agricultural potential. In an attempt to contribute towards overcoming this problem, a flexible agricultural extension approach known as RIPAT (Rural Initiatives for Participatory Agricultural Transformation) has been developed over the period since 2006 through a series of projects in northern Tanzania.

The RIPAT Manual explains step-by-step how to organize and implement a robust, group-based agricultural development project characterized by:

- HELP TO SELF-HELP – avoiding DONOR SYNDROME and ensuring that farmers take full charge of their own development
- the use of a group demonstration field, where RIPAT takes THE BEST FROM BOTTOM-UP AND TOP-DOWN EXTENSION APPROACHES
- giving farmers CHOICE regarding agricultural technologies and a VOICE regarding how they want to organize their group and work together
- FORMALIZED COOPERATION with local government authorities and extension services for continuation and up-scaling.

'This is an excellent, easy-to-follow, step-by-step guide on how organizations working with small-scale farmers should approach their task so as to empower farmers and to have sustainable outcomes. This is a "must have" resource book for all extension and rural development practitioners, be they from government or from the NGO sector. For a long time in Tanzania there has not been any such a manual to guide extension work and this will certainly fill the gap.'

Professor Amon Z. Mattee, *Department of Agricultural Education and Extension, Sokoine University of Agriculture, Morogoro, Tanzania*

'In Arumeru and Karatu districts I witnessed farmers using the RIPAT approach to substantially increase their productivity and incomes in banana production; to improve their levels of innovation, participation, and ownership of their projects; and hence to transform their lives. The approach also addressed the dependency syndrome of the farmers and reinforced their application of the most cherished principle of self-reliance in their own development.'

The Hon. Isidore Leka Shirima, *the former Regional Commissioner of Arusha, Tanzania*

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