Repackaging science for policy and practice

Only 11 years remain to achieve the aims of the 2030 Agenda. Despite the economic growth that has lifted millions of people out of poverty in the four years since the agenda was set, food insecurity and nutrient deficiencies remain daunting challenges in many parts of the world. Smallholders, the major producers of food in low-income countries, are crucial to reach Sustainable Development Goal (SDG) 2: ending hunger, achieving food security, improving nutrition, and making agriculture sustainable.

Science and scientists can have a crucial role to play in supporting vulnerable people, such as smallholder farmers, in meeting future food and development demands. Science can offer ideas for technical and social solutions, and it can support policy reform and inform new practices. Scientists will need to go beyond publishing in academic journals; they will need to find more ways to collaborate with policy-makers and practitioners to jointly frame problems, generate new insights, and create knowledge relevant to specific contexts.

However, the scientific community often remains an untapped source of information in the design, development and implementation of policies and practices. Communication seldom takes place between scientists, policy-makers and practitioners and scientific research is not always informed by the real-life needs, knowledge and experiences of policy-makers and practitioners. Many researchers lack incentives to talk to stakeholders, and knowledge about how to communicate effectively with them.

Key messages based on AgriFoSe2030 activities

- A communication gap exists between scientists and policy-makers and practitioners. Researchers and research institutions often lack skills and capacity to communicate and engage with policy-makers, practitioners and other stakeholders.

- Structures and mechanisms – i.e. participatory methods, networks, knowledge brokering – offer ways to bridge the divide. Improved communications capacity at academic institutions can support these efforts.

- Such structures and mechanisms enable a wide range of actors to jointly frame problems, generate new knowledge, and make knowledge relevant to specific contexts. Participatory methods have proved to offer a good starting point for fostering dialogue and interest, experiences in AgriFoSe2030 suggest.
One of the main objectives of the Agriculture for Food Security 2030 (AgriFoSe2030) programme is to support young scientists in sub-Saharan Africa (SSA) and South and Southeast Asia in communicating their research, as well as engaging with policymakers and practitioners. This brief explores findings from the work within the programme on how the links between science, policy and practices can be improved.

As part of the many AgriFoSe2030 activities relevant to this issue, the programme has (i) sent out a targeted survey, *Translating science in support of knowledge-driven decision-making, improved policies and practices*, to assess the skills, abilities and opportunities scientists have to communicate with policymakers and practitioners in the programme’s target regions, and (ii) organized two workshops (one in each of the target regions, with 40-50 participants in each) on opportunities and challenges for bridging science, policy and practices. The survey had 80 respondents, with 40% participation from Southeast Asia, almost 30% from East Africa, 15% from South Asia, and 7 and 8% respectively from West and Southern Africa.

**Insights from AgriFoSe2030**

Information gathered from the AgriFoSe2030 network of scientists, policymakers and practitioners who have participated in workshops and surveys identifies key obstacles that impede links between science, policy and practice in sub-Saharan Africa and South and Southeast Asia. They are:

**A lack of data**

Data, to underpin both scientific understanding of key issues and broader science-policy-practice links, are inadequate, inaccessible or non-existent. Data are insufficient, inaccessible or non-existent. Data collection is inadequate. Storing and sharing practices are poor. When data are available and accessible, the reliability is often questionable. Even if quality is acceptable, data are often not in forms that can produce qualitative results or research outcomes. The absence of usable data creates knowledge gaps that hinder science itself; this vacuum also impedes productive conversation between scientists, practitioners and policymakers.

**Inadequate models for linking science, policy and practice**

Dialogues between scientists and policymakers or practitioners are often built on weak knowledge base, hearsay and few facts, making evidence-based policy development tricky at best, and impossible in some cases. Interdisciplinary and inter-sectoral links are weak. Horizontal coordination and mechanisms for knowledge sharing (across ministries and sectors) are rare, making it difficult for actors to understand the full complexity of problems, and the potential strategies for addressing them. Monitoring and evaluating of polices, strategies and practices rarely involve scientists and experts.

**A lack of communication skills and capacities**

Research in the AgriFoSe2030 target regions is often primarily academic in nature. It is seldom designed to address specific agendas set by decision-makers. Scientists are, therefore, generally not trained to communicate their research outside of academia, and the communication departments that exist at the universities are often small and lack the capacity and resources to train scientists. Consequently, research
findings and solutions are rarely disseminated or packaged in appropriate formats or languages for policy-makers, practitioners or media.

