

Platform
for Agricultural
Risk Management

Managing risks
to improve farmers'
livelihoods

Knowledge management



How to empower farmers to manage risks: experiences from practice

In collaboration with



April 2020





PARM
PLATFORM FOR
AGRICULTURAL RISK
MANAGEMENT

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April 2020

Conducted by:

Laura Eggens

In collaboration with:





Foreword

The **Platform for Agricultural Risk Management (PARM)** is the global partnership on agricultural risk management (ARM) for development. Established in 2013 as an outcome of G20 discussions on agricultural growth and food security, it provides technical support to governments of development countries for the integration of ARM into policies, institutional capacities and investment to move away from a culture of coping with disasters towards a smart management of risk. The Platform, hosted by the International Fund for Agricultural Development (IFAD), is supported by the European Commission (EC), the French Development Agency (AFD) and the Italian Agency for Development Cooperation (AICS) and works in strategic partnership with KfW German Development Bank and the Federal Ministry of Economic Cooperation and Development (BMZ) through the African Union Development Agency (AUDA-NEPAD).

This publication builds on the outcomes of a five-day knowledge sharing and learning workshop on "How to empower farmers to manage risks: your experience" in collaboration with the Technical Centre for Agricultural and Rural Cooperation (CTA). The workshop aimed at gathering experiences from PARM and its partners on capacity development activities to use them as inputs for improved practices on CD and knowledge sharing on agricultural risk management.

This publication has been coordinated and written by Laura Eggens (PARM consultant) based on the contributions of all the participants to the workshop. The workshop and the publication greatly benefited from the support, knowledge and experiences of Jorge Chavez-Tafur (CTA), Richard Miro (Makerere University and PARM consultant) and the PARM Team - Ilaria Tedesco, Karima Cherif and Nikita Blanes.

The publication could not have been possible without the invaluable enthusiasm, commitment and hard work of all the participants to the workshop that were individual farmers, service providers and representatives of institutions such as the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF, Uganda), the Ministry of Agriculture (MoA, Ethiopia), the National Disaster Risk Management Commission (Ethiopia), Makerere University (Uganda), Hawassa University (Ethiopia), Mekele University (Ethiopia), World Food Programme (WFP), Food and Agriculture Organization (FAO), Eastern Africa Grain Council (EAGC), Uganda National Farmers Federation (UNFFE), East African Farmers Federation (EAFF), Uganda Agribusiness Alliance, and m-Omulimisa Innovative. To them it goes PARM deepest gratitude with the hope that the overall experience could be a useful one for them.

PARM would also like to thank Stenio Andrade (PARM) for editing the final version of the document and the Acosta Design Lab for the formatting and branding of the publication.



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List of acronyms

AFD	French Development Agency
ARM	Agricultural Risk Management
BMZ	Federal Ministry of Economic Cooperation and Development (Germany)
CD	Capacity Development
CTA	Technical Centre for Agricultural and Rural Cooperation
DGCS	General Department of Economic Cooperation and Development (Italy)
EAFF	East Africa Farmers Federation
EAGC	East African Grain Council
EU	European Commission
FAO	Food and Agricultural Organization of the UN
FAW	Fall Army Worm
IFAD	International Fund for Agricultural Development
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MoA	Ministry of Agriculture
MoALR	Ministry of Agriculture and Livestock Resources
MoU	Memorandum of Understanding
NEPAD	New Partnership for Africa's Development
NGO	Non-Governmental Organization
PARM	Platform for Agricultural Risk Management
ToT	Training of Trainers
UNFE	Uganda National Farmers' Federation
WFP	World Food Programme

1. Introduction

Farmers face all sorts of risks. Learning how to handle such risks and reduce their impact is essential for the survival of their farming practices. Since 2013, the Platform for Agricultural Risk Management (PARM) has supported and facilitated Agricultural Risk Management (ARM) knowledge and practices, at a national and global level. A major component of the work of PARM included capacity building initiatives to various stakeholders involved in agriculture. With the completion of its first phase in June 2019, PARM is now interested in drawing some lessons in the areas of capacity development and knowledge management that will help develop more effective activities and actions on ARM for its second phase, PARM Horizon 2 (2019-2024).

In collaboration with the Technical Centre for Agricultural and Rural Cooperation (CTA)¹, in October 2019 PARM organised a five-day knowledge sharing and learning workshop on 'How to empower farmers to manage risks: your experience' in Entebbe, Uganda. Its purpose was to analyse the specific experience of those directly involved with PARM's capacity development activities or involved in similar capacity development activities of their own; to discuss, reflect, and draw lessons and use these lessons as inputs, so as to improve these capacity development efforts on ARM and related topics.

The lessons compiled in this document are drawn from the activities and results seen in different countries in East Africa, namely Ethiopia, Kenya², Uganda, and Zambia. The lessons are composed by selected representatives from NGOs, development agencies, farmer federations, private companies, universities and ministries of agriculture. The content of this publication can be useful for an equally wide range of readers. This publication targets both practitioners of ARM and those interested in capacity building for ARM or more widely.

1.1 Purpose of publication

This publication presents the lessons learned from practice on what works in ARM capacity building efforts. It aims to achieve the following objectives:

- To discuss the key factors for effective and successful training processes on ARM, at different levels of this process;
- To illustrate these key factors with specific, real-life experiences;
- To highlight the main challenges and successes faced in this process, and what can be recommended to overcome such challenges and repeat such successes.

This publication does not aim to cover everything on ARM or capacity building processes. It is based on what has been encountered in a number of actual interventions, and on the opinions of a group of carefully selected experts who have played key roles in these interventions.

This publication follows a PARM publication from March 2019, "Key success factors in strengthening the capacity to manage risks at farm level: emerging lessons learned"³. This previous publication, based on the outcomes of a knowledge sharing event in December 2018, provided general lessons on ARM capacity development initiatives at the farm level. The current publication also looks at lessons learned on capacity building for ARM, but this time in a more concrete way.

1 The Technical Center for Agricultural and Rural Cooperation (CTA) is a joint international institution of the ACP (Africa, Caribbean, Pacific) and European Union (EU) States. It works in ACP countries to improve food and nutrition security, increase prosperity in rural areas and ensure good natural resource management. It facilitates access to information and knowledge, promotes the development of agricultural policies and builds the capacities of the concerned institutions and communities. CTA operates under the Cotonou Agreement and is funded by the EU.

2 Kenya was not a country directly involved in the PARM process but the participants from Kenya brought useful lessons applicable to the East Africa context and PARM.

3 For more information, see the PARM publication from March 2019, "Key success factors in strengthening the capacity to manage risks at farm level: emerging lessons learned", available at <http://p4arm.org/document/key-success-factors-in-strengthening-the-capacity-to-manage-risks/>



1.2 The Workshop

The workshop employed an approach called 'experience capitalization'. The experience capitalization process supports organizations and programs in analyzing, documenting and sharing lessons from practical experiences so that they can be used to improve and scale up initiatives. It does not only document 'success stories' but it actively informs on what worked, and what did not, to improve practices and learning from past successful interventions.

From 14-18 October 2019, 25 participants – including trainers and trainees – involved in capacity building activities on ARM, also organized by PARM during its first phase, gathered in Entebbe, Uganda, to generate the lessons compiled in this document. Following a “learning by doing” approach, during the workshop all participants actively took part in an experience capitalization process through refining a selected case, finding and organizing information, analyzing each case, drawing conclusions, and preparing for the dissemination of these results. This workshop aimed to help PARM, its direct partners, and all the other participants to reflect on capacity development activities and to learn from their own experiences, whilst also being trained on a proven and effective approach to reflect upon and learn from their work.

While the experiences of some contributors are highlighted in the text, it is important to note that all participants (for a list see the Annex) have been invaluable in their contributions to the lessons explored in this document.

1.3 Outline of publication

The bulk of this publication looks at **the lessons learned**, from practice, on capacity building for ARM. It is divided up into different phases of this capacity building process:

1. First, the focus lies with **training trainers on ARM**. Often, those who work with farmers are first trained themselves on the topic of ARM, and are then in turn supported in the practical implementation of training farmers. Within this section, lessons are drawn with regards to:
 - a. **Developing the curriculum** for training trainers
 - b. **Implementing the training** of trainers
 - c. **Following up** on the training of trainers
2. Second, the publication looks at the training of farmers on ARM. This includes introducing ARM to farmers, aligning methods taught to farmers' needs, and supporting farmers in introducing ARM into their farming practices. Lessons are drawn concerning:
 - a. **Planning** farmers' training processes
 - b. Working with **farmers in groups**
 - c. The involvement of **other stakeholders** in the training process
 - d. **Implementing** the farmers' trainings
 - e. **Follow-up** on the trainings
3. Lastly, lessons are drawn looking at the phase of **institutionalizing ARM capacity building**. For the different stakeholders involved, the publication highlights what works, and what does not, when attempting to mainstream ARM training in an institution (namely a University). This section is divided in lessons for:
 - a. Creating an **enabling environment** for institutionalization
 - b. How best to **collaborate** for institutionalization
 - c. **Monitoring and evaluating** the institutionalization process.



These various phases and sub-topics were chosen based on the capacity building processes that PARM and other collaborating institutions have implemented in the past years, but also on the learning needs of those involved in the production of this knowledge publication.

Each section contains general lessons drawn, concrete examples of how this has been observed in practice, and highlighted challenges and recommendations.

The publication ends with a summary of the main take-aways from the collection of experiences.

1.4 About PARM

PARM is the global partnership on agricultural risk management for development. Established in 2013 as an outcome of G20 discussions on agricultural growth and food security, it provides technical support to governments of development countries for the integration of ARM into policies, institutional capacities and investment to move away from a culture of coping with disasters towards a smart management of risk.

The Platform, hosted by the International Fund for Agricultural Development (IFAD), is supported by the European Commission (EC), the French Development Agency (AFD) and the Italian Agency for Development Cooperation (AICS) and works in strategic partnership with KfW German Development Bank and the Federal Ministry of Economic Cooperation and Development (BMZ) through the African Union Development Agency (AUDA-NEPAD).

Since 2013 PARM has been able to offer a package of services to enable the integration of a holistic agricultural risk management into the policy planning and investment plans in 8 selected Sub-Saharan African countries.

Building on the lessons from the first phase (2013-2019), PARM has launched in June 2019 its second phase, called PARM Horizon 2 (2019/2024). PARM will continue to bring evidence and build capacities on ARM at global and country level, but investing more resources in the design of ARM programs/projects for investments, with a more structured involvement of public-private-partnerships and in direct support to meso-level players (extension services, financial intermediaries, women's and youth's groups, NGOs, farmers' enterprises and organizations). Also, the KM and Capacity development component will be scaled up and activities intensified.



2. Lessons learned

So, what worked, and what turned out not to work, with regards to capacity development in agricultural risk management? This chapter compiles the lessons drawn from the analyses done by experts, institutions and organizations who took part in PARM CD activities throughout East and Southern Africa, as well as other partners from the regions involved in similar processes. This chapter focuses on the main pillars for successful capacity building, as drawn from a knowledge event on the topic held in December 2018, with the resulting publication mentioned above: “Key success factors in strengthening the capacity to manage risks at farm level: emerging lessons learned”.

What is ‘capacity development for agricultural risk management’? PARM’s publication “Key success factors in strengthening the capacity to manage risks at farm level: emerging lessons learned” defined it as “a process of obtaining, strengthening and/or optimizing abilities, skills, understandings, attitudes, relationships, behaviours, motivations, resources and conditions to manage agricultural risks for enhanced investment or development objectives over time”. It is intended to bring about sustainable institutional and behavioural change, and is more than just the transfer of skills and information. The approach taken here ultimately aims to make farmers aware of their risk environment, and enabling them to become more resilient in the face of such risks by improving their farming techniques and adopting holistic management strategies.

