

The Role of ICT in the Agricultural Value Chain
Summary Week 1 discussion: 7 to 11 December 2009



The discussions of week one focused on the role of ICT in the agricultural value chain and its potential to have both positive and negative impacts. The discussion focused on what makes for successful ICT interventions, the critical role of understanding individuals and process, and how to best plan for this.

ICT in the Value Chain

There is wide agreement that ICT can play an important role in agricultural value chains, and that different types of ICT have different strengths and weaknesses, as well as different impacts.

There was a diversity of thoughts on the nature of the key variables and their impact on success. ICT users and the context in which they exist determine which ICT tools are most appropriate at a certain point in time. There was a caution to not forget that while the positive impacts of ICT are being catalogued, many rural farmers still do not have access to or the capacity to use (for many reasons including socio-economic, cultural, etc.) ICT.

Discussions considered the need to view ICT as a tool to achieve a desired service that would enhance development, the distinction between analog and digital ICT, and classifying ICT based on where/how they impact the value chain, or the unique characteristics of the ICT.

ICT is being used by both the public and the private sector in value chains. Currently ICT use is mainly focused on information dissemination, whereas true information management applications are less developed. Linkages to the global supply chain are limited by infrastructure in many developing countries.

Given the importance of context and the rapid development of technologies, it can be difficult to determine whether the appropriate tool now will persist in being the appropriate tool in the future. From this comes a need for ICT and agriculture experts to work together, as well as the public and private sectors to collaborate.

Ultimately, focus should be on solving a problem, or improving a service, when considering ICT in the value chain. This is where real impact and success will be achieved. It is difficult to succinctly categorize different types of ICT with different interventions. Different success stories, good practices, must be contextualized in order to have value, because the use of the ICT depends on many complex factors other than the technology itself.

The Potential for Positive and Negative Impacts

Numerous ways in which ICTs can reduce transaction costs were mentioned, with examples of ICT being used in forward linkages, backwards linkages, and for information discovery. There was a particular point made that ICT can reduce time and transaction costs related to procurement of needed information, which was supported by qualitative data in a study from Sri Lanka.

Theoretically ICT could help bring the producers closer to the markets, however, experience has shown that many factors reduce these positive effect. Examples were presented that support this concern. It was also suggested that moving past the individual level, there is evidence that ICT can be positively used by groups (e.g. farmers' organizations).

To improve the use of ICT in value chains, it is necessary to consider who benefits most from specific ICT interventions in the value chain and not to assume all benefit equally. This perspective would help to alleviate many potential negative impacts of ICT in project development. Transparency in markets was noted as critical for farmers to succeed and ICT has an important role in improving this.

The negative impacts of ICT in value chains appear when the ICT leave one stakeholder group at a disadvantage to another. Partnerships, including public-private partnerships, are important in overcoming negative impacts. Positive efforts by government and CSO to developing ICT capacity in rural communities and to provide needed information content can reduce the imbalances. Correctly matching ICT tools to the users (e.g. computers for large organizations, mobiles for small holder farmers) is also important.

Drivers of Success

There were many factors listed as significant drivers of successful use of ICT in agricultural value chains. These cover a range of issues from policy environment to human capacity, from entrepreneurial incentives to appropriate content, and many others. Again, the importance of understanding context, creating an enabling environment, and using appropriate content and technology is underscored.

It was observed that some heavily funded projects have failed because they neglect the key role of local organizations.

It should be noted that there is also some question about the term “value chain” and its true meaning. A reminder that we need to be cautious of using jargon and that there may need to be efforts to improve our collective understanding of both the term and its implications for development.

Several examples and reference materials have been shared in the discussions. These will be brought together in one location to simplify their repeated use at the end of the forum.

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