In the survey, 32% of the respondents state that they have not been trained in how to communicate their findings to a wider audience, and 53% have only been trained to some degree (Figure 1). All respondents believe that some or extensive training is needed for them to become better communicators of their research findings (Figure 2).

A disconnect between scientists, practitioners and policy-makers
Scientists in the AgriFoSe2030 target countries often do their work in isolation, and they rarely engage in a policy dialogue or interact with policy-makers and practitioners along the way. There is a lack of platforms for collaborative design of research and co-generation of knowledge. In addition, there is a lack of actors involved in knowledge brokering (i.e. the process of enabling knowledge transfer between stakeholders) across sectors and disciplines, and between scientists and society.

In our survey only 14% of respondents indicate that functional routines in the workplace are in place to ensure that research is relevant to a broader audience (Figure 3).

Stakeholder engagement from the start
Participation and engagement are central tenets in ensuring that policy- and decision-making are based on science. The experiences from the AgriFoSe2030 programme further illustrates that, to bridge the gap between science, policy and practice, stakeholders need to be involved in the design of the knowledge development process. Such a collaborative approach ensures that there is co-ownership and genuine knowledge generation that reaches beyond the academic community and informs intended policy and practitioner processes. Different models of co-generation that have been used in the AgriFoSe2030 programme provide some concrete examples:

Using Theory of Change as a tool to improve the connection between science, policy and practice
In the AgriFoSe2030 programme many projects use the Theory of Change (ToC) method to identify processes and key audiences that they aim to reach and to influence within the project; these processes are conducted jointly, together with targeted key policy-makers and practitioners at the start-up phase. As expressed by Isabel Vogel, AgriFoSe2030’s ToC consultant, “Theory of Change is a critical thinking process to help analyse the complex systems in
which we seek to influence positive change, so that our actions can be guided by a deeper understanding of our stakeholders’ position, their priorities and the challenges they face in their contexts." Through a “ToC-lens” project researchers receive tailored support on how to communicate with and engage stakeholders in their science. This enables them to much more effectively target the right audiences at the right times with the right messages.

**Increasing capacities to communicate**

A network run by AgriFoSe2030 and the Regional Strategic Analysis and Knowledge Support System (ReSAKSS) aims to develop a pool of policy analysts to sustainably support the development, implementation and evaluation of polices for agricultural transformation and food security in Kenya. The network uses a learning approach tailored to the context of the young scientists, emphasizing “just in time” and “on the job” learning, involving mentoring, coaching, advising, and networking. Over the course of the training, policy analysts will engage in in policy dialogues and dissemination forums. The first analysts to complete the course have now become trainers, and they are coaching a new group of researchers.

**Ways forward**

The AgriFoSe2030 approach argues that science-based processes aiming to improve food security and farming practices should involve target stakeholders at the very start of the process. This early engagement can ensure that there is a co-ownership and true knowledge generation that can reach beyond the academic community, and inform relevant policy- and practitioner processes.

There are many ways to encourage researchers to talk with practitioners and policy-makers. One option is to use skilled intermediaries: knowledge brokers, who can provide a lot of know-how, and can help to create mechanisms that lead to constructive dialogues.

There is also a need to build capacity and strengthen institutional mechanisms to collect, analyse and regularly share data and knowledge in a comprehensive and participatory manner. This include the analysis of crucial data, exploration of knowledge gaps that require further research, and the collection and sharing of valuable and often disaggregated data.

Programmes such as the AgriFoSe2030 have an important role to play. At the same time, building capacity in the institutions, universities and academic networks in these regions is crucial. An improved dialogue between scientists, policy-makers and practitioners will result in the research being better rooted in the needs of society. If target audiences and processes are identified by both researchers and stakeholders, projects and project outcomes are more likely to be tailored to the stakeholders, and they are more likely to provide benefits to these groups in the long-term.

**AgriFoSe2030 recommendations:**

- Use co-design processes in which non-scientific actors have opportunities to provide input on research strategies and research questions early on in research projects. Co-design processes need to be transparent. Processes should foster mutual trust between actors.
- Create incentives for policy-makers and practitioners to reach out to academic institutions and scientists, and vice versa. For collaboration to take place across sectors, such efforts need to become the norm.
- Develop initiatives that consolidate collection and analysis of fragmented data. New mechanisms are needed for storing and sharing scientific data to a wider audience outside academia, and capacity building is needed for data collection and analysis.

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We thank the AgriFoSe2030 programme and the Swedish International Development Agency for the financial support provided. We thank our partners and researchers involved in the programme for the knowledge and ideas provided.

Review acknowledgement to Karen Brandon and Tom Gill, SEI, and programme management of AgriFoSe2030.

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