With the end-goal in mind, i.e. farmers gaining knowledge on ARM and implementing such knowledge to become more resilient, the main elements analyzed in this publication on ARM are (A) Training of trainers, (B) Training farmers and (C) Institutionalizing trainings. These elements have been used by PARM as part of its capacity development process and its success will be analyzed in the next sections. The sections provide a short explanation of each element and related steps, the main lessons drawn with regards to each, concrete cases that illustrate the lessons learned, and summarized advice for future interventions on capacity development for ARM.

Part A. Training of Trainers

Those who teach farmers on ARM approaches at some point in time have also been trainees themselves. This section looks at what practical experience has demonstrated to be successful, and less successful, in the training of ARM trainers. Generally, these Trainings of Trainers (or ToTs) have been a series of lessons, modules or sessions offered to national and regional experts in the field of agricultural science, veterinary science, agricultural economics, agro-business or related fields of agricultural risk management. These trainees grow their knowledge and skills to further train farmers and other local level actors on ARM.

The institutions offering the ToT – as seen in the workshop – are generally universities, NGOs, international organizations or a combination of these. Some have used the conceptual framework on ARM developed by PARM. This framework offers a holistic view on agricultural risk, and includes contributions from all stakeholders in the ARM process. Topics focus on (1) defining ‘risk’; (2) methods to assess and prioritize the risks; (3) risk management tools and instruments; and (4) concrete strategies based on a holistic approach to risk. These materials guide specific ToT processes, which are customized to fit the national context and specific needs of target farmers.

Generally, ToT processes can be divided into three parts, which will be reviewed separately in this section. Firstly, the curriculum is developed: whether it is based on the PARM conceptual framework or uses mostly other sources, one or a combination of institutions decides what needs to be taught to trainees, and in which way. It needs to respond to the needs of those who are to be trained (and to those they train in turn) and often it involves a collaboration between different actors. Next, the actual training implementation takes place. Trainers use particular approaches which are more or less effective, and they involve other stakeholders such as particular co-trainers or work directly with farmers in the training process. Finally, the ToT process requires follow-up: both to evaluate the training process and to support trainees in implementing what they have learned.

Including farmers' voices

By Sarah Bawaye, Programme Policy Officer at the Uganda office of the World Food Programme (WFP)

“Starting in January 2019, the World Food Programme in Uganda developed training materials to guide facilitators in preparing and delivering capacity building to farmers and farmers organizations. The material consists of a training manual with four modules, charts, cards, wheel game, and other visuals. The development of the curriculum for the training materials involved several stakeholders to ensure that the content is relevant to the needs of the users and farmers. The team that drafted the curriculum composed of technical people from the Ugandan Ministry of Agriculture Animal Industry and Fisheries (MAAIF), academia, research institutes, the National Bureau of Standards, government laboratories and private sector representatives. We field-tested the materials in our operational areas, after which we revised and validated them.

“One very important group of contributors to the curriculum were the farmers. The lesson we learned from this curriculum development is that farmers know best what is happening in their context. They already employ indigenous knowledge in solving their problems, which, even though it has not been documented, has been used over time. It is thus important to involve farmers in the whole process right from planning. It is also important to involve both men and women since they face different challenges, and this gives an opportunity to female headed households to participate in the program.

“A baseline survey conducted earlier had informed on the kind of enterprises grown in that area. This made it possible to adapt the content to the challenges faced in the target community. The participants were very willing and eager to embrace the training since it contained information that they considered relevant to address the challenges that they were facing.”

A.1 Developing the curriculum content

Developing the training materials is the first activity to be undertaken. What will the trainees learn, and who will be involved in deciding this? Various resource persons can be involved, both in the development and the delivery of the training of trainers. **Having professionals with a different background and expertise contributing simultaneously has been demonstrated to be a valuable contribution to the curriculum design process.** Experts with different backgrounds contribute in different ways: theoretical contributions from those with an agricultural economics background, or perspectives from the field and on adult learning through those with an extension background. Particular value has been found with those who have practical experience working with farmers in the area – who can identify the relevant agricultural risks that need to be better highlighted in the curriculum. Moreover, it has been found over and over again that **including farmers and farmers' needs from the very beginning of the training process is essential:** so, starting with the curriculum design. This means including the opinions of both male and female farmers. These opinions can be collected while conducting a needs assessment, which is regularly mentioned as an indispensable aspect of developing a curriculum that intend to benefit farmers.

So, what did farmers, the end users of the training processes, find useful in terms of the curriculum content? Farmers in East Africa have found much of the curriculum (4 modules on ARM) mentioned at the beginning of this chapter to be useful to them. One of the reasons why the ARM training was received well by farmers and district offices is **simply that there was and is a serious need for the trainings on ARM.** Farmers had a positive attitude towards the received information and were eager to implement because the knowledge would truly help them solve the risks to their livelihoods they are facing. However, despite its relevance some additional lessons can be learned from the training process. More than once, those who have been involved in capacity building on ARM tools mention that **farmers become reluctant to adopt approaches that are considered expensive.** In addition, **farmers are hesitant to adopt promoted approaches when the context for its implementation is limiting them:** if there is no market to sell their products or the suggested agricultural inputs or services are unavailable.



The process of developing a curriculum requires a structure that includes quality checks and allows for iteration. Such checks can involve all resource persons meeting, presenting and receiving feedback from peers on how to improve the content and approach to training. Not only can this take place during the curriculum development, but also once trainings are implemented and its relevance and appropriateness can be judged. This process of feedback has been helpful in several cases for improving the subsequent trainings. Even more potential for improving curricula lies with feedback loops further down the line, for instance **collecting feedback from farmers during field practice sessions of the training of trainers.** Furthermore, since the implementation of the curriculum can vary immensely as extension workers take ARM to farmers, evaluating this implementation phase may further improve the curriculum. Often the developed curriculum recommends the minimum content to be covered when training farmers, and provides materials such as teaching aids, but it allows for extension workers to adapt the training according to their context using local examples and approaches relevant to the local crops. One aspect, which is often missing, is **spelling out simple ways for the trained trainers on how to conduct an evaluation of the trainings they are or have carried out.** Please refer to Part C for more information and discussion on monitoring and evaluating the process, and how this can help improve the training of trainers.

One recurring challenge within curriculum design (as well as in the implementation of the training of trainers, which is discussed in more detail below) is the matter of **funds and time – or better said, of planning for funds and time.** At times, funds were lacking to hire more expertise for the curriculum design or to facilitate field sessions. Also, participating resource persons have been distracted by other engagements, affecting the planning for the flow and continuity of designing and ensuring that delivery of the training was seamless. Resource persons were found to have insufficient time scheduled to complete the work. Therefore, planning in sufficient time is necessary.

Encouraging the adoption of agricultural insurance

By Daniel Ninsiima, Chief Executive Officer of m-Omulimisa Innovative Agricultural Services in Uganda

“During a ToT process at Makerere University in Uganda, we were brought in for our expertise on operationalizing agricultural insurance among smallholder farmers, together with the Agricultural Insurance Consortium. Since agriculture insurance is new in Uganda and not many experts were available to be involved in the curriculum development, we were limited to insurance companies in partnership with the government of Uganda. At the time, we did not think about the need to engage our partners, especially NGOs with whom we collaborated, to work together to adapt the training curriculum to improve suitability to the different local contexts. As a result, some of the aspects of the training content remained very technical which made it difficult to explain to participants who were not familiar with insurance. In general, I believe we did well in the prevailing circumstances but we can do a lot to improve the curriculum content development process. One of the things I recommend is conducting a needs assessment prior to the training as a basis to develop content that responds to the experiences and needs of participants.

“In an area with no electricity and low literacy levels, the trainers adapted the training material from PowerPoint slides in English to a more suitable format. One of the individual exercises involved the use of markers and flip charts to identify the crops they grow and the major risks that threaten their enterprises. Through a group exercise, the participants ranked the most important risks, which were further ranked through an interactive plenary session. The trainer then used these local examples to introduce the concept of insurance and how it can help farmers guard against the risks identified.

(...)

(...)

“Although the agriculture insurance scheme was established to protect farmers against climate-related risks such as drought, accessing the service was very difficult. This is because the scheme is implemented by general insurance companies whose network of insurance agents and brokers is mainly present in major towns out of reach of the majority of farmers. To make insurance more accessible, we established a partnership with the Agriculture Insurance Consortium and established a network of village agents that would sell insurance through a mobile-based system for a commission. This is accessed through a USSD code (*217* 101#) and smartphone App - mAgosure. Although this has undoubtedly improved access, uptake is still low and the performance of agents has not been good.

“It was implied that our partner organization staff in the areas where training was conducted would follow up with the agents and farmers and report back to us and their immediate supervisors. However, this was never done and the staff claimed they were already overstretched by their job responsibilities and could not spare time to follow up with the participants. We have since met with the management of our partner organizations and agreed that follow-up and reporting in such joint activities should be integrated into the job descriptions of all field staff involved.

“Looking back, some of the issues we have had with the village agents and farmer leaders we trained, such as the low number of insurance policies sold may have been a result of not following up after training. It is very possible that they got busy with their lives and forgot about what they learned in the training. For instance, the agents and farmer leaders alike may have forgotten how to buy insurance using their phones and need to be reminded. In fact, some of the participants call us sometimes when they have forgotten the USSD code or the name of the App. So, going forward, every planned workshop should have a follow-up activity and budgeted accordingly. The funds for such an activity may not be available but there are cheaper options such as phone calls or working with the partner staff to follow up with the participants in their respective areas of participation.”



The DO's and DON'Ts of developing the curriculum



Do...

- ... Conduct a needs assessment with the end users (farmers) prior to the development of the curriculum content, in order to produce more relevant content.
- ... Also help increase the availability of service providers and markets for farmers (e.g. by putting farmers in touch with opportunities for value addition or other service providers), enabling the end users of the training process to actually implement ARM approaches.
- ... Involve a diverse group of experts contributing to the curriculum design of ARM trainings, including people with practical experience training farmers.
- ... Plan for feedback rounds in the curriculum design process, including feedback from trainees and farmers.



Don't...

- ... Teach one-size-fits all solutions that may be costly for farmers to implement. Instead, undertake (local) studies and consult local expertise to document cost-friendly ARM strategies that farmers can adopt.
- ... Underestimate the time and funds needed to enable experts to be fully committed to the process. So, in planning the curriculum design process, take into consideration sufficient time and funds for hiring experts and conducting practical training sessions in the field.



A.2 Implementing ToTs

What is important to consider during the implementation of the training of trainers, once the curriculum has been designed? The first lesson that can be drawn from a number of experiences is the need to **combine theoretical sessions with participatory sessions that trigger participants' contributions. Including field practice sessions** has been a great success, giving trainees the opportunity to try out what was being learned in class. To make optimal use of this combination of approaches, one needs to **plan sufficient time for practical exercises**, and particularly to take into account the time it may take to organize the local farmers' participation in field exercises. In addition, there needs to be enough time for trainees to reflect on what was learned, and **relate that to their own practice** – for instance through Q&A sessions or additional sessions with the trainers to adapt the learning to their own situations.

Ensuring participation starts with careful participant selection, giving equal opportunity to all potential trainees. **For some trainings it may be better to have participants with a similar background** (e.g. all working with crop agriculture, or all working in forestry). Focusing and referring to only one enterprise, like forestry, can ensure deeper participant engagement and reflection on how to utilize the content in a specific practical space. On the other hand, **diversity of participants may enrich the training too**. In each case the original **curriculum taught needs to be adapted to the specific ToT group**: if participants work in a variety of areas, the curriculum should not focus solely on crop agriculture, for example. Also, inviting the right participants for the training becomes essential. **Arranging sufficient discussions with the different stakeholders involved in the selection of participants**, such as the university, the ministry and district officials, can improve the choice of participants.

