

# Enabling Rural Innovation in Africa

## A Programme That Empowers Communities to Improve Livelihoods



**A**n urgent challenge for Africa is to enhance the capacity of the rural poor to innovate in the face of rapidly changing conditions. The new paradigm of integrated agricultural research for development (IAR4D) is an effective mode for accomplishing this end. It features a broad research agenda that addresses a chain of interactions, from natural resource management (NRM) to production systems, markets, and policies.

Using this approach, a programme called Enabling Rural Innovation (ERI) is helping communities in eastern and southern Africa bolster food security and raise incomes through more competitive agriculture. ERI is a partnership of national agricultural research and extension systems (NARES), nongovernmental organisations (NGOs) and CIAT, working together with rural communities.

ERI aims to strengthen social organisation and entrepreneurial skills in rural communities, encouraging farmers to *produce what they can market rather than*

*market what they produce.* The programme works toward this goal by enhancing the ability of rural communities to conduct research that links technology development to market opportunities and to improved management of soils and other natural resources. In their research communities draw on scientific expertise as well as farmers' own knowledge.

### An Integrated Approach to Research for Development

The ERI approach to IAR4D emerged from CIAT's work in three main areas:

- (1) farmer participatory research,
- (2) rural agro-enterprise development, and
- (3) NRM.

ERI draws on the most effective practices developed in these areas to help local organisations and communities build more robust livelihood strategies.

The approach is being tested in several African countries, including Malawi, Tanzania, and Uganda. The objective is to empower research and development (R&D) partners and rural communities to access and generate technical and marketing information that will enable farmers to make better decisions. This work directly benefits the rural poor, especially women, who need technologies that improve the returns on their labour at several points along the resource-to-consumption chain.

With ERI's approach, rural communities become active partners in co-innovation processes, triggering fundamental changes in the behaviour, roles, power relationships, and functions of formal IAR4D service providers. As farmers successfully experiment and learn, the community begins to create a sustained and collective capacity for innovation, focused not only on raising incomes but also on



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As farmers experiment and learn, communities create a collective capacity for innovation.

improving the management of soil and other natural resources. We hypothesise that increased income from markets, in addition to enhancing farmers' wellbeing, will provide them with stronger incentives to adopt new technologies and invest in better NRM.

### Basic Concepts

The ERI approach is based on four key concepts:

1. *A resource-to-consumption conceptual framework.* As indicated in Figure 1, the framework features two-way linkages between community assets (natural, human, social, physical, and financial) and production-to-consumption aspects, which include post-harvest handling, processing, marketing, and household consumption. It thus extends the commodity chain to include NRM, specifically linking integrated soil and nutrient management to market opportunities.
2. *Balancing market risk and food security.* In deciding what to produce, rural people face difficult decisions about allocating scarce household resources. ERI's approach helps them achieve an appropriate balance between activities that increase household food security and those that generate income through market-oriented production.
3. *A market orientation.* A central challenge in combating rural poverty is to foment

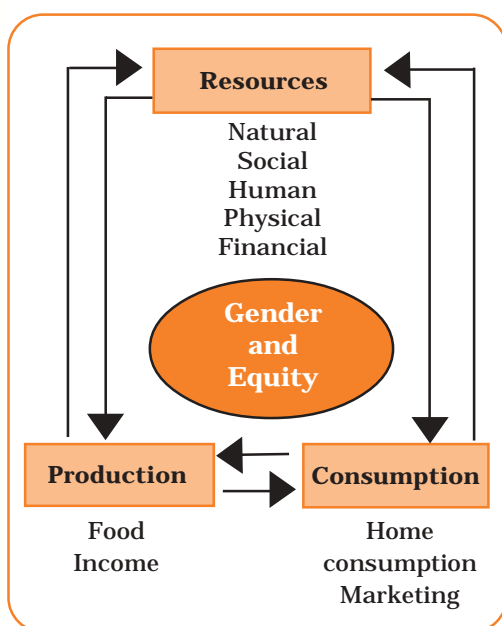


Figure 1. The resource-to-consumption framework.

a market culture at the community level. To achieve this rural people must develop an entrepreneurial outlook based on sound business concepts, build links to profitable markets, and strengthen local organisations. ERI focuses on building capacity to identify and analyse market opportunities for new or existing products, match market opportunities with community assets, develop profitable agro-enterprises through collective action, and strengthen local networks of business support services, such as credit and information.

