

INNOVATION FOR FASHION OR ACTION?

Building Innovation Capacity

LEARNING FROM RESEARCH INTO USE IN AFRICA (1)

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- Lessons on Institutional Change: RIU case stories from stakeholders of the African Country Programmes and innovation platforms in Tanzania, Rwanda and Nigeria (2011).

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RIU – and particularly Andy Frost – asked us to document these experiences, and we are grateful for this opportunity. It has not been easy to write a book based on previous reports rather than through a process that was originally intended to lead to a book. But we hope we have managed to draw some interesting insights which will help programme designers, practitioners and policy-makers in their work on enhancing innovation.

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Foreword

The Research Into Use (RIU) Programme was commissioned by DFID in 2006 to address ways of scaling up successful innovations from agricultural research. It was a step change programme, funding research on uptake rather than on the generation of new technologies. This change in direction of funding was a new approach for DFID but one that is arguably even more pressing now than at the time the programme was designed. Ensuring that the predicted global population of 9 billion in 2050 can be fed sustainably and equitably in an era of climate change is an unprecedented challenge that will require the global food system to change radically. Delivering a step change in agricultural innovation will require new capacities and alternative approaches to developing technologies and to getting them into the hands of farmers. It will require revitalised funding, new institutional arrangements and evidence-based approaches to delivery and scaling up.

In many respects the RIU has been an innovative approach for its time. It has tested a number of approaches, moving individuals, teams and organisations out of their 'comfort' zone into new disciplinary areas, partnerships and ways of working, without many good overall templates to follow. If the international development community really wants to ensure that research delivers developmental impact, such moves will be increasingly necessary. Innovation involves taking risks, but it is essential to meet the challenges of development. Learning the lessons, of what works and what does not, will ensure faster progress.

One of the approaches the RIU took was to establish and support innovation platforms within its focal countries in Africa. This book has the purpose of capturing the lessons from the RIU approach and experiences from a number of these focal countries – Nigeria, Rwanda, Tanzania and Zambia. This was quite a difficult challenge for the Royal Tropical Institute and one that I am very grateful that they took up. Some things worked well and some did not go according to plan – it is important to share these findings. It is hoped that sharing these experiences will be of value to other development investors and policy makers in designing future programmes and making decisions on respective resource allocations

Dr Andy Frost
Deputy Director
Research Into Use Programme

Acronyms

AAIP	Abia Agricultural Innovation Platform
ACP	Africa Country Programme
ADA	Abanbeke Development Association
ADP	Agricultural Development Programme
AJEMAC	Association des Jeunes Emancipés de Mushubati pour l'Agriculture et le Commerce
AKIS	Agricultural Knowledge and Information System
ARCN	Agricultural Research Council of Nigeria
AR4D	agricultural research for development
ARI	Agricultural Research Institute
ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
BRD	Banque Rwandaise de Développement
BTC	Belgium Development Agency
CA	Conservation Agriculture
CAA	Conservation Agriculture Association
CAADP	Comprehensive Africa Agriculture Development Programme
CAPMER	Centre d'Appui pour les Petits et Mediums Entreprises du Rwanda
CASE	Competitive Agricultural Systems and Enterprises
CB	community-based
CBO	community-based organisation
CBPP	Contagious Bovine Pleuropneumonia
CFU	Conservation Farming Unit
CGIAR	(formerly) Consultative Group on International Agricultural Research
CIG	Concertation and Innovation Group
CIP	Crop Intensification Programme
CMD	cassava mosaic disease
COMACO	Community Markets for Conservation Ltd
CORAF	Conference of the Agricultural Research Leaders in West and Central Africa
COS-SIS	Convergence of Sciences – Strengthening Agricultural Innovation Systems
CRT	Central Research Team
DACO	District Agriculture Coordinator Office
DDCC	District Development Coordinating Committee
DDS	Diocesan Development Services
DGIS	Dutch Ministry of Foreign Affairs
DONATA	Dissemination of New Agricultural Technologies in Africa
ECF	East Coast Fever
EDI	Economic Development Initiatives
FACAGRO	Faculty of Agronomy of the National University of Rwanda
FAMOGATA	Fanya Morogoro Chala la Taifa , Swahili acronym for making Morogoro region the national granary
FANR	Food, Agriculture and Natural Resources
FARA	Forum for Agricultural Research in Africa

FCT	Federal Capital Territory
FDF	Federal Department of Fisheries
FFS	Farmer Field Schools
FIIRO	Federal Institute of Industrial Research, Oshodi
GART	Golden Valley Agricultural Research Trust
GBP	Great Britain pound
HA	hectare
HVCF	high-value cassava flour
IAR	Institute of Agricultural Research
IAR4D	Integrated Agricultural Research for Development
ICT	information and communication technologies
IFDC	International Fertilizer Development Center
IITA	International Institute of Tropical Agriculture
IP	innovation platform
IPM	Integrated Pest Management
ISAR	Institut Scientifique Agricole de Rwanda
JICA	Japan International Cooperation Agency
KIT	Royal Tropical Institute [the Netherlands]
KSM	Knowledge of Market Services
LINK	Learning, Innovation, Knowledge
MACO	Ministry of Agriculture and Cooperatives
M&E	Monitoring and Evaluation
MINAGRI	Ministry of Agriculture, Livestock and Forestry
MINICOM	Ministry of Commerce, Industry, Investment Promotion and Cooperatives
MOU	Memorandum of Understanding
MP	multi-purpose
MRI	MRI Seed Company
MT	metric tonnes
MTR	Mid-Term Review
MVIWATA	Mtandao wa vikundi vya wakulima Tanzania (farmers' organisation)
NAERLS	National Agricultural Extension Research & Liaison Services
NAF	Nigerian Air Force
NAFDAC	National Agency for Food and Drug Administration and Control
NAIN	National Agricultural Innovation Network
NAIS	National Agriculture Information Service
NAPRI	National Animal Production Research Institute
NARS	National Agricultural Research Systems
NEPAD	New Partnership for African Development
NGO	non-governmental organization
NIC	National Innovation Coalition
NIDA	Nkoola Institutional Development Associates
NIFFR	Nigerian Institute for Freshwater Fisheries Research
NIOMR	National Institute for Oceanography and Marine Research
NORAD	Norwegian Agency for Development Cooperation
NPF	National Process Facilitator

NPK	Nitrogen/Phosphorus/Potassium
NRCRI	National Root Crop Research Institute
NRI	Natural Resources International
NSM	Nigerian Starch Mill
NSPRI	Nigerian Stored Products Research Institute
NUFAS	National Union of Fisherman and Seafood Dealers
NYAMIG	Nyagatare Maize Investment Group
OPPAZ	Organic Producer and Processor Association of Zambia
PARC	International Development Organisation Ltd
PCT	Programme Coordination Teams
PELUM	Participatory Environmental Land-Use Management
PLC	public limited company
PPPMER	Projet pour la promotion des petites et micro-entreprises rurales
PSF	Private Sector Federation
RADA	Rwanda Agricultural Development Agency
RDO	Rwanda Development Organisation
RFF	Radio Farm Forum
RIDE	Rural Integrated Development Enterprise
RIU	Research Into Use
RMDRC	Raw Materials Development Research Council
RNRRS	Renewable Natural Resources Research Strategy
ROPARWA	Rwanda National Network of Framers Organisations
RSSP	Rural Sector Support Project
RWARRI	Rwanda Rural Rehabilitation Initiative
RWF	Rwandan franc
SACCOS	Savings and Credit Cooperatives
SADC	Southern Africa Development Community
SIIF	Stakeholders Innovations Interactive Forum
TOT	Transfer of Technology
UK	United Kingdom
UNDP	United Nations Development Programme
UNU-MERIT	United Nations University Maastricht Economic and Social Research and Training Centre on Innovation and Technology
UNZA	University of Zambia
US	United States
USAID	United States Agency for International Development
WAAPP	West African Agricultural Productivity Programme
WIA	Women in Agriculture
WUR	Wageningen University and Research Centre
ZANIS	Zambia Information Services
ZICF	Zonal Innovation Challenge Fund
ZNFU	Zambia National Farmers Union
Z-RIU	RIU in Zambia



Introduction

What is this book about?

This book is about the challenges and practical realities of building the capacity to innovate. It describes the experiences of the Research Into Use (RIU) programme, a five-year, multi-country investment by DFID that aimed to extract development impact from past investments in agricultural research. Specifically, it explores different approaches through which innovation capacities were built. One approach was to establish and support innovation platforms (IPs) – an approach increasingly advocated as a way to broker linkages and facilitate interaction between multiple stakeholders in order to enable agricultural innovation. Originally, IPs were intended to help put existing research findings into use for developmental purposes in Africa. The purpose of this book is to describe lessons from these experiences for practitioners and policy-makers in the national and international arenas who are planning and implementing investments to enable agricultural innovation.

How did this book come about?

This book emerged out of learning mechanisms established by RIU. The book is based on information generated by institutional histories and through write shops with stakeholders from the Africa Country Programmes (ACPs) and IPs. These exercises focused specifically on RIU's experience with IPs. Wider RIU experiences and impact studies are reported separately (see www.researchintouse.com). Institutional histories and write shops are part of an emerging set of techniques that are increasingly being used to capture institutional change dimensions of the development process; institutional change here refers to changes in the way things are done both in the informal sense of routines and also in the formal sense of [organisational]

policies and accepted modes of practice. Where institutions are humanly devised frameworks that shape human interaction (North, 1990), organisations are groups of individuals bound by some common purpose to achieve agreed objectives. A good example to describe the difference between an institution and an organisation is to imagine it as a football game. The 'organisation' comprises the players and the goal-keeper who take part in the game; they have to play according to a set of rules and agreements between parties, which is the 'institution'. This focus on institutional learning responds to the recognition that, in addition to the measurement of outcomes and impacts, improving the effectiveness of development interventions requires a continuous process of learning and re-appraisal of what works and what doesn't. These techniques provide a rich account of the factors that affect the way interventions work, often helping to reveal a wider set of contextual factors at play, which are often missed as explanatory factors in formal evaluation exercises. These techniques are, as this book will show, particularly relevant to RIU experiences because of the complexity of the programme and its implementation history. This book shares the learning derived from RIU's use of these techniques.

Why a book on building innovation capacity?

The significance of this book's focus on learning about building innovation capacity is that in recent years there has been a growing interest in enabling innovation, including through IPs. This reflects a trend in agricultural development practice to focus interventions on the support of innovation processes rather than just on the supply of new technologies. This new focus draws attention to the different sorts of changes that are involved in innovation – often a combination of technical, organisational and institutional and policy change – and the wide range of actors involved in these related but different parts of the process. These ideas are elegantly articulated in the concept of an innovation system, with its emphasis on the importance of links between different actors and the role of the policy and institutional environment as an enabler of interaction, information flows and learning and change.

Yet these ideas also highlight that these systems of innovation are rarely self-organising. Weak linkages between key actors are a major disabler of innovation – even where opportunities for mutual benefit exist. More recently, it has become apparent that functional innovation systems are not organised by 'the hidden hand' of the market, but often by intermediary organisations that broker linkages, negotiate change and facilitate access to information and other resources needed for innovation. This is increasingly described as an innovation-brokering role. It is from this realisation that the current interest in capacity building, including through IPs and the innovation-brokering function they perform, emerges.

Use of IPs is seen as an intervention whereby an attempt is made to build the capacities amongst the different actors in the innovation process and to change the institutional environment in such a way that these actors can share ideas and resources to learn and innovate. This learning might be technological in nature; for example, the use of new production or post-harvest technology. It might be institutional in nature; for example, new marketing arrangements that link farmers to markets, or new ways that research can collaborate with farmers to address livelihood concerns. It might be policy-related in nature; for example, the development of new land tenure arrangements that give farmers access to grazing lands. It often entails a combination

of the above. The concept of a platform and the brokering role it plays helps to better organise and manage this learning process. This is a potentially powerful approach that has application in a variety of ways in the rural development process, where change needs to be negotiated between multiple agents at multiple levels.

Different experiences and early lessons on IPs are emerging and are reported in Nederlof *et al.*, 2011. These lessons suggest that IPs can be established at different levels (local, regional or national) and in different sub-sectors (e.g. maize, poultry, cotton) and have different objectives. Examples of different uses of platforms include:

Developing and testing new ways to learn about how to do agricultural research for development.

The Forum for Agricultural Research in Africa's Sub-Saharan Africa Challenge Programme (<http://www.fara-africa.org/our-projects/ssa-cp/>) established IPs to test the Integrated Agricultural Research for Development Approach (IAR4D), which draws upon innovation and uses a systems perspective as its organising principle.

Improving the enabling environment for agricultural innovation. COS-SIS (www.cos-sis.org) has established so-called CIGs – Concertation and Innovation Groups – to bring different stakeholders together and tackle the identified institutional constraints in order to bring about innovation. COS-SIS takes as a starting point that inappropriateness of existing institutions is the main problem for West African farmers. Concerted action is required for smallholder farmers to take advantage of existing opportunities (Hounkonnou *et al.*, 2012; Nederlof and Pyburn, 2012).

Linking farmers to value chains. International Fertilizer Development Center (IFDC) has established clusters to pilot the Competitive Agricultural Systems and Enterprises (CASE) approach (<http://www.ifdc.org/getdoc/729f4fe2-17df-467b-9092-d1bd1e2a5cf6/CASE>). The CASE approach aims to provide farmers with the knowledge and tools they need to increase their production and productivity and then to link them to profitable markets. Clusters were set up to facilitate this goal.

Strengthening local innovation processes. Prolinnova is an NGO-initiated multi-stakeholder programme to promote local innovation. The focus is on recognising the dynamics of indigenous knowledge and enhancing capacities of farmers to adjust to change and to develop their own site-appropriate systems and institutions of resource management so as to gain food security, sustain their livelihoods and safeguard the environment. (<http://www.prolinnova.net/>)

Strengthening regional capacity to undertake agricultural research for development. Conference of the Agricultural Research Leaders in West and Central Africa (CORAF) in West Africa (for example, with the Dissemination of New Agricultural Technologies in Africa (DONATA) project in Burkina Faso; see <http://www.fara-africa.org/our-projects/donata/>), Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA) in East Africa (<http://www.asareca.org/>) and Southern Africa Development Community (SADC) in Southern Africa are regional networks of national agricultural research for development institutes that aim at deepening cooperation in agricultural research and policy among member countries for the mutual benefit of all the stakeholders in the agricultural sector.

What are the key questions that need to be answered on building innovation capacity?

The experience of building innovation capacity, including the use of IPs, is still at a formative stage. A preliminary analysis of these experiences raises a number of operational and policy questions.

At the operational level:

- What capacities to build?
- What is the brokering capacity?
- Who should be engaged?
- How to decide on the formalisation of a platform?
- What is the appropriate level of intervention?
- What platform responsibilities are required?

At the policy level:

- Are IPs appropriate for the purpose?
- Do IPs enable innovation that responds to the needs of the poor?
- What is the role of research in innovation?
- Have sustainable capacities to enable innovation been developed?
- Was RIU worth the effort?



PHOTO: GENEVIEVE AUDET-BÉLANGER

*Innovation platforms
bring together stake-
holders in a sub-sector*

What can the RIU experience provide for the innovation capacity debate, practice and policy?

In view of these questions, the experience of RIU has much to offer. The programme established IPs with a very specific purpose in mind: putting agricultural research into use. The rationale for this was that there was a need to build capacity for innovation if research was going to make a contribution to agricultural innovation. The programme's origin resulted from a review of the DFID Renewable Natural Resources Research Strategy (RNRRS) programme, which had supported agricultural research for development from 1995 to 2006. The adoption of the research results was considered disappointing; a specific programme was called for that would support the adoption and use of research outcomes of the RNRRS and, in the process, learn how this could best be achieved.

However, as this programme encountered challenges in implementing its original objective of transferring research products into use, its approach changed. One of the key changes was the recognition that technology might not be the only starting point for stimulating innovation. In response to this recognition, one of a series of experiments set up by RIU was the establishment of country programmes. These were based on the premise that research use required an intervention that strengthened innovation capacity and that this, in turn, required the strengthening of links and interactions between the various actors involved in agricultural innovation. It was at this point that the idea of IPs emerged.

As this book will describe, having made the decision to use IPs as a research-into-use intervention, RIU then found it had to make series of decisions about how this intervention should be accomplished. How should the scope of country programmes be defined? Should platforms focus on commodities, value chains or development themes? At what levels should the platforms be established and was it necessary to create national innovation coalitions? Having little experience to guide it, RIU was experimental in nature and, in hindsight, may have made a number of wrong turns, but it learned a lot along the way. This book documents lessons about the way platforms were established and the way they were facilitated and supported by RIU's country programmes.

RIU managed to demonstrate some tangible development outcomes in its three years of supporting IPs. These outcomes include, for example: a fish seed delivery system in Malawi; the support of an indigenous poultry sector in Tanzania; the introduction of improved packaging technology for cowpea in Nigeria; the establishment of a warehouse receipts credit system in Rwanda; and the establishment of private services on animal-drawn ripping equipment in Zambia. While the platforms did not function as a way of putting RNRRS research products into use, they did act as a mechanism to draw research expertise around existing technology into rural development activities. It is yet unknown whether these platforms will persist beyond the life of RIU [see also Gildemacher and Mur, forthcoming]. However, one of the key institutional outcomes of the programme was that it showed how linkages between researchers and development actors could be established and left a legacy of relationship between these different actors.

Structure of this book

In the next chapter [2], we discuss the current perspectives and policy debates on enabling agricultural innovation and the related trends. We also discuss the various capacities that need to be built for innovation capacity to develop. This places the experiences of RIU in the context of wider debates and documentation of practice on enabling agricultural innovation. The third chapter [3] provides a historical account of the RIU programme and the RIU ACPs; this includes a discussion on the critical events that influenced the way RIU approached the task of enabling innovation. The types of innovation that were enabled by the programme are described in more detail in the fact sheets in Part II of this book. In the fourth chapter [4], we focus on the main mechanism implemented to enhance innovation – the IPs that were established under the country programmes. We describe the architecture of platforms, the facilitation and brokering of IPs as an intervention strategy, and the functions and activities of a platform (i.e. what actually happened). This also includes an overview of challenges encountered. In the last and concluding chapter [5] we review the lessons learned and offer recommendations on building innovation capacity based on the RIU programme and its country programmes.

Like all books, this one has a number of limitations that we would like to acknowledge. The cases are all from Africa, and no comparison with other parts of the world is made. In addition, all cases are from the Research Into Use programme. This was a deliberate choice, as we wanted to share RIU experiences, yet its disadvantage is that these experiences are not systematically compared with other similar initiatives. More information on similar initiatives using IPs can be found in Nederlof *et al.*, 2011.

Box 1. Recent work on innovation platforms

KIT's Department for Development Policy and Practice has a long tradition of working on issues related to knowledge development for agricultural and rural development. This book is part of KIT's recent work on agricultural innovation.

KIT has been involved in several publications about experiences with enhancing innovation – and specifically innovation platforms. One is titled "Putting Heads Together: Agricultural Innovation Platforms in Practice" (Nederlof et al., 2011). This book is from the perspective of programme managers and gives practical guidance on the do's and don'ts of establishing innovation platforms. Another recent publication, based on experiences with catalysing innovation in the Convergence of Sciences-Strengthening Agricultural Innovation Systems (COS-SIS) in Benin, Ghana and Mali, is entitled "One Finger Cannot Lift a Rock" (Nederlof and Pyburn, 2012). This book, written from the perspective of the broker, reports stories on facilitation by the brokers and is meant to be a source of inspiration for other brokers in similar positions. A resource book specifically targeted towards students on innovation dynamics is forthcoming (Pyburn and Woodhill). This book intends to be an introduction to innovation systems theory and practice in the agricultural sector.

Beyond KIT, many other publications on enhancing innovation have been written, including the well-known WorldBank investment sourcebook (World Bank, 2012). This current book, about RIU's experiences, adds to these publications by sharing a unique experience in piloting innovation including innovation platforms. The book will show that innovation platforms are not helpful for 'putting research into use', as we argue that this is the wrong question. Nonetheless, innovation platforms can play a role in bringing stakeholders together, identifying the needs for action and enhancing institutional change.



Enabling innovation: current perspectives

Sustainable agriculture requires innovation. In the past, science and technology were considered the most important avenues towards agricultural development [see Box 2]. Increasingly, however, the importance of the context for agricultural development is being recognized. This includes the acknowledgment that production often is not the main constraint for small producers. Due to globalisation and liberalisation, amongst other factors, smallholder producers operate in an increasingly complex and hence uncertain environment. This provides new challenges and opportunities for small farmers, but requires continuous adaptation and more systemic approaches to agricultural development and innovation. Hall *et al.* (2006) highlight six changes in the context which underline the need to further examine how innovation comes about in the agricultural sector. These are:

- 1 Markets increasingly drive agricultural development;
- 2 Farmers need to innovate continuously if they want to cope, compete and survive in an increasingly unpredictable environment for agriculture;
- 3 The private sector has an increasing role in generating, diffusing and applying knowledge, information and technology;
- 4 Linkages between sectors and countries have become possible, thanks to information and communication technologies (ICTs) and this also underlines the importance of taking advantage of information or technology available elsewhere;

- 5 The knowledge structure of the agricultural sector has often changed as a result of education. Interaction has become even more important and can be led by different actors, such as farmers, the private sector or non-governmental organisations.
- 6 Globalisation affects all the changes mentioned above. As a result of globalisation, both opportunities and threats have become larger.

Box 2. From transfer of technology to working with farmers

The view that scientific research is the main driver of innovation, by creating new knowledge and technology, has gradually shifted towards a view in which innovation is considered an interactive process in which research plays a role.

In the 1960s and 1970s, the prevailing model in many sub-Saharan African countries was that scientists would develop a new technology and then extension workers, in their turn, would transfer it to farmers. Farmers would adopt such a technology and use it on their own farms. Based on this model, the World Bank implemented its Training and Visit Programme in many countries. However, this Transfer of Technology (ToT) approach was challenged for not taking the farm as its entry point and failing to recognize that many other factors were also in play.

Not only has understanding of the role of research in innovation changed, so has the way that research is conducted. As a reaction to the reductionist character of previous research approaches, Farming Systems Research (Dixon et al., 2001 and Collinson, 2000) came into practice.

The ToT model was increasingly criticised for not considering the knowledge of people other than scientists, and farmer participatory approaches gained momentum. This altered the way in which development workers and scientists operated (now working together with farmers instead of in isolation). Participatory methods in development and research included rapid and participatory rural appraisals (Chambers, 1990; 1994; 1997), and participatory technology development (Reijntjes et al., 1992).

Within this changing context, the understanding of innovation has also changed. Whereas previously investments in agricultural development were guided by the National Agricultural Research Systems (NARS), in the 1990s the Agricultural Knowledge and Information System (AKIS) was developed (Röling and Wagemakers, 1998; Engel and Salomon, 1997). AKIS paid attention to the links between research, extension and education, and to identifying farmers' needs for technologies so as to establish research priorities with the farmers. AKIS focused, albeit from a research perspective, on the system.

Recently, innovation systems thinking has also emerged in the development sector. It is based on the idea that, although research has a role to play in innovation, innovation arises out of linkages, interaction and joint learning amongst stakeholders around relevant topics.

