

Applying Innovation System Concept in Agricultural Research for Development: A Report on Training Workshop 18th – 21st November, 2008, Haramaya University

1. Background

Improved Productivity and Market Success (IPMS) of Ethiopian Farmers is a five-year project funded by Canadian International Development Agency (CIDA) and being implemented by the International Livestock Research Institute (ILRI), on behalf of the Ethiopian Ministry of Agriculture and Rural Development (MoARD). IPMS supports the efforts being made by the government to identify and implement appropriate policy and institutional reforms geared towards the realization of the market-led agricultural and rural development policy objectives.

The project focuses on the development of new approaches and processes for: development of market oriented agriculture emphasizing marketable commodities; knowledge management; and innovation capacity development (MoARD-IPMS, 2006). Gender, HIV/AIDS and environmental issues are systematically mainstreamed in all project interventions. Innovation Systems Perspective has been adopted as an organizing principle, and it informs planning and implementation and monitoring and evaluation of all types of interventions by IPMS.

IPMS/ILRI, as part of its public sector innovation capacity development efforts, conducted a training workshop on “Applying Innovation System Concept in Agricultural Research for Development” from November 18th to 21st 2008, at Haramaya University.

2. Participants

The participants were 21 senior instructors from Addis Ababa, Haramaya, Hawassa and Mekele Universities. Most of the participants were those who guided IPMS-sponsored graduate students. Complete list of the participants with their contact details is provided in Annex 2.

Workshop participants

University	Number of participants
Addis Ababa	2
Haramaya	10
Hawassa	3
Mekele	6
Total	21

3. Training Workshop Objectives

The overall purpose of the workshop was to strengthen the capacity of university instructors, guiding research by graduate students, in the understanding of the innovation systems approach and its application in AR4D for enhanced impact. The specific objectives were:

1. to discuss the evolution of Innovation Systems Perspective (ISP) and to clarify key concepts
2. to demonstrate the application of ISP in project planning, implementation and evaluation
3. to understand the implications of applying ISP in AR4D and research management
4. To provide necessary skills and tools to analyze innovation processes

4. Training Materials

The training materials previously developed for training researchers from regional research institutes was revised and used. The participants were provided with a complete set of training materials. The materials included trainers' guide, text, PowerPoint presentations, exercise and worksheets, and additional reading material.

5. Structure of the Training Workshop

The workshop was divided into nine sessions to enable logical flow of ideas and continuity. Each session included a brief and interactive presentation, followed by a group exercise and, plenary presentations and discussion. This ensured optimal participation and provided adequate time for interaction and experience sharing among participants. The groups were divided based on their organizational affiliations, and were encouraged to use cases of the research projects they were engaged in, for the group exercises. This allowed them to apply and relate the concepts they learnt to their real life experience, to demonstrate their utility and potential application.

The workshop began by asking the participants to list their three major expectations. The responses were summarized in to six:

- Understand why and how innovation system is important
- Skills and tools for applying innovation system in AR4D
- Role of ISP in linking livestock research with stakeholders
- Applying ISP in designing strategies, projects, and M&E
- Learn how to integrate ISP into higher agricultural education
- Exchange of experiences and networking with colleagues

6. Workshop Evaluation

At the end of the workshop, the participants were asked to make a final evaluation of the workshop using standard workshop evaluation format of ILRI, which assesses the training workshop in general and in particular whether and to what extent the specific objectives of the training workshop were met. Twenty participants completed and returned the evaluation form.

6.1. Overall rating

Overall the participants gave positive ratings to the training workshop. It was rated excellent by 12 participants (63.2%) and good by 7 participants (36.8%). One participant didn't respond.

Furthermore, the participants were asked to rate the extent to which the workshop met their expectations. Sixteen out of twenty participants (80%) confirmed that the workshop fully met or exceeded their expectations. The result of general workshop assessment is presented in Table 2.

Table 2: Summary of the general assessment of the workshop by participants

General assessment	Response	Frequency	Remark
In general, I would rate the workshop as	Excellent	12 (63.2%)	19 participant responded
	Good	7 (36.8%)	
How would you rate the workshop in meeting your expectations?	Exceeded	3 (15%)	
	Fully	13 (65%)	
	Partially	4 (20%)	
Were the training objectives clear?	Fully	18 (90%)	
	Partially	2 (10%)	

Were there a good balance between theory and practice?	Yes	17 (85%)	
	No	3 (15%)	-lack of case studies - limited practical exercise on analytical aspects
How useful is the training for your day to day work? 5 (very useful) to 1 (not useful)	5	9 (45%)	
	4	9 (45%)	
	2	2 (10%)	
Would you recommend this workshop to your colleagues?	Yes	19 (95%)	
	No	1 (5%)	Less relevant to non-social scientist

6.1.2 Achievement of specific objectives

The participants rated the extent to which specific workshop objectives were met on a scale of 1(not achieved) to 5 (achieved).

As shown in Table 3, the majority of the participants agreed that the specific objectives of the training workshop were achieved. However, some of the participants suggested inclusion of relevant case studies and allocation of more time to discuss the analytical issues in detail.

