

Are AgRiDOCs Techie?

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PHILIPPINE AGRICULTURE by the numbers

2.8

102

58

400

20

3,2,1...

49



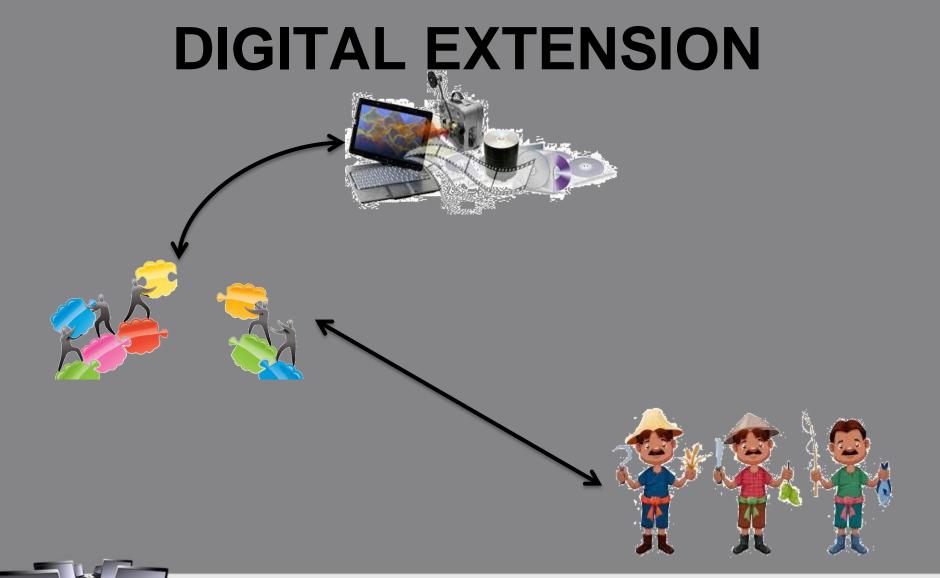
PHILIPPINE AGRICULTURAL EXTENSION by the numbers

11











INTERVENTION

- New rice extension curriculum
- ICT-based action research:
 - 1. Use of computer programs for reporting and writing development proposals
 - 2. Use of agricultural-related applications for field diagnosis and recommendation
 - 3. Use of social networking sites for exchange of information between and among trainees and facilitators
 - 4. Use of agriculture-related websites for research work

OBJECTIVES

- To find out the readiness of the AgRiDOCs in using ICT resources
- To identify the ICT resources available in the AgRiDOCs' work site
- To determine the change in ICT competency of the AgRiDOCs after the training
- To identify the AgRiDOCs' extent of ICT use after 6 months
- To know the common ICT resources shared to and used by the AgRiDOCs' clients after 1 year

METHODOLOGY

Instruments and Data Analysis

- Survey (AgRidocs)
 - 1. Self-assessment
 - 2. Yes/No questions and likert scale
 - 3. Baseline and post-training evaluation
 - 4. Change and impact evaluation after 6 months and after 1 year
- FGD (Clients; After 1 year)
- Comparative analysis

METHODOLOGY

Sample

- 1. 25 Agricultural Extension Workers (AEWs) from Luzon
- 2. 32 years old
- 3. 60% males
- 4. 64% hold permanent position
- 5. 60% personally engaged in farming
- 6. Handling 2-3 barangays
- 7. Lecture and technology demonstration as the common extension method used



METHODOLOGY

- Measurement
 - 1. **E-readiness**: Attitude associated towards the use of ICT resources for extension
 - 2. **E-availability**: Availability of different ICT resources at work site
 - 3. **E-competency**: Level of skills & knowledge in using ICT for extension
 - 4. **E-adoption**: Amount of use of different ICT resources for extension paving way for sharing to and use of ICT resources by their clients



E-readiness (Baseline)

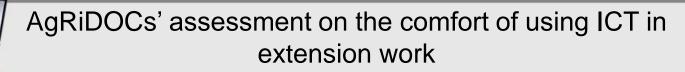
ALL believed that ICT can widen the reach of extension

92

8

Comfortable

Not comfortable



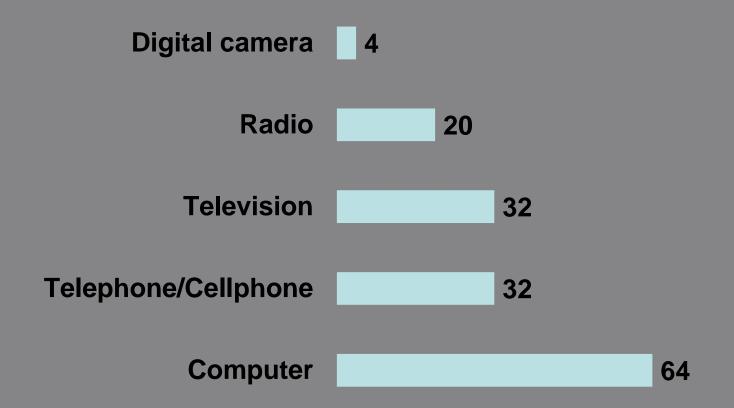
Tablet/Smartphone Radio 60 **Television** 68 Telephone/Cellphone 84 Computer 92



ICT resources that AgRiDOCs are comfortable to use in their extension work

E-availability (Baseline)

RESULTS



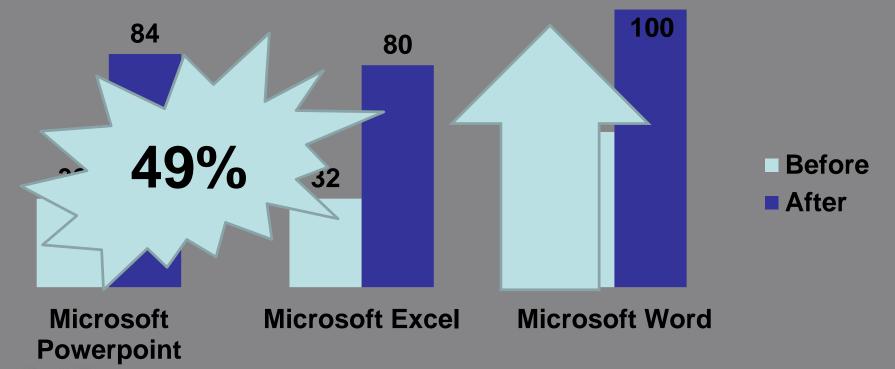
ICT resources issued by the AgRiDOCs' offices for extension work



