



RIU CENTRAL RESEARCH TEAM WORK PLAN

May 2010

Introduction

This work plan presents operational details on the way in which the Central Research Team of RIU will execute the programme's research. It outlines the way the research questions will be addressed and details the expected outputs/publications from the research while providing milestones. This work plan is shaped by the research design developed by CRT (a summary of which is attached in Appendix 1). The research design was expanded in April 2010 to supplement its public focus with a series of investment reviews aimed at a private sector investment audience (Appendix 2 summarises the details of this expanded perspective).

Research Design

The research design consists of 7 key elements:

1. The aim of the research is to contribute to an understanding of how agricultural research can best be put into use for developmental purposes. The research is premised on the notion that this field of investigation is not about how to put research products, technologies and ideas into use, *per se*, but rather about how the process of research can best be used within the wider process of innovation.
2. The specific research question being addressed is: *What configurations of relationships and processes around agricultural research are required in different contexts, for different types of innovation (technical, institutional and policy) at different points in the innovation trajectory and what policy and institutional settings support and steer these innovation trajectories towards different social, economic and sustainability goals?*
3. A better understanding of the relationship between research and innovation, combined with insights about which approaches work under which circumstances, will help planners and entrepreneurs make choices about investments that will enable innovation and have developmental impact.
4. The centrepiece of the research design is six overlapping innovation narratives. These narratives will provide competing and complementary explanations of the circumstances that lead to agricultural innovation. Each implies different roles for research and each has a set of hypotheses about how innovation takes place. These are as follows: 1) Poor User-Led Innovation 2) Public-Private Partnership-Led Innovation 3) Capacity Development-Led Innovation 4) Below-the-Radar-Led Innovation 5) Investment-Led Innovation 6) Research Communication-Led Innovation. The main purpose of these narratives is as a framework to help sort evidence about how research gets put into use under different circumstances.
5. The research will use the four RIU experiments (Africa County Programmes, Asia Project Clusters, Best Bets and the Innovation Finance Facility) to generate evidence that explains the circumstances under which these innovation narratives hold true and to understand the sequencing and clustering of these modes of innovation and the location and role of research within these processes, as well as the opportunities for private investment and public policy.
6. To ensure that RIU's research can contribute an understanding to all six narratives, gap-filling case studies will be selected from outside the programme's activities.
7. The approach to putting research into use adopted by RIU is an evolving one that will develop incrementally by learning throughout the programme's life. Direct comparison of the added value of the programme's approach will, however, be conceptually problematic. The programme nevertheless wishes to explore comparator cases where more traditional approaches to agricultural research and innovation have

dominated. This will be achieved by investigating a limited number of cases through histories of selected research and innovation trajectories.

Main Research Tasks

1. **Development of Research Design.** This document provides the conceptual basis for the whole of the research and provides an analytical framework for investigating the main research question.
Responsibility: CRT
Milestone: Completed Draft December 2009
2. **Generating Evidence on each Research Narrative.** Tables 1 and 2 present a matrix of innovation narratives, RIU projects, country programmes and Best Bets to illustrate where the primary and secondary sources of evidence will come from for each innovation narrative. Table 2 also highlights where non-RIU cases will be used to fill gaps. Detailed responsibilities and milestones are discussed below and in Table 3.
3. **Undertaking Synthesis of Lessons on Different Aspects of Putting Research into Use across the Whole Programme.** A collection of case studies and review papers will be collected together in the form of a book with a concluding chapter drawing out the main lessons. See Table 3.
4. **Highlighting Investment Opportunities.** Recognising that the private sector will be a key audience for the experiences of RIU's support of private sector-led approaches, the research will undertake investments analyses and reviews of both RIU's experiences as well as more wide-ranging scoping studies.

