E-AGRICULTURE COMMUNITY OF EXPERTISE

By

Food and Agriculture Organization of the United Nations
E-AGRICULTURE COMMUNITY OF EXPERTISE
Food and Agriculture Organization of the United Nations
Milestones in 2007, Future Plans for 2008

Executive Summary

In preparation for its facilitating role to the action line C.7 ICT Applications - e-Agriculture for the World Summit on the Information Society (WSIS) follow-up, the Food and Agriculture Organization (FAO) hosted the first e-Agriculture workshop in June 2006, bringing together representatives of leading development organizations involved in agriculture. The meeting served to initiate development of an effective process to engage as wide a range of stakeholders involved in e-Agriculture as possible, and resulted in the formation of an e-Agriculture Working Group (EAWG).1 The objective of the EAWG is to create multi-stakeholder, people-centred, cross-sectoral platform(s) that will bring together stakeholders representing relevant constituencies of e-Agriculture.

The first major activity of the EAWG was to establish an initial engagement of stakeholders through an open survey, which was conducted in the last quarter of 2006. There were 4,101 visitors to the online survey, and a total of 3,433 (84%) participated in the survey. A total of 2,121 participants (62 % of those participating in the survey) from 135 countries requested to become part of an e-Agriculture “Forum” and provided their contact details, and 300 participants came forward with examples of e-Agriculture stories and activities. For the full report, visit www.e-agriculture.org

On 28 September 2007, FAO launched the first phase of the e-Agriculture Community of Expertise incorporating the issues raised in the responses to this survey. Priorities in information exchange and communication processes for consideration by the proposed e-Agriculture community were identified as, in descending order of frequency:

• developing virtual communities/networks for information and knowledge exchange between rural stakeholders, as well as for their empowerment through participation;
• capacity building of rural stakeholders in use and application of ICT;
• enhancing farmers’ and producers’ access to market information and information on farming techniques and practices;
• improving dissemination of and access to scientific and technical information;
• enhancing access to statistics and other types of information policy and decision-making.

This document will outline the work that has been implemented by FAO and its partners in the follow-up to the WSIS action line C.7 ICT Applications - e-Agriculture, and the subsequent establishment of the e-Agriculture Community of Expertise. The activities under the e-Agriculture Community of Expertise are structured in three components: (a) development and facilitation of a web-based collaboration space (www.e-agriculture.org); (b) organization of face-to-face events; and (c) in-country interventions. What follows is a review of the development of the web-based space and its uses; face-to-face events held; development of in-country interventions, as well as plans for the development of regional sub-communities in 2008. Since the launch in late September, over 3,000 stakeholders from more than 100 countries have joined the online platform.

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1 Members include: Consultative Group on International Agricultural Research (CGIAR); Technical Centre for Agriculture and Rural Development (CTA); UN Department of Economic and Social Affairs (DESA); FAO; Gesellschaft fur Technische Zusammenarbeit (GTZ); Global Forum on Agricultural Research (GFAR); Inter-American Institute for Cooperation on Agriculture (IICA); International Association of Agricultural Information Specialists (IAALD); International Centre for Communication for Development (IICD); International Fund for Agricultural Development (IFAD); International Telecommunications Union (ITU); World Bank.
The e-Agriculture Community of Expertise

The e-Agriculture Community of Expertise is a global initiative to enhance sustainable agricultural development and food security by helping stakeholders to share experiences and best practices on information exchange, communication, and the use of associated technologies in the sector. The Community reinforces the value of global dialogue and cooperation to address emerging issues around the role of ICT as an instrument of sustainable development. The Community includes a range of participants, such as policy makers, planners, development practitioners, farmer organizations, researchers and information and communication specialists involved in agriculture and rural development. The activities are structured in three components: (a) development and facilitation of a web-based collaboration space (www.e-agriculture.org); (b) organization of face-to-face events; and (c) in-country interventions. Community members interact with each other and contribute a range of resources in the form of case studies, success stories and lessons learned, documents, publications, links, learning resources, and news and announcements. The overall aim of the platform is to enable members to exchange opinions, experiences, good practices and resources related to e-agriculture, and to ensure that the knowledge created is effectively shared and used worldwide.