Gender responsiveness was identified as an important topic during several of the ARM trainings. Nonetheless, the trainings often lack **sufficient time for the participants to discuss how to develop a culture and practice of gender responsive programming, or learn about and apply gender responsive risk assessment**, for example, as gender equality is not often seen as a priority within trainings and often put aside rather than mainstreamed within the curriculum. Even in the implementation of the training, if there is equal participation of women and men, although it is a start, it does not mean it has contributed to meeting gender responsive goals by discussing the interests, issues and aspiration of both genders. Some participants have highlighted that women farmers for example may not always have the same ease to voice their opinions in certain settings, when men or authority figures are present. This implies that although there is gender parity in the participants, the format and the content also need to be gender responsive, and it is often not. This can be due to a shortage of time to carry these out at an operational level, or because women have faced certain constraints to participate. Furthermore, the trainers should involve the gender officer when possible to get advice on the development of the curriculum or in the training. Yet they are often still working disconnected from mainstream activities, which can present an issue. As such gender awareness or sensitivity in trainings do not truly trigger gender empowerment and transformation, without an explicit goal to address gender-based constraints. (Also see the case described by Abraham Abebe in the box 'Ensuring follow-up' below.)

Training trainers: make it practical and follow up

By Richard Miiro, Senior Lecturer at the Department of Extension & Innovation Studies, School of Agricultural Sciences, College of Agricultural and Environmental Sciences, at Makerere University in Uganda

“At Makerere University in Uganda, the College of Agricultural and Environmental Sciences (CAES) developed the curriculum for an Agricultural Risk Management Course in January 2018. Based on a pilot course in 2017, developed in partnership with PARM, this time it was offered to 293 agricultural extension officers from various districts in Uganda. The idea was to sensitize these officers about ARM, and to encourage them to use ARM and other courses in their regular programming. The Ugandan Ministry of Agriculture Animal Industry and Fisheries (MAAIF) requested the training, and PARM supported the process.

(...)

(...)

The curriculum at Makerere consisted of 10 modules:

1. Risks in Uganda's Agriculture – understanding agricultural risks, their importance and need for management
2. Risk assessment/measurement and Prioritization in Agriculture (How do you assess risk exposure, risk prevalence)
3. Managing Risk in Agriculture
 - Introduction: Mitigation, Transfer, Coping, Avoidance/Prevention
 - Managing Production Risks at household and community level
 - Weather risks and Biological risks
4. Financial and Market Risk Management (with case studies on insurance and warehouse receipt system)
5. Institutional and Personal Risk Management
 - Government actions
 - Social actions
6. Assisting farmers in Risk Management (involving Information systems (market, weather), extension methods, etc.)
7. Gender issues in Agricultural Risk Management
8. Preparation for the Field Excursion
9. Agricultural Risk Policy and Communication about Agricultural risk management to Policy Makers
10. Participant Action Plan and Follow-up strategy (Consolidation and handing in)

“The training of trainers at Makerere University lasted for five days, split up in 10 or 11 two-hour sessions. Some sessions were theoretical while others were participatory and triggered participant contribution and engagement. In the design, each resource person was requested to ensure that there was a practical session in their work. For some this was easier than for others. The key outcry overall was the lack of sufficient time for practical exercises. Also, during the curriculum design the organizers of the course at Makerere University did not directly consult the trainees, nor the end users, the farmers, and this leaves room for improvement in the design process. Yet we permitted a degree of flexibility in the curriculum development process, to include topics – such as how to access and secure agricultural insurance – that were not originally part of the program.

“Trainees went on a field visit to practice the process of risk assessment with farmers, giving them space to try out what was being learned in class. On the whole this field practice was a success despite difficulties in integrating farmers in the training process. Farmers arrived at different times, making it complicated and time-consuming to allocate the trainees to farmer groups who served as their informers. Looking back, more time was needed to organize the local farmers to practice agricultural risk assessment with. We could have done better at explaining to farmers why we had come and what was to be done, and making sure that the process had some benefit to farmers as much as it was a training exercise for the participants. This is always a clumsy space, on one hand you are training participants who are yet to master the ARM process, and on the other hand you are working with farmers, whose invested time in coming for such meetings has to bring value to them. This calls for more thorough preparation on the part of the training organizers. What did work well, was that lunch and transport costs were provided for farmers.

(...)



(...)

“The responsibility for selecting ToT participants was in the hands of MAAIF and the district technical leadership. District leadership tried to give chances to those technical and managerial staff members who had not recently participated in other courses. Nevertheless, for training design purposes the training organizers needed to pay attention to who was coming. Participants had varied backgrounds, some as agricultural officers, others as veterinary officers, others as fisheries officers and some with a forestry background. Each of these tended to have unique discipline related challenges when it came to appropriating and integrating risk management into their programs. The design of the training was not well adapted to these unique disciplinary differences among the trainees. The materials designed were leaning towards crop agriculture, leaving out the other non-crop enterprises.

“I am very passionate about designing a training with the application of the training in mind, and have tried to ensure participants' commitment on how they will practice what they have learnt. As part of the design, the participants were required to develop an individual Participatory Action Plan (PAPA). Each of the 290 participants wrote down how they planned to apply the materials on ARM once they returned to their work places. A copy of each plan remained with the trainers, with the intention to conduct a follow up of the participants. However, there were no resources to actually do the follow-up. Instead, a PhD student conducted surveys assessing what was implemented, and how conducive the participants work environment was to support or hinder the application of what was learned. A number of people did not even remember that they had made commitments to put into practice. Nevertheless, the follow-up study seemed to inadvertently remind the participants to check on their commitments and implement them. We have always been weak at designing for training transfer through follow-up. This explains why application of the ARM training knowledge often remains low once participants get back to their normal routines. We end up having invested into training only to lose out from that investment.”



The DO's and DON'Ts of implementing ToTs



Do...

- ... Include sufficient *practical* exercises in the training, also in the field.
- ... Plan enough time to thoroughly go through and reflect on *practical* exercises.
- ... Ensure the background of participants match the training curriculum – whether you invite participants from a diverse or similar background.
- ... Plan sufficient time for sessions on gender and for a gendered lens to be integrated in all relevant sessions, and encourage trainees to develop a culture and practice of gender responsive programming. Merely inviting an equal amount of men and women to participate in ARM trainings is not sufficient to bring about higher levels of gender equality.



Don't...

- ... Take for granted the time and effort farmers put into participation in practical field exercises *of the training of trainers*. Instead, reward farmers in the short term too (in terms of refreshments, information materials, financial contributions, etc.) for participating in the practical exercises during the ToT.
- ... Use only examples and exercises concerning crop agriculture in a group of participants with a forestry, livestock, or fishery specialty.

A.3 Follow-up of ToT

Are trainees implementing what they have learned in the training? Do we even know? How can we improve post-training support to trainees? Most of those involved in the ToT process mention the difficulty, but also the explicit **need for following up on trainees after the training**. This is to monitor the effectiveness of the training, but also as a way to offer technical backstopping and additional support to the extension staff implementing the ARM training in the field. Different trainees may need different kinds of support, and an assessment of their needs may be useful at the end of the training of trainers.

When participants are required to **develop a personal action plan**, it enables trainers to later follow up on what trainees intended to implement with regards to ARM once they returned to their work places. Not only does this serve as a feedback mechanism for the ToT, but it also reminds trainees of their commitments and might offer an opportunity to provide them with additional support, if needed. Importantly, **there needs to be resources to actually do this follow-up**, and thus they need to be planned for in advance.

The training institution is not the only one to be responsible for the follow-up of trainees. **Support can come from the ministry, district level supervisors, partner organizations, farmer groups, or other stakeholders**. In all cases, follow-up and reporting in such joint activities should be integrated into job descriptions and partner agreements. Moreover, some identified as a barrier the **lack of a communication system for easily sharing feedback**, such as an internet-based platform.

Ensuring follow-up

By Abraham Abebe, DRR and Rehabilitation Director at the National Disaster Risk Management Commission in Ethiopia

“Following up on trainees is a way to support them. Trainings themselves may be too brief, too specific or too general. I believe that the most important support for trainees comes from supervisors and peers. We tried out supervisory consultations, where the trainee’s immediate supervisor was put into the role of trainer to encourage the application of new skills. In this way, the district agricultural officers and village-level development agents played a key role in the post-training environment by giving trainees feedback. The area where I failed was that we did not set up an organized way of communication about the feedback received, so I ended up trying to make follow-up visits myself.

“I noticed that women seemed to get a better understanding of risk management than men during the training, and women were more likely to use the new knowledge on their farm land. Even though around 75% of the participants were men, when I monitored the feedback and analyzed the training’s effectiveness, women – and especially female headed households – benefited the most. One reason I found for low female participation was that the practical exercise was conducted on fields owned by men or fields with crops traditionally cultivated by men, that limited the relevance and space for women to participate fully.”



The DO's and DON'Ts of ToT follow-up



Do...

- ... Plan for following up on trainees, with allocated budget and time.
- ... Have trainees make an action plan, such as the Participatory Action Plan (PAPA, see the case of Richard Miro) to help initiate follow-up of what they actually implement.
- ... Involve other stakeholders in the follow-up process, and record the expected support in job descriptions and partnership agreements.
- ... Organize a communication system for receiving feedback from trainees and their supervisors.
- ... Ensure your M&E system is gender responsive to accurately collect inform on women and men and provide both with the necessary support.



Don't...

- ... Expect trainees to seamlessly implement their new knowledge on ARM trainings once they return to their daily routines. Instead, provide continuous support for the trainees to help them reach farmers.

Evaluating impact

By Pontious Mubiru, PhD student in Agriculture and Rural Innovation at Makerere University, Uganda

"As a PhD student, I was interested to find out the ability of the trainees to transfer the training to their respective district, following the training that took place between February and March 2018. First a questionnaire was administered to more than 250 trainees during the training, trying to establish their perception about their intention to transfer the training to their respective units. Within three months after the training, I followed up by phoning the 250 participants, 49 of their supervisors (District Production Officers) and 75 peers that work with the trainees, to establish whether they were able to transfer the knowledge or not. I asked for personal and organizational reasons for success or failure in implementing their action plans.

"A number of reasons were given to explain why they were able to implement their action plans. These included the fact that the participants had set simple and realistic goals to accomplish, like training fellow extension staff during monthly departmental meetings and organizing joint monitoring visits to the farmers. Furthermore, support from the District Political Officers to the technical wing ensured that risk management was exercised. The establishment of a risk coordination office at one district was a way to streamline ARM. The availability of technical staff, the existence of teamwork among service delivery units at the district level, and the arrangement of logistics to facilitate trainings were also mentioned.

"Also, the training on ARM came at a time when farmers experienced serious risks. In the year 2017 Uganda witnessed unprecedented drought that claimed livestock and destroyed crops. With such risks arising from changes in climate, the districts were challenged to come up with a disaster mitigation plan. Incorporating ARM in these plans was a welcome solution."

Conclusion: Lessons on training of trainers

Overall, what can be said about the training of trainers, based on the practical experiences from experts in Uganda and Ethiopia? One of the main priorities in developing the curriculum, in implementing the trainings and in follow-up of the trainings is keeping in mind the farmers, the end-users – whether it is by conducting a needs assessment before designing the curriculum, or offering solutions that are implementable by farmers, valuing their contributions in the ToT process and including them in providing feedback on the curriculum and ToT process.

Different people are involved, and the ToT needs to take into account the needs of different people. Firstly, a diverse group of experts (including farmers) can contribute to the training development. This curriculum needs to be relevant for trainees from different backgrounds, or tailored to one specific group of experts on, say, livestock. Finally, the training needs to plan sufficient time and adapt the content to be gender responsive by integrating that lens to the existing modules, field visits, participants, format of the training and so on.

Practical exercises are essential for the ToT process. Time and funds need to be made available for field practice sessions and for moments to reflect on these sessions. A long-term vision is required, for every training. Providing a ToT is not sufficient if there is no budget or time for the full commitment of resource persons, or for a follow-up trajectory. Feedback rounds in the curriculum design process and after implementing the ToT are indispensable – and proper communication systems for such feedback are key as well. Follow-up can serve as a very useful way for additional support for trainees, and institutions can consider different ways of making this a reality – like producing personal action plans or involving other stakeholders in the follow-up process.