Research Design and Rationale

RIU's research relies on the following principles:

- The challenge is about putting the research *process* into use as much as it is about putting research *products* into use.
- Innovation diversity is central to the research design, emphasising that there is no optimal approach or way of organising research into use for innovation and impact; rather it is context-specific and path-dependent.
- The main investigative focus of the research is to understand the clustering of organisations, resources and institutional and policy regimes around different market and development niches and how these can be used to enable innovation and impact.
- The main analytical focus is on understanding which approaches work best in which market and development niches; i.e., looking for common patterns that can help planners and investors make choices.
- The research combines public policy with business investment reconnaissance perspectives to ensure that guidance on choices and new opportunities is articulated in ways attractive to the widest possible audiences.

What Are We Likely To Learn?: Horses for Courses

As a framework to help sort evidence from its research RIU adopted 6 competing and overlapping innovation narratives, which characterise commonly proposed approaches to organising innovation and impact (see Box 1). The rationale of this framework is that sometimes private sector-led innovation is going to be valuable; at other times it may just be an issue of communicating results better, etc. The framework will focus lessons on the selection, sequencing and bundling of approaches. To use a gambling analogy if these comprise the suite of horses that planners and investors are going to place their bets on, which are the courses on which these horses will perform best?

Box 1. RIU's Innovation Narratives

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.
2. **Public-Private Partnership-Led Innovation.** Approaches that seek to deploy the expertise, and resource and market perspectives of the private sector in an alliance with public actors and policies.
3. **Capacity Development-Led Innovation.** Approaches with a focus on institutional and network development with a view to enhancing innovation system capacity.
4. **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.
5. **Investment-Led Innovation.** Approaches that rely on financial incentives for innovation through a variety of operational forms.
6. **Research Communication-Led Innovation.** Approaches that seek to improve the transmission and availability of ideas to different audiences and make them accessible through databases that use communication as a network building tool.

The 'courses' are market and development niches and the opportunities these present for impact. But how do we define them and are there a finite number of generic types that planners and investors could use as a ready-reckoner? A central task for RIU's lesson learning is to reveal what these market and development niches look like in the programme's sphere of activity. To illustrate this approach the following table presents what has been seen so far. It is anticipated that this list of niches will be expanded as RIU's innovation studies proceed over the next year. What is already apparent at this early stage is that no *one* approach outlined in the innovation narrative in Box 1 will fit in any *one* niche. Rather, we expect to see a bundling of these different approaches. We expect future RIU lessons to point to teams of horses for an ever-expanding set of courses. The main output of RIU's research will be a ready-reckoner to help planners and private investors make choices cognisant of both the approaches needed as well as the risks involved and the likely returns in terms of both financial rewards and social impact.

The Courses (Market and Development Niches)	Horses (Bundles of Innovation Approaches)
Strong urban demand for traditional foods	Private sector supplying production inputs to farmers organised by the development sector. E.g., Poultry Development, Tanzania
Standards and norms in international value chains that create expertises and services applicable to poor farmers	Private companies sell products and services to poor markets incubated with public funds and development organisation assistance. E.g., Real IPM, bio-control of striga, Kenya
Upgrading of traditional commodity markets	Intermediary organisations from the public and private sectors brokering access to

	private sector organised input and output markets. Policy lobbying by the private sector. E.g., Cowpea and soybean, Nigeria; FIPS's small seed and fertiliser packs in East Africa
Policy windows associated with reform of tertiary education	University graduate scheme that promotes business-led technical services. E.g., Sleeping sickness control in Uganda
Increasing effective demand of large numbers of poor people for goods and services	Public and private sectors invest in pro-poor business models that rely on user-led models of innovation. E.g., Real IPM; FIPS in East Africa; Fish seed in Asia; Client-Orientated Breeding in Asia
Value chains with governance for ethical niche markets	Private and development sectors partner with producer-owned enterprises to link to lucrative markets. E.g., Value chain development projects in India and Nepal
High degree of social organisation for development purposes	Development and private sectors partner to build on the existence of groups of poor people organised for different purposes. E.g., Microfinance for innovation in India
Social capital from historically-developed, multi-sector alliances for development purposes	Reconfiguration of consortia for public good mobilises public, private and development actors, resources and services. E.g., Army worm control, East Africa; Flood Plain Management, Bangladesh