One conceptual framework that takes into account the above-mentioned changes, and that is helpful in further exploring how innovation comes about, is innovation systems thinking. This framework is based on the premise that innovation emerges from linkages, interaction and joint learning amongst stakeholder around different topics. The capacity to innovate refers to the abilities of the stakeholders to interact and learn jointly, as well as to the capacity to broker linkages and facilitate this process. (We will come back to that later in this chapter.) The inno-

vation systems approach recognises that research may have a role to play in developing new knowledge or information, but may not necessarily improve the capacity for innovation. Hall et al. [2006] explain that:

“An innovation system can be defined as a network of organizations, enterprises, and individuals focused on bringing new products, new processes, and new forms of organization into economic use, together with the institutions and policies that affect their behaviour and performance, on a reasonable scale. The innovation systems concept embraces not only the science suppliers but the totality and interaction of actors involved in innovation. It extends beyond the creation of knowledge to encompass the factors affecting demand for and use of knowledge in novel and useful ways”.

This framework has been developed based mainly on patterns of industrial growth in developed countries. The innovation systems approach recognises the need for continuous and incremental innovation in a changing context. It has been applied only recently to agriculture in developing countries in order to help understand a country’s agricultural sector and how to make better use of knowledge, beyond research interventions. (Hall et al., 2006)

The innovation systems concept was mainly an explanatory and diagnostic framework but it has been tested in several programmes as an operational model. Various programmes have since experimented with the practicalities of such an approach and with ways of deliberately catalysing innovation.

It is this experience within RIU that we will discuss in this book. RIU arose from the question of how to put research into use; the next chapter will show how this question was revised, and how



PHOTO: REMCO MUR

*Markets increasingly
drive agricultural
development*

enabling innovation was approached through emphasis on building the capacity to innovate, through the establishment and facilitation of IPs. RIU itself was experimental in nature and learned along the way what was needed. Thus, it can convey important lessons for others who design such programmes, or develop the policies to accommodate them.

Innovation platforms as mechanisms for innovation

Hall et al. [2010] distinguish six innovation narratives, devices for categorising the main ways in which agricultural research is being organised:

- 1 **Poor user-led innovation.** Approaches that place poor farmers and consumers at the centre of the innovation process as they have superior knowledge of their production and social context. *Examples:* participatory research; participatory plant breeding; and local innovation support programmes.
- 2 **Public-private partnership-led innovation.** Approaches that seek to deploy the expertise, resources and entrepreneurial perspectives of the private sector in an alliance with public actors and policies. *Examples:* research and development alliances; private companies supplying goods and services; business incubation.
- 3 **Below-the-radar-led innovation.** Approaches that seek to nurture emerging innovation models that focus on the opportunities presented by large markets of poor people at the intersection of market and social entrepreneurship. *Example:* use of social venture capital arrangements to identify and support business models that combine market-led and social entrepreneurship.
- 4 **Investment-led innovation.** Approaches that rely on financial incentives for innovation through a variety of operational forms. *Examples:* challenge funds; social venture capital funds.
- 5 **Communication-led innovation.** Approaches that use communication as an intermediation tool for technical and institutional adaptation. *Examples:* use of ICT and media to strengthen the transmission and availability of ideas to different audiences; network building; negotiating institutional policy change at the regime level.
- 6 **Capacity development-led innovation.** Approaches with a focus on institutional and network development with a view to enhancing innovation system capacity. *Examples:* IPs; network-strengthening initiatives; innovation brokering; policy dialogue platforms and processes.

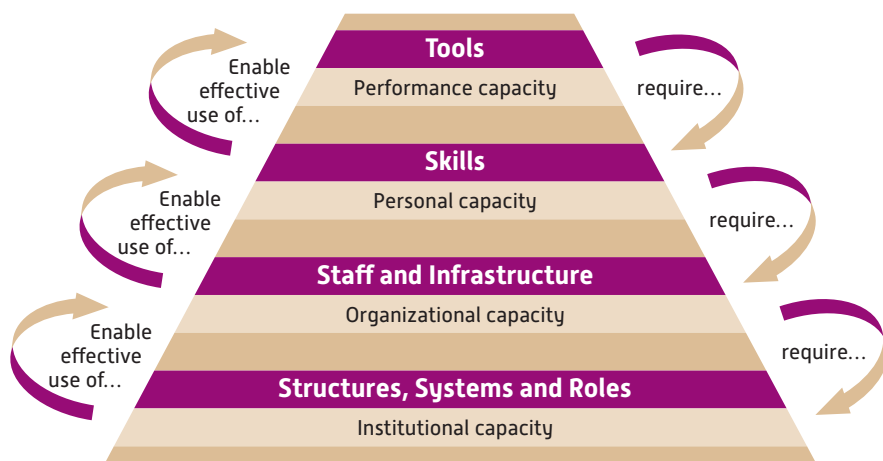
A significant challenge in designing innovation systems (Hall *et al.*, 2006) is how to overcome the asymmetry in access to knowledge. One mechanism of capacity-led innovation, intended to address this asymmetry, is the IP. RIU attempted to develop such platforms, and this will be discussed in the fourth chapter of this book. IPs are an attempt to establish innovation capacity; they are not just tools to put research into use, but are concerned with the organisation of interaction and learning amongst stakeholders around various topics. This learning is technological, organisational, and policy and institutional in nature and can take place at multiple levels. IP (Nederlof *et al.*, 2011) refers to a set of stakeholders who are bound together through their interest in shared issues. The platform provides a [temporary] forum to address these issues, and to experiment with and implement joint solutions.

In the final chapter we discuss RIU's efforts to strengthen capacity for innovation and assess what types and levels of IPs were suitable for this purpose, as well as what lessons we can learn from RIU experiences with facilitating IPs. Different experiences and lessons on IPs are also reported in Nederlof *et al.*, 2011.

Building the capacity to innovate

System change requires capacity at different levels. In 1991, the United Nations Development Programme (UNDP) defined 'capacity building' as the creation of an enabling environment with appropriate policy and legal frameworks, institutional development – including community participation [of women in particular] – human resources development and strengthening of managerial systems, adding that UNDP recognises that capacity building is a long-term, continuing process, in which all stakeholders participate (e.g. ministries, local authorities, NGOs and water-user groups, professional associations, academics, and others).

Figure 1 Capacity pyramid



Source: Potter and Brough, 2004

Potter and Brough (2004) differentiate four different levels of capacity needs for systemic change. They emphasise the interrelatedness between the different levels, which is necessary to promote concerted action by multiple stakeholders to achieve agricultural innovation (see Figure 1). If one of these levels is missing the IP cannot perform optimally. Approached from a systems perspective, the pyramid becomes relevant to the capacity to innovate. The IP is an attempt to bring people together through their interest in shared issues, aiming for systemic change. But for stakeholders to commit to innovation (and play their roles in an IP) they need to develop institutional capacity, organisational capacity, personal capacity and performance capacity (see Box 3). The sequencing in the Figure makes it appear as if interventions to improve capacity may be planned logically, but RIU experiences suggest that change is more iterative.

Box 3. Capacities required for innovation

Performance capacity: *Are there sufficient tools, money, equipment and consumables required for concrete action and experimentation?*

Personal capacity: *Are the platform members sufficiently knowledgeable, skilled and confident to participate in the platform and in experimentation?*

Organisational capacity:

- *Skills and roles capacity: Are there enough stakeholders with broad enough skills to cope with the issues? Are roles and responsibilities within the platform well defined? Is the skill mix appropriate?*
- *Accountability and learning capacity: Are there reporting and monitoring systems in place? Are there clear lines of accountability and feedback? Are there possibilities for learning, reviewing, revising and adapting? Are effective incentives available?*
- *Facility and support capacity: Is brokering capacity sufficiently established?*

Institutional capacity:

- *Systems capacity: Are internal and external relations and flows of information functioning in an effective manner? Is there good communication between stakeholders? Are there sufficient links with the different interest groups and with external actors?*
- *Structural capacity: Are there decision-making forums where discussions may occur and decisions may be made? Are the objectives of the platform in line with the level and the members?*
- *Role capacity: Have individuals, teams and structures been given the authority and responsibility to make decisions essential to effective performance?*

Adapted from Potter and Brough, 2004

In our current study, the focus was on the efforts of RIU to build institutional and organisational capacities. We are aware that it does not provide a complete picture.

Facilitating innovation and brokering

If we assume that interaction amongst stakeholders does not always just happen smoothly, but needs brokering and facilitation, the question arises: who can do so and how? According to Tennyson (2009) there can be an internal or an external facilitator, from within or outside the platform, and the facilitator can be a person or an organisation. In the case of RIU, an external organisation played the role of facilitator. In the scientific literature such facilitators are often referred to as brokers.

Klerkx *et al.* [2009] define innovation brokers as those who act as catalysts of interaction. Howells (2006) states that brokering may include: (1) involvement in the establishment of the platform – for example, by identifying potential members; (2) involvement in the process – for example, by making transactions between stakeholders possible, by acting as a mediator; and (3) helping to find advice, funding and support for the members. Winch and Courtney (2007) define an innovation broker as “an organisation acting as a member of a network of actors [...] that is focused on [...] enabling other organisations to innovate”.



*A common vision,
also on local level*

The main avenues for brokering support to IPs include the following [Nederlof et al, 2011]:

- **Developing a common vision and common problem statement:** As a first step, members need to decide which objectives they would like to achieve, and the nature of activities they aim to implement. This in turn requires a clear definition of the roles of the different members at different levels. In an IP, each organisation joins with its own objectives and expectations. With the support of a broker, a common vision among parties can be developed.
- **Scoping and strategic networking:** A platform often consists of a core group and, when necessary, other actors are brought in – perhaps only temporarily. Brokers have an important role in making strategic decisions about whom to include and when. Brokers play an important role in briefing potential and new members about the platform’s objectives and way of working.
- **Process management:** Managing a process includes a number of important activities related to common assessment, planning and monitoring the performance of the platform and its activities. This includes building trust between members and stimulating joint activities. It also includes making sure the right stakeholders are on board at the right moment. Process management is needed to enhance the likelihood of innovation and institutional change.

*In his book “**Networks with Free Actors**” Wielinga describes a large-scale experiment in animal husbandry. During the period 2004–2007, more than 120 networks were assisted by 25 facilitators, mostly researchers from Wageningen University and Research Centre (WUR). A new generation of facilitation tools was developed, focusing on energy for change and. He describes the different roles facilitators play when they aim at networking and bringing stakeholders together.*

In the fourth chapter we reflect on a broker’s role in relation to the RIU experience. We pose the following question: Does RIU’s experience confirm that IPs are helpful in developing a common vision based on a problem and opportunity identification, in scoping and strategic networking as functions of brokers, and in structuring learning through the process?

Level of the innovation platform

Platforms often operate at multiple levels. The authors state that local level platforms often look for practical solutions, while platforms at higher levels often target policy change. Based on the RIU experience we will draw lessons on different types and levels of platforms, which perform different functions in the innovation system (Nederlof et al, 2011).

Internal dynamics of the platform

Platform members can often be divided into several categories. They include: [1] farmers and their organisations; [2] input dealers, agro-food processors and traders; [3] private and public service providers, such as research, extension and business development; [4] financial services; and [5] regulatory bodies that define the formal standards and rules.

Degree of formalisation

How formal or informal a platform is depends, first of all, on the context of the country in which it operates (and it is possible to function even when a platform is very informal). Formality needs to be balanced against the flexibility necessary for enhancing innovation in an evolving context.

Capacities required

Specific capacities are required to effectively engage in innovation as well as to facilitate the Innovation Platform.



From research to innovation in the **Research into Use Programme**

RIU was set up to make better use of available agricultural research products. RIU was a programme that focused on the relationships between agricultural research results and innovation. The programme worked towards identifying better processes to help put research results into use. RIU had two objectives:

- 1 achieve impact at scale; and, in the process,
- 2 generate lessons about putting research into use and establishing innovation capacity.

This book mainly concerns the second question. A second book, focusing on the outcomes and impact of RIU, is in preparation [Gildemacher and Mur, 2012]. RIU had a total budget of GBP 37.5 million and consisted of three main components:

Asia Country Programmes

Through competitive calls, a number of projects in South Asia were selected. They are aimed at developing new partnerships to put research produced under the RNRRS into use. These programmes are not discussed in the current book.

Africa Country Programmes

The objective of the ACPs was to facilitate agricultural innovation. ACPs were established in Malawi, Nigeria, Rwanda, Sierra Leone, Tanzania and Zambia. The Rwanda Country Programme was the first of these, followed by Malawi, Nigeria, Sierra Leone and Tanzania, and finally Zambia.

Best Bet Initiative

The Best Bet Initiative makes resources available for innovative ideas that can initiate new viable enterprises. The idea behind the Best Bet initiative is to identify convincing innovative ideas that have shown initial pilot success and to support their attaining a scale that makes them commercially viable and sustainable. Ideas are selected through an innovative competitive process, inspired by the Dragon's Den; projects selected gain the funding necessary for attaining the required scale. This initiative is also not discussed in the current book. (www.researchintouse.com)

RIU programme management evolution

The partners implementing the RIU programme represent the differences in perspectives on research and innovation. Initial partners of the RIU programme were a UK-based Knowledge Institute (lead partner and coordinator), a UK-based consultancy company with a strong focus on organisational development and performance assessment (for Monitoring and Evaluation) and a private consultancy firm based in Uganda. The partners had differing activity plans and budgets and, according to most respondents, worked in isolation from each other. At the UK level there was an advisory panel (the Programme Advisory Board) for integrating innovation systems thinking into the programme, but the panel was only rarely called on for advice.

After the Mid-Term Review, the RIU programme was reorganised to comprise the following: [1] the directorate, seated in Edinburgh, and the UK support team; [2] the central research team; [3] an evaluation team led by an outside consultancy firm; [4] a communications team; and [5] the RIU country teams in the countries targeted by the ACPs.

Whereas the former team of partners was characterised as formal (in terms of procedures) and used many consultants for advice, the new team of partners operated in a rather informal fashion and used in-house expertise instead of consultants. In addition, a number of responsibilities were transferred to the country teams. As a result, the budget was also used differently and geared towards increased activities. The initial partners were each given their own budgets, whereas now the budget is decentralised and spread over the country programmes.

Critical events of the RIU Programme

The need for Research Into Use

The aim of the RNRRS programme, according to the website, was to: *remove researchable constraints to the sustainable development and/or management of the natural resources*. DFID invested over GBP 200 million in the RNRRS programme to generate research products, in addition to investments in the Consultative Group on International Agricultural Research [CGIAR]. The funds were managed through ten research programmes, ranging from animal health and fish genetic

research to forestry, livestock and plant sciences. Evaluation showed that a lot of research was done but little impact achieved. The English parliament encouraged DFID to show impact from the investments. This triggered the development of a specific programme to bring research products developed under the RNRRS into use. The RIU programme was founded on the assumption that research results could be identified that had the potential for breakthrough success if they were promoted by investing substantial resources. Based on this assumption, RIU aimed to identify thirty promising research products from the RNRRS legacy and to strengthen the impact of each selected promising research result with an investment of around GBP one million.

According to this reasoning, research produces 'products' which can later be transferred in a separate effort to their intended users. Agricultural Extension Service providers play an intermediary role in transferring these products (knowledge and/or technologies). This linear thinking about agricultural research and extension is flawed, however, and does not respond to the unpredictable context in which agriculture operates, as discussed in Chapter 2.

When the programme began, in 2006, there was considerable ambiguity about the focus of the programme: was its primary purpose to get research *into* use for impact at scale or learning (or researching) *how* to get research into use? In other words, was it a development or a research programme? After the Mid-Term Review there seemed to be consensus as to what the programme aimed to achieve. Both research and development were now considered outcomes of the programme, which meant there was no longer discussion about the objective, but that the two objectives remained united in a single programme. Throughout the programme, however, tension between the two objectives could be identified.

Critical Event 1: Reviews of the RNRRS

Several reviews of the RNRRS programme showed that there were no research products readily available for quick uptake. From the more than 1600 research results, 280 products were selected by the ten programme managers, based on their potential impact. These were considered in more detail, but in the end the reviews concluded that no such 'ready for uptake' research results existed within the RNRRS portfolio. It gradually became clear that the assumption on which the programme was based (i.e. that there are research products from RNRRS programmes 'on the shelf' that can be put into use by giving them a push) was unrealistic. This drove home the realisation that the contribution of research to innovation is not as the sole driver of first steps towards a result, after which that result can be disseminated. This realisation led to a shift in focus, from promoting research products to facilitating innovation based on innovation systems thinking (see Chapter 2). As a result, reviews of the RNRRS led to a changed understanding of the role of research in RIU.

Critical Event 2: Mid-Term Review

Probably the main, and surely the most obvious, critical event that has influenced the entire programme was the Mid-Term Review, followed by a series of technical reviews.¹ The RIU programme was revised following those reviews in late 2008 and early 2009. The main findings of

¹ From this point on, when we refer to the Mid-Term Review we will mean the Mid-Term Review followed by a series of technical reviews.



PHOTO: REMCO MUR

*Innovation in
maize processing:
yes we can!*

the Mid-Term Review related to the following issues: poor management; lack of consensus on the balance between the objective of experimenting with new ways of catalysing innovation and the objective of impact at scale; and lack of a unified vision on the role of research in innovation. A more unified vision emerged as a result of the Mid-Term Review, although differences continued to exist.

A new programme director and a new programme support team were appointed. The most important effect was that each of the country programmes was advised and supported technically by a small team. In addition the programme management transferred more decision-making power to the national implementation teams, maintaining only a small administrative and communication unit at programme level.

The account of Vera F. Mugittu, Country Coordinator of RIU in Tanzania (Box 4) shows that, in her experience, it was only after abandoning the initial centralised programme strategy and transferring responsibilities to the country teams that sufficient flexibility and space was created for local initiatives, which eventually led to the creation of the local entrepreneurship innovation platform.

Box 4. The need for local coordination and ownership

"I became one of the six Research into Use (RIU) country programme coordinators in June 2008. I considered the RIU program an action research programme aiming to maximise the poverty eradication potential of previous investments in the renewable natural resources research and thereafter collecting lessons on what works or doesn't work in putting research outputs into use. The initial focus was to create innovation systems, which continuously demand and utilise new knowledge and, in the process, promote rural innovation. To be honest, I was not fully clear of what I was supposed to do to achieve those objectives and when I tried to exchange with my fellow country coordinators I learned that they were as stranded as I was. Worse, when I sought help from the many programme advisors, both in Uganda and in the UK, I got even more confusing messages. At that point I realised two things: the first thing was that there was no clear blueprint for programme implementation, and second, RIU was a pilot programme and we were all learning.

Attached to my employment contract were detailed terms of reference spelling out generic managerial roles as the overseer of the RIU programme in Tanzania and my duties to coordinate activities to implement the programme country strategy were titled 'Demand-Led Innovation.' The document was later abandoned in August 2009, after the programme review, and this provided our country team the opportunity to develop our own implementation document, titled 'The Intervention Logic.' The new document defined the vision, statement of ambition and anticipated milestones. It was not a binding project document but a description of how we intended to run the RIU experiments in Tanzania. We did not develop a log-frame but had milestones to report against every quarter and adjust accordingly. Writing the intervention logic document was the beginning of our journey towards developing institutional arrangements necessary to commercialise the indigenous poultry sector in Tanzania."

Adapted from: Vera F. Mugittu, RIU Country Coordinator, Tanzania

Elements of the vision that were common to the project partners related to the ambition of RIU (both development and research goals) and the realisation that even in the private sector only a limited part of the research is actually taken up by the users.

However, even after the Mid-Term Review, differences in perception at the level of the RIU programme management still existed, with regard both to the roles of public and private sector in facilitating innovation and to the desirable outcome of the RIU programme – improved understanding of and a capacity to innovate, or development impact as a result of the promoted innovation. The RIU programme clearly stresses the need for building a joint vision amongst project partners before starting implementation.

Critical Event 3: Launch of the Best Bet initiative

The programme stresses the need for private sector involvement. The Best Bet initiative is based on this assumption and aims to test a competitive funding mechanism in which grants are provided to a number of large-scale technology promotion activities. The current study has not investigated the Best Bet programme; however, there is reconfirmation of the focus of RIU towards an even more important role for the private sector. To an extent, the Best Bet Initiative is a response to the assumption that good ideas can develop into viable businesses, provided they are given the right kind of push. What changed, with regard to the assumption at the beginning of RIU, was that the source of such opportunities is not the RNRRS research legacy. Any promising idea that can turn new practices or ideas into a sustainable, viable business is eligible.

Critical events for the Africa Country Programmes

Initially, RIU wanted to work in 10-15 countries in which DFID had intervened with the RNRRS programme, covering at least three countries per sub-African region. Later, this was reduced to six countries in sub-Saharan Africa, based on criteria such as geographic division, post-conflict versus stable governments and land-locked versus coastal environments. This also highlights the degree to which the programme was 'designed' rather than emerging based on opportunities at the outset. Rwanda, Tanzania and Zambia provide very different contexts, both in an economic and political sense, for agricultural sector development. As a result, the embedding of the RIU programme and the functioning of both the ACPs and the resulting IPs differ considerably.

A major lesson from the first part of the programme [i.e. before the Mid-Term Review] was that a blueprint approach for IPs does not work, and that what is successful in one country will not necessarily be successful in another. IPs represent a set of principles that need to be tailored to, and that evolve within, their specific context. In Tanzania, for example, the main approach was brokering to address constraints that prevent producers from taking advantage of an opportunity (developing a new local poultry sub-sector); according to the country coordinator from Tanzania, this is the bottleneck approach. In contrast, in Zambia the approach towards developing the use of conservation agriculture has been mostly technology-driven out-scaling, including harmonisation and dissemination of information. In Rwanda, the focus was on commodity development through building stakeholder capacity and enhancing interaction through formal coalitions. Initially, there was a strong link with the African policy frames such as CAADP. However, those ties have not been fully pursued, partly because of a difference in horizon [RIU has a 5-year mandate and CAADP has a 20-year horizon].

A few events have occurred across countries and have been critical for the current functioning of the programme:

Critical Event 1: Country assessments

As we can conclude from the summary sheets in the second part of this book, RIU started with country assessments, followed by establishment of the National Innovation Coalitions (NICs, see Critical Event 3) and the elaboration of a country strategy. In all cases, the country assessments were carried out by consultants who were not involved afterwards. During this step, first contacts were established with the main stakeholders and an external recruitment office was enlisted to recruit the experts who would carry out the country assessment. In hindsight this can be considered a poor decision, as in a number of countries the teams recruited did not produce a result that was relevant to further development of the country programmes. In both Rwanda and Zambia, the country assessment did have an influence on the programme design, and especially on the composition of the NIC, as a result of the identification of the important actors in the national innovation system. It is debatable, however, whether an extensive study was needed to achieve this result. In Tanzania, the country assessment was rejected at the central programme level, which resulted in a difficult start for the programme. Although the assessments resulted in comprehensive reports on opportunities and identification of the different actors in the national innovation system, they did little to create buy-in of organisations active in the country, nor provide concrete entry points for action. In the RIU cases, most of the choices made through this first layer of studies did not lead to a narrowing down of the scope of the RIU

intervention in those countries. In hindsight, the main result of the studies was that a decision was made on the representation of organisations in the NIC in each of the three countries.