Part B: Training farmers

Reaching farmers with useful information on managing agricultural risks is one of the most essential steps in capacity building for ARM – farmers are the end users, after all. In this phase of the capacity building process, farmers are empowered to make their own risk management decisions regarding uncertainties of weather, market prices and pests and so on. So, the trainees of the previous section went on to train farmers, and encountered new challenges and enabling factors in this process.

In training farmers, they adapt the content learned in the ToT to the context of the farmers they train – choosing relevant themes, with specific examples, in a particular language, etc., to address the needs of the participating farmers. They select and invite the right participants, and possibly involve other stakeholders in the training process. They choose a pedagogic approach, where generally there is an attempt to stimulate active interaction and include the knowledge and experiences of the participants. This is essential since farmers are knowledgeable on their specific environment and the risks to which they are vulnerable.

But this section on training farmers not only looks at reaching farmers, but also at what has been done to enable farmers to put in practice the knowledge they gained during the capacity building process. Importantly, trainers and other relevant stakeholders try to put in place monitoring and evaluation activities to assess whether the ARM approaches are being taken up, and to find where more support is necessary. Certain conditions provide an enabling environment for adopting ARM approaches, and when possible, the capacity building process is accompanied by initiatives that create such an environment – such as linking farmers to markets or insurance companies. However, farmers themselves can also take up a role in further developing their own knowledge, and that of others in their communities, as they become 'model' or 'lead' farmers, or form groups to provide mutual support.

B.1 Planning farmer training processes

Part A on curriculum development highlighted the importance of taking farmers' needs into account when developing a training where farmers are the final beneficiaries. Obviously, this continues to be primordial as the training process starts affecting farmers more directly. In planning for their trainings, extension agents have the freedom to adapt the topics and approaches according to their context. Here too, it is advised to **explicitly look at farmers' needs in this planning process**. Focusing on the specificities of the farmer groups that are trained is part of the training approach as advocated by PARM, where a first step is to identify and profile the agricultural risks farmers actually face. Here, the more specific and concretely the suggested mitigation measures match farmers' needs, the better.

Another area of planning farmer training process concerns the inclusion of both men and women in the trainings. Often it is necessary to **specifically invite female farmers to the trainings, and to create a training setting that enables women to join**, as much as possible. Firstly, setting a target number of women to attend the training helps put a specific effort into mobilizing female farmers. Specifically targeting female-headed households during the identification of participants is one suggested approach. The involvement of women in trainings is very important because they make up a large percentage of the rural workforce in African countries, and on top of that they can be more proactive in implementing ARM knowledge, and they should therefore be included right from start, at the planning level. While mobilizing farmers, it should be clearly indicated that women are needed and should endeavor to attend. But even when women's participation and knowledge transfer is high, they still face problems. **Women's adoption of best practices is often hinged on men's involvement at household decision making level and other gender-based constraints**. Women's restricted access to assets, financial inclusion and other resources (land, time, mobility) limits their ability to implement what they have learned.

Even when women were present in the different workshops, men often dominated the training process, partly due to socio-cultural factors. This was observed in different regions of Uganda and Ethiopia. On days when male participants were few, the female participants contributed a lot and participated, but on days when men were present the level of participation of the women was low. Separating women and men during training sessions could help the women open up and freely discuss the issues pertaining to their experiences as women. In general, **dividing participants into groups can help the level of participation**. Beyond the gendered implications, to encourage networking and exchange of ideas between learners, participants were sometimes divided into groups to tackle short problems together. For participants that seemed intimidated by the large group and had been quiet, the smaller groups gave them an opportunity to interact with their peers easily. For participants that were extremely shy, especially women, explicitly asking for their contributions has also shown to help their participation.

In addition to considering the participation of women, there is a need to **pay particular attention to involving young people in these training and ensuring they are relevant to them as well**. Farmers and extension agents from different areas in Uganda have reported that there was a low participation of youth, and an even lower level of adoption of the approaches. **Youth having a negative attitude towards agriculture** and wanting quick returns is one of the reasons given. It is suggested to explicitly plan for activities that encourage young people, listening to their concerns and giving them a platform for knowledge sharing. Overall, in Uganda, the mobilization of farmers to join the ARM trainings conducted by extension agents was successful, as was seen in multiple cases. They reached farmers using mobile phones, community radios, loud speakers and local leaders. Farmers who came with prior knowledge about risk management and gender, interacted more with others during breaks, trying to explain the ARM concepts to other farmers. This shows that **telling farmers about the training and how it will benefit them helps for interactions** during the sessions.

Learning is not linear

By Fetene Kabite Abdi, Senior Expert working at the Ethiopian Ministry of Agriculture, ATVET Directorate, and one of the trainees of the ARM training of trainers at Hawassa University in Ethiopia

“There is a need for long-term planning in learning. Learning is a continuous process, but it does not progress at the same rate. When you start to learn something new, you first seem to learn a lot quite quickly. You then often experience a plateau when little progress is made, even though you work just as hard as before. Usually sustained effort is needed to create a new training spurt. It is important to help students become aware of this tendency for training to occur in spurts and plateaus – this will help them to maintain their confidence and motivation throughout the training process.”

When talking about planning farmer trainings, we need to keep in mind that the training process is exactly that: a process. What have people learned about planning for capacity building as a longer-term intervention? **In many cases the ARM trainers found that time, budget and logistics for training and follow-up were a constraint in offering the most effective service**. Many mention the high farmer-to-extension ratio, which limit the capacity of the extension service to train and follow-up with a high number of farmers. **It was when supervisor and peer backing were present, where the extension staff received financial, moral and political support, that training sessions took place and were most effective**. This support enables the trainee to organize trainings for local farmers about ARM. Many of the enabling factors – or challenges when these are absent – include the provision of motorcycles and fuel, as well as stationary to conduct trainings and follow-up. Planning for the long-term provision of such support is therefore necessary.

Improving farmer trainings even further

By Alex Mabirizi, a Senior Veterinary Officer in Uganda's Bukomansimbi district and a trainee in the PARM-supported ToT in Muarik, Kabanyoro, Uganda.

“We developed content about ARM based on the broad risks that farmers face: biological risks, financial risks, climate risks, etc. Yet this content was too broad and some farmers did not recognize particular risks and mitigation measures. Hence in future trainings, it is best to identify at most three farmers with specific, different enterprises, per training. The trainings can then be tailored around the specific risks faced in these enterprises, to help other farmers also easily adopt such technologies and mitigation measures.

“The trainings that we conducted consisted mostly of seminars where farmers came and participated in identifying and ranking risks. While this was beneficial in creating cognitive awareness of the risks and their mitigation strategies, theoretical approaches lead farmers to forget more easily. In future, we want to take farmers to the farms of a farmer prone to a risk, identify the risk and participate in proposing and implementing strategies that mitigate such risks. While it may cost more money than the ‘seminar-like’ training, in the long run it offers a better value for money.

(...)

(...)

“We planned to conduct at least two trainings in every sub-county in Bukomansimbi district, but because of limited funds only a limited number of trainings could be conducted. This was an extensive loss, caused by failure to plan ahead. Also, the trainings should not only be conducted in the households of the model farmers as most of them tend to be beneficiaries of multiple government and non-government projects. This can discourage farmers and enforce the conviction that they should first receive a lot of support if they are to modernize their farming.

“One department which was missing in the trainings, but which would have contributed significantly, was the district commercial office from the Cooperatives and Trade Department. They would have been very helpful in educating farmers about financial risks and other market risks, allowing farmers to do a cost-benefit analysis that helps them determine break-even points and what interventions are financially viable. The commercial officers should be regularly involved in all extension trainings to help farmers transition from subsistence agriculture to commercial agriculture.

“During the planning process we did not make a monitoring and evaluation plan. This greatly affected the ability to evaluate the effectiveness of the trainings. This was because we lack experience in M&E planning – we need to take a course in monitoring and evaluation to help us become cognizant of the M&E parameters while planning. In future trainings we want to develop evaluation tools that are easy to use and with input of qualified personnel to develop verifiable indicators.”



The DO's and DON'Ts of planning for farmer trainings



Do...

... When designing ARM trainings for farmers, explicitly look at farmers' needs in this planning process, for example by conducting a training needs assessment in the communities where you will be working, such that the training addresses the situations farmers actually face.

... Clearly indicate that women are especially needed and should try to attend when mobilizing farmers, and involve partners in the mobilization of women specifically.

... Separate women and men during (parts of the) training sessions, to make it easier for women to participate fully and voice their opinions.

... Actively encourage women to contribute to group exercises, plenary and brainstorming sessions.

... Put serious effort into making men and women more aware of gender issues, to increase the opportunities for women to implement ARM knowledge in a male dominated society.

... Explicitly plan for activities that encourage young people, listening to their concerns and giving them a platform for knowledge sharing.

... Plan for (long-term) supervisor and peer backing for the trainers, as well as financial, moral and political support (including provision of transport and training materials).



Don't...

... Make the content of farmer trainings too broad, such that farmers fail to recognize particular risks and mitigation measures. Instead, identify several farmers with specific, different enterprises, around which the trainings can be tailored.

... Choose training times and locations that limit women in joining and participating, by taking into account distance from home, inability to accommodate dependent family members, timing that may clash with household activities, etc.

B.2 Working with farmers in groups

Much has been said about the contribution of farmer-to-farmer collaboration in the field of capacity building for ARM. Some have experienced that **farmers with something in common work together better**. For instance, dividing participants into groups according to their enterprise clusters enabled them to draw on their shared experiences, and learn from relevant examples in the training that were tailored to their specific challenges. Farmers who shared the same enterprise or religion, or otherwise already knew one another, seemed to interact better during trainings than those who did not have anything in common. In areas **where farmer organizations are functional, they act as a good entry point to farmers**.

Many times, **it has worked well to have model farmers or mentor farmers who guide their peers**, possibly offering these farmers extra training and support to do so. Farmer leaders who are nearer to, and more accessible to, the other farmers could be involved in trainings to ease access of knowledge by the other farmers. Farmers can be hesitant to adopt a new technology, without prior evidence of such a technology working. **Identifying and enrolling opinion leaders or early adopters could help to provide testimony to the rest of the farmers and thus improve uptake** of the approach. As such, it has proven effective to privately invite 'champion farmers' to share their experiences during trainings.

The transfer of knowledge within the communities should not only be vertical from technical staff to a few farmers but **efforts should be made to increase the horizontal transfer of technologies from one farmer to another through experience sharing exercises**. Yet the sharing of information between farmers is often still spontaneous and slow. Encouraging farmers to share information formally can be a solution, and if possible, capture their experiences and put it in places where other farmers can read them, like the sub-county and parish offices or community halls, and as such stimulate interest about the interventions that work. Experience sharing meetings can be organized in which model farmers share experiences, and farmers break into small groups in which they try to share and document how they can adopt the technologies shared, and adapt it to their own settings. This will help farmers appreciate the capacity of fellow farmers to teach them and demystify the belief that only technocrats have technologies to teach. Knowledge also travels in other unexpected ways. Allowing **non-targeted members of the families, such as spouses and mature children to attend the sessions** has shown to accelerate the knowledge transfer among family members beyond the targeted members of the groups.

