ICT in Agriculture

Announcing the first biannual ICT in Agriculture Newsletter from the World Bank!

Issue 1, May 2012   THE WORLD BANK

Newsletter Contents

Overview: Since the 2011 Launch

This is the first newsletter on ICT in agriculture from the ICT in Agriculture Task Force, whose members are part of the Agriculture and Rural Development Department (ARD), the ICT Sector Unit (TWICT), and regional offices at the World Bank. Newsletters will be sent on a biannual basis. Purposed to summarize activities and trends in the sector, the newsletter will provide an overview of recent events, conferences, and website stories and updates. Each newsletter will also highlight a World Bank project that uses ICT in agriculture.

In the past five months, ARD and the ICT Sector Unit have focused on three main tasks related to ICT: dissemination of the Sourcebook, knowledge building, and knowledge sharing. These tasks have included distributing over 800 book dvds, attending four intensive conferences, initiating the ICT in Agriculture Task Force, updating the website, and eliciting feedback and conversation through electronic forums with the Food and Agriculture Organization of the United Nations (FAO) and the e-agriculture community.

Read the newsletter for an overview of our previous and upcoming activities. A list of relevant resources follows on the last page.

How is GIS Improving Smallholder Agriculture?

"The Department utilizes geospatial technology applications as a toll for agricultural resources planning and management by technical staff and researchers…mainly for mapping of its various infrastructure projects, like Diversion Dams and Farm to Market Roads".
– Dr. Cruz Flameno, IT Center at the Agriculture and Fisheries Department of Agriculture in the Philippines

Continue reading at our website!

Conferences and Events

Learn more on how the World Bank is forging partnerships, collaborating, and sharing knowledge through learning events and workshops.

March 2012: Kigali, Rwanda
The 4ᵗʰ Annual ICT4D (ICT for Development) Conference, *Catholic Relief Services*

Purpose and Learning: Catholic Relief Services holds a three-day Conference each year that highlights promising companies and applications in ICT4D, along with how ICT tool have been integrated into specific projects. The World Bank sponsored this year's Conference to disseminate the e-Sourcebook and website, and to share knowledge and share experiences. 10+ companies presented their applications the first day, the second day was dedicated to exploring experience using these apps in the field, and the third day offered "master classes" so attendees could gain hands-on experience with the technologies.

For more details: A) http://www.ictinagriculture.org/ictinag/node/126
                     B) http://www.crsprogramquality.org/ict4d-2012/

March 2012: Washington DC
Sustainable Development Network (SDN) Forum, *World Bank*

Purpose and Learning: The SDN Forum is an internal event held at the World Bank each year. This year's topic was "Green Growth for All". ICT can play a critical role in reducing greenhouse gas emissions and increasing smallholder knowledge on climate-smart agriculture. This was covered in a variety of panel discussions and sessions including those during ARD Day and the ICT Sector Learning Days.

For more details: A) http://www.ictinagriculture.org/ictinag/content/featured-application,
                     B) http://www.ictinagriculture.org/ictinag/content/research-impact-0
                     C) http://www.youtube.com/watch?v=xaVivsmWYZI
                     D) http://www.youtube.com/watch?v=qndEu6htkLI&feature=relmfu
                     E) http://bit.ly/A2KYyC

March 2012: Washington DC
Mobile Apps for Agriculture and Rural Development, *World Bank*

Purpose and Learning: On the most relevant events in the ICT Sector Learning Days in the SDN Forum was on mobile applications for agriculture and rural development. Intel, in collaboration with TWICT, conducted a review of 92 applications that can be used in rural areas. The 100+ page paper reviews these applications, their sustainability, trends in the sector, among other critical topics. The panel discussion focused on the report.