The e-Agriculture Community of Expertise: A Partnership Initiative

The success of the e-Agriculture Community of Expertise depends to a great extent on the active engagement of a wide range of stakeholders. The Community is coordinated by the EAWG, and FAO is managing the development, editorial content, and maintenance of the web-based platform. Regular bulletins of outputs of the e-Agriculture Community are provided to the stakeholders and to relevant global bodies, including the WSIS Secretariat, the Global Alliance for ICT and Development (GAID) and the United Nations Group on the Information Society (UNGIS). Resources are being mobilized to support the Community’s activities from two main sources, namely the stakeholders themselves and a variety of donors.


The pilot launch of the e-Agriculture web-based collaboration space occurred on 23 May 2007, to coincide with the World Summit on the Information Society Cluster of Meetings in Geneva. The web-based platform, www.e-agriculture.org, is a dynamic space for those interested in shaping e-agriculture policies and practices to network, share information, experiences, and opinions, and to find out about new and useful systems, tools, and methodologies. Although FAO had contacted potential Forum members through an information online newsletter in April 2007, this pilot launch marked the beginning of interactive dialogue with Forum members. Members were able to participate in further development of the web site platform by providing relevant content, including news items, resources and other materials. The content provided by members helped in furthering platform development in preparation for the official “open” launch of the e-Agriculture Community of Expertise which occurred in late September 2007.

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2 For example, “E-Agriculture Week”, 21-28 September 2007, Food and Agriculture Organization of the United Nations, Rome, Italy - A week-long dialogue focusing on the use of information, communication, and associated technologies in sustainable agricultural development and food security.
In preparation for the open launch in September, featured forums were held throughout July and August 2007 on the topic, 'Responding to Demand: The Focus of e-Agriculture' and the results were reported during the special September e-agriculture week (see below).

**E-Agriculture Week/Official Launch of e-Agriculture.org – 21-28 September 2007**
The concept for an ‘e-Agriculture Week’ of consultations meetings and other events was developed after identifying a common theme amongst several meetings and consultations to be held within the same quarter. By bringing these meetings together, and offering them as an ‘e-Agriculture week’, FAO increased the value of these meetings by drawing attention to their common focus on the role of information, communication and knowledge management in Agriculture and Rural Development, and allowed participants to interact in discussions related to technologies, policy and sharing of expertise. The week of meetings, consultations and activities, which included a Technical Consultation for member states, a special Global Forum dialogue event co-sponsored by Global Knowledge Partnership, and several expert consultations organized by FAO and other e-Agriculture Working Group members, also coincided with and contributed to the open launch of the e-Agriculture Community of Expertise on 28 September 2007.

One of the main open events during this week was a conference on *Web2ForDev: Participatory Web for Development*, initiated by partner CTA and organized by FAO and with a number of collaborating organizations. This was an international event, with exhibitions and open spaces for dialogue, to explore how stakeholders in agriculture, rural development, and natural resource management can exploit opportunities provided by Web 2.0 methods, approaches and applications.

**Milestones Since Launch in Late September 2007**
The following are a sample of milestones occurring since the launch of e-agriculture.org on 28 September 2007:

**Virtual on web-based platform e-agriculture.org:**
- Hosting of ICT-KM Programme of the Consultative Group on International Agricultural Research (CGIAR) Forum, ‘Opening Access to CGIAR Research And Knowledge’, September/October 2007. The objective of this Forum was to make it easier for CGIAR staff, partners and potential partners to access, use and add value to the research and to the scientific outputs of the Consultative Group on International Agricultural Research (CGIAR).
- Hosting of the WorldFish Forum ‘Using ICT in Fisheries & Aquaculture Programmes’ in December 2007, the aim of which was to: identify and link people who are working with fisheries and aquaculture programmes; identify examples where ICT are being used in these programmes; and to discuss options for further work in this area.

