Challenges in ICT application in agriculture

Digital literacy

• Digital literacy refers to an individual's ability to find, evaluate, and compose clear information through writing and other mediums on various digital platforms. Wikipedia

Availability of location specific content

- Of the 700 living languages websites are found in 200 languages
- Language and website share

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− English − 51 %
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- Japanese and Spanish 5.1
- French -4.1
- − Others − 21.1 %

https://www.millforbusiness.com/how-many-websites-are-there/

Content in regional / vernacular language

- Challenge for the professionals
- Satisfaction of end-users is essential

Traditional use behavior of farmers

Use of internet on mobile phone for getting agriculture information, 2019, Varanasi

Category	Regular		Occasional		Never	
	${f F}$	%	\mathbf{F}	%	${f F}$	%
Internet	5	3.34	23	15.33	122	81.3

Agricultural information gained using internet among farmers, 2019, Varanasi

Types of information	Frequency *	Percentage
Weather forecast	26	17.33
Agriculture related news report	23	15.33
Market condition & prices	24	16
Govt. schemes	8	5.33
Information about input dealers	4	2.67
New technologies for crop & Animal husbandry	12	8

Unidirectional mode of information delivery

- Websites Vs Web portals
- Two way interaction is essential for understanding

Trained extension professionals

- Training of extension educationsists
- Training of extension service providers

Social factors

- Technophobia
- Negative attitude towards technology
- Demographic factors such as age, education, and income level

Other key factors

- Scaling up of ICT in extension services
- Finding sustainable business models that encourage its spread in the poorest parts of the world (World Bank, 2016)
- Integrating traditional media and new ICTs extending the reach of extension
- Capacity of the farmer to search information
- Even if the information is simple and the message is fast and timely, reception depends on farmers' understanding of the phone, computer or any other medium used
- Customisation is a key requirement for sustainability

Conclusion

ICT can offer real opportunities to improve the quality of e-extension advisory services. The ICT has both positive and negative impacts with the system. Every technology will be having its own drawbacks, ICT is having more advantages compared to the drawbacks, so the challenge is to make the best of the available ICT sources for the betterment.