Working with others and planning ahead

By John Ssenyonga, Senior Program Manager at Heifer International in Uganda

"In the trainings conducted by Heifer International and Edukans (a co-founder and implementer), from March to August 2019 in Dokolo district in Uganda, a lot of emphasis was put on reaching farmers in groups. We mobilized and worked with groups of 20-30 farmers, where training in smaller groups made it easier for farmers to physically join the meetings and be more participatory. The effectiveness of knowledge sharing is strongly hinged to group cohesion. Consequently, Heifer provides social capital trainings to enhance group cohesion before introducing the technical aspects. We used a tool called 'Participatory Self-Review and Planning' (PSRP) to promote knowledge sharing among farmers. Over 3,391 farmers (51% women and 13%) benefited from this knowledge sharing platform. On a quarterly basis, each group holds a (self-organized) meeting to reflect on how each member is adopting and implementing specific skills acquired during trainings and how the group is progressing as a whole. During the review, members point out their own weaknesses and strengths and offer each other support. The PSRP does not only consider technical farm practices but also other areas such as social support, accountability, gender, or environment.

(...)



(...)

“We also worked with Farmer Field School Facilitators (FFSFs). In each group, one best performing farmer was identified as a facilitator to share their experience and mentor their group members. The FFSFs received additional training on climate smart agriculture and risk management to enable them to offer more guidance to group members. We also involved farmers in selecting the training venues – mainly members' farms, accessible by all members in a rotational manner. Making the trainings rotational in different farms also encouraged equal participation and sharing among members.

“In addition to working with farmers, working with other stakeholders offered many benefits. Since our training was part of a bigger program on youth employment in agribusiness (the ‘Learn for Agribusiness’ project), our project team involved key stakeholders such as district and sub-county extension workers and agronomists from business companies, working with the same purpose. The training content was drafted by Edukans and validated by all the stakeholders through a one-day workshop, attended by farmer group representatives as well. In addition, for each month of the training, all stakeholders had a planning meeting to understand who does what and how and as a result, a training program would be developed and shared with all stakeholders including farmer group leaders. The involvement of different players ensured sustainability without the project. Apparently, the private sector agronomists involved and community agro-entrepreneurs have continued to work with additional farmer groups outside the project, and this is expected to continue after the project closes. Further still, two business companies (TRAFORD Ltd and Tropical Dynasty Agencies Ltd) have adopted climate smart agriculture production models to ensure sustainable production. In contrast, the involvement of government extension workers, dependent on the availability of fuel allowances to support their travel expenses and is likely to reduce or cease with the close of the project. The private sector-led extension system of company agronomists and Community Agro-Entrepreneurs is highly sustainable, as it is based on business arrangements among farmers and companies.

“In our project, trainers prepare a training plan based on the four-month crop cycle, including the planned days for follow-up, which is shared with all stakeholders. Besides the routine trainings, each group is visited once a month and during participatory self-review meetings, groups identify key gaps that are addressed by the trainer during the follow-up. In some instances, trainers are then asked to organize refresher trainings. Our trainers also conducted annual farmer field days in collaboration with the district and business companies. During such days, different service providers are encouraged to market their products and services, and farmers provide testimonies of what is working and not working, as service providers introduce new technologies. During the last farmer field day organized in August 2019, the business companies recognized and awarded the best performing community agro-entrepreneurs and best farmers practicing climate smart agriculture.

“The project is interested to establish a learning platform and centralized data system where community-based entrepreneurs, who were involved in the training, use smart phones to capture and share data – including the number of (male/female) participants, number of trainings delivered and by whom – which is processed and put on a platform accessible by key stakeholders. This initiative will provide timely information on production, farmers' needs for inputs, trainings delivered and training gaps. This would only provide quantitative feedback, to complement the more qualitative feedback provided by Heifer's PSRP tool about the skills and knowledge farmers acquired, and how they put them in practice.”



The DO's and DON'Ts of working with farmers in groups



Do...

- ... Train farmers in groups, for example based on their enterprises or in functional farmer organization, enabling them to draw on their shared experiences. If they don't exist, organize them into groups.
- ... Provide trainings on social cohesion, such as Heifer's PSRP tool, for farmer groups to enhance uptake of ARM knowledge.
- ... Support the development of leadership abilities of farmer group leaders and support ways in which they can be held accountable. Identify, work with and, if necessary, provide extra training for model/champion/mentor farmers who guide their peers in sharing knowledge and adopting practices.
- ... Increase farmer-to-farmer experience sharing, for instance by providing public places for sharing success stories or organizing sharing meetings.



Don't...

- ... Restrict non-targeted family members to join training sessions informally – their presence can enable easy spread and uptake of ARM knowledge.

B.3 Involvement of other stakeholders in training process

So far, the main actors in the ARM capacity building process were the university, trainees/extension workers (mostly from the Ministry of Agriculture) and farmers. What can be learned regarding the involvement of other stakeholders, such as NGOs, FOs and the private sector, in the training process? What could improve collaboration? Firstly, **it helps when partners collaborate with a matching overall purpose**. The collaboration between public and private sector can be formalized through MoUs at project level that stipulates the role of each partner including providing technical support, financial and non-financial contributions. The MoUs can make it easy for a project to tap into partners' resources such as venues and personnel to enhance trainings. Nonetheless, **different partners may have different policies and systems**, which might be difficult to harmonize.

It turns out to be key to **involve all stakeholders in planning, development and harmonization of the training content** as well as actual delivery of the training. Even when the training content is drafted by one party, it can be validated by all the involved stakeholders. As a result, all stakeholders developed a common understanding of the content and best training delivery methodologies. Regular joint **planning meetings, including all stakeholders, may help** to understand who does what and how.

Collaboration between government extension agents of different disciplines is often mentioned as a positive influence on the effectiveness of the ARM trainings, both in Ethiopia and Uganda. Strong linkages with other government agencies (so not just the agricultural officers, but for instance commercial and environmental officers too) enables trainees to transfer the training. Teamwork among service delivery units at the district level enabled the trainees to transfer the training effectively. On a number of occasions districts convened inter-departmental meetings, which were used as fora for knowledge disseminations regarding ARM.

Some found an added value in collaborating with stakeholders from the value chains in which farmers are involved, for instance to increase understanding of different perspectives or learning about the risks at the different levels within the value chain. NGOs can be valuable partners too. **NGOs have supported or could support the capacity building efforts with resources**: with funds, food, venues, travel costs, training materials and per diem allowances. In addition, sponsoring NGOs at times continue to work with the farmers who participated in the training, reinforcing and following up on what was learned.



Working with politicians offers both benefits and challenges, it seems. Politicians have affected trainings in election periods, when they excessively politicized the meetings and thus discouraged farmers from joining. On the other hand, **politicians have also been key in mobilizing and influencing the participation of the farmers and advocating for institutionalization of ARM.** The involvement of the political leaders and district administrators can be useful, as it informs them about the needs of the farmers and hence the collaboration can influence allocation of government resources. Political leaders can help develop policies that favor risk management when sensitized in such trainings. In future trainings **political leaders can be concretely guided on the policies that can help advance the adoption of the technologies that have been proposed,** and minimize the likelihood that they lose focus when they develop the policies on their own. Preparing a separate write-up for political leaders and administrators at the end of such trainings could help, concisely showing the challenges and possible policy and budget interventions that can be made. A volunteer among the farmers could help follow up with the administrators and politicians, thus reducing the burden on the technical staff.

Other **key stakeholders involved were the local leaders at village level:** council leaders, opinion leaders and religious leaders. They contributed towards mobilization of farmer groups and aligning the training program with other community events such as social events and market days. Farmers responded to the leaders' mobilization efforts because they respect and hold their leaders in high esteem. **Some leaders act as role models in some risk management interventions as well.** Religious leaders at times also provide the training venue. Some religious and cultural leaders attended the training and influenced their followers to attend, or took information to worship places. **They showed farmers that the knowledge disseminated was not contrary to the cultural norms and practices** of the people.

Working together

By Fred Sserwano Kafeero, District Veterinary Officer working in Butambala district, Uganda

"The agriculture department of Butambala district had prioritized the supply of simple portable irrigation equipment, which was given to farmer groups for demonstration. This motivated many farmers because the demonstration demystified this simple approach to avert drought and sustain agricultural production in and out of season. Farmer groups engaged in high value crops like ginger and tomatoes showed a constant demand for consideration for support with irrigation technology tools, to address the challenges of drought. The majority of these farmers have already showed forms of adoption.

"Our team collaborated with the NGO World Vision in mobilizing farmer communities to be part of the trainings. This was on the basis that they also had a component more or less in line with mitigating agricultural risks, as they were popularizing climate smart agriculture among farmers of one specific sub-county. Our trainers moved as a multidisciplinary team from government and this NGO, including agricultural extension agents, a commercial officer, an environment officer and financial credit service providers of Vision Fund, to offer a complete package of holistic agricultural risk management. The head of production at the district-level government facilitated the connections, and arranged a quarterly meeting where all stakeholders met and discussed the progress. The production department financed the collaboration, supplemented by World Vision. The holistic approach was based on the assumption that farmers would have varied risk challenges that would call for different expert solutions. On a few occasions the team turned out not to have sufficient expertise, mostly on agricultural insurance. In the very first trainings conducted in Butambala district, the commercial and environment officer only joined at the last hour and turned out to be very resourceful due to their special expertise in areas of financial literacy and environmental aspects - which became indispensable in addressing agriculture risk management holistically.

(...)

(...)

"In our case, responsibilities for M&E were divided. Follow-up visits were planned at three different levels to ensure effectiveness and encourage more adoption. At the farmer level, farmer group leaders, who are close to where adoption is done, were entrusted with the role of close supervision and follow-up of group members. At the sub-county level, extension officers integrated follow-up activities into their routine extension work. District sector heads were to do quarterly follow-up on the extension officers' work, combining it with supervision and support to the frontline technical extension officers. At the farmer leader level, M&E and follow-up support worked well: the leadership structures and borrowing irrigation kits from fellow helped them overcome droughts, for example. Unfortunately, even though the sub-county staff made an effort to integrate follow-up activities in their day-to-day activities, limited mobility constrained the follow-up significantly."



The DO's and DON'Ts of involving stakeholders in farmer training processes



Do...

- ... Establish platforms for communication among collaborating stakeholders, such as WhatsApp groups, web-based platforms, e-mail groups, etc.
- ... Formalize collaboration between public and private sector partners with MoUs at project level, stipulating the role of each partner and defining a common understanding of ARM.
- ... Involve all stakeholders in planning, development and harmonization of the training content as well as actual delivery of the training and schedule regular meetings during the training process.
- ... Collaborate with private sector agronomists, community agro-entrepreneurs and stakeholders from the value chains in which farmers are involved, including traders and input suppliers, to increase the chances of long-term continuation of the interventions proposed.
- ... Collaborate with politicians for mobilizing farmers and for advocating for institutionalization of ARM. Provide concrete policy suggestions for political leaders that can help advance the adoption of ARM technologies.
- ... Involve local leaders for mobilizing farmers and encouraging adoption.



Don't...

- ... Work only with agricultural extension agents, but also work with other district officers including commercial officers and environment officers, to offer a complete package of holistic agricultural risk management.



B.4 Implementing farmer trainings

What made a good training for farmers? People involved in the different types of trainings on ARM all mention **the importance of good facilitation, where farmers learn in a participatory and animated way**. Encouraging discussion rather than only presenting, actively asking for farmers' inputs, allowing interruptions for questions, addressing participants by name, and taking into account the expectations of participants are mentioned as key positive elements of good facilitation that was observed in different trainings. **A highly participatory method has been seen to increase the sense of ownership (and thus hopefully adoption) in the analysis of risk and the development of a risk management plan.**

Adapted training resources

By Steve Hodges, Chief Operating Officer of the private company Uganda Agribusiness Alliance

"During a training in Yei in South Sudan I provided the farmers with handouts. I adapted and simplified agricultural risk and risk assessment material available at the time in online literature, including from the FARM-D website, making them suitable for farmers with limited literacy. These handouts replicated the charts and the matrix tools, including for instance a diagram of the types of agricultural risks facing farmers and a simplified matrix allowing prioritization of risks identified.

"I also invited traders (off-takers from farmers) to participate in small group discussions with the farmers in my training. In these discussions, both sides – sellers and buyers – described their differing points of view on the sales transaction and discussed how to make the transaction more satisfactory for both sides."