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3 Panelists included: Anriette Esterhuysen, Executive Director, Association for Progressive Communications (South Africa); Anton Mangstl, Director, Knowledge Exchange and Capacity Building Division, Food and Agriculture Organization of the United Nations; Aida Opoku-Mensah, Director, ICT, Science & Technology Division, United Nations Economic Commission for Africa, & Executive Committee, Global Knowledge Partnership; Viviana Palmieri, Directorate Technology and Innovation, Inter-American Institute for Cooperation on Agriculture; Randy Ramusack, United Nations Technology Officer, Microsoft Corporation; Matt Keller, Director of Europe, Africa and the Middle East for One Laptop Per Child (OLPC); Ethan Zuckerman, Fellow at the Berkman Center for Internet and Society at Harvard Law School, "Global Voices" leader and founder of Geekcorps.

4 IICD, GTZ, CGIAR, Euforic, IAALD, APC, ACP secretariat, IFAD, UBC and UCAD
Face-to-Face Events:
- GK3 Conference, Kuala Lumpur 13 December 2007
  Panel Event: e-Agriculture – Continuing Dialogue to Action
  This interactive session focused on the unique factors related to enhancing sustainable agricultural development and food security by improving the use of information, communication, and associated technologies in the e-Agriculture sector. Key Questions raised included: What is the policy dimension of e-Agriculture today, and how might this change in the future? Where are the limitations in the use of ICT in rural development? What are the biggest constraints to the expansion of e-Agriculture? How can organizations join forces in an economically smart way to increase working capacities and efficiency? (See Annex I)

Future Plans for 2008
Virtual Forums
A number of virtual forums hosted on e-agriculture.org are planned in first quarter 2008, including:
- A look at the impact of communications in policy processes, access to information, and participatory approaches related to e-agriculture, headed by partner GAMOS Consortium, UK (January/February 2008)
- The role of the private sector in e-Agriculture - How do we bring new innovations to an old problem of communications for rural communities? co-sponsored by Global Knowledge Partnership (March/April 2008)
- A lead up event to the e-India Conference: Innovative systems around science and technology related to e-agriculture in Asia, co-sponsored by CDMS (May/June 2008)

Face-to-Face Events
- e-Agriculture India 2008 Conference, New Delhi, India will focus on the changing scenario of ICT for agriculture. (29-31 July 2008): An e-agriculture.org Community of Expertise Panel and workshop is planned, in conjunction with regional partners.
- Joint Conference of IAALD, AFITA and WCCA World Congress 2008, Tokyo, Japan where participants from all over the world will meet and share knowledge on all aspects of agbioscience information and agroinformatics development (24-27 August 2008). An e-Agriculture Community of Expertise workshop is planned, in conjunction with IAALD.

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Moderated by Anriette Esterhuysen, Executive Director, Association for Progressive Communications, and Introduced by Charlotte Masiello-Riome, WSIS communications focal point for WSIS followup to c7: e-agriculture, panellists included: M.S. Swaminathan, Founder and Chairman, MS Swaminathan Research Foundation; Aida Opoku-Mensah, Director, ICT and Science & Technology Division (ISTD), United Nations Economic Commission for Africa; Anton Mangstl, Director, Knowledge Exchange and Capacity Building Division (KCE), Food and Agriculture Organization of the United Nations; Manish Pandey, Deputy General Manager, KATALYST; Matt Keller, Director for Europe, Middle East and Africa, One Laptop Per Child
Development of Sub-Communities and In-Country Interventions

FAO and the EAWG are working with regional organizations in the development of sub-communities. Talks are underway with various regional NGOs who have shown keen interest in taking the lead in the establishment of these sub-committees. Examples include:

- e-Agriculture.org sub-community for the African Region;
- e-Agriculture.org sub-community for Latin America and the Caribbean, focusing on Farmers needs;
- a Youth and e-Agriculture sub-community.
- e-Agriculture.org sub-community for South Asia.
1.1 Lessons Learned

For centuries, farmers have learned from each other. This is not expected to change even with the implementation of ICT policies. So knowledge transfer should occur not only vertically (between policy makers and farmers) but also horizontally (among the farming community). In fact it is the horizontal communication at the grassroots level that sustains agricultural developments in rural communities across the world. Local or indigenous knowledge should be a key feature in ICT considerations for the agricultural community. Also what works best in a particular locale may not necessarily work in another locale. For example the German experience in agricultural development is very different from that in Africa. Individual farmers in Germany are often in competition with each other while farmers in Africa usually work in a collective group sharing information and expertise.