Table 1. Matrix of Innovation Narratives, RIU East Africa Best Bets and Innovation Financing Initiative

	Client orientated breeding, Asia	FIPS, East Africa	Real IPM, East Africa	Sleeping sickness	Army worm	NERICA	H2O
Poor User-Led Innovation	**						
Public-Private Partnership/ Agro-Enterprise Led Innovation	**	**	**	**	**	**	**
Capacity Development-Led innovation	**	*	*	*	*	*	
Below the Radar-Led Innovation							
Investment-Led Innovation	*	*	*	*	*	*	**
Research Communication-Led Innovation	*(Communication for innovation)	*(Knowledge management)	*(Communication for innovation)	*(Communication for innovation)	*(Communication for innovation)	*(Communication for innovation)	*(Communication for innovation)

Contribution of evidence to innovation narrative: ** = Primary * = secondary

Note: Communication as intermediation to facilitate innovation is implicit in all cases, so all will be contributing to this narrative.

Table 2 Matrix of innovation and Africa country programmes, Asia thematic clusters and non-RIU cases

	Africa Country Programmes	Asia Value Chain Cluster.	Asia NRM/Adaptive Collaborative Management Cluster	Non-RIU gap filling cases
Poor User-Led Innovation	*	*	**	
Public-Private Partnership/ Agro-Enterprise-Led Innovation	*	**		
Capacity Development-Led Innovation	**	*	**	Policy and innovation: Regulation of biotechnology.
Below-the-Radar-Led Innovation	*	*	*	True below-the-radar cases driven by a large market of poor people not in the RIU portfolio. Case to be selected
Investment-Led Innovation	*			Investment-led innovation case needed to cover financing arrangements not in RIU portfolio. E.g., venture capital
Research Communication-Led Innovation	*(Knowledge management and communication for innovation)	*(Communication for innovation)	*(Communication for innovation)	** (ICT and research communication in Asia and Africa)

Deployment and Roles of CRT, Research Fellows and Consultants

The CRT is led by Andy Hall. Jeroen Dijkman leads research in Africa and Rasheed Sulaiman V. leads research in Asia. The CRT is supported by 6 research fellows (see below).

In Asia the CRT, with the help of a research assistant, will lead the research component on ‘Client-Orientated Breeding’. This will involve developing a detailed history of the underpinning research of this Best Bet, how this research evolved over time and, finally, a detailed account of attempts to set up a variety of organisational formats (companies, producer organisations, etc.) to sustain a capacity for putting this mode of research into use.

The NRM theme will be covered by commissioning an existing RIU project partner (Hemant Ojha from the NGO Forest Action) to develop a history of adaptive collaborative management research and the evolution of this approach during its subsequent implementation use. This will draw on non-RIU cases as well as two RIU projects as case studies. Dr. Ojha will be titled as a ‘CRT associate’.

The value chain theme will be covered by an identified research fellow, T.S. Vamsidhar Reddy, who will be located in the office of the CRT Asia regional coordinator in Hyderabad. The study will develop a detailed history of the different strands of research that underpinned the three value chain-oriented projects in Asia. The study will then explore the strategies and challenges of putting into use various process innovations that have been promoted as ways of enhancing innovation around the value chain.

A Zimbabwean national, Elias Madzudzo, has been selected as a research fellow to assist the country programmes in Malawi and Zambia to document their experience. In addition, given his experience, he will also take special responsibility for compiling evidence about the effectiveness of the capacity development approach to putting research into use and promoting innovation.

Anna Kingiri, a Kenyan national, will cover the gap concerning the role of policy and the enabling environment for putting research into use with specific reference to the regulation of biotechnology.