76% have internet connections at work

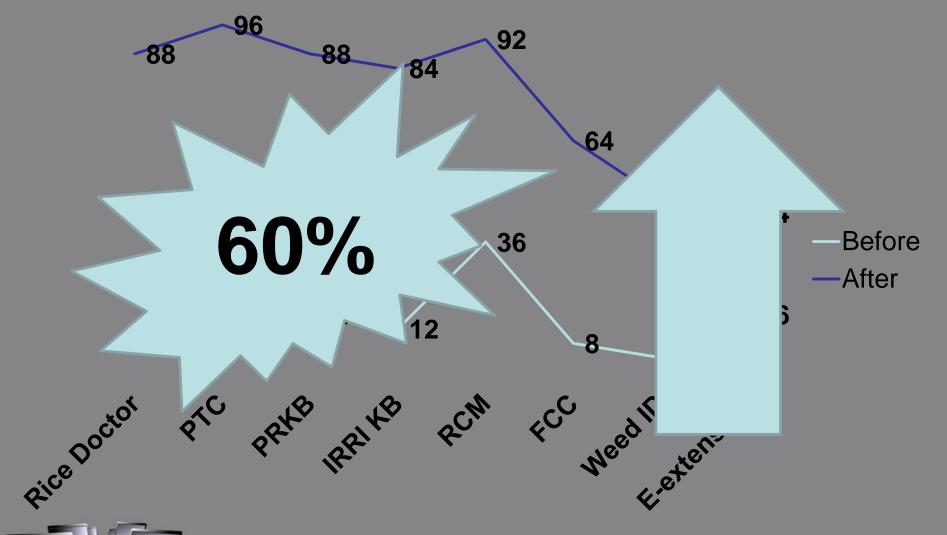
E-competency (Baseline vs. post-training evaluation)

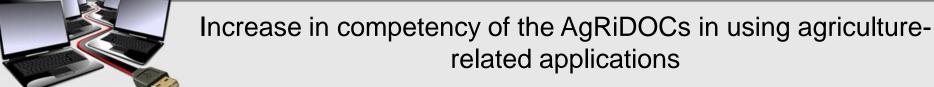
- 24% know how to make videos
- 12% made videos for extension work

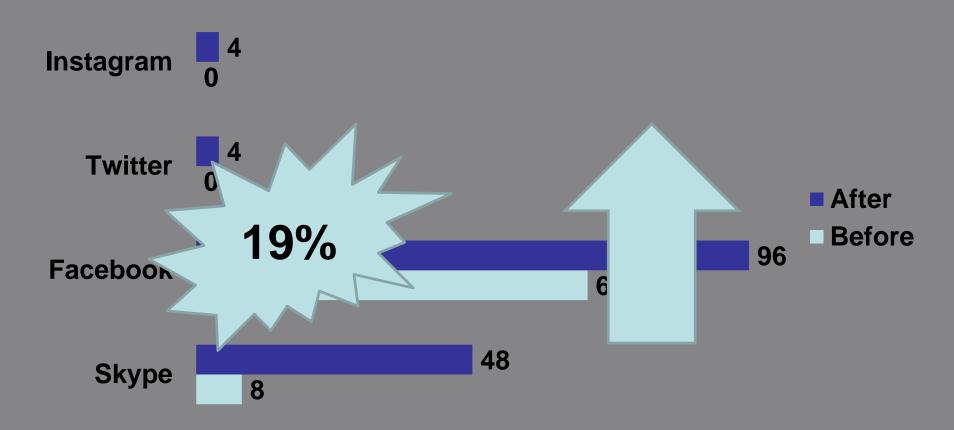




Increase in competency of the AgRiDOCs in using different computer programs





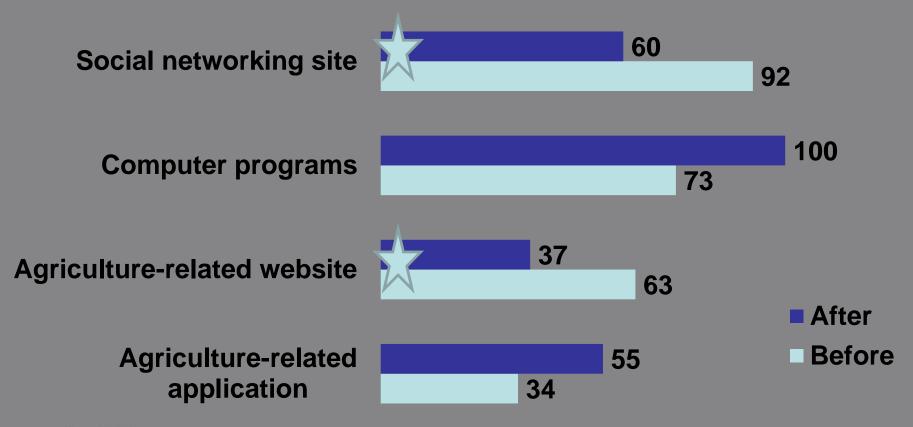


Increase in competency of the AgRiDOCs in using different social networking sites



- ALL become competent in using internet
- 96% become competent in using tablet

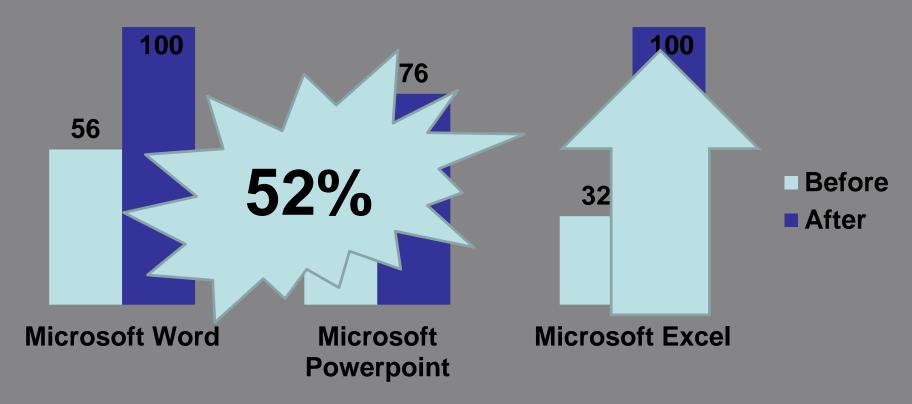
E-adoption (Baseline vs. change evaluation)