4. *Participatory approaches for research and development.* The use of participatory approaches at every stage in the innovation process is a central feature of the ERI approach. Such approaches are fast gaining recognition as effective means of investing in the human and social capital of rural communities. By decentralising control of the R&D agenda, these approaches enable farmers and other stakeholders to articulate demands for agricultural research and conduct experiments to develop technologies that are adapted to local conditions. Feedback from this process can help formal R&D systems do a better job of meeting the needs of rural communities.

### Key Steps for Enabling Rural Innovation

The ERI approach involves taking the following steps with communities and partner organisations (Figure 2):

1. Engage appropriate R&D partners and reach agreements on methods, sites, and the roles and responsibilities of each partner and community in managing interventions.



2. Conduct a participatory diagnosis of factors such as community assets, finances, current income opportunities, potential options, access to services, skills, degree of cooperation, access to new technologies, and organisational structures. The diagnosis also provides an opportunity to create a shared vision of the community's future, to explore development options, and to develop collectively an action plan for change.
3. Form farmer and market research groups. These groups should participate actively in selecting, testing, and evaluating marketing strategies and technology options. They should also make decisions about experimentation and about the information needed to develop viable business options and improve NRM.
4. Conduct participatory analysis to identify market opportunities for competitive products that will increase farm income and employment.
5. Prioritise opportunities and select agro-enterprise options based on social differences, including gender and wealth.
6. With farmer research groups, plan and implement experiments on options for developing agro-enterprises and bolstering food security.
7. Give the community and R&D organisations feedback on results and identify research questions related to rural innovation.
8. Establish participatory monitoring and evaluation systems in communities and with service providers to strengthen learning and the capacity for self-reflection, and to encourage documentation of experiences.
9. Scale up the ERI experience through farmer organisations and R&D agencies at the local, national, and regional levels.
10. Strengthen access to information for decision-making at every stage of the process, through formal facilitation mechanisms and diverse communications media.

### A Capacity Development Strategy: The Learning Alliance

Developing a core of professionals, including scientists and development partners, is crucial for enabling rural innovation and achieving impact on a large scale. ERI applies a group mentoring approach to capacity development, which we refer to as a "learning alliance."

This approach uses experiential learning methods to form interdisciplinary, multi-institutional teams, build new skills and knowledge, develop action plans, and

