

Two-Sided version of online Extension and Advisory Services in Post COVID Era in India

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Advantages of online Extension and Advisory Services in India

1. e-Extension involves the conceptualization, design, development, evaluation and application of innovative ways to use information and communication technologies (ICT) in the rural domain, with a primary focus on agriculture.
2. The use of online extension has enabled effective communication between farmers and extension scientists/workers and ensures that technology transfer continues in the absence of face-to-face communication.
3. Complement and extend existing extension efforts, and reduces the time lag in dissemination from research system to client system along with weather forecasts and calamities thus further empowering farmers to solve their everyday farming problems.
4. Scaling information delivery due to lower per-unit cost of dissemination
5. Resolves the “information asymmetry” created during the COVID-19 pandemic
6. e-Extension platform has enabled catering training, webinars, online classes to students, online viva –Voce etc., which have reduced the cost and time of organization.
7. Tailoring advisory contents to individual users through two-way communication
8. Supporting farmer-to-farmer sharing of experiences
9. Digital innovation should be treated as a modern farm input
10. Mobile phones allow farmers to actively engage in sophisticated information exchange
11. PPP models have been able to address some of the gaps, credit constraints and licensing requirements that prevented them from reaching large scale calling for greater synergies between private and public sectors through digital platforms

12. Diverse information received in multiple forms (texts, pictures, photos, audio-visuals, booklets, word documents, and screenshots)
13. It helps in networking, recognition and motivation in agriculture by enabling concerned players in this field to exchange opinions, case studies, good practices and resources.
14. Helps in linking smallholder farmers to high-value and export markets through the facility of online trading and e-commerce promoting sustainable production techniques through agro-advisory services.
15. Creates Awareness with the use of social media in agriculture within a shorter time.



Challenges of online Extension and Advisory Services in India.

1. Lack of Internet literacy in rural areas has caused low information penetration through e-extension
2. Non-availability of ICT tools with farmers
3. Poor internet connectivity in rural areas
4. Farmers lack belief in advisory services provided through mobile over the face to face communication.
5. Imperfect information flows between the stakeholders of a complex knowledge system, including farmers, traders, processors, extension agents, and researchers
6. Digital advisory applications have frequently suffered from a lack of feedback mechanisms and mismatches with farmers' information needs, their technological capabilities and habits, the timing of information delivery sources
7. Discontinuation of many services after initial funding ended, as they did not succeed in sufficiently engage policymakers or developing into viable business models



8. The limited connections to electronic mass media limit the ability to reach clients (e.g., written materials, radio, television, Internet).
9. Reluctance to use mobile applications among farmers who belong to the old age category.
10. Due to the static and inflexible nature of the organizations, where a top-down hierarchical approach continues, farmers see the quality of the information provided by the public extension staff as a major shortcoming and information flow is considered to be supply-driven and not need-based or area-specific.
11. Farmers cannot afford e- technology unless the government comes in support of agricultural infrastructure
12. Lack of technical staff from the Department of Agriculture and allied departments to deliver the ICT based technology transfer service effectively and to train the farmers in using e-extension services is making online advisory services unreliable.
13. The limited capacity of State governments to regulate and coordinate multiple providers of advisory services –leading to multiple and conflicting messages.
14. Access by rural women is more limited than is the case of men among rural societies, depicting gender disparity in the case of the Digital divide also.
15. Not accessible to poor farmers who can't afford the associated fees.

Conclusion: Even though e-extension can help with information diffusion to farmers during and after the epidemic, agricultural extension specialists are still needed to provide direct counselling to farmers. The optimal type of help is a "best combination" of support that combines traditional face-to-face technology transfer with the development of digital transformation in agricultural technology distribution systems wherever applicable. Extension scientists have demonstrated a sense of duty in keeping in touch with farmers and assisting them in finding the best possible solutions to the COVID-19 pandemic. The KVK system has designed solutions to various constraints faced by farmers and delivered them to them on time to help them overcome their difficulties.