For more details: A) http://www.ictinagriculture.org/ictinag/content/research-impact-0
                     B) http://bit.ly/IRUCbN

January 2012: Washington DC
Book Launch and Panel Event, *World Bank*

Purpose and Learning: The core team launched the e-Sourcebook, arranging this event to discuss what the World Bank is doing and where it is headed in ICT in Agriculture. While the World Bank portfolio has a surprisingly high record of agriculture projects that contain ICT components, many of these projects are not sustainable and most of them are focused on delivery of ICT hardware (e.g. the purchase of computers for line ministries). To overcome these challenges and increase the focus further on smallholder farmers' direct use of ICT and inclusive ICT innovation, panelists discussed the need for more impact analysis, an engaged community of practice, and experimentation with new tools.

For more details: http://www.ictinagriculture.org/ictinag/content/book-introduction-and-panel-event-dc

Upcoming Events

May 16, 2012: Geneva, Switzerland
World Summit on the Information Society Forum,
eAgriculture Action Line Action Plan Review

Purpose: This is an annual meeting to review the WSIS action plan as it relates to the use of ICTs in Agriculture. Following the second phase of WSIS, in 2005, the eAgriculture community of practice was created which now numbers over 700 members. The WSIS Forum provides for an annual progress review on the implementation of all WSIS action lines, ahead of the planned Summit in 2015.

For more detailed information: www.wsis.org

Late May 2012: Nairobi, Kenya
Launch of the eTransform Africa Report (one chapter on the use of ICTs in agriculture)

Purpose: The main launch will take place at the infoDev/Nokia Open Innovation Africa Summit with a presentation of the report and a media lunch. There will be a presentation at the Nairobi Bank Office as well. The eTransform Africa is a flagship report produced jointly by the World Bank and the African Development Bank. The aim of the report is to show the transformational use of ICTs in different sectors of the African economy. Agriculture is one of eight sectors covered in the report.

For more detailed information: www.eTransformAfrica.org

May 30-June 1 2012: Washington DC
Investing in and Strengthening Agriculture Innovations Workshop

Purpose: This learning event will highlight the key findings of the Agricultural Innovation System Investment Sourcebook, with emphasis on diverse approaches and cases, as well as other on-going operational and analytical initiatives. The sessions will feature key areas of investment that appear most likely to strengthen Agricultural Innovation Systems, and contribute to agricultural innovation and equitable growth. All sessions in the event will be videotaped and posted on the website below.

For more detailed information: www.worldbank.org/ard/ais

e-Forums with FAO & e-agriculture.org

A new way of sharing information and generating knowledge, the World Bank in partnership with FAO and the e-agriculture community has and will continue to host e-forums on ICT in agriculture, with participation open to all who are interested.

Details on the third e-forum (June 11-22, 2012) will be posted on the website soon!
Forum Three: Improving M&E and Data Collection through ICT

FORUM ONE: Strengthening Agriculture Marketing with ICT, December 5-16, 2011

Experience: The forum raised a number of ideas on business models and sustainability including the importance of sponsors, collaboration, and the provision of multiple services through one application. Participants also discussed the benefits of mobile phones in both short and long-term marketing, as well as the potential uses of these technologies in creating information and access to inputs and logistics.

Subject Matter Experts: Grahame Dixie, World Bank**;** Eija Pehu, World Bank**;** Shaun Ferris, CRS**;** Rantej Singh, Reuters Market Light**;** Judith Payne, USAID

Links to the summary and discussion: http://www.ictinagriculture.org/ictinag/node/113

FORUM TWO: ICT Innovation for Green Growth, March 5-16, 2012

Experience: Dedicated to exploring the use of ICT's contributions to making agriculture 'climate-smart', this forum focused on tools for land use management and planning, as well as for agro-weather and early-warnings. This included mobile phone applications that both crowd-source from and send relevant information to farmers on good agriculture practices. Discussions also covered examples on climatic services.