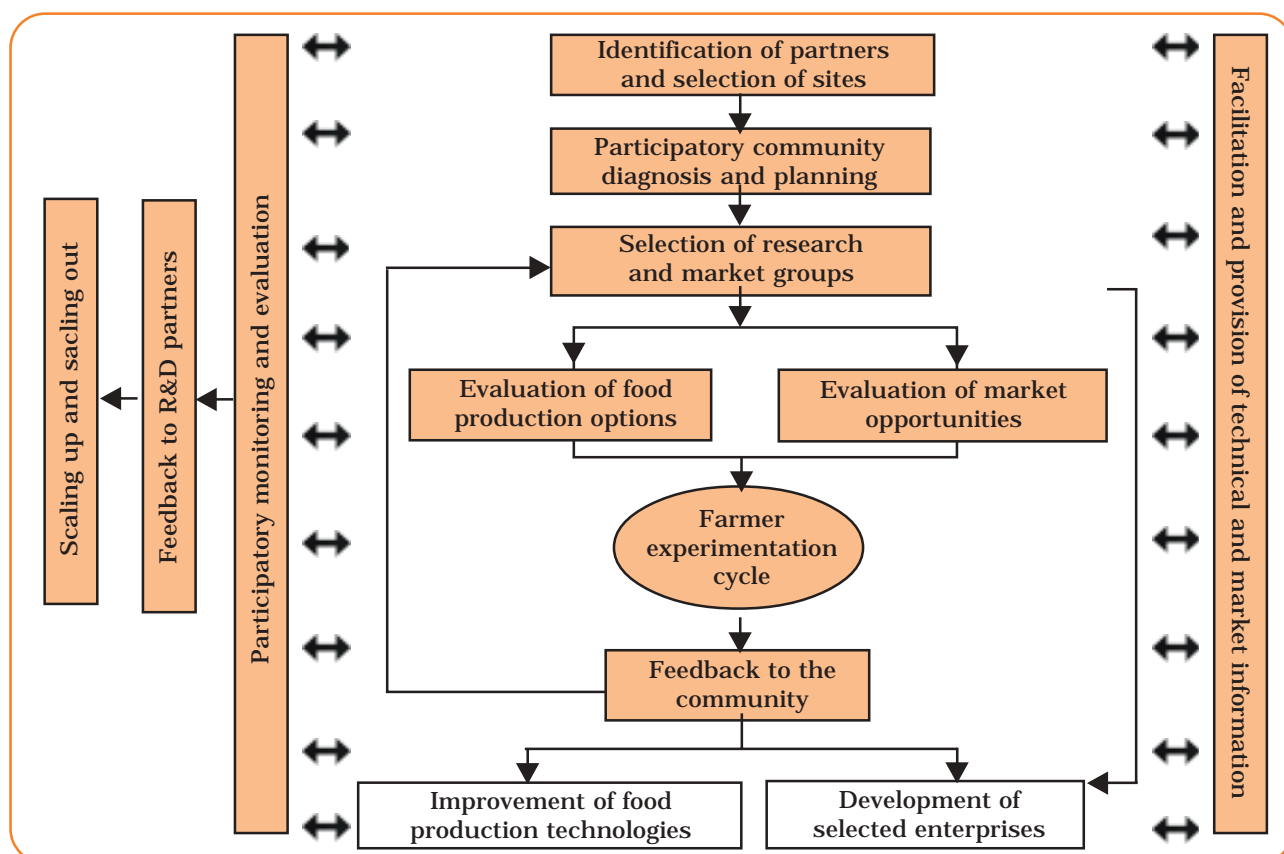


Figure 2: Key steps for enabling rural innovation.

provide follow-up and mentoring in the field. The approach was developed specifically to facilitate processes of institutional change and capacity building, and to accelerate the uptake of concepts, methods, and technologies aimed at making smallholder production more competitive. The approach is based on four key principles:

1. Training materials need to be adapted to different client groups.
2. Different learning mechanisms should be used with diverse groups of partners. These include rural women, extension agents, NGO managers, and national and international researchers.
3. The focus should shift from training to capacity development, and from short-term to long-term relationships based on dialogue and cooperation.
4. Post-training follow-up and mentoring are needed to convert theoretical knowledge into locally relevant applied knowledge.

### **Critical Factors for Success**

Each situation and community is different. The ERI approach cannot, therefore, be used as a simple blueprint, although its principles can be applied across sites. Partners thus need to ensure that the main elements of ERI are in place to enhance the prospects of success.

#### ***Developing and managing effective partnerships***

Successful innovations result from strong interactions and knowledge flows within networks of stakeholders. Effective local partnerships between researchers, extension workers, NGOs, and rural communities are central to the success of ERI. Partners are selected not only for their interest in the approach, but also on the basis of an institutional assessment that covers their working relationships with local communities, objectives, and potential to achieve large-scale impact.

#### ***Promoting gender equity and women's empowerment***

Gender, equity, and women's empowerment are central concerns at all stages of the ERI approach. Proactive strategies and gender-sensitive facilitation skills are used to build the capacity of both men and women to identify and evaluate a diverse range of

market opportunities, and to experiment with a range of technologies for crop and soil fertility management. Our strategy is to encourage the active participation of men and women in project activities, while creating gender awareness at the community level through the use of interactive adult learning methods.

#### ***Building human and social capital to empower rural communities***

With the ERI approach, each community or farmer group is supported by a development facilitator, who helps the group create human and social capital, and improve performance. Signs of success in this regard are dramatic increases in levels of trust and cooperation, the presence of several committees, regular community meetings, and frequent interaction with R&D partners.

Across sites, horizontal and vertical linkages can be created with other farmer organisations, service providers, and governmental departments. Many groups link up with other external organisations and attract additional resources from governmental agencies, NGOs, and other rural service providers in support of community action plans. These groups provide farmers with a means to pursue wider concerns, initiate new activities, organise collective action, and strengthen relationships with external organisations.

#### ***Participatory monitoring and evaluation***

With the ERI approach, participatory monitoring and evaluation (PM&E) tools are applied to support self-reflection and continuous learning in communities and projects. Community-based PM&E systems support and enhance group processes, improve local decision-making, and enhance participation. These systems also enable communities to develop indicators



**Women's empowerment is a central concern at all stages of the ERI approach.**

for measuring change, collect and analyse data, and decide how to use results.

Communities can use PM&E systems to hold R&D institutions accountable through communication, feedback, and community involvement in project monitoring. Within projects PM&E has been applied to strengthen institutional learning and to enhance stakeholder participation. Building effective PM&E systems in communities and projects ensures that lessons are documented and shared.

