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Organización
de las
Naciones
Unidas
para la
Agricultura
y la
Alimentación

Technical Consultation on Agricultural Information and Knowledge Management

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E-AGRICULTURE

I. INTRODUCTION

1. Data in the World Information Society Report 2007 published by the International Telecommunications Union show that the digital divide between high and low income countries is not reducing in overall terms, as measured using a composite “digital divide” index that takes into account several indicators. In addition to differences between countries, it is widely accepted that there is an urban-rural digital divide, whereby rural areas are significantly disadvantaged over urban areas due to a wide variety of demographic, economic, and infrastructural factors.

2. This rural digital divide concerns not only technology and connectivity, but also the multi-faceted issues of ineffective exchange of knowledge and information, as well as a lack of skilled human resources, institutional capacity, and sensitivity to gender and the diverse needs of different stakeholder groups. Bridging the rural digital divide requires an understanding of how rural service providers and communities use and apply information and communication technologies (ICT). This paper describes how this area has come to be known as e-Agriculture, and the actions that have been taken by FAO and its partners to enhance its impact on development.

II. WORLD SUMMIT ON THE INFORMATION SOCIETY

3. The UN General Assembly Resolution 56/183 (21 December 2001) endorsed the holding of the World Summit on the Information Society (WSIS) in two phases. The first Phase took place in Geneva in December 2003, and the second Phase in Tunis in November 2005. The goals of WSIS were to develop and foster a clear statement of political will and take concrete steps to establish the foundations for an Information Society for all, reflecting all the different interests at stake.

4. At WSIS Phase I, FAO launched its partnership-based Programme on Bridging the Rural Digital Divide, which highlighted innovative approaches to using new digital technologies which were based on synergies between information management and communication for development. At WSIS Phase II, the Organization launched a newly designed website for the Programme,

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promoting a framework of good practices, illustrative case studies, tools for capacity building, links to communities practice, news, and other resources.

5. The WSIS "Tunis Agenda for the Information Society", published in 2005, emphasized the facilitating roles that UN agencies should play in the implementation of the Geneva Plan of Action. FAO accepted the responsibility for facilitating follow-up related to the Action Line under *C.7 ICT Applications - e-Agriculture*, and it hosted the first e-Agriculture workshop in June 2006, bringing together representatives of leading development organizations involved in agriculture. The meeting resulted in the formation of an inter-agency e-Agriculture Working Group¹, with the goal of creating a multi-stakeholder, people-centred, cross-sectoral platform that would bring together stakeholders representing relevant constituencies in e-Agriculture. The first major activity of the Working Group was to establish an initial engagement of stakeholders through an open survey in October 2006.

III. THE E-AGRICULTURE GLOBAL SURVEY

6. The open global survey on e-Agriculture was conducted in the last quarter of 2006 to gather perceptions on the scope of e-Agriculture and to determine priorities for action. There were 4,101 visitors to the web site 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".

Survey Conclusions

7. In general, the survey respondents covered a wide range of types of organization from all regions of the world. Only 41% of respondents claimed to be already familiar with the term "e-Agriculture" in English, and French and Spanish versions of the term were even less well-known. Perceptions of what e-Agriculture might comprise focused primarily on information and communication processes and secondarily on technologies and tools, although there were a wide variety of other responses.

8. The principal subject areas that respondents associated with e-Agriculture were in descending order of frequency: farming techniques and practices, market/food chains, training, statistics/data, and science/research. A wide variety of other subjects were identified by small numbers of people.

9. Key stakeholder groups associated with e-Agriculture were identified as, in descending order of frequency: farmers/producers, rural service providers including traders/buyers, science and education, and policy-makers.

10. The generic benefits to be derived from e-Agriculture for all stakeholder groups were principally felt to be enhanced processes in information access or exchange and communication, and the agriculturally-related benefits were enhanced access to markets, improved household

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

finances, and more sustainable livelihoods. E-Agriculture was widely seen to be a contributing factor to achievement of broader development goals, such as more secure livelihoods, enhanced poverty reduction, food security, agricultural and environmental sustainability, trade, conservation etc.

11. 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.

IV. WORKING DEFINITION OF E-AGRICULTURE

12. E-Agriculture is a relatively new term and its scope is expected to change and evolve as understanding of the area grows. For now, e-Agriculture is seen as an emerging field focusing on the enhancement of agricultural and rural development through improved information and communication processes. More specifically, e-Agriculture involves the conceptualization, design, development, evaluation and application of innovative ways to use ICT in the rural domain, with a primary focus on agriculture. Standards, norms, methodologies, tools, development of individual and institutional capacities, and policy support are all key components of e-Agriculture.

V. THE E-AGRICULTURE COMMUNITY OF EXPERTISE

13. In early 2007, the e-Agriculture Working Group decided to establish an international Community of Expertise around the subject, in the context of sustaining follow-up to WSIS in the sector. The overall aim of the Community is to enable stakeholders 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 Working Group is drawing on the materials developed for the Programme on Bridging the Rural Digital Divide, and the feedback from the global survey in developing the e-Agriculture Community of Expertise.

14. The e-Agriculture Community of Expertise, which will be formally launched in September 2007, is set to reinforce the value of global dialogue and cooperation to address emerging issues around the role of ICT as an instrument of sustainable rural development. The Community is aimed at 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 will be 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 will be able to 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, as well as news or announcements.

15. The e-Agriculture Community of Expertise will provide an international framework to facilitate the processes of capturing, documenting, and disseminating the lessons learned through

national and regional activities, as well as the results and implications of multilateral processes related to the use of ICT in agriculture and rural development. The e-Agriculture Community of Expertise will also provide the basis for the international development community to monitor development of conceptual models and methodologies, and to raise awareness to them once they have been validated.

VI. PARTICIPATION OF MEMBER STATES IN THE E-AGRICULTURE COMMUNITY

16. The success of the e-Agriculture Community of Expertise will depend to a great extent on the active engagement of a wide range of stakeholders. The Community will be coordinated by the Working Group, which in turn is lead and facilitated by FAO. Regular bulletins of outputs of the e-Agriculture Community will be 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.

17. **The Consultation may wish to recommend that Members encourage stakeholders to contribute to the Community, as well as create and foster national and regional partnerships in the area of e-Agriculture. The Consultation may also wish to recommend specific topics in the area of e-Agriculture as priorities for consideration by the Community.**