ICT resources used by the AgRiDOCs for their extension work

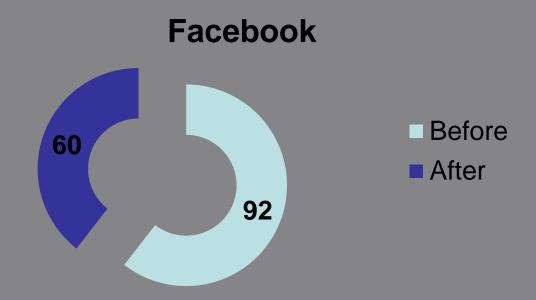
Computer Programs



Percentage of AgRiDOCs who used computer programs for their extension work

Star CropStat and QGIS were also used

Social Networking Site

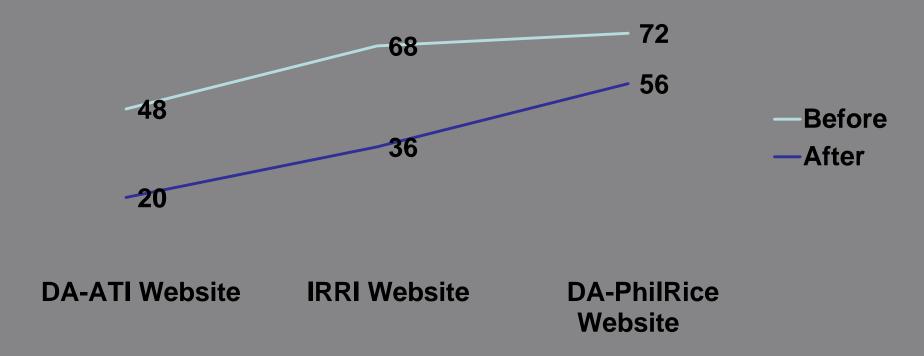


Percentage of AgRiDOCs who used Facebook for their extension work



8% also used Yahoo Messenger

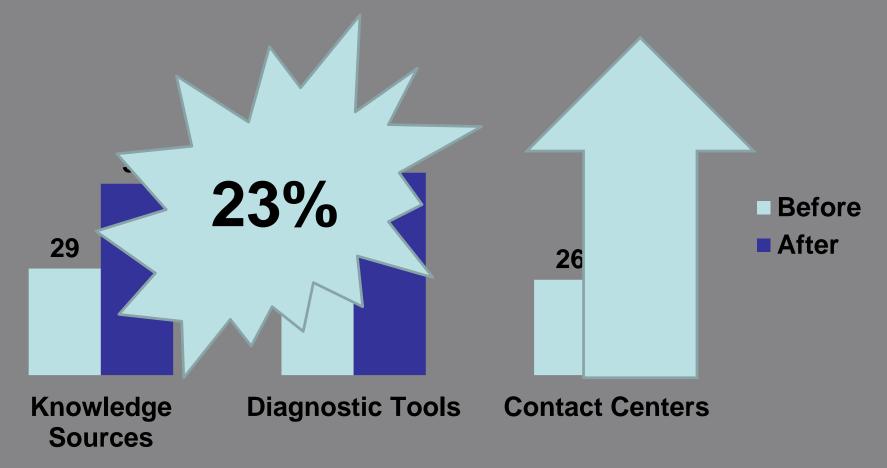
Agriculture-related Websites



Percentage of AgRiDOCs who used agriculture-related websites for their extension work

All are internet dependent

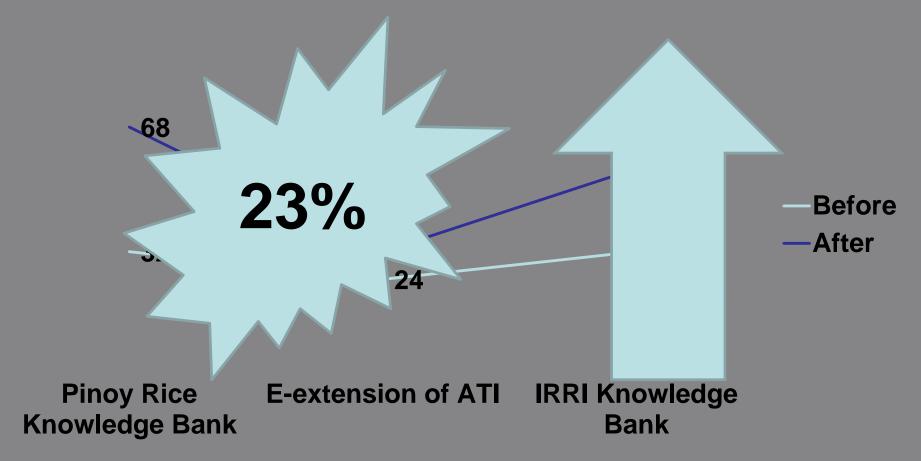
Agriculture-related Applications





Percentage of AgRiDOCs who used agriculture-related applications for their extension work

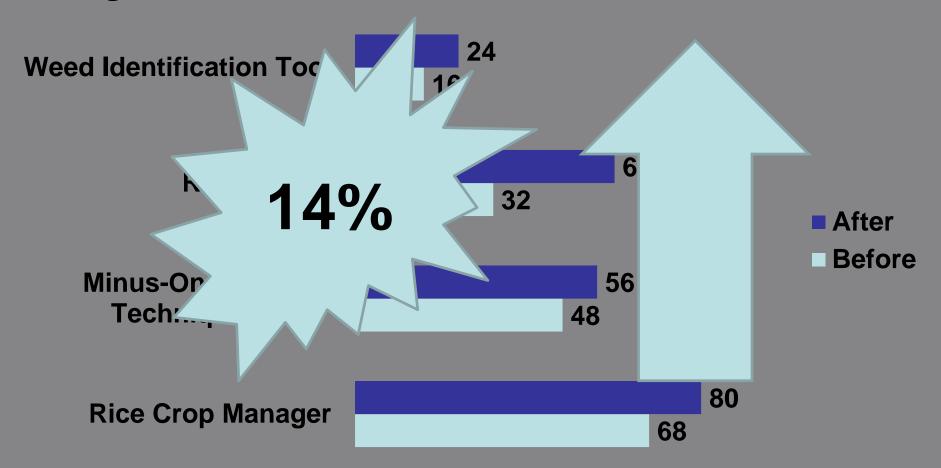
Knowledge Sources





Percentage of AgRiDOCs who used the DA-IRRI knowledge sources for their extension work

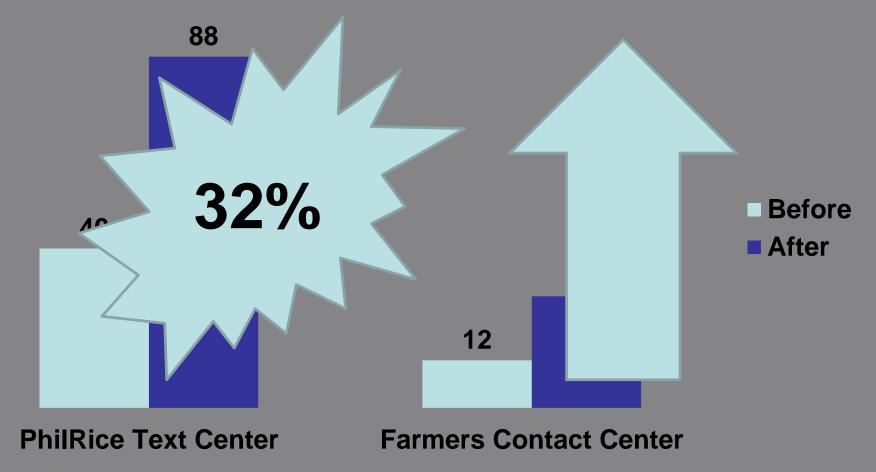
Diagnostic Tools





Percentage of AgRiDOCs who used the DA-IRRI diagnostic tools for their extension work

