High Value Activities in Agri Sector with ICT
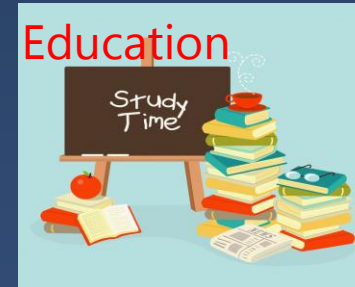
Management Association of the Philippines AgriBusiness and Countryside Development Foundation (MAP-ABCDF)
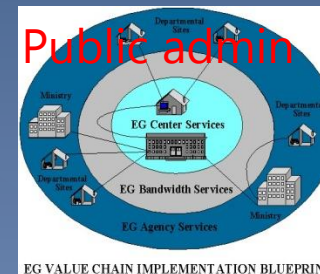
By Rodel Urani, Senior Consultant at StrateGICT Company

What is IT

- Resource required to process, acquire, store and disseminate information.[1]
- Facilitate efficiency and effectiveness for organizations and businesses
- Even more acceptable if majority if not all stakeholders are participating and contributing as to tasks relating to ICT

Vertical Industries with ICT^2

Environment

Business

Education

Science

Energy

Within the framework of national e-strategies, ICT applications benefits in all aspects of life and can support sustainable development

Agriculture

Employment

Health

Public admin

Early ICT in Agri Research[14]

- Agricultural research requires intensive use of communication

- IRRA in Los Banos established a digital microwave link to Manila which dramatically improves voice and data capability, expected to be internationally accessible in 1990

- Telecommunications, optical media, data conversion, expert systems and artificial intelligence

Current Philippine Agri with ICT

- Agriculture and Fisheries Modernization Act (AFMA) of 1997[4]
- Agriculture and Fisheries Management Information System (AFMIS.da.gov.ph)[5]
- Valuable feedbacks through SMS
- MoA of DA and IRRI to provide information dubbed as Nutrient Management for Rice (NMRice tool) through cellphones, Internet or CD's on use of fertilizers and other soil nutrients to boost palay production[6]

AFMA IRR Update as of 12.2009

- The mobilization plan for the design and operationalization of National Information Network (NIN)
- Provision of Internet services to DA Quarantine Ports and Regional Field Unit
- Provision of Internet access to all DA agencies through DA Wide Area Network
- Information systems were developed:
  - Plant Variety Registry System of BPI
  - Sanitary and Phytosanitary Standards Information System
  - Computerized Information Tracking Organizer (CITO)
- Computer operators training being implemented

AFMIS

- Integrated (national) IT- and cluster-based (local) market information system
- Caters to the needs of farmers/fisherfolk, traders, and other users of market information
- Explore alternative markets for their products
- Make better investment and marketing decisions
- Increase awareness and appreciation on the importance of market information

AFMIS Survey

- How do we go beyond it?
- How we max use of ICT?
  - Disseminate info effectively?
  - Other techniques?
  - Less cost?
  - Availability nationwide?
  - Localize, clear, concise info?
  - Live feed?

AFMIS is most useful to?

Farmers/Fisherfolk
45 31.3%

All of the Above
34 23.6%

Consumers
13 9%

Processors/Producers
11 7.6%

Input Suppliers/Traders
11 7.6%

Retailers
9 6.3%

Research and Academic Institution
8 5.6%

Exporters
7 4.9%

DA/MDC Members
4 2.8%

Logistics Service Providers
2 1.4%

Number of Voters : 144
First Vote : Monday, 09 October 2006 13:01
Last Vote : Thursday, 17 June 2010 01:40

NMRice Tool

- Would prove to be a critical tool in improving palay production in the country, as the right use of fertilizers vary among fields, seasons and even years and farmers often improperly use this indispensable farm input by putting the wrong type and amount at the wrong time
- Will also help increase farmers' incomes and protect the environment
- Farmers and extension workers will only have to answer 10 to 15 simple questions either by clicking on a computer or pressing numbers on a cellular or landline phone to immediately get the best fertilizer practices that are tailor-fit for the land they are tilling
  - Expected time to get information after sending inquiry is 15 minutes
- Tap existing Farmer's Contact Center (FCC) at Agricultural Training Center (ATI)

Agri with ICT Other Countries[7]

- Upscaling International Fund for Agri Dev't (IFAD) First Mile Initiative in Tanzania[7]
- Upscaling TICBolivia program[7]

