The Rockwool Foundation and the Rockwool Foundation Research Unit: Briefing Note – March 2013



### **HIGHLIGHTS**

Rural Initiatives for Participatory Agricultural Transformation (RIPAT) is a new approach to rural development which is characterized by the following:

- Help to self help avoiding donor syndrome and ensuring that farmers take full charge of their own development.
- The use of a group demonstration field, where RIPAT takes the best from bottom-up and top-down extension approaches.
- Giving farmers a choice regarding agricultural technologies and a voice regarding how they want to organize their group.
- Formalized corporation with local government authorities and extension services for continuation and up-scaling.

In the book Farmers' Choice a scientific impact evaluation of RIPAT shows:

- Increased levels of food security among participating farmers.
- Improved levels of nutrition among adults and children.
- Sustained adoption of most of the agricultura technologies promoted.
- Diffusion of the most popular technologies to non-participant farmers in the local communities.

The World Development Report (2008) estimates that 75% of the world's poor live in rural areas in developing countries which are characterized by subsistence farming with limited access to water, land, financial services, and technology inputs. In addition, with growing populations, most developing countries face an increasing demand for food. The agricultural sector thus continues to be of great importance for food security and rural economic development. However, both the proportion and the total amount of funds allocated to agriculture in official development assistance declined dramatically for two decades from the mid-1980s (OECD, 2010) partly as a result of failed rural development interventions. These failures were primarily due to poor understanding of agrarian dynamics and a tendency for donors to seek 'one-size-fitsall'extension approaches. This decline has only recently come to a halt and there has been a renewed interest in different agricultural extension approaches.

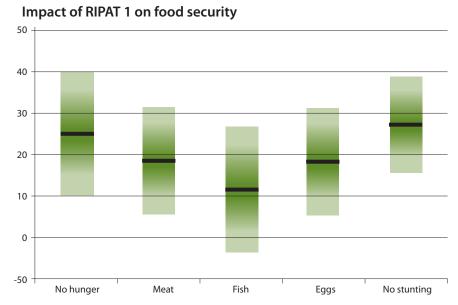
Rural Initiative for Participatory Agricultural Transformation (RIPAT) is one such approach, facilitating the adoption of new technologies among small scale farmers, which deliberately takes its starting point in the fact that one-size does not fit all. It has been developed, implemented and refined in partnership between the Rockwool Foundation and the Tanzanian NGO RECODA through a six year learningby-doing process. RIPAT is a pragmatic mix of traditional and more recent participatory extension approaches, such as Farmer Field Schools. It introduces a varied 'basket of technology options' to farmer groups over a three years implementation period, leaving each farmer with a genuine option as to which technologies to adopt depending on needs and resources.

The book Farmers' Choice examines the RIPAT intervention using a combination of quantitative evaluation methods – analysing what impact did RIPAT have on poverty and food security among participating farmers? – with qualitative methods addressing how and why did it happen?

# What impact did RIPAT have on the lives of the participating farmers?

An agricultural intervention like RIPAT is mainly of interest for policy makers, donors and implementing organizations once it has proved capable of making positive changes in the lives of its target population. RIPAT aimed at increasing food security and alleviating poverty through a sustainable and lasting change in the agricultural systems of small scale farmers. Five years after the introduction of the first RIPAT project it is safe to say that it has, to a resonable extent, succeeded in doing so.

Analyses of research data based on interviews with almost 2000 households show that, on average, households which have participated in RIPAT - compared to similar households which have not - are significantly more likely



**Note:** The black lines represents the estimated effects. The graduated bars represent the 95 percent confidence intervals around this effect. As long as the lower ends of the graduated bars are above the zero impact line, there is at least 95 percent probability of a positive impact from RIPAT. The vertical axis shows the percentage difference between responses from RIPAT 1 farmers and those RIPAT 3 farmers, after controlling for household, village and regional characteristics,

Source: EDI-RF APFS data, 2011

- to be cultivating the improved crops or breeding the improved livestock varieties promoted in the 'basket of options'. The most popular option being the new banana varieties, adopted by more than 60% of RIPAT farmers;
- to be food secure in the lean season, where RIPAT farmers are 25 percentage points less likely to experience hunger;
- to be eating meat and eggs on a weekly basis;
- to have well-nourished young children. There is a 27 percentage point reduction in stunted growth among these youngsters.

The analyses did not reveal any impact on poverty indicators. However, the effects on the food security and nutritional status of the households participating in RIPAT 1 are very substantial – and even more importantly, there are clear indications that RIPAT has brought about a sustainable and lasting change. The analyses are based on interviews undertaken almost five years after project commencement and more than one year after project closure. Thus, although RIPAT is no 'quick fix', it has potential for being a longer term and sustainable solution to food insecurity among the vast number of small scale farmers in the Global South.