Narrowing down the scope of intervention and making the right choice for an entry point are essential and need to be grounded in national priorities and interests. In Nigeria, the RIU programme deliberately looked for promising new practices (i.e. research results that proved to be successful in practice) as an entry point for action. This resulted in a multi-stakeholder approach for the dissemination of these practices, engaging different public and private stakeholders (see Box 5).

Box 5. Entry Point for action in Nigeria: promising technologies on the shelf

"A country assessment conducted in Nigeria by the RIU programme found that knowledge outputs from the nation's 18 agricultural research institutes were not being utilised by intended users as a result of institutional and other barriers. Farmers, post-harvest processors, produce marketers and agro-allied businesses are in need of knowledge, technologies and business practices that would increase their production, incomes and competitiveness. Yet some relevant research outputs that would address these objectives were available but not getting out of the agricultural research institutes into practical, economic use, due to inadequate mechanisms and lack of linkages between research and practice.

It was agreed that the RIU-Nigeria programme should attempt, on a small scale, to bridge the gap between the need (or demand) and supply for new knowledge and technology, and document the results and lessons to inform possible out-scaling and mainstreaming of results by the responsible national agencies and processes."

Adapted from: Edebiyi Daramola, Alphonse Emechebe and Utiang P. Ugbe

PHOTO: GENEVIÈVE AUDET-BÉLANGER



Joint identification of entry points for action

In Box 6, the evolution of the agricultural mechanisation platforms in the Morogoro Region is described [see also Part II of this book for further details]. Rice and maize were selected as commodities, based on the opportunity to create synergy with the established government efforts to boost grain production. The platform developed into a mechanisation platform after land underutilisation was identified as a major constraint on the expansion of production.

Box 6. Entry point for action

In the Morogoro Region, synergy with the FAMOGATA programme – a government programme with the explicit objective of making Morogoro the national granary – was sought. This was also an important reason behind RIU's decision to select rice and maize as commodities. (From: RIU Tanzania Institutional History, KIT, 2011).

"Morogoro Region has high potential for agriculture production in Tanzania, with vast arable land for cultivation. Unfortunately, the land is underutilized because the farming practices for most of the small-scale farmers in Morogoro Region are characterised by the use of hand tools such as hoes, machetes, and slashes. The use of hand tools has led to poor agricultural productivity among the farmers year after year. However, through the RIU approach of forming mechanisation platforms in the Morogoro Region, farmers and other stakeholders were brought together to address the challenges and identify solutions to the underutilisation of land and low agricultural production. Through stakeholder engagement in this platform, there has been improved mechanisation and smallholder farmers saw an increase in their production.

Prior to introducing the RIU programme, many bottlenecks existed that hindered mechanisation of agriculture in Morogoro. With assistance from RIU, a series of meetings were organised for agricultural stakeholders in four districts of Morogoro Region: Mvomero, Kilosa, Kilombero and Ulanga Districts. One of the important causes of the underutilisation of land identified in this meeting was the low availability of labour. Most farmers were dependent on labour-intensive methods for agriculture production. The stakeholders found this to have many limitations that were difficult to overcome, as the supply of labour was very limited in their districts.

Adapted from: Felix Temu, district subject matter specialist for agricultural mechanisation, Mvomero district council, and Thabit Waziri, district subject matter specialist for agricultural mechanisation, Kilosa district

Critical Event 2: Design of innovation platforms

There was a concerted central effort to ensure a balanced design of the RIU pilot for the six countries. In addition, many experts visited the country teams, providing theoretical support in the field of innovation systems thinking. This initially left little room for manoeuvre that would allow the country programmes to adapt to local opportunities, constraints and realities. The country programmes designed stakeholder interaction at three levels: the national level and the regional level, as well as the local level, mainly involving producers. These are clearly separated yet linked. This division is still evident in all cases and has influenced the design of mechanisms for enabling innovation.

Critical Event 3: National Innovation Coalition introduced

NIDA² introduced the National Innovation Coalition (NIC) concept for the specific purpose of embedding the programme in the national system. Rwanda was the first country to initiate an

² Nkoola Institutional Development Associates, a private consultancy firm based in Uganda and one of the implementing organisations of RIU during the first years of the RIU programme.

NIC, as it was the first country to begin programme implementation. The NIC played a role in further narrowing down decisions and identifying innovation opportunities by advising the RIU staff. This provided focus in terms of where to start with the programme. Choices were made regarding both subjects and geographical focus.

From this experience, it appears that for initial decision-making it is important to build as much as possible on existing local and national insights, knowledge and priorities in order to identify concrete entry points for action.

Box 7 provides an overview of the history of the NIC in Rwanda, showing that the role of the NIC in the delimitation of the intervention theme has been very important. However, the NIC lost some of its relevance afterwards and was eventually dissolved.

Box 7. The role of the National Innovation Coalition in initial decision-making

The RIU programme in Rwanda started in earnest at the end of 2007, after Rwanda was selected as an RIU country, and a study of the Rwanda national agricultural innovation system was carried out by the country assessment team. This was followed by the creation of the National Innovation Coalition (NIC) in early 2008, which included representatives of various stakeholders in the agricultural innovation system. The creation of the NIC was accompanied by the signing of MoUs by the various participating organisations. At its inception, the NIC had 11 members and its role was to identify opportunities for intervention.

The first activity of the NIC was to hold brainstorming meetings with the RIU country coordinator to develop a national action plan for the Research Into Use programme. Responsibility for the implementation of the national action plan was placed on the RIU country coordinator.

Ultimately, the RIU programme undertook several initiatives. The most important initiative was the launch of a number of district level IPs. The first three sub-sector IPs were initiated in May 2008: cassava in Gatsibo, potato in Gicumbi and maize in Nyagatare. A fourth IP was added in November 2008, in Karongi district, on small irrigation technology [foot pumps] for horticulture. These IPs formed the core of RIU activities throughout the programme. The choice of these crops for intervention was made by following the district priority crops, as determined through the crop intensification programme (CIP) of the Rwandan government. The results of the extensive consultation process prior to the establishment of the NIC had little influence on this decision.

From: RIU Rwanda institutional history, KIT, 2011

Critical Event 4: Mid-Term Review

In all of the countries the Mid-Term Review had major implications for the programme's activities. The content and methodological support from the RIU programme level shifted from a number of partners providing advice and support to a Central Research Team (CRT) responsible for research and documentation of lessons, although the role of the CRT was never clear within the RIU management structure. In terms of management of the country programmes, Country Programme Teams became directly accountable to the RIU administration in the UK. In Tanzania, the management as such did not change, as it had always been contracted to an organisation, rather than having specific people assigned to be answerable to three separate overall execu-

tive organisations. In Rwanda and Zambia, the staff hired through RIU was answerable as a team to the overall RIU management.

According to the website, the innovation systems approach was initially used as a prescriptive framework for establishing a fixed menu of organisational and institutional arrangements for innovation. This resulted in an over-designed programme, which unintentionally reduced the ability to adapt the approaches to needs and opportunities that presented themselves. After the Mid-Term Review, less emphasis was placed on a specific design and more on innovation systems thinking, as a tool to aid learning and capacity building for innovation.

Furthermore, after the Mid-Term Review, all of the countries were granted more autonomy in the use of programme resources. Additional flexibility funds were made available for the programme's activities.

In terms of content, all of the countries were asked to focus on achieving impact at scale, both directly at the level of intended beneficiaries and as an impact through institutional change. This resulted in making choices based on which activities were to be continued and which ones terminated.

Critical Event 5: Preparing a strategy for post-project continuation

The Mid-Term Review also led most countries to reduce their activities, focus on a few platforms and think about their strategies for post-project continuation of activities.

In general, it can be concluded that the RIU programme did experiment with enabling innovation. What hampered the programme in its development was the urge to over-design the pilot efforts from the outside. At the onset of the programme, in particular, the country offices had very little freedom to deviate from prescribed models and were over-advised by external consultants. This led, in some cases, to somewhat artificial IPs, of which a number were abandoned later. In addition, the activities on the agenda were too ambitious for the ultimately fairly modest resources and time frame of the programme in each of the countries. The Mid-Term Review forced the abandonment of a substantial number of activities. At the same time, it brought the country programmes more autonomy and control over the remaining activities, allowing them to develop further in a more organic fashion.

The RIU experience shows that there is no right or wrong choice when it comes to choosing a commodity or a theme as the starting point for IP building. What is essential, however, is the identification of a promising opportunity and then engaging the actors who have common objectives and are enthusiastic to engage.



Innovation platforms in practice: an overview of RIU's experience

This chapter presents a synthesis of RIU's experiences in establishing and facilitating IPs as well as the internal dynamics of platforms and how these were managed. We hereby focus on the following aspects of innovation platforms:

- the three different levels on which RIU facilitated the creation of platforms
- the achievements by the platforms
- the membership of the platforms
- the different types of activities appropriate for a platform
- the formalisation of the platforms
- the facilitation of platform activities

Level

In all countries, efforts were made to establish platforms at different levels, with mixed results. In Zambia, RIU facilitated the establishment of platforms on three levels, each of them with their own distinct functions. In most other countries, however, platforms were established at two levels, i.e. national level and regional level. Local level stakeholder groups – for example, farmers, often

organised into farmer groups or primary cooperatives – were represented by their leaders at the district level platforms.

Box 8. Three levels of platforms

Platform mechanisms at national, district and local levels were identified as the mode of operation for RIU Zambia.

At the local level, the RIU Zambia programme initiated local learning sites where producers and local agents interacted and experimented with conservation agriculture. At the district level, multi-stakeholder platforms were initiated. These platforms had a pivotal role in articulating the views of small-scale farmers represented in the study groups, helping them to influence policies through the national platform and to coordinate and plan action implemented at the local level.

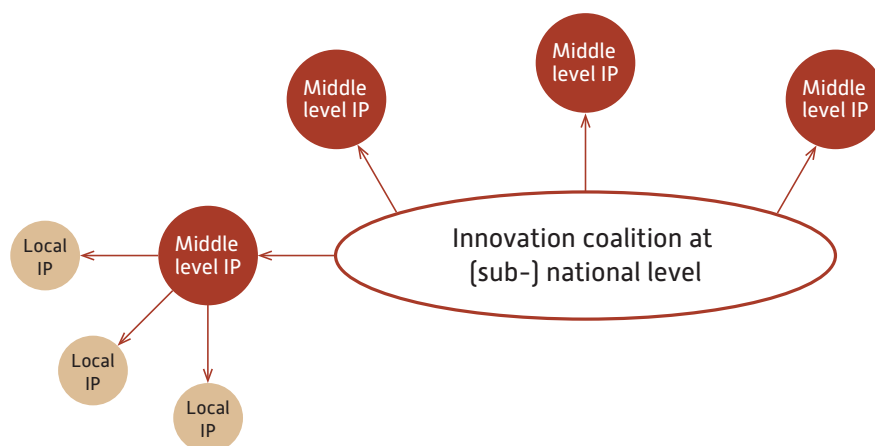
At the national level the National Innovation Coalition (NIC) was initiated with the purpose of overseeing the whole innovation system and lobbying for policy change. Because the permanent secretary of the Ministry of Agriculture and Cooperatives (MACO) is a member of the NIC, there is a direct line for influencing national agricultural policies. Many of the NIC members are also members of the Conservation Agriculture Association, and some are also members of the National Rice Development Task Force.

From: RIU Zambia institutional history, KIT, 2011

The objectives, roles and responsibilities and activities of a platform are very much related to the level of the platform: the RIU programme supported and coordinated interaction at three different levels:

- 1 National level
- 2 Middle (mainly district) level
- 3 Local level

Figure 2. Different levels of platforms (adapted from Klerkx in Nederlof et al., 2011)



The national level

At the inception of the RIU programme national level stakeholder platforms were formed, which were referred to as NICs. The first NIC was established in Rwanda and the concept was subsequently introduced in the other countries. The members of the NICs were selected to represent the main actors of importance in the national innovation system, based on the country assessment studies (discussed in the previous section).

One of the first functions envisioned for the national IPs was to serve as national think tanks. As a think tank, the national platform could provide direction to the RIU programme, spot trends and, in a broad manner, guide the initiative. The identification of promising entry points in the RIU programmes, as discussed above, is where the NIC played this role.

The engagement of the NIC at the national level provided the RIU programme with the mandate, through a wide array of stakeholders, to engage in the process of lower level consultation and platform initiation. However, beyond the initial decision-making in the programme, the role of the NIC as a think tank was limited and not all RIU country programmes developed NICs.

Other functions included that of a steering committee and that of coordinating technical support and advocating policy to leverage support for local innovation processes and scaling-up.

Box 9. National Innovation Coalition, Rwanda

In Rwanda, the NIC played an important role in initial decision-making from a national perspective, but was dissolved at a later stage. The Rwanda NIC had the role of overseeing the RIU project, although its decision-making influence was not felt to be great. Still, it did receive progress reports and endorsed budgets. One of the NIC members (CAPMER) was chosen to be the RIU fund manager. The NIC met and discussed topics on how to put research into use. It also became involved in the information market idea, which was supposed to be the main instrument for structuring the response to demands for services and knowledge from practice, by means of the platforms.

Maintaining momentum at the national level for specific NIC activities proved very difficult. The proof of the interest of the organisations participating in the NIC was their level of decision-making in their organisations. The NIC was initiated within the RIU project framework and was not an embedded part of the Rwandan administration. This made it difficult to obtain the desired leverage within government organisations and the buy-in for the RIU agenda that was envisioned.

The NIC was given a number of tasks. The task of being the channel for information from the participating organisations to the platforms was, in retrospect, not very useful. The platforms at district level can – at first through facilitators, and over time by themselves – source the services they require directly from research and other service providers. There is no need for a formal intermediate body at national level for this task. The NIC worked on a virtual information market system that would improve access to agricultural development information. These efforts were discontinued, however, after the Mid-Term Review, when it was decided to focus on fewer activities and to provide more autonomy to the country programme in deciding how to use resources.

From: RIU Rwanda Institutional History, KIT, 2011

The experience of RIU suggests that a national stakeholder forum, such as RIU's NIC, could play a role at the beginning of a programme, to assist in the making of any initial decisions on the directions of the programme. Such a forum could provide a programme with a mandate to intervene and has the potential to create endorsement for the programme and to assure national level buy-in by relevant organisations. Functioning as a national think tank on how to better support innovation processes could in theory be useful, but this was not achieved in the RIU programme. The combination with a function as steering committee for the RIU programme may have hindered any development as a think tank. As a think tank, high-level acceptance of the platform would be required, and in this regard having a mixed mandate may hamper the gaining of recognition as an advisory body.

RIU experiences show that the role of a national platform is important for initial decision-making and potential institutionalisation; however, it requires sufficient buy-in from national level stakeholders to be successful.

The middle (sub-national) level

In all four of the countries studied in the institutional histories exercise, the IPs around which most RIU activities were initiated were at the middle level. The IPs at this level achieved coordination of activities through different intervening organisations and the interaction between stakeholders that was envisioned by the programme to support innovation.

The maize platform in Nyagatare, Rwanda, is an example in which different types of service providers, as well as economic actors, such as farmers, their cooperatives and banks, collaborated for the benefit of maize value chain development at the district level. The approach of the IP resulted in a chain of improvements in the functioning of the maize sector: adoption of improved production technology; initiation of a warehouse receipt system with a local credit provider; and initiation of a maize trading company in response to marketing constraints.

In Rwanda, the platform participants identified middle level platform functions which could be found in the IPs in all four countries (Table 1). In addition, coordination between intervening organisations can be added to the functions of the middle level IPs.



PHOTO: GENEVIÈVE AUDET-BÉLANGER

A innovation platform at local level: a means for enhancing stakeholder collaboration

Table 1 Functions of the middle level innovation platforms according to platform members

Function	Examples
Advocacy for change	<ul style="list-style-type: none"> • Lobbying for tax exemption for tractor spare parts by mechanisation platform in Tanzania; • Making conservation agriculture part of national policy in Zambia
Demand articulation	<ul style="list-style-type: none"> • Identification of labour as the main constraint for adoption of conservation farming by the Zambia platforms, leading to a change in approach by public and NGO support organisations
Access to financial services	<ul style="list-style-type: none"> • The maize platform in Rwanda developed a credit scheme for maize farmers
Access to research and extension services	<ul style="list-style-type: none"> • The potato platform in Rwanda developed collaboration with research to initiate commercial mini-tuber production; • The local poultry network developed tailored household advisory services for new poultry farmers
Access to inputs	<ul style="list-style-type: none"> • The cassava network in Rwanda ensured availability of mosaic virus-resistant cuttings
Access to markets	<ul style="list-style-type: none"> • The rice platform in Zambia facilitated access to branded rice marketing; • The maize platform in Rwanda initiated a maize trading company with farmers and local traders as shareholders
Farmer collaboration	<ul style="list-style-type: none"> • Cassava farmers are seeking market opportunities and processing jointly; • Farmers in Tanzania formed block farms to gain access to tractor services
Experimentation	<p>Testing and adapting new practices:</p> <ul style="list-style-type: none"> • Mini-tuber production by seed producers in Rwanda; • Construction of a local poultry sub-sector in Tanzania; • Development of commercial ripping services in Zambia
Communication	<p>Informing stakeholders on activities, decisions, new practices, etc.:</p> <ul style="list-style-type: none"> • Participatory radio broadcasts on conservation farming in Zambia; • Local radio disseminating findings of the maize platform in Rwanda; • Highlighting of the local chicken business opportunity on national TV in Tanzania
Coordination of action between support organisations	<ul style="list-style-type: none"> • Different organisations in Zambia promoting conservation farming collaborating to communicate a similar message and provide coordinated services

The middle level platform is close to grassroots implementation while still allowing for a degree of system overview. It provides for some distance from the local level, which ensures that the more systemic issues concerning joint interest can be addressed. At the same time, it is not so far removed from practicalities at ground level that discussions become abstract and of little consequence.

The local level

Many types of formal and informal local organisation exist, especially at the farmer level. Grass-roots forms of organisation may also exist at the level of local traders or processors. RIU selected representatives from these local organisations as entry points from the grassroots level for the IPs at the middle level. Most of the activities initiated by the middle level IPs were implemented through the local level organisations. A potato cooperative formed the starting organisation for the commercial multiplication of mini-tubers in Rwanda. The learning sites in Zambia formed the structure used for experimentation and capacity building in conservation agriculture.

In Rwanda, existing cooperatives of producers were used as the main local level organisations to link with. In Tanzania, new local structures were developed deliberately by the mechanisation platform. Farmers were assisted to organise into ‘block farms’ and tractor owners into tractor owner associations, both examples of local ‘platforms’ – i.e. local forms of organisation. In Zambia, the local level organisation was created around the local learning sites.

‘Champions’ represented local level organisations or stakeholder groups at the middle level IPs. These could be farmer leaders, cooperative board members, representatives of local traders or service providers, etc. A champion is a person that represents not himself or herself alone but a larger stakeholder group. (See also Chapter 4, section on facilitation.)

Strong linkages with stakeholder groups at the local level are essential for a platform to accomplish implementation and linking to higher levels. At the local and middle level it is helpful to use existing forms of local organisation, selecting champions from these organisations to ensure the link between the local level and middle level IPs. Ideally, stakeholder groups identify their own representatives.

Key achievements of the RIU programme

The main institutional change achieved by the RIU programme has been the building of platforms that improve the interaction between stakeholders for innovation in a sustainable manner. Evidence of these changes was found mainly at district level, and in some cases also at the national level. Most middle level platforms appear likely to continue either as loose networks embedded in the district administration structures or as parts of the private sector.

At the national level in Zambia, policies on rice and conservation agriculture have been influenced through involvement of the district and national platforms, and national bodies for these two areas have been formed. RIU Tanzania, through its dairy platform and its chicken network, has secured tax breaks for milking and hatchery equipment.

At the district level, other achievements, in addition to the continued existence of the platforms as stakeholder interaction instruments, can be noted. In Zambia, RIU contributed to improved coordination of conservation agriculture efforts and the development of new services for soil preparation, which used to be a major bottleneck in the adoption of conservation agriculture practices.

In Rwanda, all three commodity platforms have contributed to improved collaboration between economic and support actors in the respective value chains. Joint needs and opportunity assessments are catered for and the results of pilots are communicated through local radio, in particular in the case of the maize platform. On the ground, the platforms have contributed to intensification of production of their subject commodities and to a durable improvement in the availability and use of high-quality planting material. The maize platform piloted new financial arrangements based on a warehouse receipt system and a maize trading company with farmers as shareholders was created. The potato platform created a seed potato production association, producing mini-tubers that previously had only been produced by a research station. The

cassava platform developed a system of multiplication and distribution of disease-free cuttings of improved mosaic-resistant varieties.

In Tanzania, the commodity platforms have, in a similar fashion, improved interaction between actors at the district level. For example, the mechanisation platform successfully developed a system through which smallholders have access to tractor services, simultaneously increasing the volume of work for tractor owners. The dairy platform continues to serve as the forum in which disagreements in the chain are discussed. Using a somewhat different approach, RIU Tanzania initiated a local chicken value chain that did not exist at all before, and is solving problems in the chain as they emerge, while increasing the areas covered.

In Zambia, RIU improved coordination of conservation agriculture interventions at the district level, and initiated small-scale ripping services and rice trading centres. An effective link was established with local radio stations in order to generate wider interest in conservation agriculture and to communicate the findings of the platforms.

Table 2 Main institutional changes resulting from the various types of platforms

Level	Zambia	Rwanda	Tanzania
National	<ul style="list-style-type: none"> NIC influence on National Agricultural Development Strategy and Rice Development Strategy Integration of this role into national networks (Conservation Agriculture Association, Zambia Rice Federation and Rice Task Force) 	<ul style="list-style-type: none"> No national level innovation after the demise of the NIC 	<ul style="list-style-type: none"> No institutional change can be attributed to NIC (NIC has only met once) Tax exemption and policy change [milking and hatchery equipment] at national level attributed to regional platform
Regional or sub-national	<ul style="list-style-type: none"> Gradual integration into district multi-stakeholder coordination structure Enhanced coordination outcome on effectiveness and efficiency; small-scale ripping services; Rice Trading Centres; Communication of results through local radio resulting in wider interest and interaction 	<ul style="list-style-type: none"> Improved chain collaboration [between economic actors] Improved service provision to the chain actors [research, financial, extension] Joint problem and opportunity identification Communication of results through local radio, resulting in wider interest 	<ul style="list-style-type: none"> Mechanisation activities integrated into district plans Tractor owners association established Hatchery owners meet and discuss issue of availability of local breed chicks Feed producers meet Bytrade linked to producers and hatchery owners RIU plays the role of match-maker/broker between stakeholders; KuKuDeal created
Local	<ul style="list-style-type: none"> Indirect attribution to RIU, but left to extension and radio stations (RFF) and the Conservation Farming Unit (Study Circles). 	<ul style="list-style-type: none"> Improved production and post-harvest practices Improved availability and use of quality seed Improved collaboration between producers 	<ul style="list-style-type: none"> Informal organisation of chicken producers Block farming; improved collaboration between rice and maize farmers and tractor owners

Platform membership

The selection of actors for a particular activity seems to be important to the functioning of a platform. How to decide what actors or actor groups to involve in the process? The country programmes approached this question in different ways. The choice depended first of all on the selected sector or theme. In most cases, a flexible approach was adopted, as shown in the case of Rwanda (Box 10). RIU experiences show that not all stakeholders need to be involved at all times. Membership is dynamic and evolves over time.