In West Africa, RIU's Nigeria country coordinator Utiang P. Ugbe is also acting as a research fellow. He will take the lead on writing up the experiences in Nigeria, as well as undertaking a review of RIU's policy dialogue experiments in Sierra Leone and Nigeria.

In addition to having oversight of the Africa Best Bets, Professor Norman Clark will undertake a desk study as a comparator case of what happens in conventional agricultural research. Andrew Adwera, a Kenyan national, will undertake a comparative analysis of two of the African Best Bets.

The innovation narrative on Research Communication-Led Innovation has special significance to DFID. This topic has two elements: Communication as knowledge management (information dissemination) and communication as a means of intermediation (brokering relationships for innovation). DFID's primary interest is in the former. There are elements of knowledge management through the RIU programme but not enough to provide a substantial case for study. In contrast, there are many high-profile examples of the use of ICTs for knowledge management and agricultural extension. Rasheed Sulaiman will pilot a study of existing experiences of ICTs. This will be expanded to Africa once the Asia programme has provided a template for this type of investigation.

The topic of communication for intermediation of innovation will be addressed in collaboration with Professor Cees Leeuwis, head of the Communication and Innovation Department of Wageningen University. Since communication for intermediation of innovation is a process that is apparent throughout the RIU programme, this topic will be tackled as a one-off review of the role communication plays in the research-into-use process.

The RIU portfolio only has examples of grant investments for innovation. Investments of the venture capital sort are potentially an important way of stimulating innovation and putting research into use. A business school researcher will be selected to review cases where venture capital funds have been used for developmental purposes.

The CRT is responsible for delivery of the research aspect of RIU and it is, therefore, the CRT's responsibility to develop a synthesis of the whole of RIU's research. It is anticipated that this will involve a series of papers highlighting different broad findings from the programme's research. The CRT's primary role in synthesising the research of RIU will be through the compilation of a book-length monograph exploring the circumstances under which research gets put into use. A tentative title and outline are as follows:

Title: Putting Agriculture Research into Use for Innovation and Impact

The outline of this book will be ready by September 2010.

Outputs/ Publications

Table 3, Outputs/ Publications

	Primary Output	Secondary Outputs	Delivery Date	Lead Responsibility
Conceptual framework and state of the art review				
<p>Research Design: Understanding the Relationship between Research and Innovation</p> <p>This will include brief reviews of current thinking on the six topics used as innovation narratives in the research design</p>	30 page report	<p>Workplan (rolling)</p> <p>UNU-MERIT discussion paper</p> <p>Journal article</p> <p>LINK LOOK Op-Ed</p>	<p>Jan 2010</p> <p>Draft Dec. 2009, Final June 2010</p> <p>Book chapter</p> <p>April 2011</p> <p>March 2010</p>	Andy Hall
Scene-Setting Papers				
<p>What can RIU's projects in Asia tell us about putting research into use?</p> <p>(Working Title: Contours of Innovation-Centric Development Projects)</p>	30 page report	<p>UNU-MERIT discussion paper</p> <p>Journal article</p> <p>LINK LOOK Op-Ed</p>	Draft April 2010	Rasheed Sulaiman
<p>What can RIU's Africa Country Programmes tell us about putting research into use?</p> <p>(Working Title: Experimenting with Innovation Brokering and Capacity Development)</p>	30 page report	<p>UNU-MERIT discussion paper</p> <p>Journal article</p> <p>LINK LOOK Op-Ed</p>	Draft April 2010	Jeroen Dijkman
<p>What can RIU's Africa Best Bets projects tell us about putting research into use?</p> <p>(Working Title: The Emergence of Bottom-Up Bottomline Business Models in Development-Relevant Enterprises)</p>	30 page report	<p>UNU-MERIT discussion paper</p> <p>Journal article</p> <p>LINK LOOK Op-Ed</p>	Draft April 2010	Andy Hall
Thematic Monographs				
<p>History and Analysis of Putting Client-Orientated Research into Use (Comparative analysis of COB and SRI)</p>	30 page report	<p>Journal article</p> <p>LINK LOOK Op-Ed</p>	March 2011	Rasheed Sulaiman