1.2 Visions, Innovations and Trends

The implementation of ICT policies in future should not be only about creating a knowledge chain but also about creating an empowerment chain. Context (the geographical aspect) will be an important consideration in the implementation of ICT development programs.

1.3 Priorities / Potential for Action

Emphasis should be placed on user generated information. Also, we need to train knowledge workers who can bridge the gap between policy makers and the agriculture community.

1.4 Burning Questions / Questions to be deepened further

1. Will farmers’ voices be actually heard? Traditionally, the mainstream media does not pay much attention to rural agricultural communities.
2. What happens to the middlemen who are bypassed in the ICT revolution, when farmers can communicate directly with the market?
3. Accessibility, which is a key concern now, is only one facet of the ICT revolution. Where will e-Agriculture be in 20 years?
4. Can policy makers be held accountable for drawbacks experienced by the agriculture sector with regard to ICT development?
PART II

2.1 Introduction/Preamble of Session
This session combines a moderated panel discussion, with key presentations to provide background on previous work in e-Agriculture. Key issues to be raised for consideration are the unique factors related to enhancing sustainable agricultural development and food security by improving the use of information, communication, and associated technologies in the sector.

2.2 Details of Session/Panel
Event: Parallel Panel Session 2
Date/Time/Venue: Thursday, 13 December 2007, 11.00 – 12.30, Room 306, Level 3
Organiser: Global Knowledge Partnership (GKP)

Panel Speakers:
1. **M.S. Swaminathan**, Founder and Chairman, MS Swaminathan Research Foundation
2. **Aida Opoku-Mensah**, Director, ICT and Science & Technology Division (ISTD), United Nations Economic Commission for Africa
3. **Anton Mangstl**, Director, Knowledge Exchange and Capacity Building Division (KCE), Food and Agriculture Organization of the United Nations
4. **Manish Pandey**, Deputy General Manager, KATALYST
5. **Matt Keller**, Director for Europe, Middle East and Africa, One Laptop Per Child

Moderator:
**Anriette Esterhuysen**, Executive Director, Association for Progressive Communications

Rapporteurs:
1. **Taufik Rashid**, Coordinator for Language Courses, Universiti Kebangsaan Malaysia.
2. **Ravichandran Vengadasamy**, Senior Lecturer, Universiti Kebangsaan Malaysia.

Key Questions:
1. What is the policy dimension of e-Agriculture today, and how might this change in the future?
2. Where are the limitations in the use of ICT in rural development?
3. What are the biggest constraints to the expansion of e-Agriculture?
4. How can organisations join forces in an economically smart way to increase working capacities and efficiency?

2.3 Summary of the session incorporating the Question & Answer Session

Panellist 1: **M.S. Swaminathan**
ICT is particularly relevant in developing small agriculture ventures. Communication centers (information kiosks) are imperative to reach everyone in the agriculture community. For example, in the Avian bird flu case, farmers should be able to relay information to the relevant authorities immediately. The communication should be two-way and in real time. Timeliness of content is crucial. It is not enough for governments to put money on hardware and infrastructure – more needs to be done for software development. Also, to bridge the digital divide, India is working towards training one million knowledge workers who will be distributed among the agricultural communities.
Panellist 2: Aida Opoku-Mensah
In the African experience, community radios have been the most effective tools in bringing knowledge to the agriculture community. We need to create an environment where innovation can flourish in the agricultural sector. Many opportunities can be created in ICT development among the agricultural communities.

Panellist 3: Anton Mangstl
ICT is an enabling tool in the agriculture sector as it is in other domains. Even governments can be bypassed in agricultural ICT developments, though the governments have a crucial role to play. Anton agrees with Swaminathan that in the process of ICT developments in agriculture, knowledge workers are necessary to keep the rural community informed.

Panellist 4: Manish Pandey
Political will is required in the implementation of ICT policies and infrastructure. Though technology can cause disruptions in the lives of the agricultural community, these are mostly positive. The benefits of technology in agriculture are too great to be ignored. For example a telecenter in a rural farming community could provide assistance in terms of presenting a wide range of choices for farmers.

Panellist 5: Matt Keller
The local content is the most important in information exchange. When everyone is connected with everyone, and information is disseminated quickly, we can help avert crises.