Box 10. Flexible membership in Rwanda

"The composition and dynamic of the membership of the platform is an important element to consider: when platforms were created in 2008, there was a non-written rule that they should not exceed 30 members! But soon after, it appeared that there was an imbalance between the number of farmers/ farmers' cooperatives and other categories of stakeholders, as farmers were naturally the first actors to join the platforms. Therefore, we agreed with platforms on the imperative necessity to expand membership and adopted a mobilisation strategy resulting into a higher and more diversified membership; in general, financial institutions and traders were the last to join platforms.

Platforms are dynamic organisations and it was observed that some members went away as new ones were coming in. The major reason for leaving was associated with the level and nature of expectation: those who thought the platform would be an opportunity to access resources (money, subsidies, free distribution of inputs, etc.) were quickly disappointed. On the other hand, we have seen new members who have contributed to bring fundamental changes to the platforms: this is the case of Caritas-Byumba in the potato platform, which is now playing a leading role in platform facilitation and is committed to mainstreaming the approach in its other interventions. The Nyagatare Community Radio is also becoming a reference in terms of giving voice to actors of the maize value chain, thanks to its weekly radio programme produced in partnership with RIU-Rwanda.

The role played by each individual member of a platform gives another perspective on how building innovation capacity can be a fruitful undertaking. This is particularly relevant in the case of RDO (Rwanda Development Organization), a very active local NGO in Eastern Province that championed the development of the Maize Innovation Platform in Nyagatare District. As the platform evolved, RIU worked closely with RDO to foster linkages and ensure information flow between platform members. That has resulted in increased internal capacity and RDO was later selected as RIU service provider to provide facilitation services to the maize and cassava platforms, in a move to pave the way for their sustainability.

Another positive development is shown by Duterimbere, a local NGO that is actively working for women's economic empowerment and gender advocacy. Interaction within the maize platform has resulted in a greater exchange of information and trust between farmers/cooperatives and Duterimbere, leading to an increase of loan portfolios for maize farmers. In addition to these aspects, Duterimbere influenced its micro-finance arm to join other members of the maize platform in the process facilitated by RIU for creating an investment group (NYAMIG) especially designed for dealing with maize trade issues in the interest of platform members. That was the starting point of RIU warrantage success story, for which Duterimbere micro-finance was rewarded by the Government of Rwanda on Labor Day, 2011."

Adapted from Augustin Mutijima, RIU Country Coordinator, Rwanda



In the majority of middle level RIU innovation platforms, four important groups of stakeholders were represented: service providers; market actors (input dealers, traders, financial services); producers and their organisations; and (local) government representatives.

Research organisations were invited from the start and were sometimes involved in facilitation and capacity development. In a number of cases, research actors gradually became less interested, often due to a lack of joint activities, and research was phased out (as in Zambia). In other cases, research has played an important role in a later stage as well, such as in the case of dairy in Tanzania, or in Zambia, where rice research was contracted. In Rwanda, research was an instrumental and active partner in all three platforms. An example is the support offered to the potato platform by providing training and technical support for mini-tuber multiplication.

In RIU there was an assumption that in order to achieve a well-functioning IP, the involvement of the private sector was needed. Getting this private sector involvement, however, turned out to be difficult. The degree of private sector involvement varied highly among the different platforms.

In Tanzania, the private sector was involved in all platforms because all of the platforms had aspects of value chain and entrepreneurial development. For example, in the case of the dairy platform the private sector (an agro-input dealer) took on the role of facilitator (bringing the relevant stakeholders together during meetings to discuss progress and improve understanding and knowledge about each other's activities). In the mechanisation platform the private sector was essential for service provision (tractor owners offering ploughing services to farmers and spare parts traders providing services to tractor owners). In the case of the poultry platform the

private sector was essential for service delivery [Agro-vets, ByTrade, feed producers, etc.] as well as for a well-functioning value chain [buyers of the chicken, transporters, hatcheries, etc.]. A private company, KuKuDeal, was created to enable continuation of the activities as well as to ensure more permanent links between chicken producers and buyers. Additional advantages included access to loans, services and a coordination platform.

In other RIU country programme-supported platforms, the private sector, especially the higher-end value chain actors, was poorly represented. In those countries, most RIU platforms seemed to be producer-oriented. Although the concept of IPs implies a more systemic approach, the activities of most local and middle level platforms were often centred on the interests of producers. In Rwanda, for example, the platforms were farmer-oriented, but specific efforts were made to include other stakeholders. For example, in order to establish a warehouse receipt system, the involvement of an interested financial service provider was required. Different service providers were approached and eventually Duterimbere, a micro-finance institution, joined the platform and has since played an important role in the system. However, rather than involving existing traders, the platform established a parallel trading system by initiating a new maize trading company of which platform members were stakeholders. The question that arises is whether this was caused by the lack of interest of the private sector or because platform facilitators largely ignored the position and interests of existing traders at different levels due to their bias towards producers.

RIU experiences show that, in some cases, the involvement of the private sector is not required, but in other cases – for example, where marketing of agricultural products was constrained – the involvement of the private sector (traders, wholesalers, retailers) might have been an asset to the process and to the attempts to solve the problems.

In all cases the local authorities were involved in the platforms. The participation of local government representatives in both Zambia and Rwanda assisted in the alignment of activities with other development activities in the district. It provided the platforms with legitimacy within the district and was instrumental in assuring embedding of the platforms and their activities within the system. In Rwanda the platforms were informally attached to the Joint Action Forums, in which different implementing organisations coordinate their development actions.

In Zambia, the first two conservation agriculture platforms started out independently but then sought a link with the District Development Coordination Committee (DDCC). The platforms that followed were embedded immediately in the district coordination structure. This stronger link to the district did reduce, to some degree, the flexibility and freedom of decision-making, as well as the balance between a focus on coordination and innovation, in order to enable better embedding. The embedding of IPs into district structures contributed to the sustainability of the platforms, but the contribution to the innovation process is less clear. In Tanzania, the local authorities were involved in the IPs. In the case of the mechanisation IP, the activities were even taken over by the local district authorities as they came to realise that the type of activities needed to enable innovation were also activities that were part of the programme used by the mechanisation officers.

It was observed by RIU that participants in platforms are to an extent self-selecting, based on the theme or topic, although it might be necessary to provide incentives for certain actors who, while important, might not see immediate benefits for themselves. Platforms experimented with different ways of managing the dynamics of entry and exit into the platform. Selecting participants and keeping them engaged are dynamic and continuous processes that require specific attention from the initiators and facilitators of the process. In most cases, membership of the platforms was not fixed, but evolved over time. In Rwanda, membership grew as a result of the increasing visibility of the platforms and their activities. At the same time, some members left the platforms due to decreasing interest.

These dynamics are illustrated by the case of Rwanda [described in Box 10]. In Tanzania, RIU adopted a flexible and dynamic approach to platform membership, gradually shifting from a platform with fixed membership towards a more iterative or ad-hoc approach of establishing partnerships based on emerging challenges and needs. This is described in Box 11.

Box 11. The chicken innovation platform: A flexible approach to stakeholder participation

"After a few months of operation, RIU had to revisit and revise its ideas concerning partnerships. Considering the marginalised and subsistence nature of the indigenous chicken industry, the programme had to abandon the idea that partnerships have to revolve around the platforms. Platforms became more expensive to maintain and platform meetings to do system analyses were too costly to hold. Some platform members just didn't have the time to sit in platform meetings. Also, in some cases, not all members of the platform were needed to debate and find a solution to a particular problem. For example, when there was shortage of indigenous day-old chicks, it was more practical for RIU management to issue a public call for supply of chicks from other producers than to have a platform meeting to get recommendations. Some challenges required spontaneous and quick solutions and, in such cases, operating around the platform philosophy was not practical.

Due to these challenges, a new way to form partnerships was adopted. Each partnership was formed on the basis that it was needed to solve a particular challenge at a particular time. For example, the programme initially focused a lot of energy on solving the chick supply problem to ensure a stable supply of indigenous day-old chicks to farmers. Issues of markets and processing were not dealt with until six months later when farmers had mature chickens to sell. This allowed the programme to effectively address smaller issues within the main challenge."

Adapted from: Matilda Mndeme, Field Operation Coordinator, RIU Tanzania, and Jwani Tranquilino Jube, RIU Tanzania Programme Communication

Appropriate activities for innovation platforms

RIU experiences show that there is a thin line between making resources available for joint action aimed at stimulating learning and experimentation for innovation, and actions that could be classified as development activities. The financing of platform activities creates dependency and provides an incentive to join platform activities simply for the sake of direct benefits rather than for innovation. In the RIU programme this could be seen in the fact that many of the activities financed were not jointly implemented between stakeholders and contributed little to learning.

A good example of this line of thinking was the decision by RIU Tanzania to end support to the mechanisation platform. The innovation developed was organising farmers in block farms and linking these through contracts with tractor owners. Once this had proven successful, sustaining the system and further replication of the approach could be considered a more routine activity, rather than enhancing process innovation. It became the regular mandate of the mechanisation officers in the district agricultural offices. Dismantling the platform may not have been necessary if a different innovation opportunity could have been identified. This is illustrated in Box 12.

Box 12. Innovation or routine? The example of the mechanisation platform in Tanzania

The major challenge for the mechanisation platform in Tanzania was that farmers wanted to be able to plough their fields but the plots they owned were very small and widely scattered. During the platform meetings farmers decided to organise into block farms, and a lead farmer was chosen for each block. Twelve farmer groups were formed, with approximately 30 members in each. Farmers managed to negotiate a better price, which was standardised according to soil type and area. Tractor owners are now interested in providing services to smallholders, as the farmers are organised, and can offer a contract for the entire block farm. At the same time, tractor owners and operators organised themselves under a tractor owner association for coordination purposes so as to be able to provide services on time.

Once better links between the farmers and tractor owners were established, and the volume of work increased, new challenges emerged:

- 1** *not enough tractors*
- 2** *weak support services for tractor repairs*
- 3** *insufficient access to loans for tractors at reasonable interest rates*

The tractor owners association managed to put pressure on government officials to control the quality of spare parts, abolish import duty on tractor spare parts, and help them negotiate better quality and better prices with the spare parts dealers.

As the RIU Tanzania programme realised that the activities were shifting from organising farmers and tractor owners and establishing functional links to following up and coordinating those links, it became acceptable to withdraw from providing additional support for the mechanisation platform. Routine follow-up now falls under the mandate of the mechanisation officers at the Ministry of Agriculture who were facilitators in the platform. They now interact with the stakeholders involved in the platform as part of their regular activities and as outlined in the district plans. In many cases the block farms have become involved in other group-based activities, such as Farmer Field Schools, part of the district development plan on maize and rice production.

From: RIU Tanzania Institutional History, KIT, 2011

Need for concrete action

Initially, RIU country programmes made major efforts to build the understanding of stakeholders on the innovation processes and systems. However, this did not seem to lead directly to concrete action. The introduction of rather abstract concepts related to innovation thinking did not provide sufficient entry points.

The RIU experience also suggests that in order to forge new partnerships that can engage in joint learning and innovating, simply selecting stakeholders and bringing them together is not enough. Besides meeting and discussing, these stakeholders also require joint action. Through this joint action, trust is built between stakeholders and the collaborative environment can be created in which innovation through joint learning can occur.

In the case of the RIU platforms, to ensure that this joint action took place, seed money for platform activities was needed. These funds were used for joint stakeholder activities [for example]. Such activities served two purposes. In the first place, they were aimed at immediate problem solving or pursuing a concrete opportunity identified by the platform as a priority. Secondly, they created the relationships between stakeholders that were required to establish a breeding ground for future innovation.

The example from Rwanda shows that concrete action helps to eventually create dynamic interaction necessary for innovation to occur. In this case, external pressure even added to the need for quick results. This is illustrated in Box 13. This suggests that activities that bind the members of the platform are important. Showing concrete results is part of this process. Therefore, to initiate an innovation process, concrete action is required early in the process in order to create dynamic engagement.

Box 13. The need for quick results

“Knowing the Rwandan context, where people and local authority want quick results on the ground, the entry point was obvious to me, and I convinced my colleagues to start engaging with the maize, potato and cassava platforms through implementing practical activities to respond to some of their needs and start in parallel a deeper process of organising platforms. That was instrumental for laying the foundation for longer-term relations and, above all, developing a common understanding of the concept of innovation platforms, and internalising it by using their own language.”

Adapted from: Augustin Mutijima, RIU Country Coordinator, Rwanda

Capacity building to be able to participate in innovation

Quality interaction between stakeholders was not taken for granted by the RIU programme. Efforts were made to ensure a certain level of understanding of the purpose of the platforms and the need for interaction in order to achieve progress. Capacity building had multiple foci. At the level of the IP itself, capacity building focused on improving the understanding of innovation as a process and of the abilities of different partners to contribute to this process. Through a number of workshops and meetings, an effort was made to create a mind-set among the participating partners in any given IP to contribute to the process of innovation. This included a change of mind-set among researchers, extension staff and government representatives, but also amongst the private sector and farmers and their organisations participating in the platform. This is illustrated in Box 14. Chicken farmers in Tanzania realised their need to learn to interact with other stakeholders as a means to acquire new knowledge for improving their businesses.

The capacity to participate in innovation was also found to depend on the organisation of stakeholders. When forms of organisation exist at the local level, representatives have a mandate to engage in discussions on behalf of the larger group and defend the interests of all members, which provides for higher-level and more strategic decision-making and discussion. Local forms of organisation are an essential entry point for action. At the local level there are often links between the producers and service providers and local authorities. If there are insufficient useful existing forms of local organisation, it may be helpful to support the building of such structures. The example in Box 14 shows how local champions (caretakers) in Tanzania played an important role in building networks amongst local chicken producers and how this enabled producers to better interact with service providers. In addition, to become effective actors in a sub-sector or value chain, stakeholders also need specific technical and entrepreneurial capacities.

Box 14. Need for capacity building to become effective agents in innovation

"Innovation in the local poultry value chain is successful when farmers have the capacity to willingly and consciously demand new knowledge based on their needs. Equally, innovation is successful when farmers are able to learn to 'search for new knowledge' and integrate that new knowledge with the knowledge embedded in historical routines to manage their farming practices.

This was the case when farmers who were engaged by RIU received their first 100 chicks. At that moment the farmers realised that the business-as-usual model could not work because they had to care for such a large number of chicks, which they never had to do in the past. The increased responsibility of looking after a larger flock stimulated the demand of farmers for new knowledge. Farmers had to work hard to ensure they did not lose chickens because it was a loan they had to pay back. Suddenly it was very important for them to find out the kinds of diseases chicks/chickens suffer from and they needed to understand the kinds of medicines needed, the dosage of the medicines, the quality of feed to be given, the types of records to be kept, etc. They also had to learn to seek advice from extension workers with respect to their specific needs. This allowed RIU to help in building new skills, stimulating knowledge and learning from practical approaches.

Farmers began to recognise and appreciate the power of 'new knowledge'. Two major areas of knowledge have been requested by farmers. The first is poultry husbandry, which includes vaccination, disease control, feeds, and the like, and the second is entrepreneurship skills and business management training.

The RIU programme responded to the request for knowledge on poultry husbandry by deploying household caretakers to provide on-farm poultry husbandry skills training. The household caretakers stayed with the farmers for a period of 30 days, catering to 12 households a day, and coached farmers as the chicks grew. The hands-on approach was well received by farmers, who absorbed the new skills and knowledge faster because they applied it to challenges as they presented themselves on the farm.

The entrepreneurial training was provided in-house by RIU itself. The entrepreneurial skills and business management training was provided in a business simulation module which allowed the farmers to test different scenarios and exercise their decision-making skills with regard to commercialised poultry-keeping. The farmers learned how to deal with risks and manage changing business environments, and about the importance of keeping records. This was crucial training because the farmers learned the value of planning and exercising business sense to ensure that they could remain in business."

Adapted from: Eliasa Saidi, Trainer and Entrepreneurship Specialist, RIU Tanzania

RIU experiences suggest that to effectively participate in innovation requires the capacity to interact amongst stakeholder groups as well as the capacity to interact within stakeholder groups. The capacity to participate in innovation requires a mind-set change.

Formality versus flexibility

How much formality is required when organising stakeholders at different levels? At the middle level in Nigeria, Rwanda and Zambia, IPs were set up as fairly formal organisations, holding regular meetings and pursuing jointly identified agendas. This seemed to work and resulted in coordinated action resulting from new collaborative arrangements.

Box 15. Registration of the cassava innovation platform in Nigeria

"The Abia Cassava IP was inaugurated in Umuahia, Abia State, by RIU Nigeria on 5 February 2009. Since its inception, the IP has been collaborating with governmental and non-governmental agencies to develop cassava production in Abia and other neighbouring states. Over the past two years we have expanded our membership from 25 to 82 members, comprising various farmer cooperatives and associations, processors, fabricators, agro-allied private companies, researchers and marketers. Together, these various organisations represent over 500 000 individuals.

The platform is registered as a limited cooperative federation representing all the member organisations affiliated with the platform. We have a corporate bank account and a well-developed financial accounting system. In addition, we have acquired an office and employed a secretary. We have introduced a membership admission fee and a compulsory monthly thrift savings contribution. All initial and new members have to fully comply with these prerequisites to ensure financial sustainability and autonomy.

We created a good communication plan within the IP whereby plans, targets, activities and expected results are clearly communicated. Members have a say in planning so they will be more committed to the planned activities. The IP has meetings twice a month where experiences are openly shared and issues discussed."

Adapted from: K. I. Kalu, Chairman, Abia Cassava Innovation Platform, Aquada Development Cooperation

PHOTO: GENEVIE AUDET-BÉLANGER



RIU: enhancing the capacities of women to participate in innovation

In Tanzania, the local chicken platform shifted over time, away from the model in Rwanda and Zambia – i.e. an IP as an entity in which one can be a participant – to a more informal type of model. For the local chicken network, interaction was not organised around a multi-stakeholder platform meeting on a regular basis. Instead, exchanges between specific stakeholders were facilitated by Muvek when necessary. Action was taken based on the assessment of bottlenecks by Muvek, often by ensuring bilateral (or multilateral) interaction between essential stakeholders – for example, between market partners and service providers.

Box 16. Flexible networks rather than formalised organisation in Tanzania

“At the grassroots level, informal partnerships and networks among farmers were preferred over formal farmer groups and structures. The informality in farmers’ networks eliminated the bureaucracy and was considered by farmers to be an effective and efficient way of quickly responding to system problems. For instance, in Rufiji District, farmers operate their enterprises individually but come together only in cases where they need to collectively advocate for particular issues, access financial services or markets, mobilise for resources and acquire information.

In each region that RIU was working in, farmers were required to operate and own their enterprises individually, but were also linked to informal networks. Encouraging farmers to have independent enterprises (not group projects) increased the level of ownership, commitment and learning. However, in all the cases RIU encouraged having a network of 20 or more farmers in a village or ward to ease service delivery and to increase cooperation among farmers who could use the networks to mobilise for resources.

In sum, we have learned that for innovation to occur in a sub-sector that is dominated by small-scale stakeholders, formation of partnerships has to allow flexible terms for partners to explore new ways of working. In some cases, it is necessary for stronger partners or innovation brokers to support weak (small) partners to move some processes forward and unblock challenges in the value chains, even when the weak partners are not in the best position to negotiate.”

Adapted from: Matilda Mndeme, Field Operation Coordinator, RIU Tanzania, and Jwani Tranquilino Jube, RIU Tanzania Programme Communication

These are clearly two quite different scenarios, both with advantages and disadvantages. The first scenario builds a multi-stakeholder platform with the objective of that platform becoming the arena in which different actors in the system find each other and come to joint action. It is based on the assumption that after a certain period of time this platform will continue to exist without much outside support, and continue to fulfil its function as an arena for matchmaking between actors aiming at innovation. To ensure its continuity and provide opportunities for matchmaking leading to joint action, such a platform would have to meet regularly and have some sort of management. So a certain level of formality is required in order to have a chance of sustained existence.

A risk inherent in a semi-formal organisation is that it will create barriers for membership, when innovation would be best served by an informal platform with free entry and exit of ‘members’. The platforms in both Rwanda and Zambia have been able to avoid this pitfall. Although the middle level platforms do register members, it is easy and free for individuals or organisations to join and participate, even before being recognised as members. The role of RIU as facilita-

tor in these platforms helped to maintain this open character, as the RIU programmes had a clear vision of innovation as the major objective of the platforms. Once RIU withdraws it is not unthinkable that the platforms may focus more on development activities rather than on maintaining their status as open networks aimed at learning, experimentation and innovation.

Box 17. Formalisation in Rwanda

In Rwanda, the platforms were at first not registered officially in any way, and the RIU management took the position that registration was not desirable as it would hinder change and flexibility and they aimed at an informal status. Some argued that this informal status would be sufficient for the platforms to function, and would allow for the flexibility they need in terms of membership and mandate.

However, the RIU experience has shown that all three platforms are now seeking a more formal status. A number of reasons have been given for this:

- 1** *Legitimacy to represent a group of people*
- 2** *Recognition by other organisations and administrations*
- 3** *Clarification of rules, regulations and mandates*

The platforms wish to register as inter-professional organisations. This status recognises their multi-stakeholder character and allows for membership of individual and cooperative economic actors, but also of organisations with a value chain support role. It solidifies the mandate of the platform as a non-profit entity, working for the public interest. It will provide the platforms with additional credibility and recognition as organisations legitimately representing the interests of particular sectors.

From RIU Rwanda Institutional History, KIT, 2011

The scenario used for the local poultry chain development relies much more on a brokering organisation actively making links between stakeholders, based on specific needs and opportunities. It has the advantage of not requiring the resource-intensive effort of building a (semi-) formal multi-stakeholder platform with its own coordination, officials and rules, and regular meetings. A disadvantage, however, is that this approach depends entirely on the brokering organisation to build relationships. On the one hand, this provides focus of effort and avoids a culture of formal meetings and workshops. On the other hand, it does less easily create ownership of the process for the stakeholders involved. In addition, the emergence of new ideas and identification of new opportunities depends to a large extent on the brokering organisation, as there is no specific regular platform meeting at which unexpected or unintentional links leading to joint action can be stimulated.

In Zambia, the first IPs formed were independent, but sought recognition later on by attaching themselves as sub-committees to the DDCC. The new IPs were set up that way from the start. The advantage is that continuity of the platform is secured, and policy messages are channelled more easily as a result of its official status. A disadvantage, as observed in Zambia, is that coordination of development activities, which is the mandate of the DDCC, will compete with focus on innovation.



