## Supporting innovation at scale through capacity strengthening for improved Agricultural Innovation System

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Several interventions during the conference emphasised the importance of capacity strengthening at different levels in the context of developing 'successful' research partnerships and transitioning to agroecology (at individual, institutional and organisational levels, etc.). My presentation elaborates on this topic by identifying which capacities are required, at which level, and which capacity development tools and approaches are needed. My name is Dr Syndhia Mathe and I am an innovation system scientist. My research focuses on the capacity of organisations in the agricultural and agrifood systems to provide what are called 'innovation support services', such as support in sharing knowledge and sensitisation, providing access to resources for innovation, articulating demand (helping actors to express their needs), and strengthening technical capacity. I have over 10 years' experience strengthening agricultural innovation systems (AIS) through action-research activities, supporting the development and scaling of more inclusive and responsible food and agricultural systems in low- and middle-income countries. I was hired as an expert on the CDAIS project (Capacity Development for AIS), and more recently and intensively on the D-LIFT project, where I worked on fostering AIS using R&I activities. I would like to share the key lessons learnt from these two projects.

First of all, let's agree on a definition of 'capacity strengthening'. For the purposes of this presentation, we will define it as the process of equipping individuals, organisations and systems with the necessary methods, tools and resources to enhance their performance and help them to achieve their goals. This includes activities such as training, coaching, mentoring, technical assistance and funding. We use the term 'capacity strengthening' and not 'capacity building'. In practice, these terms are sometimes used interchangeably, but the distinction lies in whether the emphasis is on creating new capabilities ('building') or enhancing existing ones ('strengthening'). Many organisations now prefer 'strengthening' as it acknowledges that communities and institutions already have capacities and agency.

Having clarified the term 'capacity strengthening', let's explore the three key lessons learnt from the literature and experience of R&I projects on capacity strengthening for improved agricultural innovation systems. These three lessons are based on the assumption that innovations are complex processes involving a multitude of actors.

The CDAIS project significantly increased scientific and operational knowledge of functional capacities and their complementarity with technical capacities. It shifted the focus from significant investment in technical capacities through extension and Farmer Field Schools. to investing more in functional capacities as a basis for sustaining and boosting innovation processes. Areas of functional capacity have been identified for AIS actors. Functional capacities are transversal across and along different innovation processes. These functional capacities enable AIS actors to: facilitate, reflect and learn; manage knowledge resources; navigate complexity; and participate in strategic and political processes. These four capacities should form the core of an overarching capacity to adapt and respond, enabling the realisation of innovation potential. In summary, the first lesson suggests that a new paradigm is

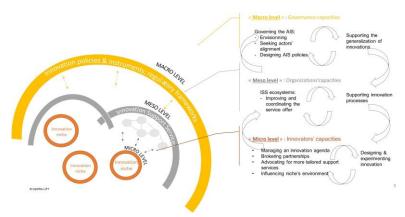
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emerging to support innovation on a large scale, advocating a broadening of the scope from technical capacities to functional capacities.

Secondly, the diagram below illustrates how research interventions can be used to improve the AIS. It presents three levels:

- 1) the innovation niche or community level
- 2) the meso level, where organisations providing innovation support services are found
- 3) the macro level, which integrates policy and system levels.

Functional capacity strengthening can occur at these three levels to foster the AIS and its capacity to support innovation on a large scale. The diagram mentions different areas for capacity strengthening, such as managing innovation at the micro level, improving and coordinating the service offer at the meso level, and designing AIS policies at the macro level. Lesson 2 suggests that capacity strengthening can be conducted at these three levels. Several tools are available to analyse, assess and strengthen functional capacities at these three levels. A e-learning course entitled 'All About Conducting Multilevel Action-Research in Agricultural Innovation Systems' will soon be available on the CIRAD e-learning platform: <a href="https://elearning.cirad.fr/?lang=en">https://elearning.cirad.fr/?lang=en</a>



The third lesson suggested that R&I projects currently play a key role in strengthening functional capacity at three levels. Three examples of projects from the DeSIRA programme illustrate this.

The first, at micro level, involved strengthening the capacity of eight innovation niches in the DeSIRA ReSI-NoC Northern Region of Cameroon. These innovation niches focus on key regional topics such as peaceful community management of transhumance around protected areas, structuring a shea butter pro-biodiversity value chain, climate-smart agriculture in cotton-based production systems and securing agricultural land through contractualisation. The niche actors have been trained in leadership, collective action, planning and so on, which has enabled them to adapt to changing contexts. An innovation marketplace has been organised to support the niche actors in articulating their demands and identifying the right contacts to do so.

The second example, at the meso level, concerns the functional capacity-strengthening of organisations supporting innovation through the MAKIS project in Madagascar, such as FOs and NGOs. This capacity strengthening is intended to help them better define and deliver their innovation support services (ISS). This includes constructing a development strategy for collaborating farmers (relay or

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seed multiplier farmers), strengthening advisors' facilitation and co-construction methods, improving MEs' (master farmers') communication skills, holding workshops on career management for staff, setting up a cross-disciplinary team to address MEs' needs in the field, establishing a co-management body to co-construct a medium- and long-term vision, and monitoring and evaluating the implementation of the system.

The third example, at the macro level, concerns the capacity strengthening of decision-makers within the AcceSS project in Burkina Faso. This aims to help decision-makers navigate the new innovation paradigm and formulate adequate policies to foster AIS and promote responsible agricultural innovation.

Even R&D projects play a key role in strengthening the functional capacity of AIS because the necessary tools need to be developed and tested. Project interventions are limited. Currently, the effectiveness of the tools has already been demonstrated and they are available for use. These strengthening competencies should be transferred to formal, permanent organisations, such as universities or vocational training organisations.

## References

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