JOLISAA Policy Brief November 2013

Some years ago, a programme in Limpopo Province, the Policy Evaluation Approach (PEA) aimed to test rural advisory systems in Africa for the effectiveness of their support for local innovation. While not always successful, there were some important lessons to be learned from the programme, one of which is that the smallholder farmer is the key player. To help them understand and acknowledge how they operate, a project is needed that can help farmers identify areas for improvement and support them to make necessary changes. The policy brief presents, explains and illustrates a number of policy recommendations for enhancing innovative and productive smallholder family farming in Africa.

**Conclusion and perspectives**

Through their work over the past three years, the partners have identified a number of lessons that show the strength of rural advisory systems in Africa for the support of smallholder innovation. Many donors, government, research and advisory service, educational institutions and private enterprises need to see how they can perceive the smallholder and the way they design interventions. If innovation is to emerge and be long-term, it is important to make sure that policies and decision making are in line with what is needed. To help smallholder farmers become better able to make decisions, the policy brief presents five policy recommendations for enhancing innovative and productive smallholder family farming in Africa.

**Why institutionalising innovation?**

A fundamental change must be made in the way projects are planned and funded. The policy brief highlights the need for change. Donors should develop specific guidelines under their portfolios of grant schemes for actively working on such change. Donors should develop specific guidelines under their portfolios of grant schemes for actively working on such change. Donors should develop specific guidelines under their portfolios of grant schemes for actively working on such change. Donors should develop specific guidelines under their portfolios of grant schemes for actively working on such change.

1. Recognise and develop the way to change the ways they interact with smallholders.

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2. Integrate innovation across all aspects of extension and education services.

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3. Identify and develop the key areas for change.

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4. Develop tools for policy recommendations.

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5. Address the multiple dimensions of innovation.

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Combining local and external knowledge and ideas to enhance innovation capacity

Linking multiple sources of knowledge enhances the capacity of smallholders to invent, adapt and respond to innovations as a condition to group cooperate. Such synergies benefit farmers and other actors in the food system to develop new practices and relationships. But focusing on linking the smallholders to any one product, buyer or technology exposes them to significant risks of market dysfunction and unbalanced relationships. Where the smallholder is central, pursuing diverse and informal value chains is likely to be more viable. For local flexibility and more rapid feedback to farmers is essential to local resilience and to respond to their demands, needs and actual possibilities.

Supporting innovative innovation processes

Innovations often fail from the start due to unsuitable and unfairly untested ways over long periods. Policy and donor support to encourage innovation, foster R&D actors should make use of diverse and efficient interactive approaches adapted to local situations.

Supportive institutional arrangements

Address the multiple dimensions of innovation

In the 1980s, PADO introduced prosopis jujfiora as a "miracle tree" that would halt desertification in Kenya’s arid lands. However, prosopis was so successful that it exposed them to significant risks of market dysfunction and can be addressed in isolation from each other, if innovation processes and dynamics may be emerging that would benefit from support. Project activities need to be aligned with local institutional arrangements to accommodate these dynamically unbalanced processes, diverse value chains and triggers for dynamic innovation. Research approaches and funding should be fitting for the local situation and cannot be addressed in isolation from each other. Research needs to be aligned with the local situation and cannot be addressed in isolation from each other.
Case 1: Aloe processing: innovation “under the radar”

Processing and marketing of aloe products in Baringo, Kenya, is a good example of innovation “under the radar”. (Sherwood et al 2012) — initially ignored by a project designed to support smallholder farmers — emerged in the late 1980s as a processing unit set up under private-public partnerships. Several catch-as-catch-can solutions were adopted. Farmers were trained to harvest aloe, store it in small storage tanks, dry it, grind it, and sell it to local traders who then supplied it to access international markets. Several technical and organisational innovations developed over time. Farmers also sold capsaicin — the active ingredient in chili peppers — and kept it going “under the radar” as a good input for their aloe plantation. Private traders set up across these three countries.

Aloe farmers in Kenya, which brought together about 100 research and extension professionals, traders and NGOs, was later to become JOLISAA (Joint Online Learning Initiative for Smallholder Agriculture and Afro-Asian). The project aimed at facilitating flexible engagement of smallholders with both formal and informal value chains through negotiation and suitable arrangements.

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Combining local and external knowledge and ideas to enhance innovation capacity and to develop new practices

Although the innovation processes “fit the social” will be dynamic, they can be strengthened, speeded up and made more sustainable through appropriate innovations. Local knowledge of different types and sources that respond to farmer demand, needs and social practices could be better integrated into innovation processes. In this way, it is necessary to meet the challenges faced by today’s and tomorrow’s farmers, so that local knowledge can be better utilized and the local innovation processes can be strengthened. To do this, it is necessary to make use of appropriate technologies for traditional food systems that are sensitive to local contexts and to the needs of women as primary food producers. This can be achieved through appropriate interventions that support the development of local food system innovation, including the following:

3. Create encouraging support measures to enhance the innovation process

Markets and value chains, where farmers are more autonomous, can foster the development of new practices and new ways of thinking. This is due to the greater flexibility and the ability to adapt local realities to changing market requirements and to the needs of consumers. For this reason, it is necessary to take advantage of the opportunities offered by the market, particularly when the local market is adequate and when farmers have the necessary skills and knowledge to take advantage of it. This is particularly important in situations where farmers are able to access new technologies and knowledge that can help them to increase their productivity and profitability, and to better respond to changing market demands.