PHOTO: REMCO MUIR

Variety of beans
on the market

RIU experience suggests that formalisation is required in certain national contexts, and can contribute to institutionalisation. Where platforms are less formalised networks, members may feel less responsible but they also have more flexibility to address emerging issues. In the latter case, the role of the brokering organisation is critical. If the broker withdraws (for example, at the end of a programme), it is not unlikely that the interaction among stakeholders leading to new joint actions will end accordingly. In the case of more formalised platforms, joint actions might be sustained and evolve into more conventional development projects, but new experimentation and innovations might become less apparent. An example of the latter model is the mechanisation platform in Tanzania.

Facilitation

Networks, platforms or other forms of interaction between stakeholders do not always happen by themselves. Often specific action is required. Together the various possible actions or roles that promote these forms of interaction can be taken up by individuals or organisations and are defined here as 'facilitating innovation'.

Roles in facilitating innovation platforms

When assessing the processes in the different RIU programmes, a number of roles to facilitate innovation can be distinguished. Different facilitation roles were played, either by the RIU ACP team or by a representative of a member stakeholder group in the platform. These roles are illustrated in Table 3, below.

Table 3 Different roles in facilitating innovation

Function	Examples
Championing	Representing local stakeholders at a higher level and functioning as an example to others: <ul style="list-style-type: none"> • Zambia's Conservation Farming Unit leaders • Ward and district champions in Tanzania's poultry network • Cooperative leaders and progressive farmers in the Rwanda innovation platforms
Brokering	Making connections between actors who can benefit from each other's services or roles. Brokering can be done between multiple actors by bringing them together in a network, either informally or more formally. Brokering can also be done between two actors, to ensure they start working together: <ul style="list-style-type: none"> • Ensuring that ISAR (Rwanda research institute) starts working with the potato platform out of mutual interest • Introducing cassava-producing cooperatives to a cassava processor in another province • Linking private sector seed multipliers to research institutes and producers in the cowpea platform in Nigeria
Facilitation	Stimulating and assisting the interactive process between stakeholders with the objective of improved quality of interaction: <ul style="list-style-type: none"> • Assisting in the organisation and guiding the process for innovation at platform meetings and other moments of stakeholder interaction • Facilitating an IP self-assessment in Rwanda
Thematic leadership (thrust leadership in RIU)	Taking initiative on a certain topic (after a cluster of challenges is identified during first platform meeting): <ul style="list-style-type: none"> • In Tanzania's dairy IP, different clusters of activities had thrust leaders • In Rwanda, subcommittees were formed per topic, each chaired by a thematic leader
Mobilisation	Lobbying essential stakeholders to join a platform or local level organisation: <ul style="list-style-type: none"> • Formation of farmer learning groups/circles by CFU facilitators in Zambia • Identification of farmers who want to join in the poultry activities by ward champion in Tanzania • Convincing local input dealers to join the potato innovation platform in Rwanda
Mediation	Resolving conflicts: <ul style="list-style-type: none"> • Occasional role of the RIU team in IP conflict situations in Zambia • Guiding the discussion between input suppliers and producers in Rwanda about the price and quality of inputs
Advocacy	Promoting the network and assuring support of and buy-in for the network by those individuals and organisations that matter: <ul style="list-style-type: none"> • Local radios play this role to some extent, e.g. through discussion of the role of traditional and civic leaders in conservation agriculture in Zambia • Platform members play this role by communicating their achievements to their peers • Agricultural Research Council of Nigeria (ARCN)
Problem solving	Identifying, proposing and providing practical solutions for bottlenecks hindering progress of multi-stakeholder action: <ul style="list-style-type: none"> • Promoting the importation of rippers by Zambian traders and connecting them to ripping service providers • Suggesting piloting the use of cocoons for maize storage by the maize platform in Rwanda • Finding suitable crates for the transport of live chickens
Technical backstopping	Providing technical advice and training to ensure that opportunities discussed are economically, technically and socially viable: <ul style="list-style-type: none"> • Providing assistance with the development of a voucher scheme for inputs on credit for local chicken farmers • Supporting local credit for providers and producers of maize in Rwanda in the development of a warehouse receipt system

Facilitating innovation platforms encompasses a variety of roles. These roles can be played by different persons or organisations that are often, but not always, members of the platform. In the case of the RIU platforms, the majority of the tasks listed in Table 3 were taken on by an external organisation. In Rwanda and Zambia, they were done by an organisation set up for that purpose by RIU (ACP), and in Tanzania by a contracted organisation (Muvek). This is illustrated by the cases of local chicken production in Tanzania and profitable cassava production in Rwanda, described in Boxes 18 and 19.

The brokering and facilitation roles are critical to innovation, as they enable the enhanced interaction and joint learning among stakeholders, which, as we argued in Chapter 2, are central to innovation systems. One criterion to consider when selecting a facilitator is its organisational capacity, i.e. what type of organisation will have the capacity to sustain the facilitating role over time and to initiate new IPs where needed? The RIU programme did not pay much attention to this factor. In Zambia and Rwanda, the personal innovation capacity was built within a temporary organisation that had ceased to exist by the end of the programme. In Tanzania, the organisation will continue to exist, but it requires external resources in order to maintain its role as facilitator of platforms or networks.

Building the capacity to facilitate innovation within an organisation with a long-term mandate and presence would be preferable. This could be a public sector organisation, such as a local government, extension service or research organisation, with all the associated limitations. Or it could be an NGO with a guaranteed long-term presence. Or, as in Tanzania, it could be a consultancy firm that can see a market for providing the specific service of facilitating innovation. In Gicumbi District in Rwanda, RIU delegated the facilitation role of the potato innovation platform to a local NGO (Caritas). Its knowledge of the local context and its proximity were important criteria in the selection of Caritas. In most other cases, however, RIU remained the main facilitator and broker of innovation, which raises the question of how brokering and facilitation will take place after the end of the RIU programme.

In Tanzania, RIU brokered relations between different stakeholders for the development of the local chicken chain, leading to new business opportunities. A national drug company, formally not involved in the local chicken chain, now supplies drugs to smallholders on a commercial basis, as shown in Box 18.

Box 18. Brokering in practice

"RIU has helped us and other stakeholders to realise new business opportunities. Bytrade was linked to many other stakeholders whom we did not have contact with before. Some of the new ones we are now in contact with are feed manufacturers, hatcheries, local poultry farmers (core customers), extension workers, different facilitators and donors. Most important, RIU created new business opportunities for us and other stakeholders. Besides drug supply we were able to start a few new businesses, doing business in enzymes, acidifiers and premixes with feed manufacturers and disinfectant supplies to hatcheries and farmers. Our sales on poultry products have doubled and in other areas, such as vitamin sales, they have tripled."

Adapted from: Dr. Charles E. Mgaya, Manager of Animal Health Division, Bytrade Tanzania Ltd. (input supplier)

Box 19. Profitable cassava production

"In our dry region, we used to plant cassava because it is drought-resistant and a staple crop. But many of us were forced to stop cassava farming because of cassava mosaic disease. Farmers who tried cassava usually mixed it with other crops like beans and sweet potatoes on the same field. Under those conditions, we could not get sufficient yield from cassava farming.

*In 2008, RIU called a meeting in which various stakeholders interested in cassava participated. Among the participants were farmers, traders, fertilizer dealers, transporters, financial organisations and supporting organisations like the *Projet pour la Promotion des Petites et Micro-entreprises Rurales (PPPMER)*, the *Rural Sector Support Project (RSSP)* and *Rwanda Development Organisation (RDO)*.*

*RIU gave us various supports which included the brokering of linkages with researchers from ISAR who selected new cassava varieties for us: *Seruruseke*, *Rwizihiza*, *Kizere na* and *Mavocat*. Furthermore, RIU provided links to extension workers who assisted us on a daily basis and showed us how to improve our farming practices. RIU also paid for our study tours in the Southern Province to learn from ISAR and from model cassava farmers. They also provided various inorganic fertilizers, including NPK. Through the platform, we got a market for cassava cuttings: in 2009 we sold 216 000 cuttings to the *Rwanda Rural Rehabilitation Initiative (RWARI, NGO)*, providing revenues of more than *RwF 1 500 000 (GBP 1600)*."*

Adapted from: Donat Mutagoma, Twuzuzanye cooperative, Gatsibo District, Rwanda

Once the platforms were established, the participants in the platforms took on a number of the above-mentioned roles. These roles particularly included championing and technical backstopping, which are increasingly performed by platform members. In the case of RIU Tanzania, champions were trained and deliberately involved in the local village processes, and provided guidance to local chicken producers. RIU provided support to the champions to carry out their roles. The role of the champion was mainly to represent stakeholder groups within the platforms. In Rwanda and Nigeria, NGOs and government extension agencies were involved in technical backstopping of farmers and other stakeholders.





Lessons for policymakers and practitioners

Introduction: building innovation capacity

Research Into Use experimented with different mechanisms to catalyse agricultural innovation as alternatives for more linear approaches. In terms of tools and skills (see Potter and Brough in Chapter 2), the RIU programme offered training to different groups of stakeholders – as well as to champions – on innovation systems, facilitation and value chain analysis, for example. The programme also built the skills of these individuals to participate in proposal writing in order to access funding for innovation activities (i.e. innovation funds). In this book we focus on the capacities built on an organisational and institutional level. We will specifically focus on the ACPs and the IPs they introduced to build innovation capacity at a structural level. Chapters 3 and 4 have explained the history and operation of RIU's efforts to use IPs as a way of building innovation capacity.

RIU aimed at building innovation capacity as a way of linking research findings and expertise into agricultural development activities. With little existing experience to guide this effort, RIU approached this goal by establishing the ACPs. These, in turn, were expected to establish and manage IPs at different levels (national, middle and local levels) focusing on a variety of themes of significance to development.

At the start of the programme some partners considered RIU to be a research programme, undertaking research on bringing research into use. Other partners considered it a development programme, intended to benefit thousands of producers by bringing research into use. It was only halfway through the programme that consensus was reached on trying to achieve both functions. This was late in the process and it has not been easy to compensate for this delay. The RIU programme clearly demonstrates the need for building a joint vision amongst project partners before implementation.

For a development programme, a certain degree of control over the activities and the resulting outcomes is important, not only to provide accountability towards the donor, but also for planning purposes. However, in an innovation programme many steps, needs and activities depend on each other and on the context and therefore cannot be designed in much detail. This often creates tension. We would like to draw attention here to the dangers of over-design: missing the opportunities that could really bring about a change; considering innovation a linear process although it is not; killing creativity and flexibility. Innovation is an iterative, evolving process that requires adaptive design and management.

Experiences in the four countries show that it is important to embed initial analysis and decision-making in the various platform levels. The initial involvement of consultants who were accountable to the central RIU management did not create ownership and did not trigger reflection and analysis that could lead to decisions in the countries or by the platforms. Analysis and priority-setting are crucial steps in the design and life of an IP. These steps often require the involvement of external experts, but ownership should be transferred to the national and local stakeholders as early as possible and their work should be embedded in the processes of the platforms.

The RIU programme also clearly taught us that the context in which one operates determines how to design and undertake activities, and how they evolve. In a country like Rwanda it is essential to work with national authorities and to link with existing organisations. In other countries it may be important to operate more autonomously from the existing structures. At the start of the programme, the NIC concept was proposed as a template. Even though the idea of a national committee responsible for scoping opportunities and constraints may be relevant and necessary to improve the national innovation systems, this does not necessarily look the same everywhere.

During the life of the programme a number of successful platforms were established that enabled innovation of relevance to poor people [see Gildemacher and Mur, 2012]. Examples include: the establishment of a warehouse receipt base credit system in Rwanda; a soybean and cow-pea platform in Nigeria focusing on improved storage to increase incomes and food security among smallholder farmers in the northern states; and the conservation agriculture platforms in Zambia aiming at using natural resources in a sustainable manner through improved soil and water conservation and the use and maintenance of trees in the farmland. These innovations arose from the platforms, but they are independent in the sense that they no longer need support. Some platforms worked effectively during the life of RIU, but failed to reach a point where sustainable development outcomes had been achieved. Further support of the platforms would have been necessary for this to happen.

Facilitation or innovation brokering was the main role of the RIU-supported ACP offices. Some platforms developed their own internal capacity to facilitate and perform their own innovation brokering functions, often as a result of RIU strengthening the capacity of local champions. Most platforms, however, did not develop this capacity. Hence, most platforms ceased to function following the withdrawal of RIU support. RIU's support to a variety of organisations that acted as ACP's and facilitated innovation proved insufficient to develop a sustainable innovation capacity and sustain the innovation process. This was partially due to lack of resources from other sources. Without any policy support, and without public or private funds to play this brokering role, the sustainability of the initiative was severely undermined.

As RIU was experimental in nature, it did establish explicit measures to learn about its experiences, including its mistakes. In this concluding chapter we present lessons from the RIU experience aiming at establishing innovation capacity for two distinct audiences:

- 1 Practitioners and implementing agencies who are dealing with the hands-on facilitation and management of IPs;
- 2 Development investors and policy-makers who are responsible for allocating resources to these sorts of interventions.

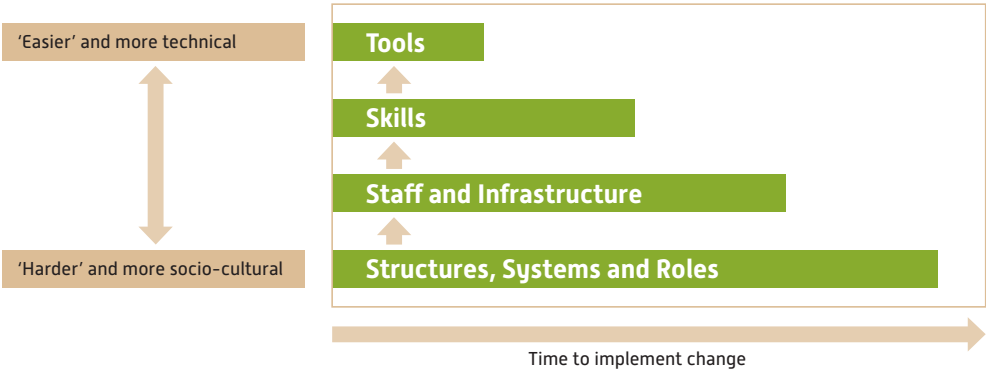
Lessons for practitioners

What capacities to build?

Figure 1 (from Potter and Brough, 2004) clearly illustrates that building capacities is required at multiple levels – tools, individual, organisational and institutional. If one of these levels is not operational it has a negative impact on the others. A first lesson, therefore, is to focus on all of these levels when designing and implementing a programme aimed at enhancing innovation.

According to Potter and Brough (2004), such a complex type of intervention requires more time [see Figure 3].

Figure 3. Complexity/time dimensions of capacity building [Potter and Brough, 2004]



In this study, we try to answer a number of questions related to institutional and organisational capacity:

- What is the appropriate level of intervention?
- How to decide on the formalisation of a platform?
- What platform responsibilities are required?
- Who should be engaged?
- How to establish brokering capacity?

What is the appropriate level of intervention?

The first question we address is about the appropriate level of a platform. The operational level determines the function and responsibilities of the platform. The RIU programme very deliberately designed interventions at the national (country) level, the local (village) level and the level in between. Each level had its distinct function, while at the same time the RIU programme emphasised the complementarity between the levels. In this section we reflect on the purpose of interventions at the different levels.

- **National level:** The major reason for establishing the national level platforms was to signal broad opportunities, based on national priorities, and to embed the programme in existing policy and institutional contexts, as well as providing it with legitimacy.

The RIU programme provided mixed experiences with regard to national level platforms. In Rwanda, the national level platform did not add much value to the middle level platforms or to the RIU programme as a whole. In Tanzania, the national platform never became operational. In Zambia, the national platform functioned as a hub for policy advocacy and national level coordination. If a programme on facilitating innovation has a goal of improving the functioning of the national level innovation system through improved collaboration between support organisations, then a national level platform can be considered. This national platform could function mainly as a think tank for advising national level decision-makers on improving the efficiency of the innovation system. A national platform can also have an important role in evidence-based policymaking.

The RIU experience demonstrates that such a national platform will only function properly if higher-level decision-makers can be convinced to contribute and participate, or to act as champions. In this light, it could be helpful to attach a national platform to an existing decision-making body, or even to entrust the envisioned tasks of the national platform to an existing national stakeholder forum.

- **Middle level:** The middle level provides the optimum level of opportunity for interaction between stakeholders. At this level it is possible to ensure the participation of direct representatives of grassroots actors such as producers and small processors. At the same time, service providers with direct links to local intervention can also participate. The middle level links lessons from practices at the local platforms and relates them to policies and policy feedback from and to the national level.

- **Local level:** Local level organisation and collaboration is essential for the functioning of IPs at the middle level. The local forms of organisation ensure that participants, provided they are properly selected, represent a larger group of stakeholders. Furthermore, such local forms of organisation of stakeholders provide entry points for practical action for innovation decided on by the platform.

Structure: how to decide on the formalisation of a platform?

Innovation requires an iterative approach, characterized by flexibility. For a programme facilitating innovation through platforms it would be recommended, in principle, to avoid developing an IP into a formal entity in such a way that it creates barriers to participation and blocks flexibility. Formalisation may reduce the ability of the platform to adjust to changing needs, circumstances and opportunities.

In the practice of RIU, however, it was observed that platform participants almost invariably demand a level of formalisation. Some level of formalisation may assist the platform in gaining the outside recognition it needs to develop clout and to achieve more than just local innovation. In addition, participants representing an organisation in a platform may require a certain level of formality.

It should also be recognized that some level of formality may help in establishing a platform as an autonomous entity that can continue to function with less external facilitation support. Membership with associated fees is, for example, a type of formalisation of the platform. It also contributes to the autonomy of the platform, as it creates a reservoir of funds for governing the platform, and ensures a selection of members with a certain extent of commitment to the platform. Fixed roles within a platform (such as president, secretary or treasurer) as well as laws and bylaws, are also signs of formalisation. What works best often depends on the country context (see also Nederlof and Pyburn, 2012).

PHOTO: GERARD BALTISSEN



Chicken producer –
member of the Tanzania
Poultry Innovation Platform

An informal network is also an option, as was demonstrated in Tanzania in the case of the local chicken network. In this case, the functioning of the network also largely depended on the engagement of the main brokering agent. Longer-term engagement of the main facilitator must be ensured. In the specific case of the local chicken network in Tanzania, an attempt is being made to ensure this longer-term engagement by coupling it with profit-making activities by the brokering organisation in the chain.

What platform responsibilities are required?

Platform responsibilities include a range of tasks that go beyond ensuring access to technology and information. Based on the experiences in the four countries, an overview of the responsibilities a platform can assume at different levels was drawn up (see Table 4). The levels of decision-making in a country, and the decentralisation of decision-making, have a major influence on which actions should take place at which level. In a country where most responsibilities for policy-making are at the state or regional rather than at national level, the function here classified under ‘national’ level may actually be better placed at state or regional level.

Table 4 Responsibilities across different levels

Level	Responsibility
National	<ul style="list-style-type: none"> • Signalling need for outside support • Signalling broad economic opportunities and constraints • Signalling promising pilot experiences worthy of national level support campaigns • Coordinating joint action and avoiding duplication of mandates • Voicing local and middle level concerns to national decision-makers • Addressing systemic constraints to effective interaction
Middle	<ul style="list-style-type: none"> • Identifying opportunities and constraints requiring action • Providing arena for planning of joint action • Matchmaking between service demand and supply • Articulating demands for systemic change • Articulating needs for policy change • Providing space for improving interaction between input suppliers, producers and buyers
Local	<ul style="list-style-type: none"> • Capacity building of local actors • Organising producers for bulking products • Organising producers for access to inputs and other services

Building these capacities across different levels is essential for a platform to function.

Who should be engaged?

Membership highly depends on the level and the related responsibilities of the platform. Participation would be the most diverse in middle level platforms. The RIU platforms did not restrict membership, whether formal or informal.

Individuals and larger groups, such as cooperatives and service providers (research, extension, local government, financial) were represented. Effective representation requires adequate communication between the representatives and their constituencies, which might require specific effort. The private sector, especially the higher-end chain actors such as transporters,

wholesalers and retailers, was barely represented. Most platforms were farmer-dominated and, as a result, also largely focused on farmers' interests.

The selection and recruitment of participants is a dynamic and continuous process which can be considered part of the package of tasks related to facilitating innovation.

What is the role of research in innovation?

The programme was built on the hypothesis that research is out there, and needs to be brought to the potential users. This hypothesis is based on the assumption that innovation is a linear process, and that transfer of technology leads to innovation. However, those implementing the programme concluded that this was a wrong assumption. They argued that research was only one of the drivers for innovation, and hence important within the innovation system amongst other services and stakeholders. It is important for a programme to reach consensus on the fundamental assumptions – in this case, the role of research. At the end it was agreed that the wrong question had been posed at the start. "How to put research into use?" is not a question that can be answered after the research has been undertaken already. Instead, the process of undertaking research should be informed by whether or not its outcomes are going to be used. The involvement of potential users in research is crucial. Research can also result from and feed back into innovation platform activities.

This still leaves the question of how best to enable the use of research in the process of agricultural innovation. The RIU experience seems to suggest that IPs are a successful method of enabling innovation, even if this is through new uses of existing information from a variety of sources, rather than from research. Nevertheless, research expertise could and should make a more useful contribution. Ironically, one of the early features of the RIU programme was that it would not fund research as a part of into use activities. In retrospect, this probably restricted the development of linkages between research and the innovation processes the programme was trying to enable. The implication is quite clearly that the distinction between research as a separate activity and innovation and general development is often a false one. Development investors could address this by making research funds available to IPs, so that they can access research when they have a need for it.

How to establish brokering capacity?

In all four countries, the RIU Country Programme Teams were responsible for the facilitation. As external actors the country teams were well-positioned to take the role as neutral facilitators. Interventions that simply go around setting up IPs with local partners are unlikely to leave behind any sustained capacity to innovate, unless the programme carefully selects these partners and builds their capacity. In the RIU ACPs, most of the attention was focused on the platform and not on the facilitators or brokers. The facilitator was seen as a means rather than an end but actually, from a sustainability perspective, the brokering capacity should be considered an end. Platforms can and should come and go, but the sustainable element has to be the broker or facilitator.

However, experiences show that some of the facilitation roles (see Table 3) can sometimes be better placed with platform members (i.e. internal facilitation). Some of these functions include

championing and technical backstopping. A flexible approach is required whereby the external facilitator and the platform members jointly decide who should perform what specific functions. Shared facilitation and gradually handing over functions from the external to an internal facilitator will allow for building internal facilitation capacities.

In the case of RIU, platforms often were facilitated by the country programmes. The main lines of support they were expected to give, as discussed in Chapter 3, were in designing a common vision, scoping and strategic networking, and process management.

An innovation process is emerging and requires continuous reflection and adaptation of actions. The experiences in the focus countries showed that there are some critical events involved in providing support to this process.

- **Delimitation of the innovation platform:** Delimitation of the mandate of an envisioned IP is required. The RIU programme made this a time- and resource-consuming process. It does not, however, need to be like this. Alternatively, priority commodities could be identified in advance at national level, thus guiding the choice of geographic location based on the agro-ecological and economic potential of a given commodity.