Training content was made more relatable by using local examples on ARM, especially when the content of the training got more technical. The large diversity of ecological zones that the PARM-trained trainees worked in, even covering different countries, have made it more cumbersome to develop the right examples and solutions that are adapted to the local context. Preferably, the training allows for the sharing of experiences, which the participating farmers have gone through themselves.

In addition to being participatory and offering space for farmers' experiences, **the best workshops gave farmers an immediate, hand-on experience with ARM strategies**. Many trainers and farmers confirm that this has been the case in the majority of ARM trainings both in Uganda and Ethiopia, and that this needs to be implemented more where trainings were less practical. ARM sometimes had a reputation of being impractical to implement among trainees and their supervisors: all the more reason to increase its practical application in the capacity building process. Sometimes trainings fully took place on the farms of participating farmers.

The lessons learned on logistics for farmer trainings all center around making it easier for farmers to attend and participate in the trainings. Offering transport refunds and refreshments are small examples, but most focus on other logistical issues. Almost all farmers, extension workers and others who have experienced farmer trainings on the ground, mention **the need to pay attention to when trainings are being scheduled**. For instance, planning trainings during harvesting time affects the concentration and availability of farmers. Also scheduling sessions during planting at the start of the rainy seasons, or during the wedding season, on religious days, or in the mornings when farmers tend to be occupied, does not work well. In addition, planning trainings far from farmers' homes is a restriction for their participation. Involving farmers in planning training when, and where, to hold the meetings has worked well.

Language is another key aspect that is mentioned by many – from farmers to those involved in the curriculum design. Delivering the ToT in the local language, and/or offering materials in other local languages, **made the knowledge easily transferable to farmers**. Translating specific terms has posed a challenge for extension workers, particularly when different languages were spoken in an area. Translation during the trainings for farmers has been one solution, but often made **the interaction and participation process difficult and slow** and perhaps some of what was being exchanged between the trainer and participants was lost in translation. It is suggested that local capacity is built so that training for such groups is conducted by a trainer that speaks the local language.

Another topic where language remains an issue is in the production and distribution of reference materials, both for farmers and those who train farmers. **Having training materials in the office at all times has been fundamental in extension workers' ability to train farmers effectively**. Trainees and farmers often requested printed reference materials on the ARM topics discussed. Yet there have also been logistical challenges involved in **transporting bulky materials to often remote places** where the training workshops were conducted.

A training on the ground

By Khafu Davies Enoth Lutala, an agronomist working at the Nanyele Women Farmers' Association in Isaasi village, Bulucheke sub county, Bududa district, Uganda

“From the 1st to 3rd of October 2019, I conducted a training in my village for farmers and agro input dealers on the use of hybrid vegetable seeds to manage agricultural risks. These hybrid vegetable seeds are a risk management tool since hybrids are more resistant to pests, diseases and unpredictable climatic conditions. In addition, hybrids have longer shelf life and give higher yields, thereby increasing farmers' incomes. Furthermore, hybrids give uniform products in terms of size, shape and color, making marketing not only faster but also easier.

“The training had a high number of participants (reaching the target number) and used participant-centered methodologies. As a result, the adoption of hybrids has been high. But adoption was also high because the farmer group and sub-county leadership set a good example in taking up the promoted approaches. They set up functional bylaws that made it easier to use the hybrid seeds and also provided security during the trainings. Religious leaders mobilized farmers for the training and provided the training venue. In addition, some attended the training and convinced the people that the knowledge disseminated was not contrary to the cultural norms and practices of the people.

“Unfortunately, some female leaders refused to participate, making the overall involvement of women less than I had hoped. In the presence of male leaders in the training, these female farmer leaders probably felt restricted in voicing their views if it contradicted their male counterparts in public. Another limitation for the participation of women was their role as caretaker. Some female participants attended with their babies, making it a difficult task arranging a temporary baby sitter.

“Team work with the other staff members was successful, and the available extension helped. Training materials were available, as was a motor cycle. Still, there was not enough fuel, stationery and food at the training venue to make the endeavor stress-free for the participants and me as a trainer. Using the local language and a practical training approach was very good, but different learning capabilities and levels of education among the participants made it more difficult. Sharing practical experiences by fellow farmers would be a good way to move this forward. Finally, the farmers' attitudes and flexibility were key in determining who adopted the ARM approaches, and who did not.”



The DO's and DON'Ts of implementing farmer trainings



Do...

... Include a 'learning by doing' approach, field visits and demonstrations. The biggest break-throughs have come from hands-on sessions, so future activities in training farmers should be as practical as possible. For example, model or lead farmers can help develop demonstration plots with assistance of local governments to demonstrate interventions that mitigate some of the most common risks. These demonstration plots should be within reach of the farmers.

... Facilitate trainings in a participatory and animated way to increase the chances of adoption.

... Make participation as easy as possible for farmers: plan trainings at times and locations appropriate for farmers and conduct trainings in the local language. Consult farmers to select venues.

... Have training materials readily available for trainers, and provide smaller leaflets or handouts for farmers.



Don't...

... Keep training content general. Instead, make it more relatable by using local examples on ARM, relevant to the local ecological zones, and if possible, share participants' individual lived experiences.

B.5 Follow-up on the training

Trainers were trained, farmers were trained... what next? Unfortunately, many development interventions end here, expecting that trainees take what was learned forward automatically. In this section, we consider what can be learned from the steps after the ARM trainings – evaluating what was taken up from the training, how knowledge can be further incorporated in farmers' lives and ways in which farmers share what was learned among themselves. Follow-up visits are not only meant for monitoring what farmers are doing with the gained knowledge or to find how to improve the trainings, but also as **a way to provide them with technical support**. It is important to follow up on the farmers after training, as it motivates them and provides an opportunity to clarify lessons.

The effectiveness of ARM trainings can be measured afterwards, but many mention that despite the intention to do so, often there is a lack of time and money to actually implement monitoring and evaluation efforts. **Proper planning for M&E is therefore necessary**. The results framework should be accompanied by a performance measurement plan, which will enable the concerned institutions to collect the appropriate data and report. Not only have past experiences shown that M&E efforts need to be planned, but **extension workers also need to be trained in planning for M&E, and it needs to be included in their job descriptions**.

Reaching trained farmers can be challenging, when visiting or even phoning them is expensive. Moreover, follow-up was found to be a challenge due to the loss of contacts of participants: inactive cellphone numbers and e-mail addresses or changed locations make it hard to trace farmers. It is possible to consider **low-cost methods** for assessing the adoption of practices such as WhatsApp groups, SMS, and developing a network of a few local champions who can assist with follow up at the local level. **Integrating follow-up in routine work** has advantages, as it would not require planning of additional activities. But it also runs the risk of being lost in other activities when it is not specifically planned for. In some cases, farmers were asked to record their farming activities and submit these records. In all cases, whomever is responsible, **a centralized, standardized and well-organized feedback system is required** to make follow-up easier and a more effective way of monitoring progress. What is still missing is **the documentation of best practices from farmers, which would further knowledge sharing and replication of such practices**. These case studies can be shared with other farmers.

Farmers who monitor

By Nelson Ssempera, an extension agent from Sembabule district, and Suzan Sabayinda, farmer in Sembabule district

“Some farmers were rigid to change, fearing to make losses after doing more investments to manage risks. Still, we made it as easy as possible for farmers to provide feedback. We regularly met with the trained farmers through their groups, visited their farms (voluntarily and on demand by the farmers) or contacted them by phone. However, with all this some farmers are reluctant to give feedback, because they feel they have not made sufficient progress. Also, long distances and telephone network failures pose challenges.

“Farmers were also asked to directly contribute to M&E efforts. The extension agents asked the farmers in Sembabule to record their farming activities (e.g. when and how much they sowed and harvested) and keep their records from the start up to the end of the season. They were also encouraged to report to their leaders when they faced difficulties. Unfortunately, Sembabule has a record management system that is manual and poorly organized. The illiteracy of some farmers makes preparing and managing written records (for example on when to plant, input costs and yields) is a big challenge. We do see that it is useful to document success stories. I documented farmers' success stories and reported them to the chief and district agricultural officer. The success stories helped me lobby for more funds from my bosses.”



The DO's and DON'Ts of following up farmer trainings



Do...

- ... Train trainees in planning for M&E, and include follow-up activities in their job descriptions.
- ... Establish a centralized system where (quantitative and qualitative) data, reports and photos can be easily shared, for example led by the Ministry of Agriculture in collaboration with private sector IT companies who can institute platforms for e-learning and farmer profiling.
- ... Involve farmers in providing feedback on the trainings, for example by organizing regular review meetings and nominating farmers as a contact person to help in the follow-up.
- ... Documenting farmers' best practices, for sharing with other farmers and furthering knowledge sharing and replication of such practice, and for lobbying among decision makers for more funds.



Don't...

- ... Forget to always plan and budget for M&E activities, to evaluate the impact of the trainings done and direct future improvements. It should be part of the training design.
- ... Restrict yourself to formal feedback systems that need to go through the M&E department, and instead consider low-cost methods for assessing the adoption of practices such as WhatsApp groups, SMS, local radio, and developing a network of a few local champions who can assist with follow up at the local level.



Conclusion: Lessons on training farmers

As field staff works towards building farmers' skills and knowledge on ARM, some lessons from practice can be highlighted.

Again, taking into account farmers' needs and realities, including context-specific risks and examples, is high on the list of priorities. A farmer-centered approach is recommended, where emphasis is put on pedagogic methods that encourage participation and 'learning by doing'. Having training materials readily available and selecting training times and locations that suit farmers are pivotal for high rates of knowledge transfer. Specifically, solutions are offered for making the ARM trainings more gender inclusive, both during the mobilization of participants and in the trainings themselves.

Secondly, the experiences reviewed here have shown ways to support field staff in their training efforts, including technical backstopping after the initial trainings have been finalized. Planning for long-term support is often still lacking, as is the concrete support for follow-up activities at a local level. One way in which trainers can be supported and the uptake of ARM approaches increased in the community is by actively engaging farmer groups and leaders in the process. Training farmers in groups, and explicitly supporting the cohesion and leadership of such groups, has shown to work well. Selected farmers can then also be engaged as a contact person to maintain the follow-up process.

Sharing lessons on what is happening at the farmer level further helps to develop ARM knowledge and skills. Documenting good practices and encouraging farmer-to-farmer experience sharing enable the replication of good practices and even of the ARM training opportunities. Yet effective platforms for knowledge sharing, both among farmers and with a wider range of stakeholders, need to be developed.

Finally, much can be said about the necessity of multi-stakeholder collaborations in ARM capacity development. Involving partners starting from the planning phase and formalizing collaborations are mentioned. Specific stakeholders that have been valuable in the processes analyzed here include local leaders, private sector actors, politicians, and district officers beyond the agriculture department.

Part C: Institutionalizing ARM training

When ARM capacity development processes work well for trainees and farmers it is worth designing systems to mainstream such trainings in the relevant institutions. What would it look like, once an ARM training has been institutionalized? Broadly, we can classify the institutionalization process into three categories: institutionalization into training and academic institutions, institutionalization into the national and local government agencies, and institutionalization into NGOs, CBOs and self-help organizations. This can take many forms, of course, but in general, it would mean that ARM is taken into account in the organization's project cycles and planning processes. There would also be a long-term vision to help those in the institution, as well as its partners, to train colleagues, partners, and farmers on ARM regularly, and monitor and update these training activities. Funds and time for ARM capacity development are made sufficiently available on a regular basis.

Mainstreaming, or institutionalizing a working approach has many facets to consider. It helps if there is an organizational culture where the importance of ARM is acknowledged, and if there is support from management and partner or donor organizations. In many cases, it has been found crucial that at both the design and implementation phases there is process ownership and commitment by governments, rather than only external agencies. This implies that ARM forms an integral part of the national agriculture sector development agenda, and that capacity building is seen as part of achieving that objective. Procedures need to be in place to help mainstream capacity building activities at all levels of the institution, including local level staff.

