

# A Benchmarking Tool for Agricultural Innovation Systems

*A Component of the TFESSD project*

*“Mobilizing Rural Institutions for Sustainable Livelihoods and Equitable Development”*

**Background.** Continuous innovation in the agricultural sector is essential to achieving food-security, stimulating pro-poor growth, and maintaining existing natural resources. New approaches to studying agricultural innovation can deepen our understanding of how innovation occurs—how diverse actors in the agricultural sector engage in the generation, exchange, and use of information and knowledge. These new approaches highlight the analysis of how the roles, actions, and interactions of multiple actors influence innovation processes and outcomes; and how these processes and outcomes are conditioned by social and economic institutions.

**Objectives and rationale.** The objective of this study is to develop a benchmarking tool for guiding investment in sustainable agricultural innovation systems; and to demonstrate the link between national-level analysis and more local-level processes of rural innovation.

National-level benchmarking can be valuable tools in guiding agricultural innovation policy. Such exercises have proven themselves as effective tools for guiding innovation policy in OECD countries. However, its application to developing countries and developing-country agriculture is fairly novel, and rarely forges a clear analytical link between national-level performance and local-level realities. This study seeks to benchmark, rank, and compare national agricultural innovation systems at the national level while also analyzing the local realities that underlie innovation processes. In doing so, the study intends to provide a balanced approach to influencing policy discourse and decision-making.

**Methodology and data collection.** National-level benchmarking will rely on (a) a conceptual framework designed for the selection and construction of innovation indicators, (b) tools drawn from other benchmarking-type studies that gauge and compare sectoral performance across countries, and (c) an assessment of the indicators’ effectiveness in terms of cost of assembling and influence on policymaking. Data will be drawn partly from existing information in such areas as investment in human capital; investment in agricultural education, research, and extension; business and investment climate; governance environment; and so on. However, since few countries or organizations collect all the necessary data on a regular basis, additional efforts to collect national-level data will also be required.

Local-level innovation analysis will rely on social network analysis tools that provide both visualizations and statistical tests of key properties and interactions that characterize an innovation process. Data will be drawn from specially-designed surveys of purposively-selected respondents who relate to a given crop, trait, technology, or geographical region.

*Examples of questions to be addressed:*

- What is the role of rural institutions (RIs) and other actors in access to information, services, markets and market development, coordination of value chains, etc?
- How do the RIs interact with the other actors in the rural space – for livelihood development?
- What support to RIs can improve rural innovation systems to contribute to sustainable growth & development and enhanced technological change?

- How to include and enhance the impact of innovation and R&D on poor, women and other disadvantaged or marginalized people?
- How can social and environmental issues be incorporated into the agricultural innovation systems? What are the roles, interaction and coordination between the various actors involved in this process? What capacity exists at each stage/level?
- What indicators for agricultural innovation system (local and national levels) can serve as benchmarking tool to guide investment in innovation systems?

**Country case studies.** To illustrate the concepts and methods described above, the study will use Ethiopia and Vietnam as country case studies.

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