



# THE FELDAFING PRINCIPLES FOR ENHANCING AGRICULTURAL INNOVATION SYSTEMS



FELDAFING, GERMANY, 22 NOVEMBER 2013

## INTRODUCTION

Reducing rural poverty, food insecurity and malnutrition is a pervasive and complex challenge in international development. Well-targeted investments in agricultural research and development can play a significant role in raising rural incomes and in improving food and nutrition security, which are essential for driving wider economic growth.

The international development community is addressing these challenges by increasing the quantity and quality of international investment in agricultural research and development. It is giving increased attention to encouraging agricultural innovation processes that lead to outcomes at scale. To achieve this, investments and activities of international agricultural research and international development organisations urgently need to be integrated.

Participants in the GIZ–CGIAR workshop in Feldafing, Germany, on 19–22 November 2013, recognised that efforts in agricultural research and development are often neither well aligned nor well linked. Agricultural research therefore does not always lead to effective development outcomes. Much investment in agricultural development is

made without the benefit of using improved practices and technologies, better methodologies and new lessons generated through research.

Responsibility for this situation lies not only with the research and development institutions but also with the donors, who need to better align and integrate funding for development and funding for research. Moreover, efforts to guarantee the relevance of agricultural research for development through, e.g. demand-driven priorities and stakeholder engagement, must be matched with continued efforts to guarantee the quality of research: applying the very best of all relevant sciences in an integrated and socially responsible way.

The Feldafing workshop focused on the potential of “agricultural innovation systems” as an approach to bridge the gap between research and development. During the workshop, an international multi-stakeholder group of experts from across research and development identified several organising principles – the “Feldafing Principles” – based on innovation systems thinking and methods that could help to bridge this gap.



---

## THE FELDAFING PRINCIPLES

To integrate research and development in agriculture and to stimulate agricultural innovation processes that contribute to achieving development outcomes at scale, the Feldafing workshop participants agreed that:

Investments should be guided by the following key organising principles to strengthen innovation in agriculture, natural resource management, food and nutrition security, and rural development.

### **1. Recognise that innovation is an interactive process with multiple, complementary dimensions.**

Innovation is not only about technology development. Rather, it encompasses social, cultural, economic, organisational, institutional and political dimensions as well as technological ones. All these aspects need to be integrated into the planning of interventions and the analysis of ensuing innovation as an ongoing process. These processes take time and require researchers and development practitioners who have the skills to engage effectively with this complexity.

### **2. Plan for scaling from the outset of an intervention process.**

In framing scaling strategies in projects, programmes and other research and development initiatives, clear impact pathways that can support or refute the evidence in explaining the theory of change should be proposed. Even as interventions are being tested and piloted, scalability must be considered and the costs estimated. The scaling strategies should take into consideration all relevant stakeholders and should include assessment of legal conditions to outscale the innovation in the area of planned implementation within a feasible timeframe. It should also be recognised that some useful research may lead to results that are not scalable. Moreover, scaling processes themselves need to be studied and

understood, e.g. sociocultural contexts and institutional and policy conditions; this is also an important focus for agricultural research for development.

### **3. Facilitate multi-stakeholder engagement, tailored to the specific objectives and research topics, building on existing networks rather than creating new ones.**

The foundation for a well-functioning innovation system is a process of multi-stakeholder engagement that is as inclusive as possible. Male and female farmers, farmer organisations, development partners, donors, researchers, extension services, civil society groups, relevant government entities and the private sector may all need to be involved. Gender and power dynamics will always be an issue in such multi-stakeholder processes; a clear effort must therefore be made to provide an open and safe space for all opinions and ideas to be expressed.

Some stakeholder representatives within multi-stakeholder platforms may need support not only to take part in platform meetings but also to build their capacity to facilitate their stakeholder groups to ensure proper representation and communication. The dynamic process of stakeholder engagement should be documented, and guidelines for monitoring and evaluation of the process should be designed to help identify lessons learnt and promising practices of engaging all relevant stakeholders. It is also important to ensure that the lessons are fed back into decision making so that appropriate adjustments can be made in a process of learning by doing plus reflecting.