Contact Centers





Percentage of AgRiDOCs who used the DA contact centers for their extension work

Before

60% assisted farmers using ICT

After 1 year; N=20





Laptop _____

Projector 5

Smartphone 0 5

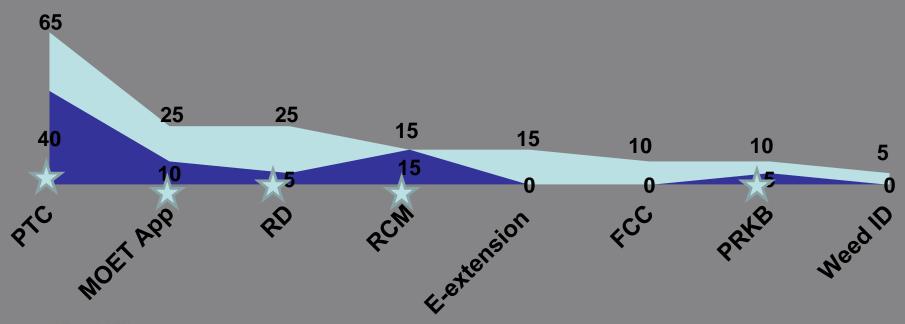
Tablet 20



After 1 year; N=20

Shared ICT resources

■ AgRiDOCs' report ■ Clients' report

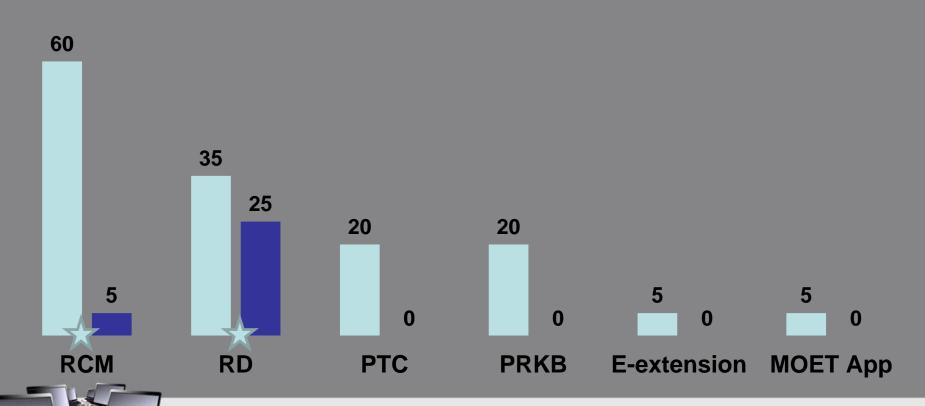




After 1 year; N=20

ICT resources used to help clients

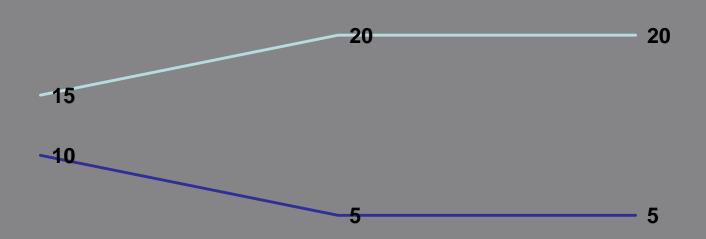
■ AgRiDOCs' report ■ Clients' report



After 1 year; N=20

General purpose of using ICT resources

-AgRiDOCs' report -Clients' report



Teaching

Documentation

Damage Assessment and Recommendation



CONCLUSION

- AgRiDOCs are e-ready.
 - All agreed that ICT resources widen reach in extension and generally they were comfortable using those.
- The training improved the AgRiDOCs' ICT competency.
 - AgRiDOCs became competent in using tablet, internet, computer program, and agriculture-related applications.



CONCLUSION

- AgRiDOCs used the ICT options taught in the training
 - However, there is a low usage of internetdependent ICT resources.
- As a result of AgRiDOCs' e-adoption, clients, mostly farmers, were benefitted.
 - They have an easy access to farming information and appropriate farming management.



CONCLUSION

- Including ICT in AEWs' rice production trainings is an advantage.
 - By doing such, the AEWs will be more ready to reach more farmers at a faster rate.





Improving Technology **Promotion and Delivery Through Capability Enhancement of the Next** Generation of Rice Extension Professionals and other Intermediaries (Project IPaD)





Thank you!



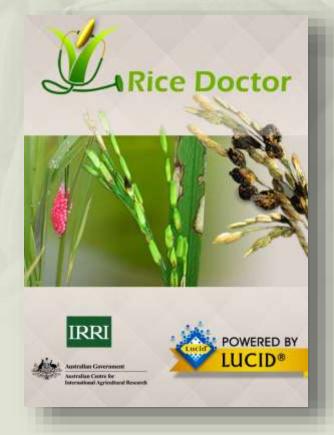


The Doctor is III

Ensuring Effective and User-friendly Rice Doctor Consultations

JCC Barradas, LM Atienza, PR Shankar, and NP Magor Impact Acceleration Unit, International Rice Research Institute







Rice Doctor

Supports farmers and agricultural extension workers in providing:

- Instant midseason in-field diagnosis to 86 crop problems
- Management and prevention options
- Direct access to information on pests and diseases







ICTs in Agriculture

- ICTs create an impact in agricultural transformation by making information and expert support easily accessible to its users.
- This can only happen when the users are able to use it.



RD Evaluation and Usability Testing

This study determines the **usability** of Rice Doctor in making accurate and timely diagnosis of pests, diseases, and other agronomic problems.



The Research Design



 Visual Inspection and diagnosis (VI)



 Material-guided diagnosis (MG)

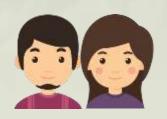


Rice Doctor (RD)

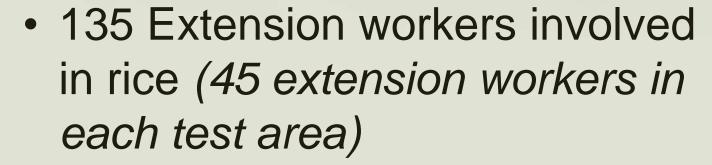


The Research Design





 Three test areas in the Philippines (Cotabato, Iloilo, and La Union)





 Three test plots to be diagnosed in each test area



Field Evaluation

Test Area (Three sites)

Plot 1
MMM

VI (5)

MG(5)

RD (5)

Plot 2

VI (5)

MG(5)

RD (5)

Plot 3

VI (5)

MG(5)

RD (5)



The Research Design





- Field inspection by a local rice specialist to check and identify pests, disease, or other crop problems in the test plots
- Findings would be compared with what was found using the three diagnostic methods



Field Evaluation





Group Discussions













Initial Observations

- To make RD think the way an AEW would think.
- Preferences of young/old AEWs
- AEWs: Will we trust RD more than ourselves? Will we use RD?
- The need to revise and update content and pictures



The Doctor is III

Ensuring Effective and User-friendly Rice Doctor Consultations

E-mail: impactacceleration@irri.org

Enabling the

AgRICE

A New Breed of Rice Extensionist

LEA DEL ROSARIO – ABAOAG

Supervising SRS, TMSD

29th National Rice R&D Conference 7-8 September 2016 PhilRice Maligaya, Muñoz, NE



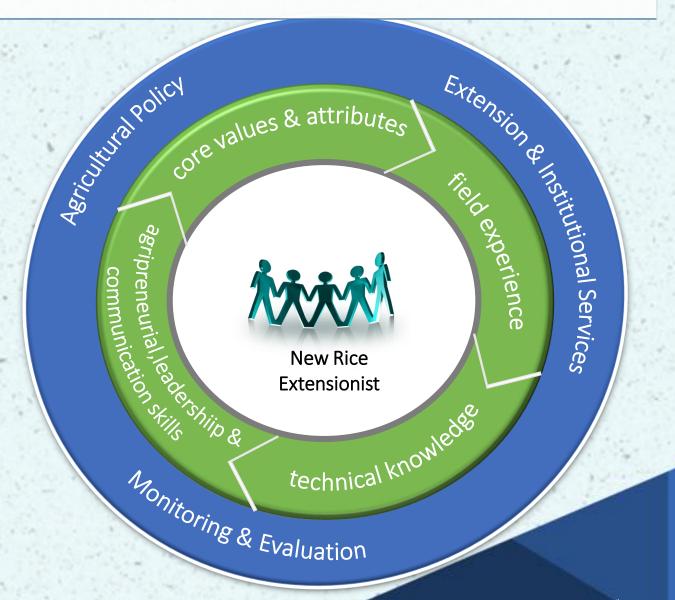


AgRiDOC?

