Subject IV

Role of ICT in Dissemination of Knowledge in Agriculture Sector – Its Scope and Efficacy

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A total of 20 papers were submitted on this theme. Of which 4 full length papers and 14 summaries were published in the Conference Volume. Out of these only 7 papers were presented in the session. These studies do not fully reflect the field level developments.

The papers broadly fell under the following sub-themes:

- Role, developments and chronicle of ICT initiatives.
- Role and implications on ICT in certain agriculture sub-sectors and commodities.
- Performance analysis of ICT modes across regions.
- ICT in agricultural marketing.
- Issues and way forward.

Many studies have indicated that the knowledge needs of the farmers and other stakeholders fell broadly under the areas like marketing information, government schemes including subsidies, issues relating to the package of practices, weather forecasts and post harvest technologies. A study by NSSO in 2005 brought out that fellow/progressive farmers were the major source of information to the farmers followed by input dealers, radio/TV, newspapers, while the departmental efforts were the least preferred.

Almost 62 ICT initiatives have been taken up under government, private and joint sectors, especially in the last 18 years. Different technologies say web based, electronic and satellite based were used for the ICTs.

The experiences of these ICTs in agriculture have indicated the following:

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There were issues of communication gaps and inadequate capacity of the experts manning the Kisan Call Centres.

There were barriers of language and gaps in comprehension by the users.

Touch screen kiosks were more interactive, but at times quite slow and did not work in convenient times for the farmers.

Satellite based technologies like Integrated Potential Fishing zones enhanced the profitability of fishing across the fishermen categories.

Customised mobile based advisories served the farmers needs but at times lacked response/desired effects due to dependence on English only SMSs.

ICTs do help in brand- variety selection in crops or areas highly prone to climate vagaries with convergent efforts of research and extension institutions.

ICT interventions like AGMARKNET are more useful to researchers, traders and elite farmers groups.

There are many ICT initiatives including e-learning; training extension officials and video conferencing etc. as practiced by TNAU, which need to be emulated across the country.

Some of the recommendations that emerged from the session are:

- Some ICT initiatives are not user friendly which needs to be addressed.
- Matching the farmer’s/stakeholders’ needs with appropriate mode of ICT as per local conditions.
- Feasibility of ICT infrastructure at the cutting edge level, i.e., block/mandal level with utilisation and dissemination cost-benefit analysis.
- It requires huge financial inflows for grounding the ICT ventures across the country. The tougher task is to motivate the farmers to use the services.
- The issues like band width limitation and legal framework need to be sorted out.
- ICTs can act as storehouse and clearing house for technological solutions to stakeholders.
- The cost benefit analysis and transaction costs of services in conventional vs. ICT need to be worked out.
- Provision of specific budget for promotion of ICT use by public R & D system.
• Issues of last mile (cutting edge level) connectivity/reach to be addressed.
• Participatory mode for moving from information to knowledge management.
• Strengthen the use of technologies like IPFZ forecasts to mainland fishing to augment fish catches and thereby exports.
• Some models are successful in some sectors or some areas, studies on feasibility or up scaling are required.
• Advisories of Kisan Call Centres to be made more specific rather than generic, which requires decentralised set up or multi-tier establishments.
• Priority to ICT in the ensuing 12th Five Year Plan and the subsequent plans.
• Awareness campaigns on ICT portals to be done involving farmers training organizations.
• Integrated models to be tried for increasing efficacy.
• ICTs to be tried as mobile *krishi vikas raths* for online solutions especially in remote areas.
• In the age of competition and resource crunch identification of appropriate ICT models for different contexts needed.
• There is no escape from ICTs. Hence we need to embrace them by continuous awareness and capacity building programmes for all stakeholders.

Out of these recommendations emphasis to be laid on focused studies to assess suitability, contexts, viability and sustainability; higher budget allocation for ICT infrastructure and intensive capacity building for all stakeholders.