History and Analysis of Putting Adaptive Collaborative Management into Use	Edited Book	Journal article LINK LOOK Op-Ed	Draft chapters Dec. 2010 March 2011	Hemant Ojha as Commissioning Editor
History and Analysis of Putting Value Chain Research into Use	Book	Journal article LINK LOOK Op-Ed	Case study reports starting March 2010 Journal article 2010 Draft all case studies March 2011	Vamsidhar Reddy
Cross-Cutting Synthesis Papers and Gap Filling Case Studies				
A Review of Experiences of Financing Innovation, with Selected Case Studies of Venture Capital Arrangements: Implications for Role and Use of Research for Development	30 page report	Journal article	Dec. 2010	TBC
Communication and Innovation: RIU Experiences and Role in Using Research for Development	30 page report	Journal article	March 2011	Cees Leeuwis supervising selected expert
Using ICTs to put Research into Use in Africa and Asia	30 page report on both Africa and Asia	Journal article	Asia – June 2010 Africa – Dec. 2010	Rasheed Sulaiman supported by regional expert in Africa
Policy and the Enabling Environment for putting Research into Use: Regulation and Technology in Africa with Special Reference to Biotechnology	30 page report	Journal article Chapter in Research Into Use book (see below)	Background note July 2010 Draft Oct. 2010	Anna Kigiri
Gender and research into use: state of the art	30 page report	Journal article Chapter in research into use book	Background note July 2010 Draft April 2011	Anna Kingiri
Comparator Cases				
What happens to Research? A Review of Traditional Research and Innovation Trajectories	30 page report	Journal article Book chapter	Oct. 2010	Norman Clark
Investment Reviews				
An Investment Analysis of Africa Best Bets	20 page report	Investor briefing notes	April 2010	TBC

A Review of Investment Opportunities in Innovation-Centric East Africa Bottom-Up Bottomline Business	20 page report	Investor briefing notes Discussion paper. Journal article Book chapter	Sept 2010	TBC
Overview and synthesis				
Working title: Putting Agricultural Research into Use for Innovation and Impact: Matching Horses with Courses Will draw on chapter versions of reports mentioned above and below	Book	A series of supporting and synthesis journal articles, LINK LOOK Op-Eds, and other policy-orientated publications	June 2011	Lead editor and lead author on intro and synthesis: Andy Hall Chapter authors: See below
The Role of Innovation Brokers in Putting Research into Use: A Review of RIU's Africa Country Programme Experience	30 page report	Book chapter Journal article LINK LOOK Op-Ed	Background note July 2010 Jan 2011	Elias Madzudzo
Brokering in Input Markets: the Case of FIPS	30 page report	Book chapter Journal article	Sept. 2010	Elias Madzudzo

Appendix 1

LINKING AGRICULTURAL RESEARCH TO INNOVATION: AN INTRODUCTION TO RIU'S RESEARCH DESIGN

Andy Hall, Jeroen Dijkman and Rasheed Sulaiman V.

1. Introduction

RIU is a research and development programme designed to put agricultural research into use for developmental purposes and to conduct research on how to do this. The programme is funded by the UK's Department for International Development (DFID). It follows earlier investments by DFID in agricultural and natural resources research supported through its renewable natural resources research strategy (RNRRS). While this strategy delivered high-quality research, the uptake of this research and its impact on social and economic progress was modest.

RIU seeks to address this both by supporting activities that put RNRRS research products into use, but also by investigating the wider question of the relationship between agricultural research and innovation. This wider investigation of the topic responds to extensive evidence that suggests that agricultural innovation is very often not the result of simply transferring research products to farmers, entrepreneurs and policymakers. More usually, research promotes innovation only when it is embedded in the wider set of relationships and processes involved in diffusing, combining and adapting ideas and putting them into use.