Rice Extension Professional

- Key Informant Interview and Focus Group Discussions plus a National Consultation Workshop
- Definition of an extension worker in ATI's Agriculture and Fisheries Extension Performance Indicator System
- Modernizing Agricultural Extension Systems (FAO, 2005)
- Agricultural development/ extension worker HB 4011 Agriculture and Fisheries Extension Act of 2010
- New extensionist by GFRAS (2012)
- The GRiSP Global Framework for Agronomy Extension (IRRI, 2012)
- Definition by PhilRice of a Rice Self-sufficiency Officer (RSO)

Capability Building Framework



New Breed of Rice Extension Professional

Palerto PalubSaka PalayGuro P-REx

A C R L Development Officer of the Community

Ka-Agri KaSaKa Hanep Kaagapay
PalayHenyo Rice Buddy



Agricultural Development Officer of the Community

(**Ri** for rice, being the entry point; chained **DOC** to stand for partnership, community engagement)

A development catalyst with a strong sense of mission to help transform farming communities toward competitiveness, sustainability, & resiliency using science-based & locally appropriate strategies

The Training Program

Enabling the AgRica: A New Breed of Rice Extensionists



Module 2 "AgRiCool"

Module 3 "AgRi Survivors"

Module 6
"Be RICEponsible"

Module 4
"PalaYcheck &
PalaYamanan
v2.0"

Module 5
"Rise with
Rice"





AgriSurvivors

AgRì DOC





Duration: 3-4 days



Heightens the understanding and appreciation of development and extension work using Transformational Leadership framework









The foundation: mind setting & <u>defining new</u> <u>mission</u> of catalyzing farm community transformation **Duration: 5 days**



Cultivates their passion for and knowledge of agriculture, in general, and rice science for development, in particular





Inspiring sense of mission; seeing the possibilities and opportunities





AgRiSurvivors

Module 3

Duration: 6 days



Develops understanding of and appreciation for the various types of farmers and extension intermediaries, and their coping mechanisms to survive in the rice industry/environment

<u>Sensing the actors</u> in the farm community & their coping mechanism to deepen their sense of mission









PalaYcheck/PalaYamanan v2.0

Module 4

AgRibor Robinson & Robatcheck Advicheck Advicheck

Duration: 35-45 days

Strengthens understanding of the principles ("WHYs") of diversification, intensification, and integration in a ricebased farming system; of technology localization; of skills in field problem diagnosis and management; and of nature inspired and high tech/precision farming

<u>Equipping them for their mission</u> – strengthening their <u>technical competence</u>









PalaYcheck/PalaYamanan v2.0

Module 4

Duration: 35-45 days

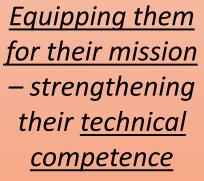








AgRiboc





Rise with Rice

Module 5

Duration: 20-25 days



Promotes learning of entrepreneurship, and other critical knowledge, skills, and competencies to catalyze development and extension efforts



Equipping them for their mission — developing their entrepreneurial, leadership, communication skills







Be RICEponsible

Module 6

Duration: 20-25 days







Nurturing values
and attributes
essential to their
mission and
applying lessons
learned to their
communities.



AgRì Do



Key Changes in the Curriculum

Broader Role Technology TRANSMISSION

Community TRANSFORMATION

RICE

RICE-BASED FARMING SYSTEM

PRODUCTION

ENTREPRENEURIAL Outlook

New/ Renewed Capacities **Proposal writing**

Partnership

Modern farm equipment

Field problem diagnosis

ICT-based extension tools & resources

Key Changes in the Curriculum

Fun & **Interactive** Learning

Games

Video showing

Debates

Reflective Journals

Conversations/KSL

Hands-on

Visits/Tours/Summaries/Integration

Kredo ng AgRiDOC

AgRiDOC ako May pananalig sa Diyos at sa kakayahan ng Pilipino Isinusulong at pinasisigla ang agrikultura Para sa pag-unlad ng ating bansa

AgRiDOC ako
Progresibo't may puso ang serbisyo
Kaalaman ay subok ng agham at karanasan
Patuloy na nag-aaral, pinagbubuti ang kakayanan

Ikinararangal ko, AgRiDOC ako Lingkod at kaibigan ng magsasakang Pilipino Kabalikat sa pagbabago upang ani'y lumago at produkto'y tumaas ang halaga sa merkado.

Mapunta man kung saan, ako'y maaasahan Sa pagbahagi ng bagong kaalaman at kaisipan Lalo na sa paggawa ng nararapat na paraan nang guminhawa at tumatag ang buong pamayanan.

'Yan ang misyon ko, AgRiDOC ako!

What the AgRiDOCs said

"Di lang naka-focus sa technical aspects...nahahanda (pa) ang puso and attitude para harapin ang mga hamon sa agriculture." MRutaquio, Quezon



What the AgRiDOCs said

"Dati parang gusto ko ng iwanan yung agriculture...dahil sa training...mas nagkaroon ng eagerness, alam mo na talaga yung role mo." *JEscalona, Min Or*

"Dati focus ako sa pagiging implementer lang. Ngayon, may perseverance and persistence na gumawa pa ng trabaho na di na expected sa akin." RSaulon, Albay



What the AgRiDOCs said

"I must admit that I was working before with full of doubts. Sometimes I'm even ashamed that I am just an agricultural extension worker. The AgRiDOC training is an eye-opener. Now I am proud to say that I am an agricultural technologist and I serve the farmers." – MBlanco, Surigao del Sur



"After meeting the AgRiChamps, mas naramdaman ko ang hugot. Mas determined na ako na mahalin ang aking trabaho. Dahil din sa training tumaas ang confidence level ko at naging imaginative ako. Gusto kong ituro ang aking mga learnings sa community namin."

- MMejos, Zamboanga del Norte

The AgRiDOCs



PILOT BATCH

Luzon – 25 19 proposals generated/12 fully or partially implemented Visayas/ Mindanao – 25
20 proposals generated/
4 fully or partially implemented

CLUSTER ROLLOUT

Nationwide - 67

ARRTTs -24

Enabling the AgRica



The New Breed of Rice Extensionists



Implemented by PhilRice, ATI, and IRRI with funding from the DA National Rice Program through the Bureau of Agricultural Research



KNOWLEDGE SHARING AND LEARNING FOR STRATEGIC GROUPS OF RICE EXTENSION INTERMEDIARIES

EP Angeles, KET Barroga, ST Rivas, IR Tanzo ,& HJL Altamarino (PhilRice)
BA Pamatmat & JC Barradas (IRRI)

29th National Rice R&D Conference 7-8 September 2016 • PhilRice CES Improving Technology Promotion and Delivery through Capability Enhancement of the Next-Generation of Rice Extension Professionals and Other Intermediaries

With funding from the DA-National Rice Program through the DA-Bureau of Agricultural Research.