Hence, institutionalization means mobilizing resources and customizing training materials, for instance. Securing long term funding for capacity development is therefore a success factor – including not only donors such as those supporting PARM, but also governments and private sector actors involved in ARM activities. Also, monitoring and evaluation activities play an important role, to help assess how the integration process is progressing and in which areas capacity development efforts can still be improved. Institutionalization almost always also involves other stakeholders: establishing long-term collaboration, and distributing roles and responsibilities in a way that motivates everyone to stay involved. National and international research centers and universities, for example, can help ensure effective continuous delivery of knowledge. International organizations and civil society organizations with interests in managing agricultural risks are also relevant players in the long run. Overall, common interests and trust is what holds partnerships together.

Not many experiences of institutionalizing capacity development for ARM have been documented. Still, a few lessons can be drawn, and are developed in this section.

C.1 Creating an enabling environment for institutionalization

For the institutionalization of ARM trainings there needs to be an enabling environment in which the trainings, and ARM approaches in general, are welcomed. Proper financing is the core element for an enabling environment. But also, the availability of computers, a library, electricity and free internet, as well as free schedules, have made it easier for the people involved in these processes to take part in the capacity development activities. Also, **the level of bureaucracy has influenced the possibility to mainstream ARM capacity building efforts.** Bureaucracy from the administration and other bodies affect the effective progress of plans, programs, finance and implementation. Such kinds of bureaucratic issues may be avoided through better awareness creation and involvement of all staff in the overall progress of the activities. The system worked well when potentially lengthy administrative authorization processes, with inherent bureaucratic inclinations that may delay implementation, were avoided. In addition, **when upper-level management has been supportive of the activities, mainstreaming became easier.**



Avoiding risks with farmer organizations

By Marygoretti Gachagua, Programme Officer Partnerships and Special Programmes at the East African Farmers Federation (EAFF) in Kenya

“The most beautiful thing about EAFF is that we have a very supportive young and dynamic management. This is exhibited right from project design to execution. Our management gives us room to think outside the box. As you know there are various ways in which things change on the ground during project implementation, meaning strategies need to change. For example, if we are implementing a project that stipulates that we must plant soy beans in March but the rains are too heavy – we are then at liberty to advise to change the plan since heavy rainfall will cause soy to rot. Because they take up our advice it becomes easy to avoid various risks in agriculture.

“Our plans for capacity building activities were developed based on the needs of our members. We developed a satisfaction survey in 2012 to develop our new strategic plan. Our membership gave us views on how to serve them: based on their priorities, our new strategic plan looked towards commercializing agriculture. Within this plan, one of the approaches that we chose to embrace was building sustainable farmer organizations in Eastern Africa: because strong, sustainable farmer organizations are less risky to work with. We also made an effort to regularly discuss challenges and progress with our members. This enabled the implementation of the activities throughout the different levels of the organization. We appointed a focal person for each project, who regularly discusses progress and challenges in the ‘CEO forum’. The forum serves to get buy-in from the management of the EAFF members, who then are more likely to effectively implement regional projects. The focal persons are change agents in the different projects. With this system in place, it is easy to introduce dynamic training approaches to our membership.”

Some aspects of the enabling environment can be influenced by the advocates of ARM capacity development, while others are beyond their control. One successful way to promote ARM capacity building within an organization has been by **sensitizing staff on the importance of ARM – and developing a policy for doing so**. When new processes in the institutions were developed, it has been important to build staff capacity so that they understood it fully and could explain its relevance explicitly to others, even when new staff came to the institution.

The most cited road towards institutionalization, as learned from several experiences, is the **incorporation of ARM in strategy documents, budgets and plans** – in international institutions, government departments and civil society organizations. This allowed for proper hiring of expertise, setting aside funds for activities and follow-up, and guiding a baseline study at the beginning of the process. This also promoted the internal generation of funds, when the institution realized there was not enough funding available. It was also the way to engage other stakeholders in the plans for capacity development.

On the road towards institutionalization, it has been helpful if **dedicated ‘ARM champions’ have been at different levels of the organization**. Management has been mentioned before, and the ministry level, but also consider, for example, a focal person within local government departments or at the level of farmer leaders.

What has been making it **more difficult to mainstream ARM capacity building activities is the cost of producing materials**, even more so when further training activities would require constant updating so that the training did not become irrelevant for the everyday realities of the farmers.

Interesting to keep in mind are the **restrictions that donor requirements place on the autonomous implementation of capacity development activities**. There may be a conflict of interest as different opinions and ideas come forth, and when financing partners dictate the terms of implementation. Implementing partners are then forced to divert from activities that match their own priorities.

Proper planning makes all the difference

By Turnbull Chama, Technical Assistant Climate Change Adaptation at the Zambia FAO Country Office

“FAO has since 2017 partnered with the Zambian Ministry of Agriculture to help communities develop and use resilient coping strategies at farm level using more innovative, interactive and experiential ways of learning implemented through strategic extension methodologies such as the farmer field school approach. Each farmer field school is composed of 30-35 members, who meet regularly to share hands-on experiences during the course of the farming season. The initial pilot, which covered 20 communities and targeted over 600 households, is now being up-scaled and will directly reach over 940,000 households in five provinces of Zambia from 2019 until 2025. During the 2018/2019 and 2019/2020 farming seasons, FAO trained frontline extension staff from the Ministry of Agriculture and Ministry of Fisheries & Livestock in setting up adaptation demonstrations and the facilitation of the farmer field schools. The training involved stepwise explanations of each of the adaptations and extensively covered the objectives, design and layout, agronomic management, agronomic and economic data collection, and harvesting techniques during the farming cycle. The training also looked at livestock and aquaculture. Following the training of the extension agents, the project supported the establishment of demonstrations in the communities where the project had established farmer field schools in 2017.

“For continued building of the capacity within the partner institutions of FAO, in-house ‘inductions’ took place regarding ARM and the ARM trainings we conduct. The FAO staff received a chance to learn about the training content. This led to improved effectiveness and efficiency as we implemented the trainings, while at the same time it contributed to building an institutional memory on the training efforts. While learning about the trainings, the staff were encouraged to contribute their own relevant experiences, to avoid limiting their innovativeness and maintaining the status quo.

“We designated funds for the trainings in the annual work plan, making it easy to implement – even though the rigorous training package we used was expensive to develop. We had allocated sufficient budget to this activity, allowing us to hire the appropriate expertise. We were able to ensure timely planning, and implemented the activities in line with the 2018/2019 approved procurement plan – including follow-up. The strategy plan document, generated prior to the start of implementation, provided a good functional framework for implementation. The activity plan enabled the effective utilization of resources, and it guided M&E processes. We planned and conducted a baseline study at the beginning, which identified the training needs. Yet even though the plan was useful in guiding implementation, it did overlook something important. We did not train lead farmers so they could continue giving support to other farmers in the absence of the extension staff. This oversight was corrected during the mid-term implementation review, after which the lead farmers in all 20 communities were trained.

“The entire process leading up to the design and development of training materials has been consultative and inclusive. We organized a joint stakeholder planning process, which enhanced unity among FAO, partners and farmers. We put in place a robust legal and operational institutional framework defining the expected outputs, implementation activities and grievance mechanisms. These were contained in a signed Letter of Agreement between FAO and the Department of Extension Services of the Ministry of Agriculture. This written agreement enhanced leadership and accountability for the financial resources among the partners. And partners submitted activity reports in a timely manner, as a result of the Letter of Agreement.

“Importantly, prior to the start of the ToT we conducted a comprehensive baseline survey for the assessment of biophysical, environmental, socio-economic and existing farming systems and adaptation management conditions in the targeted communities. The results of the survey helped identify and elaborate the site-specific adaptation options, which were demonstrated in farmer field schools. As a form of checking whether the implementation was on track, we continuously produced activity, monitoring and evaluation reports. The reports enhanced transparency and accountability, as well as allowed for lessons, knowledge and experience sharing in agricultural risk management. The project provided sufficient resources to carry out monitoring and evaluation and so far, all the field-based assessments have been conducted according to the schedule and now the upscaling of the activities is set to commence this 2019/2020 farming season.”



The DO's and DON'Ts of increasing chances for institutionalization



Do...

- ... Understand the level of bureaucracy in an institution and design plans accordingly, as it is likely to influence the possibility to mainstream ARM capacity building efforts.
- ... Try to make upper-level management supportive of ARM activities, for example by sharing what has been (successfully) done so far.
- ... Make (new) staff and management aware of the importance of ARM, and develop a policy for systematically sensitizing newcomers to ensure continuity of trainings for recruited staff.
- ... Incorporate ARM in strategy documents, budgets and plans. In particular, put (or lobby for putting) ARM in government strategies, because capacity building efforts are mainly executed by government extension staff. ARM can be mainstreamed in the agricultural extension system, and other stakeholders can lobby for such mainstreaming.
- ... Ensure management buy-in through mentioning ARM in planning meetings, always mentioning it as something to consider



Don't...

- ... Make institutionalization a responsibility of upper-level management only, but consider the influence that can be exercised at local, implementation or farmer level as well. Existing structures can be used to train different tiers of (government) staff, for instance, or include in institutional plans the training of lead farmers to continue support to other farmers in the absence of extension staff.
- ... Rely much on donor funding, unless the requirements for such funding completely match your own institutions' needs and plans.
- ... Neglect to share with all staff members the programs and plans regarding ARM in the organization.

C.2 Collaboration for institutionalization

Part of institutionalizing ARM capacity development is making collaboration with partners as smooth as possible. **Joint planning between partners** was one way that facilitated collaboration. The process required that all key stakeholders from the public, private and development partners were identified and joined in a round table meeting, to ensure that all the important issues and views were addressed and put into context. This allowed the different stakeholders to appreciate and own the process, knowing that they have participated in its development – this made implementation easier at different levels. Planning together provided consistency in the implementation of the developed training, and resulted in more effective monitoring and evaluation of the trainings conducted. Nonetheless, **such an inclusive stakeholders' engagement can be expensive**. Still, when partners were transparent in how resources were shared, the collaboration promoted synergies and ownership of the activities, and reduced duplication of work. It also saved money, when the resources were pooled. Also, **if beneficiaries were to share in the costs**, the heavy financial burden of implementation would be significantly reduced, which would help for work to be done on time.

In institutional collaboration, **different partners had different roles – and not everyone was necessarily equally involved**. To keep this difference transparent, **signing MoUs with partners and farmers helped for effective and pleasant teamwork**. Despite recording partnerships in official documents, unbalanced contributions have still, at times, been a problem for collaboration throughout planning, implementation and follow-up phases. In addition to collaborating with ministries and farmers, **linkages with market actors seemed to work well**, for instance to stimulate smallholder farmer engagement along value chains. Also, feedback from farmers **revealed a need for a stronger link between research and extension** to enhance technology development and dissemination.

How everyone contributes differently

By Kinfe Asayehegn Gebreeyesus, Assistant Professor and Coordinator of PARM trainings conducted at Hawassa University, Ethiopia

“At Hawassa, the university-level management was not involved in the agreement and the implementation of the ARM training of trainers, which was fully organized at the college level. More awareness and consultation by the university-level management would have made it easier than it was now to implement the training. Since curriculum approval lies at the university senate level, their involvement would have helped to institutionalize ARM in the curriculum of the relevant bachelor courses. I also saw how sensitizing university staff on risk management improved their understanding of ARM. Because of this, I presented a report of the ARM ToT done to the staff and head of my office. Creating awareness helped them to better understand the importance and its implementation process.