PHOTO: GENEVIÈVE AUDET-BELANGER

Post harvest handling
by platform members
in Rwanda

- **Stakeholder mapping and selection:** Further delimitation of the subject needs to be made with key stakeholders at the local level. After this, stakeholder mapping can be carried out and representatives of stakeholders approached to participate in the establishment of an IP or network.
- **Joint innovation system analysis and identification of promising entry points for action:** A joint analysis of the innovation system related to the chosen subject of the platform should lead to the identification of needs and opportunities, leading further to a list of promising entry points for action. In addition, essential missing stakeholders need to be identified and efforts made to convince them to join the initiative.
- **Joint action:** The next step should be the identification of possible joint actions and the establishment of a division of roles within the platform. Specifically, the role of the facilitator of the platform must be discussed. It is essential to arrive at an understanding among the platform participants with regard to the mandate and tasks of the organisation providing the main facilitation services. Joint action also requires establishing systems for joint monitoring, assessment of the need for change of direction and documentation of lessons learned from initiatives taken by the platform.

Lessons for development investors and policy-makers

RIU experiences provide a number of important lessons with implications for investors and policy-makers. The RIU experience suggests that IPs are not a panacea for organising learning and enabling innovation. Few capacities exist to facilitate the establishment and support of these types of processes. Without these capacities in place, investing in IPs will deliver few advantages over existing rural development interventions. However, the RIU case does point to the fact that if the capacity to facilitate IPs is in place then platforms can act as mechanisms to enable innovation. This suggests that the focus of investment and policy support should be aimed at building these capacities and this means focusing first on specialist agencies to perform the facilitation and brokering role rather than focusing first on IPs. In a sense RIU did this; however, its selection of organisations and its relatively weak engagement with policy weakened its ability to generate policy support (and therefore resources) to continue support for them.

Are innovation platforms suitable for their purpose?

The answer is that, in the case of RIU, IPs worked only partially. Initially, RIU was a programme that focused on the relationships between agricultural research results and innovation, in order to achieve social and economic gains in diverse developing country settings. As this book has shown, IPs, while enabling a number of innovations, are not always an effective way of using existing research products or expertise to lead to change. There are a number of reasons why this might be true: the nature of the topics addressed; the time scale of the projects; and probably the limited funds available to access research.

There is some evidence that IPs enabled innovation that responded to the needs of the poor, but this will only be confirmed by an impact assessment study that is currently in preparation. It is not clear from the RIU experience what measures were taken to make platforms and their efforts to

enable innovation focus specifically on the poor. It is probably safe to say that RIU interventions were at best inclusive of the poor, but not targeted at the poor. This is likely to be a general feature of innovation support interventions because by their very nature they encompass a range of stakeholders. Indeed a key feature of these initiatives is to provide incentives to individuals and organisations with resources and ideas to engage in enabling innovation with wider benefits.

Development investors who might wish to go the IP route might consider including a much stronger policy component in any interventions. This would help to leverage experience from enabling innovation during policy debates about the value and need for public support of these types of activities. This might also imply working with existing public organisations to pilot these sorts of specialist services. It also means that attempts to support innovation brokers need to focus not only on the rural space and value chains but also (and in many cases primarily) on the policy space.

Have sustainable capacities to enable innovation been developed?

Building innovation capacity through an IP implies the creation of processes that address various levels of capacity. A change in mind-set of the platform participants with regard to their individual roles may well be needed in order to create an environment in which stakeholders understand and respect each other as partners in innovation.

It is worthwhile to reflect on the need to stretch the lifespan of an IP as such. If a platform is considered to be a place where people come together around a specific problem or opportunity and if action is taken accordingly to solve the problem, the platform might be abolished once this has been done. In such a case, an external programme could ensure the brokering and facilitation role. The intervention is based more on building performance and personal capacities.

If a platform is regarded as a mechanism to establish and sustain the capacity to engage in multi-stakeholder interaction, experimentation and joint learning – i.e. innovation capacity – it is worthwhile to research whether the different functions and related systemic capacities, including brokering and facilitation, are well established.

The answer will almost certainly be that they are not. Some of the platforms may continue to operate at a relatively modest level of activity but with little focus on innovation. The specialist agencies that were the focus of RIU support – ACP offices – are not likely to continue acting as facilitators of IPs. Some of them don't have the capacity, and none has the resources, to do so.

Was it worth the effort?

Finally, it is all too easy to reach the conclusion that RIU attempt to use innovation platforms was not entirely successful. However this was an ambitious effort in uncharted water to build innovation capacity through Platforms. The platforms may have indeed achieved fairly mixed results. However where RIU truly succeeded was that it made the effort to learn from its experiences and share these with others. It was important to do this because as an experiment the main impact from RIU will come from the influence these experiences exert on the practices of development investors and policy makers and the resource allocation decision they make. Ultimately this is where success will be judged.

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Women bringing their products to the collection centre



PART II

RIU and its innovation platforms

Summary data sheet **RIU programmes**

Name: Research Into Use programme

Objectives

The Research Into Use (RIU) programme aims to accumulate and evaluate evidence in order to shape and share lessons on how best to enable innovation in the agricultural sector in developing country settings. The key research objective for RIU is to explore the effectiveness of different approaches in maximising the benefits of agricultural research for its potential beneficiaries.

RIU has two specific objectives:

- 1** to achieve impact at scale
- 2** to generate lessons about putting research into use

Components

The programme consisted of three components: the Best Bet initiative, the Asia country programmes and the Africa country programmes. The Africa country programmes are discussed in this book.

Best Bet Initiative

The Best Bet Initiative makes resources available for innovative ideas that could initiate viable new enterprises. The idea behind the Best Bet initiative is to identify innovative ideas that have shown initial pilot success and to support their attaining a scale that makes them commercially viable and sustainable. Ideas are selected through an innovative competitive process, inspired by the Dragon's Den, and are offered the funding deemed necessary for attaining the required scale.

Asia Country Programmes

Through competitive applications, a number of projects in South Asia were selected. They are aimed at developing new partnerships to put research produced under the Renewable Natural Resources Research Strategy (RNRRS) into use. From 2009 to 2011, eleven projects were undertaken, based on four themes: seed delivery systems, innovation in value chains, scaling-up research products for natural resource management and investing in institutions for rural service delivery.

Africa Country Programmes

The objective of the Africa Country Programmes was to facilitate agricultural innovation. The programmes were established with the explicit agenda of experimenting with ways to build capacity that enable research to be put into use. The first Country Programme was established in Rwanda, followed by programmes in Malawi, Nigeria, Sierra Leone, Tanzania and Zambia. [This book focuses on the RIU country programmes in Malawi, Nigeria, Rwanda, Tanzania and Zambia.]

Mechanisms

The main intervention strategy of the RIU country programmes was based on innovation platforms. As defined by RIU, an innovation platform consists of a broad range of stakeholders who share a common interest and come together to solve problems and develop mutually beneficial solutions.

Partners

Initial partners of the RIU programme were Natural Resources International (NRI) (lead partner and coordinator), PARC (for monitoring and evaluation) and NIDA (Nkoola Institutional Development Associates) a private consultancy firm based in Uganda. After the mid-term evaluation, the RIU programme comprised: (1) the directorate, seated in Edinburgh, along with the UK support team; (2) the Central Research Team (led by LINK (Learning, Innovation, Knowledge) programme of the United Nations University Maastricht Economic and Social Research and Training Centre on Innovation and Technology (UNU-MERIT)); (3) an evaluation team led by an outside consultancy firm; and (4) a communications team.

Funding

The RIU programme is a 5-year, £37 million development programme.

Further information

<http://www.researchintouse.com>

PHOTO: GENEVIÈVE AUDET-BÉLANGER



Female Members of the Nyagatare Maize Platform discussing

Summary data sheet **RIU Africa Country Programmes**

Objective Africa country programmes

The programmes were established with the explicit agenda of experimenting with ways of building capacity that enable research to be put into use. Ultimately the programmes aim to facilitate agricultural innovation.

Countries

The first Country Programme was established in Rwanda, followed by Malawi, Nigeria, Sierra Leone and Tanzania, and finally Zambia. This book concentrates on the RIU country programmes in Rwanda, Tanzania, Malawi, Nigeria and Zambia.

Mechanisms

The main intervention strategy of the RIU country programmes was built on innovation platforms. According to RIU an innovation platform consists of a broad range of stakeholders who share a common interest and come together to solve problems and develop mutually beneficial solutions.

Critical events

- 1** *Country assessments.* During this step first contacts were established with the main stakeholders.
- 2** *Design of innovation platforms.* There has been a concerted effort to ensure a balanced design of the RIU pilot for the six countries. The country programmes designed stakeholder interaction at three levels: the national level and the middle level, and additionally at the local level, mainly involving producers. These are clearly separated yet linked.
- 3** *National innovation Coalition.* The National Innovation Coalition concept was introduced for the specific purpose of embedding the programme in the national system. Rwanda was the first country to initiate a National Innovation Coalition.
- 4** *Mid-Term Review.* In all of the countries the Mid-Term review had major implications for the programme's activities. The content and methodological support from RIU programme level changed from a number of teams providing advice and support, to a Central Research Team chief responsible for research and documentation of lessons. In terms of the management of the country programmes, they become directly accountable to the RIU administration in the UK. After the Mid-Term Review, less emphasis is put on a specific design and more on innovation system thinking as a tool to aid learning and capacity building for innovation. Furthermore, after the Mid-Term review, all of the countries were granted more autonomy in the use of programme resources. Additional flexibility funds were made available for the programme's activities. In terms of content, all of the countries were asked to focus on achieving impact at scale, both directly at the level of intended beneficiaries and as an impact through institutional change. This resulted in making choices based on which activities were to be continued and which ones terminated.
- 5** *Preparing a strategy for post-project continuation.* The Mid-Term review also led most countries to reduce their activities, focus on a few platforms and think about their strategies for post-project continuation of its activities.

Zambia Country Programme

RIU in Zambia focused on conservation agriculture (CA). Initially three district level platforms were initiated. One of these platforms shifted focus towards rice, in combination with CA. Later, three additional innovation platforms on CA were added. The detailed timeline is depicted here-under. This work was implemented by the Zambia country programme established by RIU.

Box 1: What is conservation agriculture?

Conservation agriculture (CA) aims at using natural resources in a sustainable manner. It is based on soil and water conservation as well as the use and maintenance of trees in farmland. CA has three main principles: (i) rotation of cereals with legumes and deep-rooting crops; (ii) minimum tillage, such as potholing or ripping but not ploughing; and (iii) water conservation through maintaining continuous crop cover, mulching and ridging, and potholing (depending on the climatic zone).

The technology was developed in 1997 and was initially based mainly on the practice of "potholing". Potholing refers to making planting holes with a narrow hoe or shaka hoe, causing minimum disturbance of the soil. The organic matter/manure or fertilizer is then concentrated in the planting hole. Weeding is done manually. This is a labour-intensive practice, which has hampered the adoption of CA. However, due to the loss of cattle and oxen caused by a Contagious Bovine Pleuropneumonia (CBPP) and East Coast Fever (ECF or corridor disease) epidemic, since the turn of the century many farmers have been forced to work the soil manually rather than using oxen. Mechanical CA is less labour-intensive. It is based on "ripping" the soil (by animal-drawn Magoye rippers or tractor-drawn rippers) and using chemical weed control (pre-emergence or post-emergence), sometimes in combination with mechanical weeding.

PHOTO: FEMKE VAN DER LEE



Conservation agriculture: providing alternatives for ploughing

Timeline RIU Zambia

1995-2005	<ul style="list-style-type: none"> Large on-farm conservation farming programme, supported by the Norwegian Agency for Development Cooperation (NORAD), the Netherlands and others and implemented by the Zambia National Farmers Union's Conservation Farming Unit (ZNFU/CFU)
1999	<ul style="list-style-type: none"> Sustainable agriculture became part of the Ministry of Agriculture and Co-operatives' (MACO) policy
January 2008	<ul style="list-style-type: none"> Choice of Zambia as a country programme. Decision made by Nkoola Institutional Development Associates (NIDA), Comprehensive Africa Agriculture Development Programme (CAADP) (chaired the RIU advisory board), Forum for Agricultural Research in Africa (FARA), and Southern African Development Community – Food, Agriculture and Natural Resources Directorate (SADC-FANR).
May 2008	<ul style="list-style-type: none"> Start of the Zambia Country Assessment and strategy development Listing of potential issues and commodities
August 2008	<ul style="list-style-type: none"> Establishment of the National Innovation Coalition (NIC) to serve in an interim capacity through nomination by MACO (as "patron")
October 2008	<ul style="list-style-type: none"> Zambia Country Assessment and Strategy Final Draft, 4 October 2008 Appointment of the Zambia RIU Country team; invited National Process Facilitator (NPF) declined. One staff contract of Z-RIU with Pelum (NGO)
November 2008	<ul style="list-style-type: none"> Innovation Challenge Fund Africa closed, Zambia not allowed to participate Decision that Zambia would take issues for the Innovation Platforms (IPs) rather than commodities (NIDA and general RIU management)
December 2008	<ul style="list-style-type: none"> NIC, country team and strategy launch, 15 December 2008. Launch of the Z-RIU programme
January 2009	<ul style="list-style-type: none"> Revised Mid Term Review report out (first version in November 2008)
February 2009	<ul style="list-style-type: none"> Finalisation of the Implementation Plan Decision on the thematic issues: Conservation Agriculture (CA); Remoteness and Isolation; and Knowledge of Market Services (KSM). NPF was recruited and started work in February. Country team now complete (Annual Report 2008-2009) Identification of areas.
March 2009	<ul style="list-style-type: none"> Second NIC meeting; Implementation plan endorsed Report on the District Inception Workshop for Platform Formation, 25-26 March 2009, Chipata Motel, Chipata (stakeholder mapping and identification process around the two themes). Two platform themes were identified (CA and KSM) Country Programme Annual Report (2008-2009)
April 2009	<ul style="list-style-type: none"> Symposium with University of Zambia (UNZA) on enhancement of agriculture, 7-8 April 2009 Training of the Monze and Chipata IP representatives, Barn Motel, Lusaka (on CA, IP management, ICT, governance, partly by CFU, Z-RIU). Formation of the Chipata, Monze Core Programme Coordination Teams (PCT) and Info (Media) team (as an executive committee)

Timeline RIU Zambia

May 2009	<ul style="list-style-type: none"> • District IP formation inception workshop in Monze (stakeholder mapping and identification process around the two themes). • First Conservation Agriculture Association (CAA) inaugural meeting by Golden Valley Agricultural Research Trust (GART) interim secretary and CFU, decided RIU support logistics
June 2009	<ul style="list-style-type: none"> • First regular Monze CA IP meeting
July 2009	<ul style="list-style-type: none"> • Report on meetings between individual RIU Country Programmes and the Technica Review Team, 24 July 2009, PanAfrica Hotel, Nairobi
September 2009	<ul style="list-style-type: none"> • MoU between PELUM (on behalf of RIU) and Panos (NGO)
November 2009	<ul style="list-style-type: none"> • Structural change: Platforms on KSM and Remoteness and Isolation dropped; four priority activities selected (CA platforms, voucher system, communication, rice value chain) • Start of the flexibility fund (rice revolving fund, cleaning up Supa). Start of Rice Value Chain Stakeholders Forum • Learning sites: 10 in Monze and 15 in Chipata (demos, field school, field day) represented a duplication; looking at entrepreneurs (Animal Draught Power voucher) based on labour constraint in CA tillage and challenge of weed
December 2009	<ul style="list-style-type: none"> • Notes on programme work plan for 2009 to 2011 (=revised implementation plan)
February 2010	<ul style="list-style-type: none"> • Expanded number of IPs; expanding IPs on CA and not on rice (considering limited resources in flexibility fund)
June 2010	<ul style="list-style-type: none"> • 11 June 2010 NIC meeting
September 2010	<ul style="list-style-type: none"> • Second thematic meeting of the CAA held on 1 September 2010, Pamodzi Hotel, Lusaka
December 2010	<ul style="list-style-type: none"> • Exit strategy formulation with all IPs
January 2011	<ul style="list-style-type: none"> • RIU institutional history study • Consolidation; capacity building (development entrepreneurship for ripping services, rice stakeholders, private sector involvement, community/local media outlets) • Local radio in Chinsali, involvement in community radio programmes on rice value chain • Ripper introduction in rice cultivation with Animal Draught Power
June 2011	<ul style="list-style-type: none"> • Planned closing down of the programme

Summary data sheet Conservation Agriculture Zambia Innovation Platform Kalomo

Name: Kalomo Stakeholders Innovations Interactive Forum (SIIF)

Objectives

To enhance the implementation of Conservation Agriculture (CA), both in terms of disseminating the ideas and of communicating to educate farmers. The activities in CA are coordinated and knowledge is shared with non-governmental organisations (NGOs), such as AfriCare and World Vision.

Origin

RIU initiated the platform.

Facilitator

RIU facilitates in collaboration with the District Agriculture Coordinator Office (DACO) chair, secretary and fund manager.

Level

The platform functions at district level as a subcommittee, and as part of the District Development Coordinating Committee (DDCC)'s agricultural subcommittee. There is a link with the National Innovation Coalition (NIC).

Members

Value chain actors: Farmers

Service Providers: Ministry of Agriculture, District council, AfriCare, World Vision, Ministry of Forestry, Department of Forestry, Radio Namyanga

Regulators: DACO, District council secretary, Department of Forestry, NGOs, radio stations

Activities

Due to issues of funding, the IP and its activities were not made operational. However, an initial meeting with RIU did take place, followed by a training of chiefs and civic leaders in November 2010. There is much activity still in the planning stages.

Summary data sheet Conservation Agriculture Zambia Innovation Platform Kazungula

Name: Kazungula SIIF

Objectives

To have farmers adopt Conservation Agriculture [CA]. The platform aims to coordinate activities in CA, share knowledge and disseminate information through the radio sub-committee.

Origin

RIU initiated the platform.

Facilitator

RIU serves as chair and secretary, as well as the fund manager.

Level

Kazungula Innovation Platform (IP) operates mainly on the district level as a subcommittee of the District Development Coordinating Committee (DDCC). There is a link with the National Innovation Coalition (NIC).

Members

Value chain actors: Farmers

Service Providers: NGOs; Care International, Africa Now, Crop Serve

Regulators: Local government members: DACO, National Agriculture Information Service (NAIS), District Forestry Office, Ministry of Meteorology, ZNFU, Radio stations, Organic Producers and Processors Association of Zambia (OPPAZ)

Activities

In a relatively short period of time, the platform has started several activities, such as an animal draft power voucher system and broadcasting of radio programmes. The platform has also executed a baseline survey and some of the platform members have attended trainings organised by the RIU country team. Activities accomplished include the following:

- Setting up of the local voucher system.
- Learning sites – *A special feature of the initial conservation agriculture platforms was the relationship with the conservation agriculture learning sites. The sites were run by prominent farmers and the ZNFU's Conservation Farming Unit (CFU) learning groups. The RIU programme initially invested heavily in these local groups, directly (inputs etc.) and indirectly (training of CFU facilitators).*
- Trainings
- Research study (M&E)
- Radio communication

Box 2 Evidence of impact of the conservation agriculture ripping services

Mr. Simasiku, of Mechatome Camp in Kazungula District cultivates four hectares, with three hectares under conventional agriculture and one hectare using conservation agriculture (CA). Mr. Simasiku is an informal community leader. He monitors his yield, and explains what he is doing to other farmers. His maize yields have gone up on the CA hectare from 1.5 MT to 3 MT/ha. He uses the plant basin method on two limas (plot of 0.5 ha) with the shaka hoe and used manure and fertilizers in the other two limas. He has two limas in rotation with groundnuts, but does not rotate with any deep-rooted rotation crop (cotton or sunflowers), as he prefers to grow crops that also can be eaten. Weeding is also done by hand hoe. Weeding is the primary constraint, mainly due to labour problems; he now has two rippers drawn by oxen. He does not use herbicides. He is very enterprising and runs his farm as a business. He is expanding the area under CA and he managed to buy oxen based on the maize sold in the market. He is not one of the entrepreneurial farmers selected to receive ripping services, as he was not prioritised by the community.

Source: Mr. Silvasy Shibulo (DACO's office Kazungula)

PHOTO: FEMKE VAN DER LEE



Farmer assessing his maize crop

Summary data sheet Conservation Agriculture Zambia Innovation Platform Monze

Name: Monze Innovation Platform

Objectives

Coordination of all Conservation Agriculture (CA) activities, dissemination of CA knowledge, information sharing and gathering of feedback, more efficient resource utilisation (e.g. equipment for farmers), learning and innovation.

Origin

RIU initiated the platform. RIU and Conservation Farming Unit (CFU) organised the initial workshop and the District Agriculture Coordinator Office (DACO) invited. RIU was instrumental in the initial phase for brokering, while CFU was crucial for the technical support and training.

Facilitator

RIU facilitated the initial stages, DACO manages the day to day activities. The facilitator is chair of the innovation platform (IP).

Level

The Monze IP operates at the district level, but has links with the National Innovation Coalition (NIC) and the local farmer platforms.

Members

Value chain actors: MRI seed and Zamseed (seed companies), Golden Brand Farm Centre, Monze District Business Association

Service Providers: *NGOs:* Matantala RIDE, Diocese of Monze; *Government organisations:* Zambia National Farmers Union (ZNFU), Conservation Farming Unit (CFU), District Agricultural Coordination Office (DACO), Radio Station SkyFM

Regulators: Government organisations, Conservation Farming Unit, District Agricultural Coordination Office. The chairperson of the platform is the District Agricultural Coordinator for Monze. He coordinates the day-to-day activities of the innovation platform.

Activities

- Trainings for farmers, which are mainly aimed at increasing farmers' knowledge and skills in conservation farming practices such as ripping or potholing, mulching and crop rotation.
- Setting up local learning sites and demonstration plots.
- Formation of radio listening groups to be involved in participatory radio programmes at local level. Through these participatory radio programmes, farmers could share experiences and consult experts.
- Establishment of the animal draught voucher scheme to provide the necessary animal draught power for ripping purposes on a 50-50 cost-sharing basis.

Summary data sheet **Zambia National Innovation Coalition**

Name: National Innovation Coalition Zambia

Objectives

Enhancement of innovation policies in general, and conservation agriculture and rice development in particular. Zambia has initiated a National Innovation Coalition (NIC) as the national stakeholder interaction mechanism for the facilitation of innovation. Its particular goals are: advocacy, lobbying, awareness, and oversight (through a steering committee) in Conservation Agriculture (CA) and the rice value chain. At the national level the NIC was initiated with the purpose of overseeing the whole innovation system and lobbying for policy change. Because the permanent secretary of the Ministry of Agriculture and Cooperatives (MACO) is a member of the NIC, there is a direct line for influencing national agricultural policies. Many of the NIC members are also members of the Conservation Agriculture Association (CAA), and some are also members of the National Rice Development Task Force.

Origin

Two champions from the Cotton Association of Zambia and the Permanent Secretary of MACO initiated the platform. Theme, location, objectives and activities were decided in various workshops and based on country assessment reports/implementation plan (three issues, two levels, two districts), as well as RIU instructions (issues, focus, etc.)

Facilitator

RIU staff facilitates, through support of the chairman and with RIU funds. A consultant was contracted once for writing the minutes, but with inadequate results.