Understanding the configurations of actors, policies and institutions that allow agricultural research to contribute to innovation and development in different circumstance is the central research task of RIU. The programme's research design is largely inductive, seeking to learn from an analysis of RIU's own experiments in putting research into use. This will be coupled with contrasting comparator case studies as well as case studies of other promising research-into-use type approaches not covered by RIU.

2. Exploring the Link between Research and Innovation

The critique of agricultural research failing to lead to innovation and impact is not a new one. There is now broad consensus that recognises that it is not the research products or technologies, *per se*, that are ineffective, but rather the process by which these products are developed. This builds on four observations about the nature of the innovation process:

- a) Successful innovation involves a high degree of user input and this means that innovation involves the blending of tacit and codified knowledge from different sources, including, but not limited to, research.
- b) Knowledge use is an embedded process, highly context-specific and rarely amenable to simple transfer to different locations without adaptation and reworking.
- c) Innovation is a social process of learning, whereby strategies, approaches and capacities develop over time through experience and other forms of knowledge accumulation leading to recognisable, path-dependant innovation trajectories.

- d) The political economy of knowledge and knowledge-related processes skews innovation trajectories in certain directions and purposeful institutional arrangements are required to specifically target public and social goals such as poverty reduction or sustainability.

Where there is less agreement is on the question of the sorts of organisational configurations (networks, partnerships and alliances) institutional settings (routines, norms and ways of working) and policy environments that are required to operationalise these observations in agricultural research and innovation planning. Instead, there are a series of overlapping innovation narratives competing for policy attention, all implying different roles and configurations of research within the innovation process. These narratives cover the spectrum, from farmer-led innovation to research-led innovation, and assign various roles to public, private and civil society organisations and individuals.

It is increasingly argued that instead of viewing these as competing innovation narratives, what is actually required and needed is innovation diversity. So, for example, under some circumstances research-led innovation may be necessary. At other times farmer participatory research may be required. Public-private sector partnerships could promote certain types of innovation processes. Sometimes innovation will require dense networks of diverse actors. At other times only relatively few actors will be critical. Different institutional arrangements will be required to achieve social and environmental goals. Similarly, as an innovation trajectory unfolds over time research will be embedded in innovation processes in different ways reflecting different roles that it plays.

The key research question for RIU is, therefore, not to find the *best* way of putting research into use. Instead the key research question concerns understanding which sorts of configurations are relevant under which circumstances and at which stages in different innovation trajectories.

3. RIU Research Design

In order to address this broad research question RIU has selected 6 innovation narratives to organise its research around. These represent commonly-found innovation narratives that are currently competing for attention in development policy. Each of these narratives has implicit hypotheses and specific questions. Understanding when and under what circumstance these narratives have relevance will make a major contribution to development research planning.

- 1) **Poor User-Led Innovation.** Poor farmers and consumers should be at the centre of the innovation process as they have superior knowledge of their production and social context. The role of research varies but is usually peripheral or of a backstopping nature. Key questions include: How to strengthen decentralised innovation capacities of this sort and what are the institutional and policy regimes needed to promote products that emerge in this way, particularly seed varieties? How can the governance of innovation ensure that the voice of the poor is heard in agricultural science and technology planning and implementation?
- 2) **Public-Private Partnership-Led Innovation.** The private sector has not played an adequate role in public agricultural research and allied activities. It sometimes has research expertise of its own. It also has incentive structures and mechanisms to deliver demanded technologies to consumers, farmers and others in the value chain. Key research questions include: What types of innovation and innovation processes are helped by the involvement of the private sector? When does the

private sector's involvement help the poor and what sort of incentives and institutional arrangements are needed to allow this to happen? How can social capital be developed between companies and other elements of the innovation system?