“We incorporated ARM activities in our annual plans. The training team of the university, in consultation with PARM, had a kickoff meeting to draft the capacity development activities to be undertaken by Hawassa University in 2018, and the required time and budget. The training team assessed the technical and financial proposal and allocated and organized the logistics and budget according to the proposed activities. However, activities related to follow-ups and evaluation of post-training action plans evaluation now run without budget. All the telephone calls and communications of the training team were covered by the team's own expenses. This contributed to lower quality follow-up and evaluation. Still, our team did assessments of ARM projects in their respective offices, incorporated ARM tools in their project management, and providing support to monitoring and evaluation of the projects.

“Different partners contributed differently. The ‘primary partners’ were those who actively took the lead of the ARM training process, and who were the major contributors in terms of finance, logistics and experts to develop the training curriculum and conduct the training. Primary partners were Hawassa University, PARM and the Ministry of Agriculture and Livestock Resources (MoALR). The secondary partners contributed to the training event through sending training experts (Bahir Dar University), and trainees (Mekelle University, the regional bureau of Agriculture and Rural Development, National Disaster and Risk Management Commission, the Federal Cooperative Agency, the National Meteorology Agency, and IFAD). We also worked with the Ethiopian Commodity Exchange, as the ToT at Hawassa included a field visit to this institution to learn about the coffee market, and how this institution can be used as an ARM tool for local producers and international buyers. We considered the trainees partners because they developed their action plans, which were expected to be implemented after returning to their job place. Both the primary and secondary partners were expected to do follow-ups of their staff that were trained in the ToT but, as mentioned, this follow-up was not effectively and sufficiently done.

“Moving forward, we are trying to integrate the ARM course into our bachelor program. A course curriculum was developed and approved. The course material has been drafted and course tutor is assigned. Soon this course will be like the other courses in the curriculum. With a common understanding with PARM, the university proposed and developed a financial and technical proposal to train the ATVETs instructors, with the expectation of PARM Horizon 2 to be implemented in Ethiopia. Initially we struggled to get the MoALR on board as a focal institution, but a new dialogue has started in collaboration with PARM.”



The DO's and DON'Ts of collaboration for institutionalization



Do...

- ... Synergize efforts with partners and avoid duplication of activities, by organizing joint planning meetings. Make sure there are enough funds for this joint process.

- ... Clearly define the different roles of partners, and solidify this in written agreements such as MoUs. For example, ARM practices can get financial support from financial institutions and insurance companies can provide insurance for smallholder farmers. Universities can contribute training experts. Written agreements make partners sure that they will be able to contribute and will help to hold all stakeholders accountable.

- ... Set up a country-level multi-stakeholder platform on ARM bringing together public, private and development actors to spearhead the mainstreaming of ARM in programs, commit resources and undertake joint actions, including people working at different levels. Develop an association of ARM professionals per country.



Don't...

- ... Undermine any potential stakeholder or partner: they are all important in the development of the nation and can share what they have.

- ... Dictate to partners and stakeholders – they should participate and give willingly, creating a sense of ownership over the project.

C.3 M&E for institutionalization

Also, for institutionalization, M&E had an important role to play. Good risk management decisions depend on accurate information, which requires reliable data. **Baseline surveys and continuous monitoring showed what can be learned from practice, and these lessons could in turn contribute to scaling up of capacity building activities.** Learning what worked in specific communities, for instance by using continuous M&E tools, helped adapt the capacity development approaches to the specific sites, making them more effective in the long term. Moreover, the results from M&E efforts were used to show other stakeholders in the process what has been done, promoting transparency and accountability for the funds allocated to all partners. This in turn fostered trust and should improve long-term collaboration. Therefore, some mentioned the need to link feedback systems to existing government systems, which could promote sustainability. **M&E also helped to share the lessons that have been learned along the way,** in order to improve not only the implementation of the institution's own activities, but also that of others.

As with follow-up of farmer trainings, such **M&E efforts need to be in the institution's budget and action plan.** Limited time and staff have been common challenges here too. Time and budget need to be allocated not only to data collection and analysis, but also to producing communication materials, which allow for the sharing of lessons learned – whether internal to the organization or beyond. In addition, being evaluated was not always comfortable for all involved: the fear of exposing potential failures or setbacks at times restricted some partners' participation.

Mainstreaming ARM in the Ministry

By Consolata Acayo, Assistant Commissioner Information & Communications at the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) in Uganda.

“One of the ministry’s mandates is to support the control of sporadic and endemic diseases, pests and vectors in the country. And 2017 is a year to be remembered by Ugandans! This is when the most devastating pest befell the country, the Fall Army Worm (FAW). Affecting more than 80 types of commercial and food security crops, the FAW caused significant yield loss to our farmers. Thus, the government had to take drastic action to ensure its containment. Farmers needed substantial support to sustainably manage this new pest using Integrated Pest Management (IPM), which required different stakeholders put their hands together. At the time of the outbreak there was no budget at the MAAIF, and only 15% of the staff at district level needed to control the outbreak was recruited.

“MAAIF joined a large group of national, international, government, private, civil society and academic stakeholders to form a Steering Committee and a Technical Working Group to put in place the control strategies for the FAW. The meeting was also to mobilize resources and logistical support for the control measures. The government then reallocated funds from a different project for this activity, which included the training of extension staff to help farmers manage the FAW with an ARM approach. Other partners contributed resources for the capacity building efforts and for the development of the National FAW strategy. To make a longer term and integrated response to outbreaks such as the FAW possible, the consortium provided an Information Paper to parliament and the cabinet, and set up quarterly National Dialogue meetings with key stakeholders for effective implementation of the control of the FAW.

“In the control of the FAW, at the beginning there were just a few pesticides that had been recommended for use, but after the evaluation we were able to add more of what farmers had come up with – like the mixture of washing powder called and the chemical ‘Rocket’. We then set up a study to check this out and provide information for further usability and possible dangerous side effects. It is through M&E that we are able to bring out issues and evidence from which other can learn. If you visit the ministry website at www.agriculture.go.ug, you will be able to get a copy of the FAW control strategy.

“For long-term ministry support against risks such as the FAW, it is important that all (new) staff undergo an induction process to embrace the institutions new focus. This will improve on the staff’s effectiveness and efficiency as well as build an institutional memory. Having staff that is informed and up-to-date with the affairs of the institution promotes positive attitudes, enhances acceptance towards innovations, and accelerates the sharing of knowledge and experiences – which then increases rates of adoption.

“ARM enabling environments are very important, and the return on investment can always be high when all players are on board. We strongly promote the Public-Private-Partnership. A commonly accepted view has always been that the government should create an enabling environment, while the private sector follows with investments and enterprise development. The ministry has realized that this is not always the case: the public sector is not necessarily an initiator of the enabling environment and the government risks misdirecting its efforts which may not meet private sector needs. We also noted that communication and flexibility between public, private and development partner stakeholders are very essential to building an enabling environment. As such, the Ministry is now in the process of developing the National Development Plan III – the Agricultural chapter, and has decided to bring on board all relevant public, private and development partners in this process.

“Yet some partners were slow in releasing funds, which delayed implementation. Some planned activities were never carried out. As a result, we were later to mainstream the framework that managed the FAW into the work plan. Such practices lowered moral from other players, some of which then started to hold back their resources as well. Planning for sufficient funds is complicated but essential, since such risks mostly come as emergencies, requiring funds to be reallocated. This often means putting aside other planned activities that should have been implemented using these resources. These other activities then may never be undertaken, or delayed until other resources are found. We must keep in mind that such unplanned spending can interfere with planned activities, and sometime causes conflicts of interest.

(...)



(...)

“When the country was hit by the most devastating pest it had ever experienced, the FAW, most of these stakeholders came together and within a short while a strategy of control was developed, shared, and implementation started taking effect. I believe that responding to risk requires developing strategies, which combine different risk management tools as well as policies and programs to address constraints and broader issues that create the context in which risks occur. The FAW remained a good example. Now, most farmers know what to do, and the FAW is a manageable risk.”



The DO's and DON'Ts of M&E for institutionalization



Do...

- ... Use baseline surveys and continuous monitoring to contribute to the upscaling of capacity building activities. Include this in planning and budget.
- ... Link feedback systems with existing government systems for the sake of sustainability.



Don't...

- ... Forget to plan for M&E when institutionalization is a goal of the organization's efforts: regular monitoring of the process helps adjust and improve the institutionalization process.
- ... Let the fear of exposing potential failures or setbacks restrict internal M&E to improve the institutionalization process.

Conclusion: Lessons on institutionalization of capacity development for ARM

Institutionalization of ARM capacity development has not yet been widely practiced, yet some initial ideas on what works, and what does not, have been shared. In an institution with supportive management and low levels of bureaucracy, institutionalization has been easier. Yet clearly defined institutional rules and procedures also help the mainstreaming of ARM: incorporating ARM in strategy documents, budgets and plans is essential; policies for training new staff on the matter are useful; and including plans for monitoring the integration of the ARM approach in the organization's work helps improve its long-term implementation.

Much emphasis is put on institutionalizing ARM training in government institutions, since government extension staff are main players in the promotion of ARM approaches among farmers. Institutionalization here means training government staff at different levels. For non-government actors, lobbying for and offering support for institutionalization at the ministry level may be useful.

What other stakeholders can contribute to a national-level institutionalization of ARM capacity development is also considerable. Lead farmers can be trained to support other farmers when extension staff is overwhelmed. Insurance companies can provide insurance for smallholder farmers. Universities can contribute by offering training experts. For any partnership to contribute to the institutionalization of ARM approaches, synergizing efforts and joint planning are needed. Clearly defining roles and responsibilities in written agreements and setting up platforms for continued communication, linked to existing systems, are mentioned as useful tools.

3. Final words

The experience capitalization exercises on which this publication is based have brought up a large number of lessons learned from real-life capacity development initiatives concerning agricultural risk management. Some of these lessons may have already been known to some or many practitioners working in this field, and may simply confirm previously held beliefs. Many of the participants in this process emphasized the importance of training trainees and farmers using local examples and languages for example – an idea many may know, in theory, but which is at times still overlooked. And lessons are learned again.

Others offer new insights, something unexpected, which may also influence the future implementation of similar work. For example, highlighting the need for differentiating the approach for different types of farmers, and how to involve farmers to make the best use of their expertise, can be taken into account in the next phase of PARM's work.

Using a capitalization approach in this way has worked well: getting a group of practitioners together, with varied experiences within different phases of the capacity building process, has been genuinely useful. Not only did they produce a large amount of lessons from practice, they were also able to validate and challenge each other, build new partnerships and build skills in an approach that they can use for future learning. Certainly, to get a more in-depth understanding of what works well (and not so well) in capacity development for ARM, particularly with regards to institutionalization, this process is worth repeating – perhaps focusing on specific elements of the capacity development process only.

Looking at similar experiences in different countries, or with other stakeholders, may provide even more new understanding of such work. The current process included stakeholders from East and Southern Africa, while capacity building for ARM has been taking place in many more regions. Also, even though the group was quite heterogeneous, the group may not have been representative for all types of organizations involved in similar activities. A large focus lay with government extension staff, for example, and it would be interesting to hear more from the private sector, the ministry level, NGOs and farmer organizations.

All stakeholders engaged with PARM and in similar initiatives are invited to make use of the lessons presented in these pages. All those involved are encouraged to keep reflecting on what works, and what does not, in different contexts. Monitoring and keeping records of these activities, finding reasons why they are successful or not, and looking for the unexpected results in each initiative can help the sector grow and improve the support given to farmers worldwide.



Annex

List of workshop participants and contributing authors

	Name	Country	Occupation and organization
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4	Christine Nalubega	Uganda	Farmer in Mukono district
5	Consolata Acayo	Uganda	Assistant Commissioner Information & Communications at the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF)
6	Daniel Kaweesi	Uganda	District Agricultural Officer at Sembabule District Local Government, and one of the trainees of the ARM training of trainers at Makerere University
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12	John Ssenyonga	Uganda	Senior Program Manager at Heifer International
13	Joseph Kiwanuka	Uganda	Farmer trainer and PhD student at Makerere University



	(...) Name	Country	Occupation and organization
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