Table 3: Summary of participants' evaluation of the extent to which specific workshop objectives were achieved

Specific objectives	5 (frequency)	4 (frequency)	3 (frequency)	2 (frequency)
To discuss the evolution of the ISP and to clarify concepts	14 (70%)	6 (30%)		

To demonstrate the application of the ISP in project planning, implementation and evaluation	11 (55%)	8 (40%)	1 (5%)	
To understand the implication of applying the ISP in AR4D and research management	12 (60%)	6 (30%)	1 (5%)	1 (5%)
To provide necessary skills and tools to analyze innovation processes	9 (45%)	6 (30%)	4 (20%)	1 (5%)

6.2. Assessment of the workshop strengths and weakness

The participants identified the strengths and weaknesses of the training workshop:

6.2.1. Strengths

Content and structure

- A good balance between theory and practical exercise.
- The content is relevant, timely and addresses our most important knowledge, skills and attitude gaps.
- Scope covered agriculture and related fields.

Learning techniques and processes

- Well organized, participatory and interactive mode of delivery.
- Participants were encouraged to apply ISP on their own work and share with colleagues from other institutes

Facilitators

- Highly qualified and well organized resource persons.
- Good time management, many issues covered within limited time

Training material

Well organized and adequate reading materials

6.2.2. Weaknesses

Content and structure

- Case studies from different fields would have been useful.
- Lacks practical examples and success stories with the application of ISP.

Learning techniques and processes

- A lot of materials to cover in a limited time, but the presentation of details too insufficient for non-social scientists (e.g. tools and techniques).
- Time given for group tasks was too short.
- Failure to mix participants from different universities for enhanced interaction and experience sharing.

Other

- Four days allocated for the training is too short given the topics covered.

7. Workshop Wrap up Session and Recommendations

Plenary discussion was held during the wrap up session. The discussion was structured around:

- How effective was the workshop- did it meet the workshop objectives and your expectations?
- Relevance- what changes would you like to see if such a workshop was conducted again- in terms of material, presentations, process, exercises etc.
- What additional assistance would you need to be able to apply these concepts and skills in your work when you go back to your organizations?
- Open Floor

The participants found the innovation systems perspective very useful to improve relevance and enhance impact of agricultural education and research. They exchanged views on anticipated challenges and opportunities to institutionalize innovation systems approach. Finally, actions to be taken were identified:

- IPMS should organize workshop for sensitizing policymakers, senior agricultural research managers and university officials.
- Integrate ISP in the existing courses such as research methodology
- Incorporate innovation systems concept in on-going research activities and pursue colleagues to do so while reviewing and designing new research projects.
- Collaborate with IPMS and other actors for demonstrating the value added by the application of ISP in AR4D.
- Use the opportunity created by the on-going business process re-engineering to integrated ISP in higher education and research.
- Explore the possibility of establishing 'Institute of Innovation Studies' at national, regional or university level
- Establish network or community of practice for experience and resource sharing.

Annex 1

Integration of ISP in agricultural research and education.

<i>Actions suggested to integrate ISP</i>	<i>Anticipated challenges</i>	<i>Suggestions to overcome the challenges</i>
<i>MEKELE UNIVERSITY</i>		
<p>Integrate into existing curriculum such as research methodology courses</p> <p>Setting up Institute of Innovation Studies</p> <p>Integrate ISP into on-going BPR</p> <p>Promote the application of ISP in agricultural research and extension in various forums</p>	<p>Competence to convince colleagues and superiors about the value of ISP</p> <p>Resistance from peer and others</p> <p>Donors commitment for long-term impact</p> <p>Creating partnership with the private sector (short-long term impact preference)</p>	<p>Continuous exposure to literature and participation in relevant forum</p> <p>Developing facilitation skills</p> <p>Commitment to practice the concept (frontline role)</p> <p>Sensitization at peer and higher level</p> <p>Piloting and documentation to demonstrate the value of innovation systems approach</p>
<i>HARAMAYA UNIVERSITY</i>		
<p>Convince the university community of the value of ISP</p> <p>Commit resource and re-align policy and organizational set-up and strategic plan</p> <p>Capacity building</p> <p>Effective leadership and learning from experience elsewhere</p>	<p>Resistance</p> <p>Organizational environment within which ISP is applied</p> <p>Acquiring funding for activities beyond technology generation</p> <p>Instilling shared vision and developing capacity for innovation</p> <p>Developing appropriate strategy</p> <p>Stimulating pro-poor and pro-environment innovation system</p> <p>Ensuring sustainability</p>	<p>Sensitization and demonstrating the value of ISP</p> <p>Identifying and addressing of policies and practical obstacle</p> <p>Setting clear goal, purpose and means (strategy) for integration of ISP</p> <p>Seeking new funding mechanism for innovation work</p> <p>Capacity building</p>

HAWASSA & ADDIS ABABA UNIVERSITY

Revise research method course to incorporate ISP concept	Costs related to curriculum review	Solicit fund from government and other partners
Share the new knowledge and resource with colleagues	Resistance from colleagues and administrators	Create wider awareness(e.g. brochure)
Re-align research proposal formats, templates and guideline with ISP	Lack of adequate flexibility in the university system	Work with BPR teams so that the ideas and principles of ISP are embraced by the on-going reform process
Explore ways to promote the ISP in the university system	Resource limitation (time, space, etc)	

Annex 2

Innovation System Training Participants - November 18-21, 2008

	Name	University	Contact address
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