Wariombora Msele: "Now we have a better life" When Wariombora joined a RIPAT group back in 2006 she lived with her family in a small hut. Now she greets visitors in front of her new house constructed with bricks and iron sheet roof. She has also built a pit latrine. Wariombora explains that the house has been paid for by the surplus she gained from selling bananas, goat milk and chicken. Technologies that she adopted from the basket of options after being taught by the RIPAT extension staff how to practice the technologies.

"First it took time to see the benefits from the new crops and techniques, but now we have a better life", as she puts it. She explains that her family has gradually become more food secure allowing her to sell more agricultural products, giving her an increase in income and an opportunity to save money in the joint saving box that the group is keeping.



## How did this impact come about?

There are indications that the sustained adoption of technologies and the long term impact on food security and nutrition for the participating farmers are closely associated with teaching the farmers in a full basket of relevant and efficient technology options. At the same time the RIPAT approach gives the farmer a genuine choice regarding which of these options to adopt on their own farm and to what extent, according to each farmer's needs and resources.

Apart from the element of choice, the fact that each farmer belongs to a strong farmers' group has contributed to an increased sense of empowerment among the farmers – especially among female farmers. It has also increased the farmers' bargaining with more knowledge about and a say in agricultural matters. 70% of the RIPAT 1 farmers stated that they were still group members more than one year after the end of the project and 13 of the original 16 groups were still active.

Finally, the research repeatedly stress that apart from RECODA being dedicated to their work, the organizational management structure around RIPAT is another reason for these achievements. That is, a management structure which entails both joint experimental learning in groups, a pragmatic combination of traditional and participatory extension approaches, and a strong focus on integrating both local needs, resources and conditions of small-scale farmers as well as involving local governmental authorities into the intervention design.



# Super-farmers and extension officers

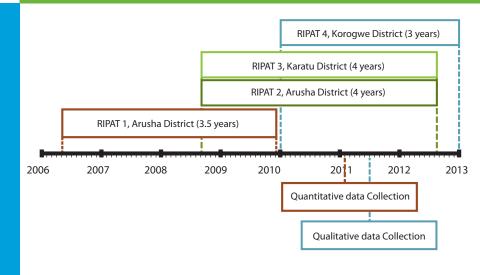
One of the RIPAT strategies for conveying knowledge and spreading is to arrange farmers in groups and educate "super-farmers" who can function as paraprofessional advisors. The story of Halima Kiroro and Regina Wilfred Mbise is just one example of this productive strategy. Halima is a government agricultural extension officer covering one ward of five villages with a total of perhaps 2,000 farm families. Regina is one of the progressive "super-farmers" in this ward who was trained through the RIPAT project. Together they teamed up to spread the RIPAT agricultural development concept to additional villages. Halima explains, "I don't have any means of transport and going around is very difficult. RIPAT helped me very much to reach many farmers in the easiest way, i.e. by establishing famers groups where I can meet about 30 farmers at one time".

The remote village of Valeska is a part of Halima's ward – but it was not included in the RIPAT project. However, Halima has facilitated the formation of three RIPAT-like groups in Valeska with the help of the RIPAT "super-farmer" Regina, from the neighbouring village. Through training and capacity building the RIPAT project generated local implementation capacity in the ward - enabling project educated super-farmers and extension officers to spread and upscale the intervention.

# **RIPAT** project facts

Since 2006, a series of four RIPAT pilot projects has worked with more than 2,000 farmers in 34 vilages in three districts in Northern Tanzania each with an implementation period of three to four years.

A typical RIPAT project targets eight villages; two groups are established in each village, each group being made up of 30–35 small-scale farmers.



## "RIPAT is doing wonders in a short time"

Former Regional Commissioner of Arusha, Honourable Isidore Leka Shirima has followed the implementation of RIPAT during his time in office.

"I have seen that the modern agriculture promoted through RIPAT can produce good yields, and I have heard farmers testify how the higher income has enabled them to send their children to school and even to enable them to construct better houses. I believe in RIPAT – I have seen it work," he says.

"Such farmers are able to continue on their own after project completion – and that is the sustainable way of doing things. It is all about promoting help to self-help. Introducing good and sound agrotechnologies is important. But it is even more important to apply a set-up that ensures project ownership and continuation with good and persuasive demonstrations, because when farmers see the tangible results they will adopt new crops and technologies," he explains.



### "Popular bananas"

The sustained adoption of most of the introduced technologies among RIPAT farmers has influenced the neighbouring farmers and there are clear indications of considerable diffusion and thus adoption by non-RIPAT farmers of the most popular technologies. In the research data in particular, the improved banana varieties have been adopted by more than one out of every eight on average.

started there were hardly any banana fields in the village. Farmers were skeptical when the RIPAT project offered them the opportunity to learn better farming techniques, including how to grow high-yielding bananas. Although Rispa Dixon was interested, she was not able to join the RIPAT project when it started in 2006 because her husband was sick. But when she saw how her neighbors, who had joined the project, had managed to establish goodlooking banana stools, she asked them to teach her. She explains: "Bananas have helped me a lot as they are a source of food, and I sell the surplus to buy basic needs like clothes, sugar, cooking oil, soap, etc." and says: "I was able to pay school fees after selling bananas."