### ***Developing a scaling-up strategy***

Pilot learning sites are needed to test and adjust methods, and to develop skills and confidence. To reach larger numbers of people, however, a scaling-up strategy must be mapped out from the start with

carefully selected partners. This involves (1) encouraging lateral movement of the approach and lessons learned from pilot sites to other farmer groups and communities in the area, for example, through farmer visits; (2) institutionalising the ERI approach within initial partner organisations, and building the capacity of new partners to apply the approach; and (3) influencing policy makers within the government, NARES, and NGOs to support ERI initiatives.

## **Principles and Guidelines**

To create knowledge and approaches that are applicable across national boundaries, the ERI Programme conducts research on the innovation process. Through this research we extract lessons learned from experiences across pilot sites, and we gain a clearer understanding of principles and guidelines

### **The Nyabyumba Farmers' Group**



The Nyabyumba Farmers' Group of Kabale District, Uganda, was formed in 1998, with 40 members. The Group, supported by Africare (an international NGO), focused on producing improved potatoes from clean seed provided by the National Agricultural Research Organisation (NARO).

In 2000, the Nyabyumba Group formed a farmer field school to improve their technical skills in potato production and increase yields. In 2003, equipped with the necessary skills for producing high-quality potatoes in large quantities, the group decided to increase their commercial sale and requested support from Africare, NARO, the Regional Potato and Sweetpotato Improvement Network in Eastern and Central Africa (PRAPACE), and CIAT.

Through this consortium of partners, the Nyabyumba Group received training in identifying and analysing market opportunities and developing a viable business plan for the potato enterprise. From the market study, the group identified Nandos, a fast-food restaurant based in Kampala, and local wholesale markets, also in Kampala.

The Group set up a series of committees to manage, plan, and execute their production and marketing processes. To provide a constant supply, the farmers set up a staggered planting system to ensure that as much as 5-10 tonnes of potatoes were available each month, from which they then selected the best quality tubers to send to the Kampala markets. To date, the Group has supplied more than 76 tonnes of potatoes to Nandos and a similar amount of lesser quality tubers to wholesale markets.

The Group has been receiving a steady income and now has savings of nearly 1 million Ugandan shillings (US\$600). These funds are being used to build a store and buy irrigation equipment to expand the business. The Group's success is based on (1) long-term support from a consortium of research and development partners, (2) increased technical skills in potato production and marketing, and (3) collective marketing.

**The group received training in identifying market opportunities and developing a business plan.**

for achieving large-scale impact. ERI's research poses questions like the following:

1. Is the approach effective for reaching women and the poor? What are its implications for intra-household dynamics? Who benefits and how?
2. What conditions or incentives are necessary for women and other marginalised groups to invest in NRM?
3. When does community enterprise development lead to natural resource mining, and when does it prompt farmers to invest in NRM? Do stronger market linkages motivate farmers to adopt improved technologies and NRM strategies?
4. What are the best practices, guidelines, and principles for building and sustaining effective partnerships between R&D partners, the private sector, farmer organisations, and policy makers, and for linking integrated NRM with a market orientation? What transaction costs are involved in creating and sustaining these partnerships? How can we institutionalise the ERI approach?
5. What role do community-based PM&E systems play in empowering communities, strengthening group organisation, and improving information flows for better decision-making?
6. What levels of social capital are required for developing community-based agro-enterprises? What can be done to strengthen social capital, particularly among women and the vulnerable, thus enabling them to seize market opportunities and build agricultural assets?
7. What contextual factors (institutional, policy, historical, or contested knowledge) can hinder or enable innovation in rural communities? What conditions (social, technological, policy, or economic) and facilitation processes are needed to enhance community-based agro-enterprise development, farmer decision-making, and adoption of NRM options?

### Training Materials

As an aid to scaling-up the ERI approach, a set of training materials are being developed that includes manuals, guides, supporting documentation, and case studies. As these materials are completed, they will be made available on the ERI Web site ([www.ciat.cgiar.org/africa/eri](http://www.ciat.cgiar.org/africa/eri)).



### Solutions That Cross Frontiers

*The International Centre for Tropical Agriculture (CIAT) is a not-for-profit organisation that conducts socially and environmentally progressive research aimed at reducing hunger and poverty and preserving natural resources in developing countries.*

*CIAT is one of 15 food and environmental research centres working towards these goals around the world in partnership with farmers, scientists and policy makers. The centres are funded mainly by the 58 countries, private foundations and international organisations that make up the Consultative Group on International Agricultural Research (CGIAR).*

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