Project PaD

PhilRIce-ATI-IRRI

The Right Match Sets the Fire

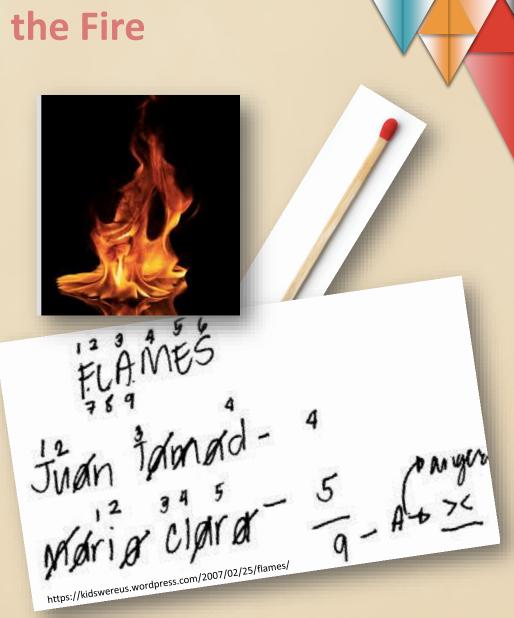
match noun \'mach\

1: a person or thing equal or similar to another

2: a pair suitably associated

3: a contest between two or more parties

4: a prospective partner in marriage



~1:1000



WHAT WE HAD TO DO

- ✓ Identify REIs
- ✓ Define their roles
- ✓ Engage and equip them to do more to help farmers

√ Identify REIs

Focus group discussions

Key Informant Interviews

Review of Literature



RICE EXTENSION INTERMEDIARIES (Strategic Groups)



e.g. RBOs, NGOs, LFTs, ESPs, 4H clubs, IA leads

e.g. agri faculty, staff, students, and student orgs; SCU extn mgrs

e.g. rural broadcasters, agri beat reporters, reg'l information officers

e.g. seed centers, agrichem/fert companies, retailers, local agri banks, MFIs

✓ Define their roles



RICE EXTENSION INTERMEDIARIES

are seen as more conscientized & equipped in their role of providing timely science-based information, products, & services to help farmers.

information conduits

agri & farming advocates

learning facilitators

links to other service providers

✓ Engage and equip REIs

The target rice extension intermediaries were engaged through knowledge sharing and learning (KSL) events.



KSL FRAMEWORK



Modify/ Retain

Assess/ Evaluate Document /Follow-up Implement/ Test

COMMUNITY

Farmer leaders/IAs

ACADEME
SCUs that are
COE/COD in agri

MEDIA

Info officers, community broadcasters

PRIVATE
provinces with
≥3 AgRiDOCs)



~11,000 REIs from priority areas and various groups

Snowball events

Complete directory to aide follow-up through social media, emails, SMS, other opportunities



FEEDBACK FROM M&E

- QUICK AFTER-EVENT SURVEYS
- BASELINE SURVEY after KSL
- FOLLOW-UP SURVEY after 6 mos
- ROI

	Community	Academe	Medi a	Private
Satisfied with KSL	Yes	Yes	Yes	Yes
Relevant to REIs	Yes	Yes	Yes	Yes
Equipped through ICT tools	Yes	Yes	Yes	Yes
Level of usage (KSL)	93%	82%	100%	85%

SUMMARY FEEDBACK FROM M&E

- ✓ Private REIs were most efficient in terms of number of people reached.
- ✓ Academe REIs have more varied ways of helping farmers/agriculture.

	Community	Academe	Media	Private
Type of beneficiaries	Family, friends, co-worker, AEWs, farmers, others	Family, frnds, co-worker, farmers, students, others	Farmers	Fam, friends, co-worker, AEWs, farmers, others
Number of beneficiaries	6,821	3,268	260	8,341
Places reached	Brgy, municipality, Luzon	Brgy, municipality, Luzon, Vis	Brgy, municipity , Vis, Min	Brgy, municipty, Luz, Vis, Min

HOW REIS ARE HELPING FARMERS

"Pagpo-photocopy ng ICT-based tools brochures at pagpapamahagi ng mga ito sa mga farmers na bumibili ng seeds (sa extension program naming) at pagdadownload ng Rice Doctor at pagrerequire sa mga studyante na gamitin ito." – Academe

"Pagkalat ng number ng text center; pagrerekomenda kung saan makakahanap ng tulong." – Farmer coop head "Sa pamamagitan ng pagse-share ng mga natutunan sa aming mga kliyenteng magsasaka during our center meeting schedule sa kanilang mga lugar." - MFI

"Adjusting the financing package— reduced loanable amount to avoid over expenses (of the farmers) and pay immediately the(ir) debt ." — Private/Rural Bank

KEY LESSONS & INSIGHTS

match noun \'mach\

- 1: a person or thing equal or similar to another
- 2: a pair suitably associated
- 3: a contest between two or more parties
- **4:** a prospective partner in marriage

- INTENSIFICATION –
 COLLABORATION
- INTEGRATION –
 COMPLEMENTATION

INSTITUTIONALIZATION –
 CONTINUED ENGAGEMENT



PhilRIce-ATI-IRRI

With funding from the DA-National Rice Program through the DA-Bureau of Agricultural Research.



Listening Groups as a Knowledge Sharing and Learning Mechanism in Group Learning Activities among Farmers

SPasiona | MGNidoy | JManalolV

Development Communication Division

Listening groups



- Radio Forum is a broadcast material aired for a specific listening group.
- Canadian National Farm Radio Forum (1941-1965)
- "Longest and most apparently successful listening groups projects in the world."



Farmers Field School

- "School without walls" for agricultural extension
- Experiential group learning
- 20-30 farmers are enrolled in the entire crop production season

Challenges

- Expert availability
- Extension worker-farmer ratio (1:154)
- Geographical location
- Areas with peace and order issues
- Operational funds (mobility & info materials)

Objectives

The overarching goal of this study is to revisit the relevance of listening groups in group learning initiatives.

Specifically:

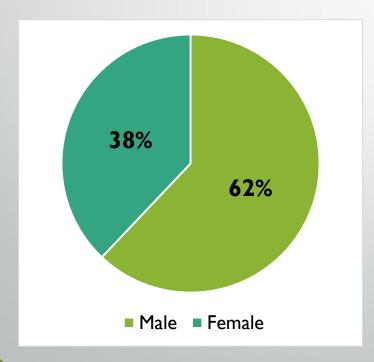
- Assess the effectiveness of the LG in conveying information on rice production technologies
 - Identify the push and pull factors
 - Identify types of information that can best be conveyed using this method
- 2. Examine how LG can improve KSL



Methodology

Survey (N=87)

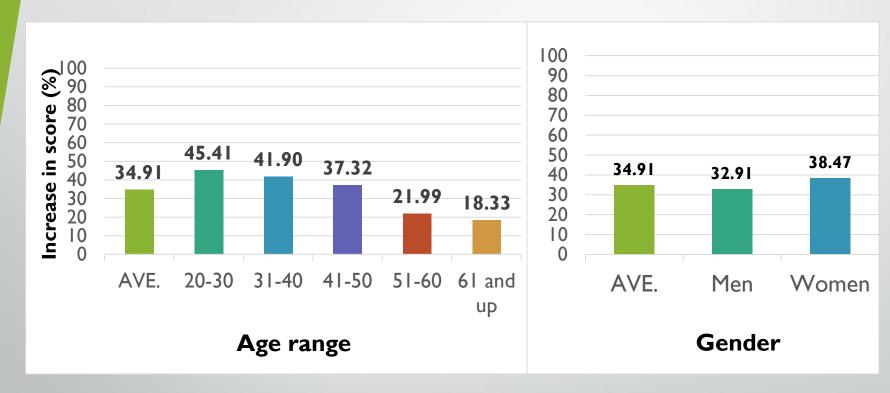
$$Male = 54$$
 Female = 33



- Survey conducted with organized farmer groups in 4 sites:
 - Ollocos Norte
 - Tarlac
 - O Agusan Del Sur
 - Negros Occidental