#### How:

- Creation of a vision of a better future through the careful sensitization of communities to the potential for change and the mobilization of farmers to take charge of their own development.
- Establishment of farmer groups with good leadership to enable the transfer of appropriate agricultural technologies through participatory demonstrations and reflective learning techniques.
- Close collaboration with local government authorities, village leaders, and government agricultural extension officers to ensure the continuation of the project and further spreading to the wider community.

### When:

- In areas with a monsoon climate, it is best to start a RIPAT project some two—three months before the rainy season sets in. This gives the project staff ample time to organize the groups, teach the first lessons, and prepare land for the group activities.
- It encourages and motivates the group and the community if at the end of the wet season there is visible evidence of the project activities in the form of a harvest.
- A project should not operate for too long before hands-on activities commence and tangible results can be expected.

### Where:

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



## A step-by-step manual for practitioners

The RIPAT manual provides authorities and NGOs with an easy to follow step-by-step manual to facilitate implementation of RIPAT like interventions. The manual is especially relevant for staff of NGOs and development organizations at programming and field levels – particularly the group facilitators – but also for local government officials involved in agricultural extension and rural development.

#### Content of the RIPAT manual:

# Part 1: Guidance primarily targeted at the implementing organization

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

# Part 2: Guidance primarily targeted at group facilitators

Provides guidance on how to function as a group facilitator in general when working with groups of farmers. It sets out the steps for organizing the groups, for ensuring that they have good leadership, and for developing a solid group constitution. It describes how group activities and the learning process can be facilitated over the project period. This part of the manual also includes guidance on how the learning can be anchored in the communities by training resource persons, called super-farmers, as well as on how exchange of information between groups and spreading of technologies can be promoted.

## Part 3: Guidance on monitoring and quality control

Provides tools for monitoring key parameters and guidance for how to include quality control measures throughout project implementation. The monitoring information is provided by the groups and is collected by the staff of the implementing organization, whereas the information used for quality control is collected by third-party quality controllers to ensure impartiality

### The RIPAT manual and other resources can be downloaded from the website www.ripat.org

### The RIPAT manual

Comments and feedback from users are warmly welcomed, and should be sent to:



### The Rockwool Foundation

Kronprinsessegade 54, 2. tv. 1306 Copenhagen K, Denmark E-mail: ripat@rockwool.org

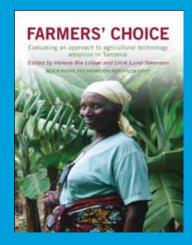
### Training and implementation support

For training courses on how to plan and implement a RIPAT project and for third-party quality control assistance, please contact:



### **RECODA**

Nanenane Themi Ground – Njiro P. O. Box 10633, Arusha, Tanzania Tel: +255 27 2549350 / +255 0768 224052 E-mail: info@recodatz.org or recoda11@gmail.com



#### Review of the book 'Farmers' Choice'

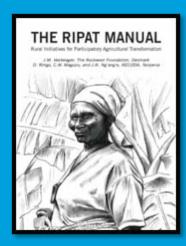
Edited by Helene Bie Lilleør and Ulrik Lund-Sørensen, The Rockwool Foundation Research Unit, Denmark

"On the basis of the evaluation results, I conclude that the RIPAT approach has been very effective in reducing the gap between available knowledge and technology and that used by small farmers in project areas, with significant positive spillovers to adjacent areas. RIPAT offers great promise as a tool to reduce this gap in other areas both within and outside Tanzania and I encourage governments to adopt the basic RIPAT concept, paying attention to the importance demonstrated by RIPAT, to provide context-specific options to farmers for their consideration and choice rather than the more traditional extension service with one-way communication, top-down technology solutions, ignorance of adoption constraints facing farmers, and a high failure rate. It is not a coincidence that the title of the book is "Farmers' Choice" and not "Farmer Compliance".

#### Per Pinstrup-Andersen

Professor, Cornell University, USA

To buy the book: www.developmentbookshop.com/farmerschoice www.rff.dk



### Review of the RIPAT Manual

J.M. Vesterager, The Rockwool Foundation, Denmark D. Ringo, C.W. Maguzu, and J.N. Ngʻangʻa, RECODA, Tanzania

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

#### Amon Z. Mattee

Professor, Department of Agricultural Education and Extension Sokoine University of Agriculture, Morogoro, Tanzania

Download the RIPAT manual: www.ripat.org



