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"Bridging the gap between increasing knowledge and decreasing resources"

Bridging the Gap Between Formal and Informal Research in Agriculture and Natural Resource Management

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Abstract

The many efforts to transform scientific knowledge into sustainable agriculture and natural resource management (NRM) have brought limited benefits to smallholder farmers, including fishers, livestock-keepers and other resource users. Donors, policymakers and civil-society organisations (CSOs) are exerting pressure on the formal agricultural research and development (ARD) sector to make its research more useful to smallholders. Many formal ARD institutions are now seeking ways to engage more closely with smallholders in order to conduct research that is more relevant for and accessible to them, and are seeking examples and good practices as sources of learning.

Some examples of ARD that is focused on smallholders and in which the research process is comanaged and driven by smallholders can be found in "informal" ARD that is facilitated by CSOs. Information on the process and outcomes of these initiatives rarely appears in double-refereed scientific journals; most of the documentation is scattered in reports, websites and publications for development practitioners.

The CGIAR Research Program Aquatic Agricultural Systems (AAS) pursues an approach to ARD that involves embedding research in development processes and strengthening stakeholders' capacities to innovate and adapt. AAS, together with CCAFS (Climate Change, Agriculture and Food Security), asked prolinnova – an NGO-led multistakeholder international network that promotes local innovation processes in agriculture and NRM – to explore the approaches, outcomes and impacts of "informal" ARD facilitated by CSOs. Based on eleven case studies from Africa, Asia and Latin America drawn from over 100 cases that were identified and vetted, we assessed the extent to which farmer-led processes of research and innovation in agriculture and NRM led to improvements in rural livelihoods. These built on local knowledge and generated more intensive ways of using available resources with low levels of external inputs.

This paper presents the main findings of this study. It analyses available evidence on the impact of farmer-led approaches in terms of food security, ecological sustainability, economic empowerment, gender relations, local capacity to innovate and adapt, and influence on ARD institutions. It then draws lessons for future partnerships between formal and informal ARD actors who are seeking common goals in serving smallholder communities.

Keywords: Adaptive capacity, endogenous development, farmer experimentation, impact assessment, innovation processes, local knowledge, participatory research, smallholder farmers

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