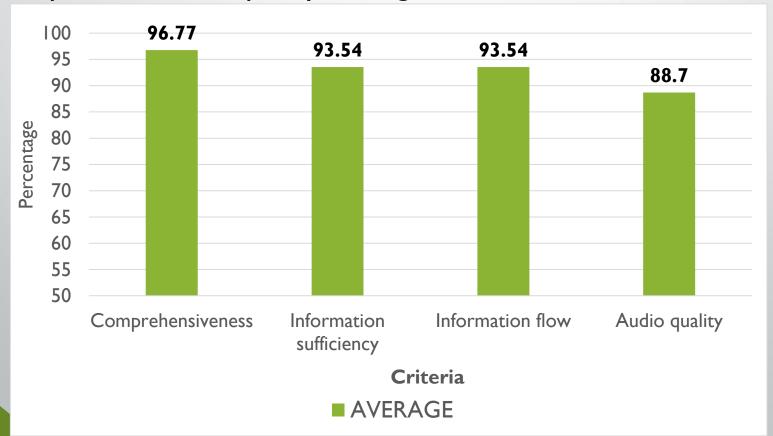
Results: Push factors of listening groups



Higher scores were recorded among the younger and women population.

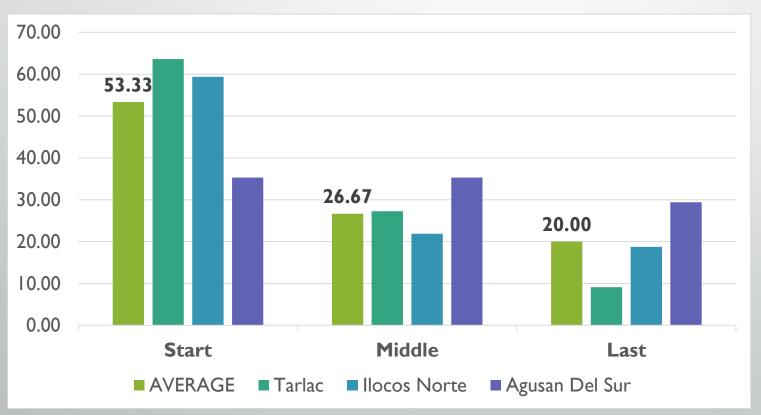
Results: Push factors of listening groups

- Engaging audio content
- Optimum audio quality & length



Results: Push factors of listening groups

Preferred part in group learning initiatives



This method may be more effective in introducing concepts.

Pull factors of listening groups

- Physical disabilities of the audience
- Too technical terms / unfamiliar language (e.g. "darak")
- Unconducive environment



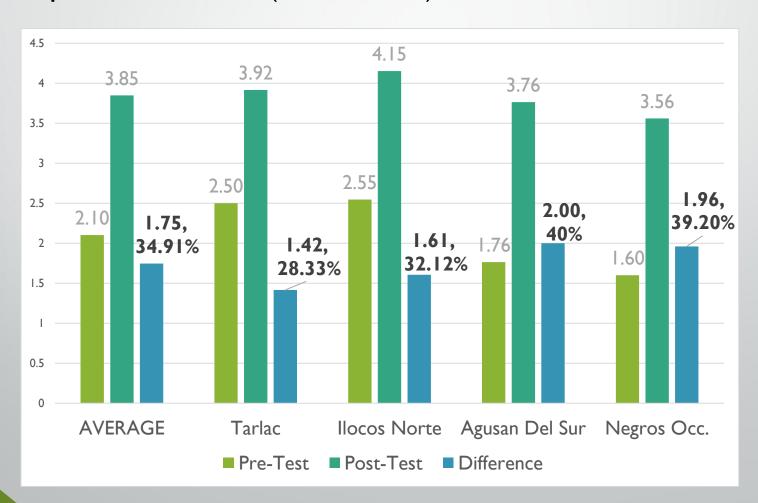
What farmers want to hear



Top preferred topics are about pre-harvest management.

How much farmers learned

Pre- vs. post-test scores (across sites)



Integration of group dynamics (infotainment)

Provision of visual aids

freet-darock 10x room - few room " 9- million / year makis malines Cabote - deeple before harvest 3-4 weeks Cready to open after 1 mil esfabriti- knopie tattong lingo dalawa 3. energ Hakbay -- ibabad mag damag Cup to rong y up can be took bowan wentre wester man 4. Tadda in - 2/3 inches -/ u/fu 5. 6 to 12 pas funged Drock had in contaminate probability 6. pasperized - 6 to 8 Hour pas 10-1014 day Cabole Pamaga I puede ng tampan ng pre 500 hags (batch per 60 Sa Prot nila 100. Gm. 8. Kita Sa Kabuti product 9. 200 grams on /4 kilo Writer - 200 Sa winter data 10. punde nu man ng darak-6 bestim ruom, cleus fb thorvest for madali motobo sa matit malas 11. 3 to 4 weeks for one morning or mage -> vernicomposting max mapal ang Cabote tong tayo) isang dram How help VC.

- 7 avril metlace

emission

emission

emission 12. 1-kilo magani ng- ite Apter: Sa Vermi Cas poena 13. 100 the gram / 5 kiloge Paraba Vitmi Compos 14. Commercial Value - \$140.0 OS. Of fer Harvest - maunis Mis Victori.

CONCLUSION

- Listening groups:
 - remain relevant
 - invite discussion among farmers
 - can address issues on expert availability BUT does not intend to replace physical presence of experts
 - is a cost-effective KSL strategy
 - is an effective KSL strategy especially if group dynamics are incorporated
 - is more effective among younger and women farmers
 - can help maximize the use of audio materials (Pinoy Rice)

RECOMMENDATIONS

- Provide visual aids like handouts about the topic to better facilitate learning.
- Consider the listening groups in curriculum development of FFS.
- Try first in small group learning activities.
- Entertain a wide range of topics that are of high relevance to the intended audience (participatory approach in topic selection)
- Encourage greater involvement of younger and women farmers in group learning initiatives.











Ubiquity of Mobile Phones: Lessons for the Rice Crop Manager DA ATI-IRRI-Smart Collaboration









Technology Dissemination



Before....



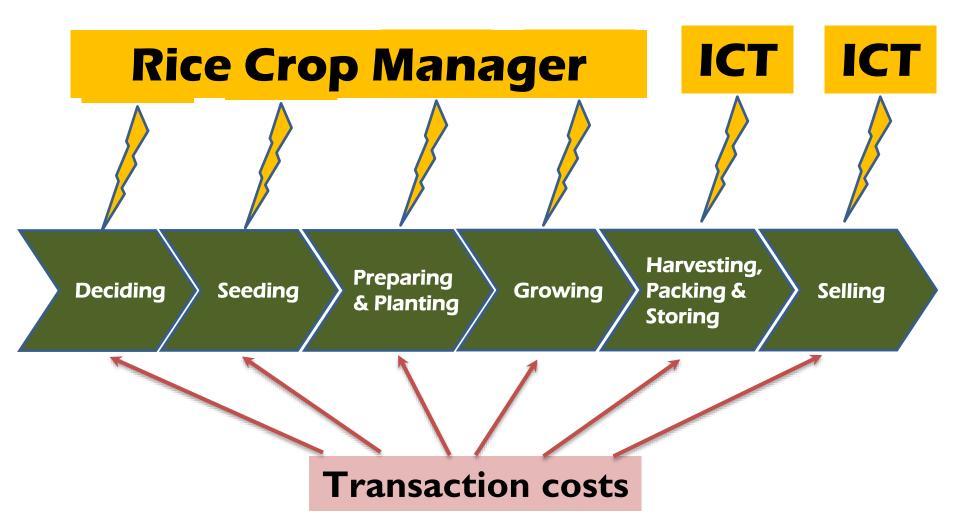
Near Present....