Requirements for the development of new practices and new ways of thinking include:

1. Access to quality inputs and services that are relevant to local needs.
2. Access to information and training that are relevant to local needs.
3. Access to markets that are relevant to local needs.
4. Access to credit that is relevant to local needs.
5. Access to extension services that are relevant to local needs.
6. Access to local institutions that are relevant to local needs.

In an external-driven project, space needs to be given to the local level and to the needs of farmers to accommodate these dynamically unfolding processes. The level of support provided should be adapted to local needs, and the project should be flexible enough to accommodate changes in the market and the needs of farmers. This is important to ensure that the innovation process is successful and that the project is able to achieve its goals.

Any attempt to foster innovation processes through public initiatives must first be a community-based initiative. This is because the innovation process is inherently social and cannot be driven by a single institution. Therefore, the project should be designed to foster a participatory process that involves all stakeholders, including farmers, researchers, extension agents, and government officials. This process should be flexible and adaptable to the needs of the local community, and it should be designed to foster the development of new practices and new ways of thinking that are relevant to local needs.

In conclusion, the key to successful innovation processes is to identify and support processes that are driven by local needs and that are able to respond to changing market demands. This requires a flexible and adaptive approach that is able to accommodate changes in the market and the needs of farmers. This is particularly important in situations where farmers are able to access new technologies and knowledge that can help them to increase their productivity and profitability, and to better respond to changing market demands.

4. Address the multiple dimensions of innovation

This is the area of JOLISAA work that has received the most attention and has been the subject of the most intense effort. The approach has been to develop a framework that includes the following dimensions:

1. Social: This dimension includes the social context in which innovation processes take place, including the values, norms, and practices of the local community. Innovation processes that are successful in this dimension are able to respond to the needs of farmers and to the social context in which they operate.

2. Economic: This dimension includes the economic context in which innovation processes take place, including the availability of inputs and services, the profitability of new practices, and the ability of farmers to access new markets. Innovation processes that are successful in this dimension are able to respond to the economic context in which they operate.

3. Institutional: This dimension includes the institutional context in which innovation processes take place, including the availability of extension services, the availability of credit, and the ability of farmers to access new technologies and knowledge. Innovation processes that are successful in this dimension are able to respond to the institutional context in which they operate.

These dimensions are interlinked and mutually reinforcing, and they are all necessary for the success of innovation processes. Therefore, it is necessary to develop a comprehensive approach that takes into account all three dimensions and that is able to respond to the needs of farmers and to the social, economic, and institutional context in which they operate.
Building on local dynamics: policy recommendations for enhancing innovation by African smallholder farmers

Introducing improved technology does not automatically lead to innovation and desired change. It is one of many inputs into an ongoing, collective, interactive and multi-faceted innovation process that involves continuous adaptation to new conditions. As a development policymaker – be it in agriculture, education or public health – you want to reduce poverty and assure the food and nutrition needs of people in Africa. You also want to help smallholder farmers become better able to adapt to changing environmental conditions, and be able to innovate and thrive for the benefit of smallholders, rural and urban residents. JOLISAA and other research partners have documented numerous ongoing cases of successful smallholder innovation, including in beverage technologies (Case 1). Local smallholder farmers have developed innovative and productive smallholder family-farming initiatives. A few of the many successful cases documented in JOLISAA, which have the potential to contribute to documenting and understanding how agricultural innovation happens, and acquire the skills needed to support it are presented here:

- **Strengthen pivotal role of agricultural advisors**

  Agricultural advisors are in a key position to be brokers of innovation. They can support services to innovative initiatives to enhance farmers’ capacities to contribute their skills, and share their knowledge, resources and decision-making authority with one another. They facilitate such initiatives at key stages in the process. They need to have an in-depth understanding of local opportunities and help clarify the roles of all involved. At different stages, different actors may play the brokerage role, contribute their skills, and share their knowledge, resources and decision-making authority. They need to have a thorough understanding of local opportunities, challenges, actors and institutions. Understanding of local opportunities is crucial. At different stages, different actors may play the brokerage role, contribute their skills, and share their knowledge, resources and decision-making authority. They need to have a thorough understanding of local opportunities, challenges, actors and institutions.

- **Integrate innovation systems approach in education**

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- **Innovative and productive smallholder family-farming sector**

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Introducing improved technology does not automatically lead to innovation and desired change. It is one of many inputs into an ongoing, collective, interactive and multilevel process that involves continuous adaptation to new conditions and the building of new competences, institutions, agency and income. By acknowledging this reality and building on it, policymakers, implementers and farmers are increasingly working with agricultural systems and other complex socio-ecological systems to produce food, livelihoods and wealth in a sustainable way.

1 Build on innovation “in the social wild”

While CGIAR or its partners from research and development (R&D) institutions, many smallholder farmers are already innovating individually and collectively to solve problems, improve their farm’s viability and maintain or improve their livelihoods.

African smallholder agriculture is dynamic, with farmers responding to the rapid and changing global environment, including climate change, economic and financial crisis, population growth, rapid urbanization, global market forces and other trends. Innovation is a natural phenomenon, driven by the need and desire to reduce risks and shocks, to manage natural resources in a sustainable and responsible way and to reshape urban-rural linkages. For such initiatives take place “under the radar”, as the development of a local, private-sector and even national farmer organization may be a long-term process. Innovation is not just a technology development process but a broader, ongoing and multilevel learning process.

KEY POLICY RECOMMENDATIONS

5 Build on innovation “in the social wild”

• Combinability and external knowledge and ideas to enhance innovation capacity

• Support disruptive and diverse value chains to lower the innovation risks

• More attention to value chains as part of the overall innovation process