Level

National level, closely related to MACO.

Members

Value chain actors: Farmers

Service Providers: NGOs, Care International, PELUM, ZNFU, CFU, Cotton Association of Zambia, UNZA, Community Markets for Conservation, Ltd (COMACO), Japan International Cooperation Agency (JICA), USAID

Regulators: Government institutes, PANOS, Zambia Information Services (ZANIS)

Activities

Based on advice given by the RIU management, the NIC selected a number of priority topics to work on through district level innovation platforms. Two innovation platforms focusing on CA were initiated in Monze and Chipata districts. In February 2010 another three platforms were initiated on the same theme in Petauke, Kalomo and Kazungula. An important activity coor-



The National Innovation Coalition in Zambia targeted the rice value chain

minated through the district platform was the initiation of an Animal Draught Power Voucher Scheme for the development of local ripping services.

In addition, an innovation platform was initiated in Chinsali district that also started out as a CA platform, but has evolved into a rice sector platform.

Furthermore, the RIU programme worked on communication-led innovation through the local media [radio, television and the printed media]. RIU has supported the development of participatory radio as a support tool for agricultural innovation. This included, though not exclusively, activities related to CA, in collaboration with the innovation platforms.



*Preparing for
rice culture*

Tanzania Country Programme

RIU Tanzania initiated Innovation Platforms (IPs) on mechanisation, dairy management and entrepreneurship. The platform on entrepreneurship continued until the end of the programme, and focused on establishing a new value chain for local chicken. Details of the timeline are provided hereunder. The Tanzania programme was implemented by Muvek, a private consultancy firm that specialises in providing development consultancy services to both public and non-public development actors involved in agriculture, health, infrastructure and rural development (for more information see <http://www.muvek.co.tz/>).

Timeline RIU Tanzania

Inception period

2007	<ul style="list-style-type: none"> • Country assessment (report) • Country strategy (report) – rejected by RIU UK
January 2008	<ul style="list-style-type: none"> • Revised country strategy (report) by Management Advisory Team
February 2008	<ul style="list-style-type: none"> • New country strategy (report) – accepted by RIU UK • Desk study on zonal choices by Muvek
March 2008	<ul style="list-style-type: none"> • Feasibility study of Zonal Innovation Challenge Funds and how to move forward (demand-led innovation approach chosen) • Open tender launched for country programme coordination
May 2008	<ul style="list-style-type: none"> • Established advisory panel
June 2008	<ul style="list-style-type: none"> • RIU officially initiated in Tanzania • Country team recruited- Muvek (management) and EDI (Zonal Innovation Fund) • Second advisory panel meeting, initiated NIC (following example of other countries) on implementation and planning of the programme • Strategy and implementation plan by Muvek, based on advisory panel/NIC meeting
July 2008	<ul style="list-style-type: none"> • Information Markets Rapid Appraisal for Tanzania (by A. Moshia). Prepared InfoCom (information market challenge component)

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Timeline RIU Tanzania

Implementation (pre-MTR)

September 2008	<ul style="list-style-type: none"> • Consulted regional authorities – Morogoro and Tanga regions – for selection of topics/priorities (aligning with regional priorities and plans)
November 2008	<ul style="list-style-type: none"> • Stakeholder mapping and situational analysis
December 2008	<ul style="list-style-type: none"> • Brainstorm meeting of NIC and Muvek to select priorities for Morogoro and Tanga based on consultations with regional authorities; selection of stakeholders to invite based on stakeholder mapping • First platform meetings of IPs on mechanisation, dairy and post-harvest. Challenges identified for each IP topic chosen. A choice was made for goals per platform. Thrust leaders were elected. IPs were established. • Launch of Zonal Innovation Challenge Fund
December 2008–January 2009	<ul style="list-style-type: none"> • Call for concept notes on draught power, post-harvest, dairy IPs
January 2009	<ul style="list-style-type: none"> • Meeting with regional authorities in Coast region – recommendation of regional priorities
February 2009	<ul style="list-style-type: none"> • First brainstorm meeting for Coast, priorities and stakeholders selected
February 2009–March 2009	<ul style="list-style-type: none"> • Second stakeholder meeting on mechanisation, post-harvest and dairy. New members invited. Champions, facilitators and mobilisers assigned
February 2009	<ul style="list-style-type: none"> • First training workshop on management of post-harvest losses, first training workshop on use of farm implements (CB for mechanisation and post-harvest). Conducted by Research Institute/Ministry of Agriculture (mechanisation department) • 23 concept notes invited to prepare full proposals for ZICF; 10 shortlisted; 4 funded
March 2009	<ul style="list-style-type: none"> • Communication strategy (general) by Muvek • Learning workshop on facilitating innovation in Multi Stakeholder Processes
April 2009	<ul style="list-style-type: none"> • Poverty impact study • First platform meeting for Coast • First brainstorm meeting for developing a system that would increase access to agricultural information
May 2009	<ul style="list-style-type: none"> • Second platform meeting for Coast • First introductory meeting for external community mobilisers (they were introduced to the programme and platform and each asked to think about platform they wanted to engage; however, this did not happen). • Second call for concept notes for IP poultry • RIU team agreed that it would work better if internal mobilisers from the communities (i.e. champions) were used.
May 2009–Morogoro June 2009–Tanga	<ul style="list-style-type: none"> • Baseline surveys

Timeline RIU Tanzania

Technical and Midterm Reviews

June 2009	<ul style="list-style-type: none"> • Mid-Term Review RIU UK
July 2009	<ul style="list-style-type: none"> • Country coordinator met technical review team • Platforms reduced to two • Zonal Innovation Challenge Fund closed down (EDI contract not renewed) • ACP gained more flexibility • Focus changed to achieve impact at large scale but on fewer activities
November 2009	<ul style="list-style-type: none"> • Meeting with CRT (Jeroen and Andy)- decided to scale down mechanisation and focus on poultry and on expanding to five more regions to achieve impact at scale (so far to Dodoma and Singida)
December 2009	<ul style="list-style-type: none"> • New intervention logic Tanzania (2009-2011)

Implementation (post-MTR)

July 2009	<ul style="list-style-type: none"> • Implementation on poultry started (activities planned through previous IP meeting) [this should be after June 2009]
June 2009	<ul style="list-style-type: none"> • Implementation of mechanisation IP (mobilisation for tractor owners and farmers for bundling of demands and supply of mechanisation services). • Union of tractor owners formed
December 2009	<ul style="list-style-type: none"> • Post-harvest platform and dairy platform closed down • Mechanisation IP informed of scaling down
June 2010	<ul style="list-style-type: none"> • Withdrawal from mechanisation platform • Meeting with district and ward champions to introduce ward champions to whole programme (as they were picked from the bottom). Redefined roles of district and ward champions.
January 2010–September 2010	<ul style="list-style-type: none"> • Poultry programme rolled out in other districts (Kibaha, Bagamoyo, Mkurunga and Kisarawe districts)
June–July 2010	<ul style="list-style-type: none"> • Creation of KuKuDeal
August 2010	<ul style="list-style-type: none"> • Introduction of contract poultry-keeping and KuKuDeal in Rufiji, Bagamoyo, Kibaha and Mkuranga districts (Coast region)
September 2010–January 2011	<ul style="list-style-type: none"> • Piloted the first phase of contract poultry-keeping under KuKuDeal in Rufiji, Bagamoyo, Kibaha and Mkuranga districts (Coast region)
October 2010–February 2011	<ul style="list-style-type: none"> • Out-scaled to Dodoma and Singida regions
January 2011	<ul style="list-style-type: none"> • Study on institutional history
June 2011	<ul style="list-style-type: none"> • End of the programme?

Summary data sheet Tanzania Poultry Innovation Platform

Name: Poultry Tanzania Platform



PHOTO: GERARD BALTISSEN

*Local chicken production
in Tanzania*

Objectives

To develop the sub-sector of local chicken. Some of the challenges that RIU Tanzania is helping to overcome are:

- Ensuring availability of the required number of 1-day chicks to satisfy the demand
- Ensuring that producers can afford the initial investments needed
- Ensuring that producers have ample knowledge of chicken rearing
- Securing a market for the producers so as to reduce their risks
- Ensuring availability of quality medicine and feed
- Ensuring an acceptable quality of chicken
- Ensuring proper transport of live chickens

Origin

The innovation platform (IP) on poultry started out with the aim of improving farmer entrepreneurship. It evolved from the Pwani district platform, which was assessing opportunities for improving the entrepreneurship skills of producers. The stakeholder platform initially established identified local chicken breeds as an opportunity for economic development. To overcome the reluctance of farmers to enter the business, the programme subsidised a first flock of 100 chicks by 40 percent and ensured advice and linkage and exchange with a hatchery. Required inputs for the first month of chick rearing were provided on credit by RIU Tanzania through a voucher scheme. The poultry initiative evolved as a developing value chain, with Muvek as the main organising factor.

Facilitator

Muvek Development Solutions is the broker.

Level

From local to national.

Members

Value chain actors: breeders, producers, processors, Muvek

Service Providers: private sector service providers (fodder suppliers, veterinarian services, drug suppliers), research institutes

Regulators: district and regional authorities

Activities

Several platform meetings were held to establish the IP. In July 2009 the poultry activities started by mobilising farmers, organising provision of sheds for the chickens and making agreements with service providers. Household advisors supported the first farmers who engaged in poultry farming. Beginning in September the first chicks were distributed in Rufidji district. From 2010 on the programme was rolled out in other districts as well (Kibaha, Bagamoyo, Mkurunga and Kisarawe districts). In 2010 hatchery owners were persuaded to come to a more efficient and reliable chick distribution system. In June the idea for KuKuDeal emerged. KuKuDeal is meant to be a contract farming company, linking chicken producers and buyers. KuKuDeal will have a mandate to manage the routine trade relations between producers and buyers, as well as credit and advisory services, and will make a profit out of delivering this service.

Summary data sheet Tanzania Mechanisation Innovation Platform

Name: Mechanisation Tanzania

Objectives

To make it possible for farmers to plough their fields even though the plots they owned were very small and widely scattered. The initial objectives were to improve collaboration between tractor owners and small scale farmers and, subsequently, to improve rice and maize post-harvest revenues.

Origin

In the Morogoro region, synergy was sought with the FAMOGATA programme, a government programme with the explicit objective of making Morogoro the national granary. This was also an important reason behind RIU's decision to select rice and maize as commodities.

Level

Regional (with some institutional change on the national level) and local. As the RIU Tanzania programme realised that the activities were shifting from organising farmers and tractor owners and establishing functional links to following up and coordinating those links, it became acceptable to withdraw from providing additional support for the mechanisation platform. Routine follow-up now falls under the mandate of the mechanisation officers at the Ministry of Agriculture who were facilitators in the platform. They now interact with the stakeholders involved in the platform as part of their regular activities and as outlined in the district plans. In many cases the block farms have become involved in other group-based activities, such as Farmer Field Schools, which are part of the district development plan on maize and rice production.

Facilitator

Muvek Development Solutions facilitated interactions. It became clear that the main activities needed would normally be the responsibility of the district council; therefore, the district council has integrated this into district plans and taken over the activities.

Members

Value chain actors: producers, farmer groups at ward level

Service Providers: private sector service providers, input dealers, transporters, processing companies, Katrin Agricultural Research Institute], Dakawa Agricultural Research Institute, MviWATA [Tanzania national farmers organisation], NGOs (World Vision), Savings And Credit Co-operative [SACCO]

Regulators: district and regional authorities, District Agricultural and Livestock Development Office, district executive officer, district council



The Tanzania Mechanisation Innovation Platform aims to boost maize production

Activities

Several platform meetings were held, as well as training on the use of farm machinery by the Ministry of Agriculture. During the platform meetings the farmers decided to organise into block farms, and a lead farmer was chosen for each block farm. Twelve farmer groups were formed, with approximately 30 members in each. Farmers managed to negotiate a better price for tractor service, which has been standardised according to soil type and area. Tractor owners are now interested in providing services to smallholders, as the farmers are organised and can offer them a contract for the entire block farm. In June 2009, tractor owners and operators organised themselves under a tractor owner association for coordination purposes so as to be able to provide services on time. Given that the same stakeholders were interested in post-harvest and mechanisation, meetings were jointly organised. Because the stakeholders decided that the challenge of mechanisation needed to be dealt with before dealing with post-harvest issues, the IP on post-harvest never materialised, but those issues are integrated in the activities of mechanisation platform.

Once better links between the farmers and tractor owners were established, and the volume of work increased, new challenges emerged:

- 1 There were not enough tractors;
- 2 Support services for tractor repairs were weak;
- 3 There was insufficient access to loans for tractors at reasonable interest rates.

The tractor owners' association managed to put pressure on government officials to control the quality of spare parts, abolish import duties on tractor spare parts, and help them to negotiate better quality and better prices with the spare parts dealers.

The platform was phased out in June 2010. The activities were handed over to the District Mechanisation Office of the Ministry of Agriculture.

Summary data sheet Tanzania Dairy Innovation Platform

Name: Dairy Tanzania

Objectives

To stabilise production of milk over the course of the year. One of the achievements of the platform was a proposed zero taxation on dairy processing equipment and inputs used by the processing industry, which was approved by parliament and to which the platform contributed. There seems to be a lot of mistrust with respect to milk prices, particularly between processors and producers, resulting from poor understanding of the costs and benefits for the different stakeholders. In addition, personality clashes were reported to be hampering joint action by stakeholders in the interests of the value chain.

Origin

RIU.

Facilitator

Muvek Development Solutions.

Level

Regional and local.

Members

Value chain actors: processors, producers

Service Providers: private sector research

Regulators: district and regional authorities

Activities

The platform held several meetings to discuss the implementation plan. In December 2009, RIU Tanzania announced its withdrawal of support for the platform. A private agro-input dealer, AgriCare, volunteered to take over the facilitation role from RIU and is now initiating and organising the platform meetings. The platform meets every three months and all members fund their own participation. The main bottleneck for the platform at present is a lack of funds needed to carry out some of the activities. The main achievements of the platform are sharing of ideas and feelings and increasing the understanding of weaknesses and strengths in the dairy sector. Even though the current facilitator and managing director of AgriCare is said to be a dynamic, self-driven and motivated person, it has also been said that the platform might need professional facilitation and mediation in dealing with conflict and mistrust in order to be able to move forward.

Rwanda Country Programme

In Rwanda, three commodity-based platforms were initiated: for maize, cassava and potato. A fourth platform focused on assuring access to smallholder irrigation infrastructure. The latter was phased out after the mid-term review. Details about the activities of RIU in Rwanda are given in the timeline hereunder. RIU Rwanda was implemented by the country office established by RIU.

PHOTO: GENEVIÈVE AUDET-BÉLANGER



Farmers assessing the maize sector in Nyagatare, Rwanda

Timeline RIU Rwanda

Inception period

Nov-Dec 2007	<ul style="list-style-type: none"> Country assessment by team of experts, resulting in an implementation report
Dec 2007-Jan 2008	<ul style="list-style-type: none"> Bringing together national stakeholder group: NIC serving as national level support group to the RIU
End 2007	<ul style="list-style-type: none"> MoU signed by high level representatives of NIC members
Feb 2008	<ul style="list-style-type: none"> Official RIU launch, together with CAADP CAADP has an RIU pillar
April-July 2008	<ul style="list-style-type: none"> Brainstorm meetings held in Kibuye by NIC Country office receives mandate to implement Sam Kanjakirike named as the RIU coordinator Two main activities selected: <ol style="list-style-type: none"> 1 Improved market information 2 Platforms at district level

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Timeline RIU Rwanda

Implementation (pre-MTR)

May–June 2008

- Opportunity assessment / platform selection
Four platforms chosen: 1) Maize in Nyagatare, 2) Cassava in Gatsibu, 3) Rural development in Karunji, 4) Potato in Gicumbi

June 2008

- Platform initiation based on guidelines (30 participants)
First list created through district administration; further participants added through “snowball” method. Initially RIU sought a facilitator from platform itself but without payment this was impossible. The RIU programme officer was doing initiation, facilitation and monitoring. Later (after MTR) local support was contracted.
- Needs and opportunity assessment by platforms.
 - Value chain analysis
 - Identify missing actors and lobby for their participation
 - Collect ideas for actions from the platforms
 - Prioritise and plan
 - Address expectation challenge: RIU’s aim was to tackle a little gap where value could be added and then bring together other service providers and improve use of other resources but beneficiaries are expecting something more concrete.
- Through the needs assessment, the gap was identified: improved seed for maize, cassava and potato. Work began by building drying areas and other post-harvest technology; however, for all three crops, the real bottleneck was seed. Different groups exist in the platform to discuss different issues and to assure the participation of the right people at the right moment. At first the work was primarily on building awareness of the need to work together.

Aug–Sep 2008

- Decided one of NIC organisations would be the fund manager. CAPMER was selected.

2009

- New 2009 action plan.
Idea was to influence NIC members to buy into RIU agenda but this was not very effective; there was no leverage over national bodies, as RIU is a small project.

MTR

2008

- Impact on programme only after technical review

2009

- Departure of country coordinator; disruption limited, as RIU facilitator became coordinator
- Technical review led to:
 - Karonji rural platform dropped. Market information goal dropped.
 - More autonomy for the RIU team
 - More collaboration as a team
- Fund management changed from CAPMER to PSF

Implementation (post-MTR)

- Platforms are shifting focus from planting material to marketing issues

June 2010

- NIC becomes dysfunctional. Focus turns entirely to facilitating the district platforms

**Nov 2010–
present**

- Contracting local service providers (RDO, Caritas) to take over facilitation of the platforms

Summary data sheet **Rwanda Maize Innovation Platform**

Name: Maize Rwanda

Objectives

Development of the maize sub-sector.

Origin

RIU.

Facilitator

RIU, with local support. Currently transferring more responsibilities to local organisation.

Level

The platform is located in Nyagatare district.

Members

Value chain actors: Producers, cooperatives (processing, collection, marketing), processors, traders, wholesalers, World Food Programme, Ministry of Agriculture

Service Providers: Rwanda Agricultural Research Institute, district and sector level agricultural extension agents, Rwanda Development Organisation (NGO), Duterimbere Micro Finance Institution

Regulators: Ministry of Agriculture (Rwanda Agricultural Development Agency (RADA)), Ministry of Commerce, Industry, Investment Promotion and Cooperatives (MINICOM)

Activities

In the Nyagatare maize platform, stakeholders initially prioritised technical issues as the main bottlenecks in the maize sector. Acquisition of high quality seed, farming technology and storage were tackled first. After progress was made in these areas, maize marketing emerged as the next important constraint to be addressed, in order to promote progress of this sector in the district. This goal led to the establishment of a maize trading company, with producers and local traders as shareholders.

The maize platform focused initially on increasing productivity, in line with the objectives of the Crop Intensification Programme (CIP). Individual producers and members of maize-producing cooperatives were assisted through the programme in accessing high quality maize seed and fertilizer. Furthermore, they received technical training in good crop husbandry and post-harvest practices. Through the involvement of agro-dealers the availability of these agro-inputs was ensured on a sustainable basis.

These activities resulted in yield increases and attention then shifted towards the storage and marketing of maize. The storage concern resulted in piloting a warehouse receipt system that assists individual producers and producer cooperatives in storing their produce for a longer period, while still having access to much needed cash income at the time of harvest. The warehouse receipt system has developed into a profitable product for the financial service provider, and a well-received service for the maize producers. There is now demand in neighbouring districts for this service.

To take maximum advantage of maize marketing opportunities, the platform members initiated a maize trading company called Nyagatare Maize Investment Group (NYAMIG). Members of the platform are shareholders in the trading company. Discussions are currently ongoing regarding the relationship between NYAMIG and the platform itself.



PHOTO: REMCO MUR

■ NYAMIG, an attempt to improve maize marketing

Summary data sheet **Rwanda Cassava Innovation Platform**

Name: Cassava Rwanda

Objectives

Development of the cassava sub-sector.

Origin

RIU.

Facilitator

RIU, with local support. Currently transferring more responsibilities to local organisation.

Level

The platform is located in the Gatsibu district.

Members

Value chain actors: producers, cooperatives (collection, processing, marketing), traders

Service Providers: District and sector level agricultural extension agents, Rwanda Development Organisation (NGO) Institut Scientifique Agricole de Rwanda (ISAR)

Regulators: Rwanda Agricultural Development Agency (RADA), Ministry of Commerce, Industry, Investment Promotion and Cooperatives (MINICOM)

Activities

For the cassava platform in Gatsibu, the primary constraint for producers was the cassava mosaic virus. Varieties resistant to the virus were produced through joint IITA-ISAR efforts; however, reliable planting material was not available to producers. This issue was tackled by training multipliers and supporting the distribution of cuttings. Only after this problem was solved, and good harvests could be obtained, did the focus turn to the issue of marketing. To improve the marketing of cassava, solutions are being sought through building closer links with the existing cassava processing industry and seeking out opportunities for local processing.

The cassava platform had concentrated mainly on solving the problem of the cassava mosaic virus, which had devastated cassava production in Rwanda, Burundi and parts of the Democratic Republic of the Congo. Through producing cuttings of new resistant varieties obtained through ISAR, in combination with improved crop husbandry, cassava yields increased dramatically for the participating producers.

Marketing cassava, however, is quite a challenge in the chosen district. The platform began assessing opportunities for producers to set up a cassava flour processing unit, and was looking into marketing cassava in the south of Rwanda, where a flour processing plant is in operation.

The mid-term review decided to phase out support to the cassava platform. RIU has been assisting the platform by linking members to other support networks, such as the Integrated Pest Management (IPM) project run by the Ministry of Agriculture and Livestock resources (MINA-GRI) and sponsored by BTC (Belgium development Agency).



PHOTO: GENEVIÈVE AUDET-BÉLANGER

The Rwanda innovation platforms bring together extension officers and farmers

Summary data sheet **Rwanda Potato Innovation Platform**

Name: Potato Rwanda

Objectives

Development of the potato sub-sector.

Origin

RIU.

Facilitator

RIU, with local support. Currently transferring more responsibilities to local organisation.

Level

The platform is located in the Gicumbi district.

Members

Value chain actors: Producers, cooperatives (seed production, processing, collection, marketing), processors, traders

Service Providers: Rwanda Agricultural Research Institute, district and sector level agricultural extension agents, Caritas Gicumbi (NGO)

Regulators: Ministry of Agriculture (Rwanda Agricultural Development Agency (RADA)), Ministry of Commerce, Industry, Investment Promotion and Cooperatives (MINICOM)

Activities

The most important issue identified by the potato platform was the availability of high quality seed. This was addressed through two different types of interventions. In the first place, it was done through positive selection, i.e. teaching producers to maintain the quality of their own planting materials. Secondly, with the support of ISAR, the platform initiated a commercial mini-tuber multiplication unit. The mini-tubers produced are further multiplied and marketed by individual seed multipliers, who are also members of the platform.

The platform also works on improving the availability and use of agro-inputs, such as fertilizer and fungicides. In addition, the platform began venturing into the collective marketing of potatoes.

The potato platform was very outspoken about the need to become more autonomous from RIU, more so than the maize platform had been. The cassava platform specifically indicated that it was not in a condition that would allow autonomous existence.