- 3) **Capacity Development-Led Innovation.** The rate limiting step in technical change is not technology development or promotion, *per se*, but the level of innovation capacity. This capacity is viewed in a systems sense as the behaviours of loose networks of innovation-related players and the institutional and policy settings that shape their behaviour and evolution. Key research questions include: What interventions can facilitate institutional and policy change? How can innovation capacities be made more responsive to changing social, economic and environmental conditions? How can learning-based change be stimulated and accelerated? What is the role of intermediation and innovation brokering services?
- 4) **Below-the-Radar-Led Innovation.** Opportunities presented by large markets of poor people are leading the emergence of new types of innovation processes and products. Also emerging are innovation processes that are invisible to research and corporate communities due to alternative professional views of excellence and success. These are described variously as bottom-of-the-pyramid innovation and below-the-radar innovation. Innovation along value chains is a key feature of these developments. The key research questions include: What are the new modes of innovation that are emerging? Do these genuinely present opportunities for developmentally-relevant innovation? How can largely invisible processes be identified and supported? Do innovations along value chains allow poor producers and consumers benefits from new market opportunities?
- 5) **Investment-Led Innovation.** Financial resources are a key incentive for innovation and are increasingly used to help encourage the development of new partnership configurations around specific problem areas and research products. Innovation prize funds, public buy-back for privately-developed products, challenge funds and venture capital type arrangements are examples of this. The key research questions include: How effective are such mechanisms in enabling innovation processes that are developmentally relevant? How useful are these mechanisms in building new capacities for innovation?
- 6) **Research Communication-Led Innovation.** Research products need to be processed into forms suited to different audiences and made accessible through databases. This is particularly important for policy-orientated research, where concise, timely information can play a critical role in decision-making. Key research questions include: What are the circumstances under which information limits decision-making? What are the most appropriate communication tools to fill this gap? What patterns of networking between researchers, decision-makers and others complements communication?

To explore these different innovation narratives RIU will investigate its own experiments in putting research into use. The RIU portfolio of activities contains the following elements:

- **Best Bets.** Up to ten large-scale technology promotion activities that are anticipated to have significant private sector involvement. Currently 2 have been selected: (1) A cluster of activities building on client-orientated breed programmes in South Asia that is developing ways to establish both seed delivery systems and new capacities for

client-orientated breeding (2) An initiative in East Africa that is building research and development activities around the eradication of sleeping sickness.

- **Innovation Challenge Fund.** A portfolio of projects in South Asia aimed at developing new partnerships to take advantage of clusters of research products from the RNRRS. There are two thematic groups of these projects. The first is on innovation in value chains. The second concerns scaling-up of natural resource management research products.
- **Africa Country Programme.** RIU has established 6 Africa country programmes in Tanzania, Malawi, Nigeria, Rwanda, Zambia and Sierra Leone. The rationale of these programmes is that currently mechanisms to articulate the demand for research and other information are poorly-developed. The country programmes are, therefore, experimenting with a variety of networking devices to establish links between research and entrepreneurial, policy and farming communities with a view to strengthening innovation capacity.
- **Innovation Development Fund.** RIU will establish a social venture capital fund to investigate whether this mode of investment can stimulate development-oriented innovation.

The approach to putting research into use adopted by RIU is an evolving one that will develop incrementally by learning throughout the programme's life. Direct comparison of the added value of the programme's approach will, however, be conceptually problematic. The programme, nevertheless, wishes to explore comparator cases where more traditional approaches to agricultural research and innovation have dominated. This will be achieved by investigating a limited number of cases through histories of selected research and innovation trajectories.