First Mile Initiative in Tanzania

- A seven-year agriculture marketing system development program

- Used blended technologies (community core meetings, mobile, face-to-face, internet, village billboards)

- Measurable outcome was a $1.8 million increase in producer sales

- IFAD's new Rural Micro, Small and Medium Enterprise Support Program in Tanzania will draw on the First Mile initiative on a larger scale
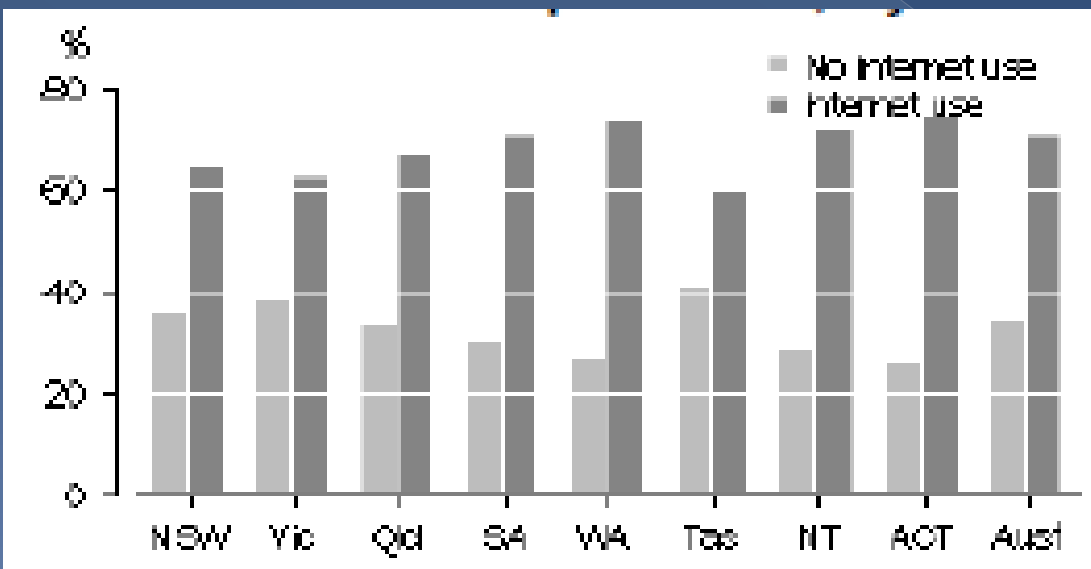
Upscaling TICBolivia

- Focus on price, market and production information in Bolivia
- The information is distributed and collected through rural agriculture information centers in small rural towns linked up through the Internet
- In 2005, around 50 centers were operational
- The pilots have currently expanded to 80 centers
- Many of these centers have a very basic set up but have become fully sustainable

IT in Australia

- Origin of many international standards on IT including corporate governance of IT
- Agriculture
  - Farm Use of IT (FUIT)
  - Use of computers and Internet on farms

Farms Use of IT[8,9]

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	%	%	%	%	%	%	%	%	%
June 2000									
- Farms using a computer	53	58	58	64	68	57	71	70	58
- Farms using the Internet	31	33	32	40	40	35	49	42	34
March 1999									
- Farms using a computer	49	49	45	53	59	49	65	64	49
- Farms using the Internet	19	17	16	19	18	22	31	26	18
March 1998									
- Farms using a computer	40	37	37	43	49	36	52	55	40
- Farms using the Internet	12	10	10	12	10	12	22	20	11

2007-08

Integrated Crop Management[11]