Subject Matter Experts: Bruce Campbell, CGIAR; Eric Sereut, Syngenta Foundation**;** Rodomiro Ortiz, SLU**;** Elizabeth Dodsworth, CABI**;** M-A Bromhead, World Bank**;** Ademola Braimoh, World Bank**;** Reuben Sessa, FAO

Links to the discussion (summary coming soon): http://www.ictinagriculture.org/ictinag/content/ict-innovation-green-growth-happening-now

The World Bank Feature Story:
Improving Agriculture and Advisory Services through ICT in Uganda

In June 2010 and in collaboration with the Ministry of Agriculture, Animal Industries and Fisheries (MAAIF), the National Agriculture Research Organization (NARO), and the National Agriculture Advisory Services (NAADS) in Uganda, the World Bank invested in a five-year project that seeks to increase productivity and the incomes of farmer households by enhancing government performance. One of the chief components of the project (called the "Agriculture Technology and Agribusiness Advisory Services"(ATAAS)) is to form strategies and programs to leverage ICT to improve the delivery of agriculture services. Using ICT, this component focuses on the following objectives:

- Improving services by increasing the quantity, quality, and timeliness of information used in decision-making and day-to-day administration.

- Increasing outreach and promoting networking among agricultural service providers, farmers and other key players for profitable and sustainable agricultural sector by leveraging mobile and other Internet-based information and communications technology.

- Enabling better program stewardship by changing the organizational culture to one of accountability, transparency, competency, and performance-based incentives.

A number of strategies have been employed to fulfill these objectives. One of these is the designing and implementation of a Joint Services Center, or the core ICT platform for interaction between NARO, NAADS, other partners, and clients. The platform features shared infrastructure and a framework that unites operational functions; this allows for increases in integrated services and new gains in efficiency and shared transparency. Another component of this project is the use of mobile phones and applications to 1) deliver information to farmers, 2) collect M&E data, and 3) gather beneficiary feedback.

An interesting pilot just added to the ATAAS project focuses on obtaining accurate performance evaluations of extension agents, which is a constant challenge for agriculture departments in decentralized environments. Funded through a Demand for Good Governance Innovation grant, a team from the AFTAR (Africa Region Unit) and TWICT in the World Bank is piloting the use of mobile technologies and call centers to improve the quality of the government's agricultural extension service. This is made possible by enabling farmers to provide feedback on the actual performance of the extension services providers through the aforementioned technologies. The team is also using the pilot to test the use of mobiles and an Internet dashboard to monitor two ATAAS project outcome indicators. The pilot is being launched this spring in Mbale district with early results expected by June 2012. If successful, the technology solution will be scaled up throughout the ATAAS project.

Please visit the following website to monitor the developments of the ATAAS project:
http://web.worldbank.org/external/projects/main?pagePK=64283627&piPK=73230&theSitePK=374864&menuPK=374969&Projectid=P109224

From the Task Force

The ICT in Agriculture Task Force is an internal World Bank team with colleagues from ARD, TWICT, and the regional units. Representatives from each of these units meet 2-3 times per year to discuss ICT in agriculture projects and investments and to share challenges and knowledge from working in the field. The team also functions as a steering committee, discussing what types of activities, analytical pieces, and events would be most useful to staff working in this area. The first meeting was held in February 2012, and consisted of introductions and overviews of World Bank projects in ICT and agriculture. The task force also decided to focus on activities including the generation of training materials, continuation of regional roadshows, and development of a roster of companies and agencies working in this niche.

The next meeting is set for the end of May 2012. The task force will review progress made in the regional projects and those in the anchor units. Focus will be placed on activities related to the two most prominent themes for the upcoming fiscal year: e-extension and M&E through mobile applications.

Website Highlights

Featured Applications

Coders4Africa
Biometrics in India
Kilimo Salama

Sustainable Solutions

Geographic Info. Systems
Talking Book
Digital Green
FrontlineSMS

Research and Impact

Mobile ARD apps
Video learning
Mobile phones
Market performance

RESOURCES

ICT in Agriculture Sourcebook (2011) and website

www.ictinagriculture.org

Agriculture Innovation Systems Investment Sourcebook

www.worldbank/ard/ais

What the website offers:

http://screencast-o-matic.com/watch/clnFYFayZ

m-ARD Report (ICT Sector Unit & Intel, 2012)

http://bit.ly/GR9qrB

Agriculture & FAO online community (e-forums)

www.e-agriculture.org

e-Transform Agriculture Report

http://www.etransformafrica.org/sector/agriculture

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