Guidelines for facilitating the process, including the feedback and follow-up action, should be developed, but keeping in mind the need for “horses for courses”: not all innovation processes will or should be the same, and some – especially those that involve private-sector actors – may

---

not be as inclusive and participatory as others.

**4. Focus on a demand-driven approach to research issues that considers the needs of different groups and gives particular attention to resource-poor and illiterate farmers and women.**

Taking into account all aspects and sources of demand, the needs of clearly defined stakeholder groups should be thoroughly assessed to ensure that research responds to these needs. It may be necessary to support some disadvantaged or marginalised groups in participatory assessment of how climatic and other changes are likely to influence their environment and livelihoods; this will enable these groups to identify their demand with a long-term perspective.

To identify appropriate supply from the research side, the public-goods nature of research outcomes and the other stakeholders involved, including those beyond the agricultural sector, should be taken into consideration. The process of identifying demand for research should build on past experiences and lessons learnt about the spreading and adaptation of technologies. Providing some guidelines based on these experiences and lessons could help streamline this process of matching demand and supply in agricultural research.

**5. Create open communication and learning spaces as a facilitated two-way dialogue that gives equal value to contributions of different actors, allowing free access to knowledge and encouraging the sharing of information.**

Good communication requires a comprehensive and multi-faceted communication plan that allows sharing of information but also capturing of feedback from different stakeholder groups (different types of farmers, donors, development practitioners, researchers, policy-makers) through

different channels (ICTs, trusted change agents etc). Good communication is crucial for building trust and reducing barriers of language and culture, thus supporting innovation processes. To be able to learn, people need to be encouraged to discuss openly and honestly any misconceptions and unexpected consequences. Lessons learnt must be fed back into the innovation system by applying principles of adult learning and including learning from failure.

**6. Take a long-term perspective that allows innovation processes to evolve and mature.**

For innovation processes to be successful in meeting development challenges, a long-term perspective – beyond the period of a specific project – is needed. Recognising the dynamics of public funding mechanisms, political changes and shifts in priorities, both donors and project designers need to link project goals with the specific goals and strategies of national governments, keeping a long-term perspective. The projects supporting innovation processes should build in strategies to ensure that short-term funding constraints, e.g. because an intervention ends, do not undermine long-term goals. Short-term projects should be designed within longer-term programmatic frameworks to enable pro-active sequencing of projects to achieve the longer-term goals.

Not only is there a need for flexibility in implementation; there is also a need for agility in funding, in response to new opportunities that emerge as a result of ongoing innovation processes. Donors should commit to supporting long-term research that goes beyond but can be linked back to projects that may have ended; positive and negative impacts can often take place long after a project's end and provide important lessons for future project planning. Investment should also be made in developing the capacity and functionality of the public sector, which

can play an important role in achieving long-term impact.

**7. Provide incentives including strategic capacity enhancement for different actors involved in the innovation processes.**

Various types of incentives are needed to enhance the performance of multi-stakeholder innovation processes. These incentives may be monetary, but consideration also needs to be given to non-monetary dimensions such as mutual respect, recognition, trust and confidence among actors as important incentives for effective involvement of a diversity of actors in ways that address their interests. Such non-monetary incentives are especially important in empowering the resource-poor women and men who farm and harvest natural resources, many of whom are bypassed by more conventional development approaches.

For government staff, a strong incentive can be achievement of internationally agreed indicators of progress towards national policy goals regarding development, conserving biodiversity etc. In conjunction with this, additional incentives can include capacity enhancement for strategically selected groups, including for national policymakers and for those, especially in civil society, who seek to influence policy. For research and development institutions, capacity enhancement is needed to ensure good leadership and good governance. This should include use of incentive systems to encourage research that contributes to achieving development outcomes, including research that fosters innovation and engagement with innovation systems.

**8. Recognise the need to invest in research to understand innovation dynamics, including the complementary dimensions of innovation (see Principle 1).**

Accompanying research needs to be planned as a component of development interventions to be able to

understand and strengthen innovation processes. Such research includes an appropriate monitoring and evaluation system and involves process documentation, observing and analysing what is actually happening, and recognising unexpected changes and outcomes. The interim research results should serve as a basis for periodic reflection and learning by the stakeholders involved. This not only allows them to make adjustments accordingly but also contributes to the science of scaling.