Appendix 2

RIU CENTRAL RESEARCH TEAM RESEARCH DESIGN NOTE INVESTMENT REVIEWS FOR PRIVATE VENTURE CAPITAL AUDIENCES AND PROGRAMME DESIGN STUDIES TO TAKE FORWARD THE RIU BEST BETS CONCEPT

Andy Hall
April 14, 2010

Introduction

The current RIU research design seeks to inform policy by understanding the circumstances under which different modes of innovation put research into use for developmental purposes and to learn from the modalities of these processes (Hall, Dijkman and Sulaiman, in prep.). The following note expands innovation narratives 2 and 5 of this design. Innovation narrative 2 seeks to understand the circumstances under which public-private sector partnerships lead to innovation and investigates the modalities and how the roles, responsibilities, resources and comparative advantages of the two sectors can be mobilised for innovation for developmental purposes. Innovation narrative 5 seeks to understand the circumstances and modalities by which different forms of investment lead to innovation.

The aim of this note is to expand the current focus of these elements of RIU's research design, which is currently focusing on the public policy significance of these modes and drivers of innovation. The expanded focus discussed here will explore the feasibility and modalities of private (and possibly public) equity investment in emerging business models that show promise in exploiting research and innovation for developmental purposes.

Venture Capital Investment Rationale

This new emphasis arises from one of the conclusions from a recent review of RIU. The review speculated that the African RIU Best Bets approach held out the strongest possibility of emerging as a novel development programme concept for future donor support. This concept would involve using public resources to leverage private equity funds that could be invested (in a strictly financial sense) in business opportunities associated with research and innovation that contribute to wider developmental goals. The role of the public sector resources would be to organise the identification of opportunities that might not otherwise be apparent to mainstream venture capital markets and in providing an institutional framework to ensure a clear focus on wider developmental goals. While RIU's existing public policy focused research can underpin the rationale of using public funds in this way, it is not currently orientated towards the sort of investment analysis that is needed to persuade the private sector to pledge investment funds to this sort of initiative. This note explains the nature of additional studies to inform this audience, and discusses how this additional research will contribute to the design and operationalisation of the new innovation for development programme concept expected to emerge from RIU.

The RIU Best Bets Concept

The African RIU Best Bets have been set up as an experiment to explore ways of engaging the private sector (often as part of a wider coalition of development players) in order to put research into use through innovation. This cluster of RIU projects is notable as it supports an emerging class of East African enterprises that combines profit and developmental agendas. These development-relevant enterprises have business models that have both a bottom-up and bottom-line ethos (Hall, Clark and Frost, in prep.). The RIU experience suggests that these business models show promise for putting research into use. RIU support has been used to develop markets among the poor for new products and services and train promotion agents to help incubate business innovation by these enterprises. RIU's support also has wider capacity development impacts that arise from better networking of enterprise perspectives into the agricultural research and rural development landscape.

Investment Reviews and Programme Design Studies

The investment reviews of the African RIU Best Bets will be used as illustrative cases to bring to the attention of venture capital funds the existence and nature of investment opportunities in development-relevant enterprises and the novel business models associated with them. These reviews will draw on business analysis skills and will focus on the following for each RIU Best Bet:

- Unique selling point of business model
- Size of market and nature of demand
- Nature and sources of revenue streams
- Potential for returns on investment
- Risks associated with these types of initiatives
- Patterns of competition
- Policy and regulatory issues and wider business environment (corruption, insecurity, political interference, etc.)

These specific illustrative cases will be supported by two background studies:

The first will undertake a sector scoping study in order to develop a picture of how widespread the types of organisations and business investment opportunities are of the kind found in the RIU Best Bets. The emphasis will be to scope the opportunities that would both mobilise innovation and help the poor. The geographic focus will be East and Southern Africa and West Africa. The aim here will be to illustrate that there is a wide enough field of this type of entrepreneurial activity to warrant the establishment of a specialised investment fund. This document will be central to the development of the fund's business plan. This study will use the expertise of a business analyst.

The second background study will be a global review of experiences of venture capital investment funds for development. There is emerging experience of financing rural innovation through a range of venture capital-like arrangements. This study will review experiences with a view to developing the operational design of the new fund. This study will use the expertise of both a business analyst and a development/ innovation specialist.

References:

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