- ICT can facilitate immediate sharing of vital information
  - › Pest infestations: type, date, area, control mechanisms employed, environmental factors, et al
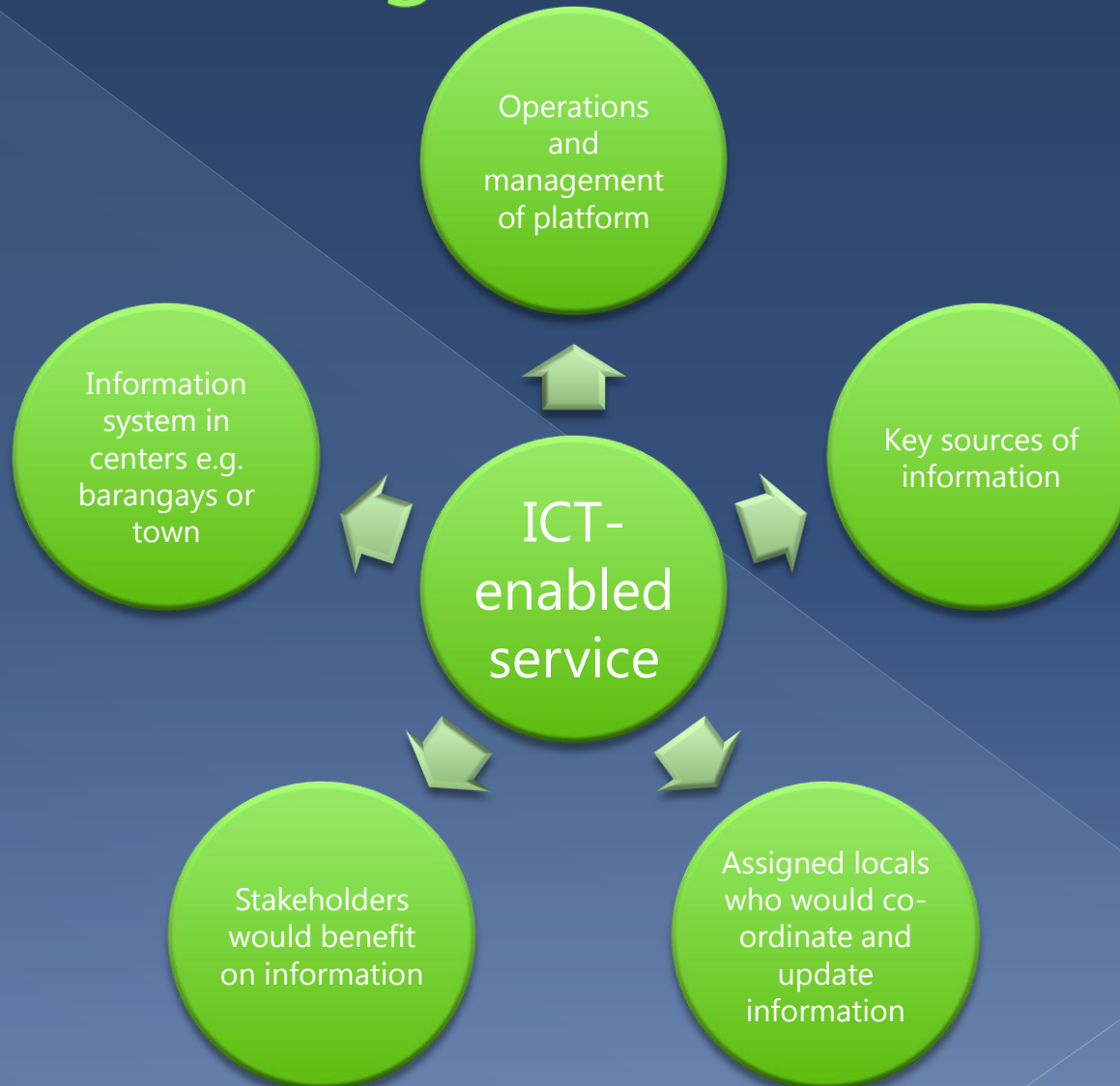 - › Mixing and applying agrochemicals

Agri Entities on Conformance[13]

- Handlers, producers, could be farmers may use ICT to be kept informed on
  - › Agricultural and related regulations
  - › The need to comply on product handling procedures
  - › Any other requirements

UN Jobs[12]

- Senior ICT Specialist is responsible to • Lead CITPO's work in the design and implementation of ICT integration in the agriculture and rural development sector, including in relation to climate change efforts. This would cover, inter alia, work in the following areas: • Policy, legal, regulatory and institutional issues relating to agriculture sector applications. • Business models for public-private partnerships (PPPs) in ICT applications in the agriculture sector, including business case development and financial projections.

Provisioning[10]

Farmer's Seen to Benefit Most[3]

Government reports such as supply and demand estimates, export sales and historical data

Current weather information and forecasts

Accessing historical information on such things as trends and product labelling

Keeping current on current prices

To buy inputs and sell outputs

Sources

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Agriculture - http://www.simonsgp.com/attachments/Image/agriculture1.jpg

Thank You!

Q & A

Rodel Urani, Senior Consultant
StrateGICT Company, purely ICT consultancy firm
http://StrateGICT.pro consultancy@strategict.pro +63.2.215.8861
*We provide businesses StrateGICT engine!