A common theory of change needs to be created and frequently revisited. Long-term funding is needed, with enough flexibility to allow redefining of tasks, roles and partners. Such research into the ongoing processes in real life will provide the evidence of how innovation actually happens and provide lessons for the participants and others about how to strengthen innovation processes and to achieve scale. The accompanying research should be implemented in such a way that government bodies in the country or region can take active part in the learning and adjustments en route. This would increase the probability of long-term sustainability.



## MOVING FROM PRINCIPLES TO ACTION

Participants in the GIZ–CGIAR workshop are committed to applying these principles through a new learning partnership that fosters more effective integration of agricultural research and development investments to achieve innovation and outcomes at scale. In doing so, they seek to strengthen links with national and regional partners and to generate learning that can be used by other research and development partners as they seek to increase their investment in agricultural research and development. The specific steps to be taken to develop this learning partnership will be activated through a set of Working Groups created for the coming 12 months until the next GIZ–CGIAR Innovation Workshop.

The **Working Groups** that seek to enhance agricultural innovation systems by putting the above principles into concrete action are:

- 1. Operations research:** Draw up a framework for operations research in the midst of ongoing innovation processes;
- 2. Synthesis of documented experience:** Synthesise existing outputs of capitalisation of experiences, to highlight promising practices and lessons learnt in agricultural innovation systems, including analysis of unexpected dynamics and “failures”;
- 3. Capacity enhancement:** Collaborate with the CGIAR Capacity Development group in identifying, documenting and sharing findings about capacity enhancement needs, strategies, services offered and existing resources related to agricultural innovation systems;
- 4. Communication and knowledge:** Continue the flow of communication and knowledge exchange on agricultural innovation processes and systems within the group of Feldafing Workshop participants and beyond;
- 5. Donor dialogue:** Facilitate donor dialogue around incorporating innovation thinking into project design;

- 6. Scaling strategies in AATP:** Explore and test scaling strategies within the context of the African Agricultural Technology Platform (AATP).



### Background to the workshop:

Funding for international partnerships in agricultural research for development, e.g. in the CGIAR system, has been increasing in recent years, yet uptake of research outputs for development outcomes remains comparatively low. The GIZ–CGIAR workshop, organised by two GIZ projects – Innovation Transfer into Agriculture / Adaption to Climate Change (ITAACC) and the Advisory Service of Agricultural Research for Development (BEAF) – was originally designed to gain a better understanding of the obstacles to widespread uptake and adoption of the outputs from agricultural research. The highly interactive workshop at the GIZ International Training Centre in Feldafing, Germany, provided the space for joint learning by researchers, development practitioners, policymakers and donors, who transcended the linear concept of research, extension and adoption to embrace an approach of multi-stakeholder partnership in agricultural innovation processes for development impact.

### Editorial Committee:

Dr. Ann Waters-Bayer (ETC Foundation)  
[ann.waters-bayer@etcnl.nl](mailto:ann.waters-bayer@etcnl.nl)

Michel Bernhardt (GIZ BEAF)  
[michel.bernhardt@giz.de](mailto:michel.bernhardt@giz.de)

Piers Boccock (CGIAR Consortium)  
[p.boccock@cgiar.org](mailto:p.boccock@cgiar.org)

Dr. Patrick Dugan (World Fish, AAS CRP)  
[p.dugan@cgiar.org](mailto:p.dugan@cgiar.org)

Dr. Joerg Lohmann (GIZ ITAACC)  
[joerg.lohmann@giz.de](mailto:joerg.lohmann@giz.de)

Dr. Sidi Sanyang (CORAF)  
[sidi.sanyang@coraf.org](mailto:sidi.sanyang@coraf.org)

**Photo credit:**  
© 2013/ GIZ

**Contact:**  
[itaacc@giz.de](mailto:itaacc@giz.de)

For more information on the GIZ–CGIAR workshop, visit the *icipe*-Homepage: [www.icipe.org/itaacc](http://www.icipe.org/itaacc)

April 2014