

## Sub-theme 5.2. Innovation Systems and Impact Evaluation Studies

### **Rationale**

Technological changes are critical inputs for increasing productivity and ensuring economic growth, and for tackling societal challenges. It is, therefore, necessary to put in place a research system that is responsive and accountable to technology users and other stakeholders. It is, therefore, necessary to know that producing and publishing ‘shelf-bending’ research reports should not be taken as the main output of research. It is necessary to ensure that successful research interventions give priority to promoting widely-shared community development and adoption of appropriate technologies. This is because research will have no impact on socio-economic development without disseminating research results and promoting adoption.

Research outputs should be demonstrated and popularized with full participation of technology users and clients. The outputs should be promoted, transferred, and disseminated at a larger scale. The extent of adoption of technologies should be traced for further feedbacks for assessing barriers to adoption and to pinpoint areas of further interventions by various stakeholders.

Society has to get returns from research undertaking to justify the commitment of human, financial, and material resources for research. The impact brought about by the technologies on the community’s livelihoods should also be assessed. The sub-theme deals with research on building knowledge and institutional capacities of the community for efficient and productive utilisation of technologies.

### **Aim**

The aim of this sub-theme is to research into aspects of research output delivery mechanisms and outlets to the users as well to investigate the impact of knowledge, technologies, and innovations on people’s livelihoods through research-extension linkages.

## **Description**

This sub-theme focuses on technology demonstration and popularisation, technology transfer and dissemination, technology adoption and impact assessment, and research-extension linkages.

## **Potential Collaborators**

Community or technology users; various ministries at federal levels; various regional and zonal offices including agricultural offices, health offices and others; regional and federal research centres; health extension workers and development agents at different levels; non-governmental organisations working on community development activities; and many others.

## **Expected Output**

- Enhanced use of technologies and knowledge
- Increased adoption rates of technologies
- Improved livelihoods of the community through positive and demonstrable impacts
- Enhanced participation of stakeholders in research and extension activities
- Increased orientation of research to customers' needs

## **Research Areas**

### **5.2.1. Technology demonstration and popularization**

This research area focuses on issues related with demonstration of new technologies, practices and knowledge to users and beneficiaries; comparison of new technologies, practices and knowledge with the existing practices; gathering information on users' reactions to new technologies.

This research area is also concerned with creating the basis for linkages between research and extension activities and among other stakeholders. The research area also deals with the flow

of information from research to user communities and vice versa; maintaining continuous contact between research and extension; strengthening the link in several ways including improved collaboration between research and extension and among stakeholders involved. Furthermore, it is also concerned with community level participation in technology generation and dissemination.

### **5.2.2. Dissemination and scaling up of technologies and best practices**

This area is concerned with research in identification of appropriate technologies and practices for transfer and dissemination; identifying areas and assessing capacities of users of technologies and practices.

### **5.2.3. Technology adoption and impact assessment studies**

This research area focuses on determinants of technology transfer from one user to the other; major barriers for adoption; interventions and supports necessary for adoption of technologies; and feedback for researchers. This research area also focuses on short and long term outcomes of technologies; sustainability of the use of technologies; the impact of the technology on environment, social, and economic condition of the society. Furthermore, it also deals with returns from research investment.

### **Beneficiary**

Farmers, scientific community, government, policy makers, industry, research institutions, and the wider public