Summary data sheet **Rwanda National Innovation Coalition**

Name: NIC Rwanda

Objectives

- 1 Oversee and support the RIU program
- 2 Coordinate and assure the provision of technical support for the commodity platforms through NIC members
- 3 Facilitate innovation through policy advocacy at national level
- 4 Serve as a vehicle to internalise RIU lessons in the participating organisations

Origin

RIU.

Facilitator

RIU, with platform president. Found to be dysfunctional after mid-term review.

Level

National level organisations representing service providers, private sector and producers.

Members

- 1 Institut Scientifique Agricole de Rwanda (ISAR)
- 2 Rwanda Agricultural Development Agency (RADA)
- 3 Rwanda National Network of Farmers Organisations (ROPARWA)
- 4 Private Sector Federation (PSF)
- 5 Centre d'Appui pour les Petits et Mediums Entreprises du Rwanda (CAPMER)
- 6 Rwanda Development Organisation (RDO)
- 7 Association des Jeunes Emancipés de Mushubati pour l'Agriculture et le Commerce (AJEMAC)
- 8 Ministry of Commerce, Industry, Investment Promotion and Cooperatives (MINICOM)
- 9 Faculty of Agronomy of the National University of Rwanda (FACAGRO)
- 10 Banque Rwandaise de Développement (BRD)
- 11 Pro-Femmes TWESEHAMWE

Activities

A National Innovation Coalition (NIC) was formed in Rwanda at the end of 2007. This was intended to be the executive branch of a larger National Agricultural Innovation Network (NAIN), as proposed by RIU. In contrast to the NAIN, the NIC did not contain all the organisations involved in agriculture, but rather a selection of stakeholders including private sector representation, farmer representation, research, agricultural education and extension.

The first activity of the NIC was to hold brainstorming meetings with the RIU country coordinator to develop a national action plan. Responsibility for implementation of the national action plan was placed on the RIU country coordinator. The coalition had the role of overseeing the RIU project. Although its decision-making influence was not felt to be great, it received progress reports and endorsed budgets. One of the NIC members (CAPMER) was chosen as the RIU fund manager.

The NIC met and discussed strategies for putting Research Into Use. It also became involved in the goal of improving market information, which was supposed to be the main instrument for structuring the response to demands for services and knowledge from the activity of the platforms.

Maintaining momentum at the national level through specific NIC activities proved very difficult. An indicator of the interest of the organisations participating in the NIC was the level of decision-making in their organisations. The NIC was initiated within the RIU project framework and not an embedded part of the Rwandan administration. This made it difficult to obtain the desired leverage within government organisations and the buy-in to the RIU agenda that had been envisioned.

The NIC was given a number of tasks. The task of serving as the channel for information from participating organisations to the platforms was, in retrospect, not very useful. The platforms at district level can source the services they require directly from research and other service providers, first through facilitators and eventually on their own behalf. There is no need for a formal intermediate body at national level to accomplish this task. The NIC also worked on a virtual market information system that would improve access to agricultural development information. These efforts were discontinued, however, after the mid-term review, when it was decided to focus on fewer activities and to provide more autonomy to the country programme in deciding how to use resources.

The role of the NIC in ensuring support to RIU by the different members of the NIC was well understood. The attempt to ensure buy-in to the RIU agenda by Rwandan organisations was unsuccessful. Although an MoU was signed between the MINAGRI and RIU, and RIU was launched along with CAADP, RIU was unable to rally higher-level decision-makers behind its agenda. The main reason for this failure is that it was always seen as a body linked to an external project. This was further emphasised by NIC's role as a steering committee for the RIU project. The change agenda of the RIU country programme in Rwanda was too ambitious, given its status as a project and its limited resources. Much closer ties with the MINAGRI, at the highest level, are essential to enable real change.

Most members of the NIC were active during the 1-1.5 years it was in existence and tried their best to fulfil the NIC mandate. However, attendance at NIC meetings dropped as it became apparent that, for some organisations, the benefits of participation were limited. A lack of clear activities other than meetings and workshops, and the cancellation of the market information system, combined with limited influence on RIU project implementation, resulted in diminishing attendance. The NIC has not met since May 2010.

Nigeria Country Programme

RIU programme initiated and established three value chain innovation platforms focusing on Aquaculture, Cassava and Cowpea/Soybean crops in Nigeria. Cowpea and Soybean were combined under one platform because both are legumes and grown in the same agro-ecological zone. RIU Nigeria Country Office, which implemented the programme, was hosted by, and embedded within, the administrative structures of the Agricultural Research Council of Nigeria (ARCN), the federal agency that regulates and coordinates agricultural research in Nigeria.

Timeline RIU Nigeria

November 2006	<ul style="list-style-type: none"> • Exploratory visit to Nigeria by members of the consortium managing RIU
January 2007	<ul style="list-style-type: none"> • Country assessment by a team of experts, resulting in an assessment report
April 2007	<ul style="list-style-type: none"> • RIU-Nigeria fisheries assessment report completed
June 2007	<ul style="list-style-type: none"> • Survey of potential programme stakeholders, led by consultants, resulting in a list of identified stakeholders for the programme
November 2007	<ul style="list-style-type: none"> • Concept note for Nigeria Country Strategy
January 2008	<ul style="list-style-type: none"> • Country programme strategy prepared by consultants
May 2008	<ul style="list-style-type: none"> • Final Nigeria Country Strategy submitted
September 2008	<ul style="list-style-type: none"> • RIU-Nigeria Implementation Plan Expert Review Workshop • First Draft of Country Implementation Plan prepared by consultants
October 2008	<ul style="list-style-type: none"> • Country coordinator and country team recruited
December 2008	<ul style="list-style-type: none"> • Commencement of programme implementation • Institutional assessment of potential Innovation Platforms
January 2009	<ul style="list-style-type: none"> • RIU-Nigeria implementation plan finalised
February 2009	<ul style="list-style-type: none"> • Cassava Innovation Platform launched in Umuahia, Abia State
March 2009	<ul style="list-style-type: none"> • Cowpea/Soybean Innovation Platform launched in Kano City, Kano State
April 2009	<ul style="list-style-type: none"> • Meeting of RIU-Nigeria country programme consultants with RIU-Nigeria Team on RNRRS adoption by platforms
June 2009	<ul style="list-style-type: none"> • Aquaculture Innovation Platform launched in Abuja, FCT • RIU-Nigeria assists ARCN in management of its research database

Timeline RIU Nigeria

July 2009	<ul style="list-style-type: none"> • Presentation of RIU-Nigeria policy report on policy directive of cassava flour to House Committee on Agriculture of the National Assembly • New director appointed for RIU • Technical review of Africa and Asia country programmes
August 2009	<ul style="list-style-type: none"> • RIU-Nigeria develops two-year work plan
September 2009	<ul style="list-style-type: none"> • Collaboration planning meeting between RIU-Nigeria and IITA/Purdue Improved Cowpea Storage • Development Input Limited appointed as fund manager for RIU Nigeria programme
October 2009	<ul style="list-style-type: none"> • First zonal Aquaculture workshop held in Idah, Kogi State
November 2009	<ul style="list-style-type: none"> • Second zonal Aquaculture workshop held in Zaria, Kaduna State • Partnership agreement signed between RIU-Nigeria and IITA to promote triple bags for cowpea storage
December 2009	<ul style="list-style-type: none"> • RIU-assisted activities on cowpea expanded from two states to six states to promote triple bagging method • RIU-Nigeria meeting with programme managers in six northern state agricultural development programmes
January 2010	<ul style="list-style-type: none"> • RIU-Nigeria team supervise field demonstrations of triple bagging technology by extension agents in six northern states
February 2010	<ul style="list-style-type: none"> • Capacity building for fish farmers, NGOs, private sectors and government para-statal organisations (various training workshops)
March 2010	<ul style="list-style-type: none"> • Aquaculture stakeholders' meeting on building local capacity for fish meal and its linkages to feed production in Nigeria
April 2010	<ul style="list-style-type: none"> • RIU implements the supply of seeds and other farm inputs in Bauchi and Plateau states, funded by US Embassy • Development of local partnership between RIU-Nigeria programme and Abuja office of International Committee of the Red Cross Society
May 2010	<ul style="list-style-type: none"> • RIU, Gates Foundation, Purdue University, and IITA conduct a joint assessment of field operations on triple bagging • Distribution of CMD-resistant variety in Abia state • Signing of protocol partnership of RIU-Nigeria intervention on fish • Abia State government buys into RIU programme and invests in scaling-up input supply across the state
June 2010	<ul style="list-style-type: none"> • Distribution of dual purpose cowpea and rust-resistant varieties of soybean in Kaduna and Kano states • Opening-the-bags ceremonies (i.e. technology evaluation at village level) conducted in 950 villages after the use of solarisation and triple bagging (hermetic) method of cowpea storage • RIU signs project agreement with NIOMR, NIFFR, Feed Masters Ltd and Grand Cereals Ltd on local production of fish meal using clupeids as raw materials

Timeline RIU Nigeria

July 2010	<ul style="list-style-type: none"> • Entrepreneurial skill acquisition workshop on post-harvest value addition to cassava
August 2010	<ul style="list-style-type: none"> • Situation analysis of fodder availability, marketing channels and the implications for livestock production
September 2010	<ul style="list-style-type: none"> • Evaluation of RIU-Nigeria activities by ARCN
October 2010	<ul style="list-style-type: none"> • Baseline profile report of farmers involved in cowpea production, storage and marketing in northern Nigeria completed
November 2010	<ul style="list-style-type: none"> • RIU-Nigeria Learning Event
December 2010	<ul style="list-style-type: none"> • RIU-Nigeria Learning Event hosted by Cross River State at Obudu, Cross River, for the three platforms for the first time
January 2011	<ul style="list-style-type: none"> • Cassava Innovation Platform becomes Abia Agricultural Innovation Platform (AAIP), registered as a company
March 2011	<ul style="list-style-type: none"> • Number of corporate shareholders in the AAIP increases from 25 to 75 fully-paid member organisations
May 2011	<ul style="list-style-type: none"> • Abia State government donates 20 hectares of land to AAIP for commercial agricultural use
July 2011	<ul style="list-style-type: none"> • 12-month extension approved, focusing on cowpea storage. RIU-assisted activities on aquaculture and cowpea IPs are ended
November 2012	<ul style="list-style-type: none"> • RIU hosts investors' forum (manufacturers), resulting in two new companies producing triple bags
January 2012–June 2012	<ul style="list-style-type: none"> • Study comparing triple bags supplied by three different manufacturers conducted across six states in northern Nigeria
May–June 2012	<ul style="list-style-type: none"> • Impact Assessment conducted by consultants, led by KIT of the Netherlands
June 2012	<ul style="list-style-type: none"> • RIU-Nigeria programme winds up after handing over report to ARCN



Member of the Cassava Innovation Platform in his field

Summary data sheet **Nigeria Cassava Innovation Platform**

Name: Cassava Value Chain Innovation Platform

Objectives

- 1 To increase the production of cassava mosaic disease (CMD)-resistant cassava variety
- 2 To increase the production of high-value cassava flour (HVCF)
- 3 To increase the commercial utilisation of HVCF among confectionery companies
- 4 To increase post-harvest product diversification in the cassava sector
- 5 To increase the market for cassava products

Origin

RIU.

Facilitator

RIU provided technical direction and initial funding which enabled consultants to provide technical assistance. The platform was organised by elected Executive Committee members led by a Chairman. A prominent traditional ruler in Abia State was a patron/member.

Level

National, state and local government agencies (including national agricultural research institutes, universities), registered for-profit companies, informal associations (e.g. local farmers' groups) and other community-based organisations (CBOs).

Members

NGOs/CBOs (14): Abanbeke Development Association (ADA); Umuahia Central Multipurpose Coop Society Ltd; 12 other village-based women's farming groups

Private Sector (3): Aquada Development Corporation Ltd, Nigerian Starch Mill (NSM), Biostadt Company (formally Syngenta Nig. Agrochemical Co. Limited)

State & Local public agencies (2): Abia State Agricultural Development Project, Office of the First Lady, Abia State

Federal agencies (6): National Root Crop Research Institute Umudike (NRCRI), National Agricultural Extension Research & Liaison Services (NAERLS), Zaria, Nigerian Stored Products Research Institute (NSPRI), Raw Materials Development Research Council (RMDRC), National Agency for Food and Drug Administration and Control (NAFDAC), Federal Institute of Industrial Research, Oshodi (FIIRO)

International (1): International Institute for Tropical Agriculture (IITA)

Activities

To increase cassava production and productivity, RIU undertook the following activities: (1) funded and organised the training of representatives of cassava farmer groups to improve their agronomic practices; (2) sponsored a sensitisation campaign to promote CMD-resistant varieties of cassava developed and released by the IITA; (3) brokered sustainable arrangements for the supply of cuttings for the CMD-resistant varieties, by sensitising the farmer groups on the economic benefits of serving as commercial outgrowers; (4) brokered bulk purchase arrangements whereby the cassava farmers supplied cassava in bulk to a major starch-producing company in the region; facilitated sustainable supply arrangements between the cassava farmers and fertilizer dealers, crop protection chemicals suppliers, and other relevant inputs and service providers.

To increase post-harvest value addition and product diversification in the cassava sector, RIU: (1) funded and organised trainings, sensitisation campaigns and skills development workshops on improved processing methods and the various new products (such as paper gum and odorless fufu) into which cassava could be processed; (2) promoted mixed or inter-cropping to maximise the use of scarce land resources among low-income farming families; (3) promoted the cultivation of CMD-resistant cassava varieties in other south-eastern states, thereby creating a big market for cuttings supplied by the commercial outgrowers; (4) developed, trained and facilitated supply arrangements for fabricators of equipment such as hand-held peeling tools, to increase operational efficiency in the peeling of cassava as part of post-harvest value addition.

To enhance institutional learning and change, RIU-funded consultants conducted an appraisal of the Presidential Directive on Cassava relating to the blending of cassava flour with imported wheat flour. The report of the policy appraisal was presented to the National Assembly's Committee on Agriculture in 2010. The Committee invited RIU to present a Memorandum during the public hearing on a privately-sponsored Cassava Bill, which, as of 2012, was still going through the legislative processes. The Agricultural Research Council of Nigeria (ARCN), working through the National Root Crops Research Institute (NRCRI) and in collaboration with Harvest Plus (a US-based programme), will continue to build on RIU's effort by promoting the integration of bio-fortified (vitamin-enhanced) cassava varieties with CMD-resistant varieties, as part of the agricultural research for development (AR4D) approaches across Nigeria.

Summary data sheet **Nigeria Aquaculture Innovation Platform**

Name: Aquaculture Value Chain Innovation Platform

Objectives

- 1 To improve practical fish farming skills among the target groups
- 2 To increase the local supply of fish meal and fish feed
- 3 To reduce importation of fish meal and fish feed
- 4 To increase the supply of high-quality fingerlings to fish farmers
- 5 To increase the pool of competent service providers in the aquaculture sector
- 6 To establish private sector linkages with national agricultural research institutes in the aquaculture sector
- 7 To develop standards and certification in order to enhance quality control and raise standards in the sector

Origin

RIU.

Facilitator

RIU provided technical direction and initial funding which enabled consultants to provide technical assistance. Platform was organised by elected Executive Committee members led by a Chairman. A prominent traditional ruler in Abia State was a patron/member.

Level

National, state and local government agencies (including national agricultural research institutes, universities), registered for-profit companies, informal associations (e.g. local farmers' groups) and other community-based organisations (CBOs).

Members

NGOs/CBOs (4): Kaduna Nigerian Air Force (NAF) based Women, Hope For Life, Catholic DDS Farms, Fish house Aquaculture Ltd (Farmer)

Private Sector (13): Feed Masters Nig Ltd, Grand Cereals Nig PLC, Rebson Feed Co., Nigerian Agricultural Coop & Rural Development Bank (Financial Institution), First Bank Plc, Ojodu Farms Idah, Talon R&D Nig. Ltd, Grajes Farms, Ochedi Integrated Farms, FPI Ventures Idah, Goddy Farms Nig. Ltd, Ateko Farms, Jasse Farms

State & Local public agencies (3): Federal Capital Territory Agricultural Development Project, National Union of Fishermen and Seafood Dealers (NUFAS), Feed Millers, Aquaculture Practitioners' Associations

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Federal agencies (9): National Institute for Oceanography and Marine research (NIOMR), Nigerian Institute for Freshwater Fisheries Research (NIFFR), Agricultural Research Council of Nigeria (ARCN), Abuja [research management], Federal Department of Fisheries (FDF), National Animal Production Research Institute (NAPRI), Zaria, National Agricultural Extension Research & Liaison Services (NAERLS), Zaria [extension mandate], Nigerian Stored Products Research Institute (NSPRI), Ilorin [Post-harvest storage mandate], Raw Materials Development Research Council (RMDRC), National Agency for Food and Drug administration and Control (NAFDAC)

International (1): New Partnership for African Development (NEPAD)

Activities

To increase fish production and productivity, RIU: (1) funded and organised the training of representatives of fish farmer groups to improve fish farming practices; (2) sponsored a sensitisation campaign to promote integrated aquaculture-horticulture practices among fish farmers; (3) facilitated the development of criteria for the certification of farmers in order to establish standards that could raise the quality of practices in the fish farming sector; (4) brokered sustainable supply arrangements that enhanced access to high-quality fingerlings for fish farmers; (5) compiled a list of government-recognised names and contact addresses of service providers in the aquaculture sector and made this available to fish farmers as part of strategies to reduce fraud and the activities of unqualified practitioners in the sector.

To increase post-harvest value addition in the aquaculture sector, RIU: (1) funded and organised trainings, sensitisation campaigns and skills development workshops on fish smoking, processing, packaging and marketing, and cost-effective technologies for these activities; (2) promoted the deliberate production of small-sized catfish to enhance post-harvest processing and packaging; (3) developed, trained and facilitated supply arrangements for fabricators of kilns and other equipment, to increase operational efficiency in the storage and processing of fish as part of post-harvest value addition.

To enhance institutional learning and change, RIU brokered a partnership involving the Federal FDF, NIFFR, NIOMR and several commercial organisations engaged in the production of fish feed. The partnership offered training on the use of clupeids and low-value tilapia to produce high-quality fish meal at affordable prices, in order to reduce the cost of fish feed production in the country and reduce Nigeria's over-reliance on imported fish feed. ARCN integrated the RIU-developed Aquaculture Innovation Platform member organisations into the World Bank-funded West African Agricultural Productivity Programme (WAAPP), thereby ensuring the scaling out of the successful RIU-sponsored pilot activities, as part of the AR4D approaches across Nigeria.

Summary data sheet **Nigeria Cowpea/Soybean Innovation Platform**

Name: Cowpea/Soybean Value Chain Innovation Platform

Objectives.

- 1 To increase cowpea production and improve productivity in target communities
- 2 To improve storage of cowpea grains and reduce post-harvest losses due to bruchid infestation of the cowpea grains
- 3 To improve the commercial management and utilisation of cowpea fodder

Origin

RIU.

Facilitator

RIU provided technical direction and initial funding which enabled consultants to provide technical assistance. The platform was organised by elected Executive Committee members, led by two co-chairs (one male and one female).

Level

National, state and local government agencies (including national agricultural research institutes), universities, registered for-profit companies, informal associations (e.g. local farmers' groups) and other community-based organisations (CBOs).

Members

NGOs/CBOs (14): Women in Agriculture (WIA), Kano State Cowpea Marketers Association, Cowpea Farmers & Seed Producers Association (Kano State), Hikima Women Forum (Kaduna State), Dararafe Women's MP Coop (Kano State), Miyatti Allah Cattle Breeders Association (local branches), Kaduna Soybean Farmers Association, Gonin Gora Women MP Coop, Vegetable/Edible Oil Millers Association, Gamariya Women MP Coop, Poultry Farmers Association of Nigeria, Tofa Seed Breeders Association (Kano State), Kausani Seed Breeders Association (Kano State), Garko Women Farmers Association (Kano State), Abanbeke Dev't (Widows) Association

Private Sector (11) Feed Masters Nig Ltd (animal feed producer), Grand Cereals Nig PLC (animal feed producer), Rebson Feed Co. (animal feed producer and researcher), Lela Agro Nig Ltd (maker of jute and plastic bags), Seed Project Co. Ltd (producer and marketer of certified seeds), Premier Seed Nig Ltd (producer & marketer of certified seeds), Candel Agro-Chemicals (agro input supplier), Jubaili Agro-Chemicals (agro input supplier), Nigerian Agricultural Coop & Rural Development Bank, United Bank for Africa, Wetlands Associates Ltd (agricultural engineers, equipment fabricators & input suppliers)

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State & Local public agencies (7): Bauchi State Agricultural Development Programme (ADP), Gombe State ADP, Jigawa State ADP, Kaduna State ADP, Katsina State ADP, Kano State Agriculture and Rural Development Authority, Agriculture Department of Garko Local Government Council, Kano State

Federal agencies (5): Agricultural Research Council of Nigeria (ARC�), Abuja (research management), Institute of Agricultural Research (IAR), Zaria (cereals mandate), National Animal Production Research Institute (NAPRI), Zaria (livestock mandate), National Agricultural Extension Research & Liaison Services (NAERLS), Zaria (extension mandate), Nigerian Stored Products Research Institute (NSPRI), Ilorin (post-harvest storage mandate)

International (1): International Institute of Tropical Agriculture (IITA)

Activities

To increase the production and productivity of cowpea and soybeans, RIU: (1) funded and organised the training of representatives of farmer groups to improve agronomic practices; (2) brokered access to seeds of improved varieties; (3) brokered sustainable annual seed supply arrangements between the farmers and seed production companies, fertilizer dealers, crop protection chemicals suppliers, and other relevant agro-input and service providers; (4) developed post-harvest markets for cowpea and soybean, thereby enabling the farmers of these crops to sell directly and at higher prices to companies that produce vegetable oils or animal feeds.

To reduce post-harvest losses caused by bruchid infestation of cowpea grains, RIU: (1) funded and organised trainings and sensitisation campaigns against the application of toxic chemicals by cowpea farmers and marketers of cowpea grains, during the storage of the cowpea grains; (2) promoted the use of airtight triple-layered bags to protect the stored grains; (3) brokered a sustainable annual supply of triple bags to cowpea farmers and marketers, by linking these end users with three companies who manufacture storage bags; (4) developed, trained and facilitated supply chain structures to ensure that the private sector would provide a sustainable supply of the triple bags in future years.

In order to improve and commercialise the management and utilisation of cowpea fodder, RIU: (1) sensitised cowpea farmers on the profitability of fodder markets, if fodder is made available to livestock farmers as animal feed; (2) invited and brokered the development and local production of a fodder compactor which compressed the fodder into 5 kg and 9 kg bales, for easy handling and storage; (3) funded and organised microenterprise trainings for selected village youth to operate and maintain the fodder compactors in partner communities; (4) brokered sustainable supply arrangements between fodder baling points with bulk merchants who supply the fodder to cattle grazing reserves in Kaduna and Plateau states.

To enhance institutional learning and change, RIU and the ARC� jointly undertook the above-listed activities, thereby enabling ARC� to incorporate and scale out the agricultural research for development approaches and lessons learned.

