Agricultural Education and Training Good Practices: ICT
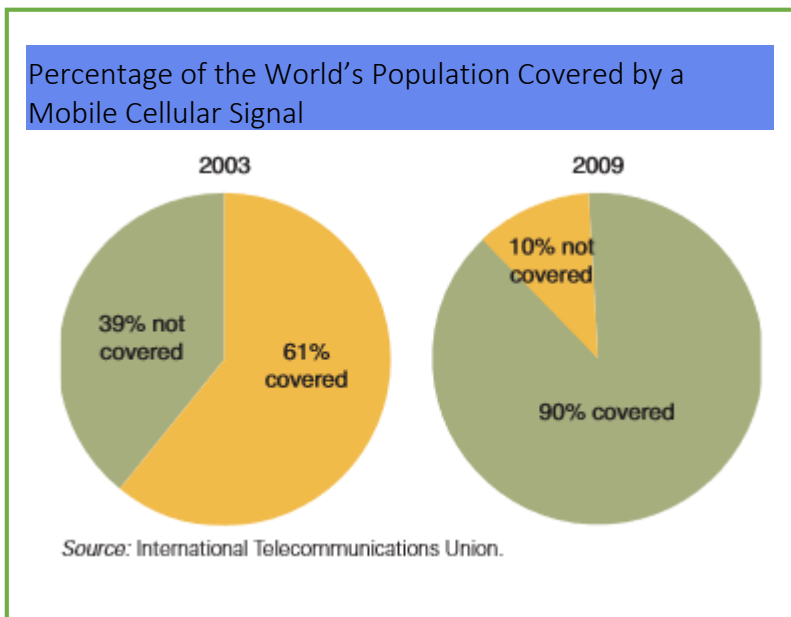
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What is Information and Communication Technology (ICT)?

ICTs are any device, tool or application that permits data exchange through interaction or transmission. The accessibility, affordability and adaptability of these technologies has increased rapidly, even in impoverished regions, making them staples in the home and workplace.

Why ICT in Ag? Why now?

1. Ag matters: Agriculture is a leverage point for reducing poverty and increasing food security. Agriculture accounts for one third of the GDP and three quarters of employment in Sub-Saharan Africa, this trend is echoed throughout the developing world.

2. Program benefits: Integrating ICTs into agricultural programming and interventions can increase effectiveness, broaden impact and ensure retention of skills. ICT-enabled services are relevant and useful to improve the capacity and livelihoods of poor smallholders by creating networks for information exchange and support.

3. Good timing: ICTs bring refreshed momentum to agriculture and increasing investments in agricultural research, private sector interest in the development and spread of ICTs and the upsurge of organizations committed to agricultural development all contribute to ICT impact.

Percentage of the World's Population Covered by a Mobile Cellular Signal

2003: 39% not covered, 61% covered

2009: 10% not covered, 90% covered

Source: International Telecommunications Union.

Ideas for Integrating ICT

- Use appropriate technologies to the context – newer isn't always better, learning what types of devices are already in use to catalyze participation and impact.
- Ensure compatibility of messages or applications with a diversity of technologies to increase accessibility and participation.
- Be responsive to demand – listen and learn what types of information are going to be the most useful and valuable to the target audience.
- Understand the social structure of communities and potential impacts of new technologies on gender and marginalized groups.
- Empower leadership and seek support to promote ICT.

How can ICT affect Agricultural Education and Training (AET)?

ICT can improve the quality of teaching and learning and increase the relevance of AET for greater overall impact on the agricultural workforce. This can be achieved through a variety of ways. Training teachers in basic technology skills and ICT-based teaching methods can improve their competency as educators. By enabling teachers to pass on these skills to students, the effectiveness and employability of AET graduates is improved. The development of technological skills by students will improve their performance and eligibility for relevant employment after graduation.

ICT also enables teachers to access a broader range of information sources to create, revitalize and share educational learning materials. This is a critical part of empowering educators to revise and increase the relevance of outdated curricula. ICT also expands opportunities for distance education and e-learning, which can remove many of the barriers inherent to more traditional education. Another impact of ICT training can be the improvement of education administration and management by enabling efficient and effective management of human and financial resources and monitoring of student performance.

Success Story: ICT in the Field

Reuters Market Light

Reuters Market Light - a mobile phone based services in India - services over 1.3 million subscribers in 13 states for $1.50 per month. The farmers receive daily messages with information about prices, commodities and advisory services from a database on 150 crops and 1,000 markets. The service is estimated to have generated $2-3 billion (US) in income for farmers and 50% have reduces spending on agricultural inputs.

Success Story: ICT in the Classroom

International Institute for Communication and Development (IICD) helps to introduce ICT solutions in the education sector and has unlocked great potential for ICT in AET. In one intervention, teachers in Burkina Faso learned to conduct online research, create websites and use video, publishing and other applications to improve their lessons. Social media training helped the teachers start an active online community for sharing teaching materials with schools across the country.
Source: www.IICD.org

Further Reading on ICT and AET:

ICT in Agriculture Sourcebook
Reuters Market Light
Agricultural Innovation Systems

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