Limited Agriculture Value Chain







Rice Crop Manager





- Uses science-based principles and modern computing to calculate field- and farmer-specific management recommendations
- Periodically updated with new findings from research and new information on rice farming
- Version 1.0 released in November 2013
- Version 1.2.2 released in August 2015
- Version 2.0 in released November 2015



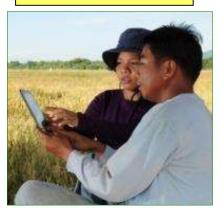
How Rice Crop Manager works?

Personal computer



- 1. Download from web site: webapps.irri.org/ph/rcm
- 2. Interview farmer, off-line or online
- 3. Submit online for automatically calculated recommendation





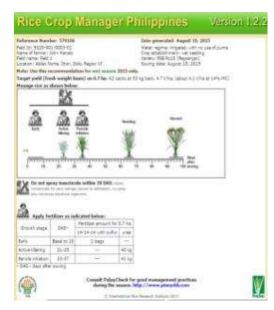


SMS



located on cloudbased server

4. Provide recommendation to farmer



Printout



RCM automatically provides farmers with personalized recommendations





- Accessed through a web browser with a smartphone, Tab, or computer http://webapps.irri.org/ph/rcm
- Used by extension worker, crop advisor, or service provider to interview farmer

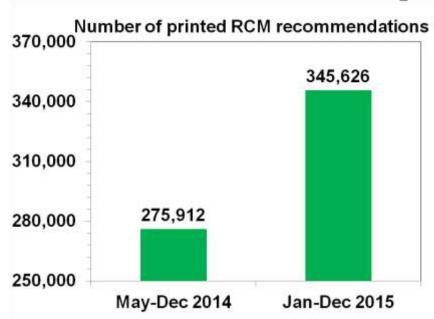
Recommendations are:

- Customized to farmer's specific needs and situation
- Provided to farmer as printed guideline before crop establishment
- Provided as SMS starting in 2015



620,000 printed *Rice Crop Manager* recommendations reached about 150,000 farmers by 31 December 2016











Information available at: http://cropmanager.irri.org/statistics



SMS-based information service is operational

- Enhanced RCM in June 2015 with an SMS-based service
- Launched for RCM farmers through phone calls from authorized DA-ATI staff members to farmers with RCM recommendations.
- RCM-based SMS information service is incorporated into DA-ATI Farmers' Contact Center (FCC)







Mobile phone research



- Tripartite agreement between DA-ATI, IRRI, and SMART Communications == research on mobile phone use and access of farmers
- To design an effective way to enhance access of farmers to mobile phones and SMS service to increase the reach of information from RCM

Duration: Two cropping seasons (Mar/Apr 2016 – May

2017)



Launching in La Paz, Tarlac 17 December 2015

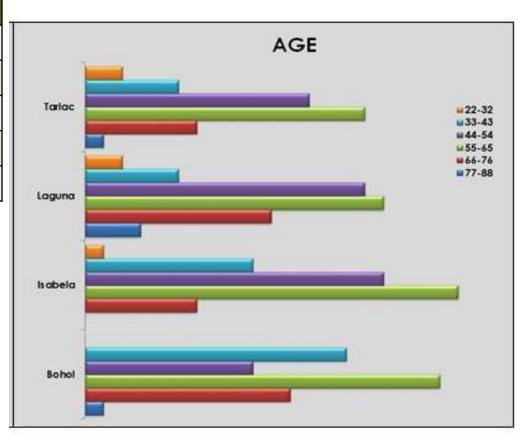


Survey: Mobile Phone Access and Use



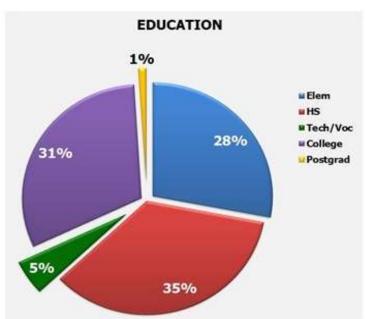
	Respondents		
Research Sites	Research Design	Actual Surveyed	
La Paz, Tarlac	54	41	
Talibon, Bohol	54	54	
Cauayan, Isabela	51	52	
Siniloan, Laguna	51	51	
TOTAL	210	198	

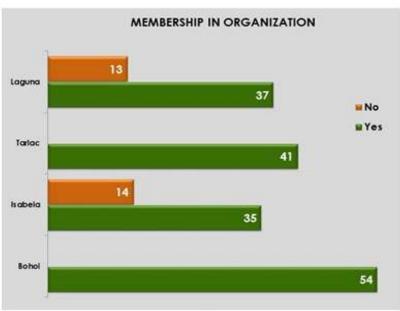
Age ranged from 22 to 88 years, with average age of 55 years



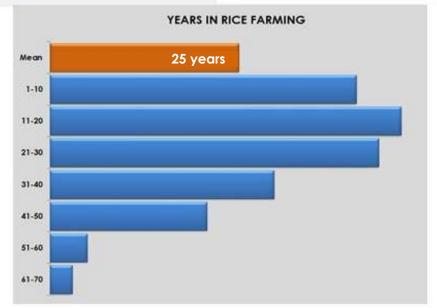


Demography



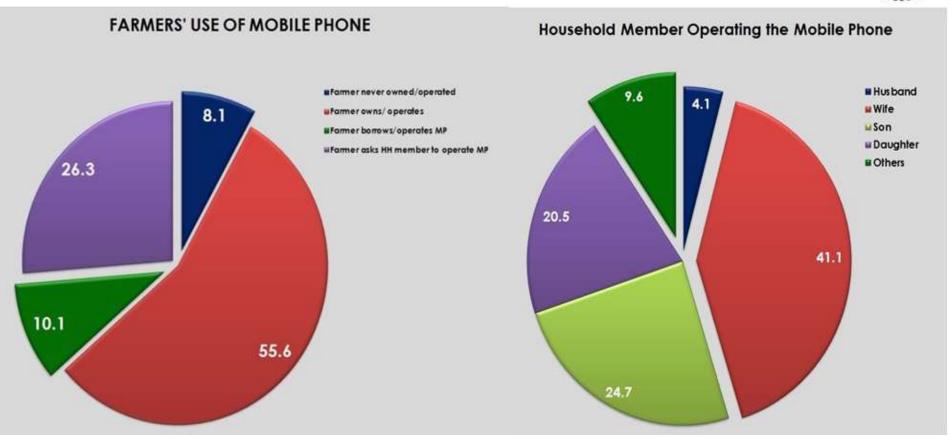


THENT OF A GRICULTURE





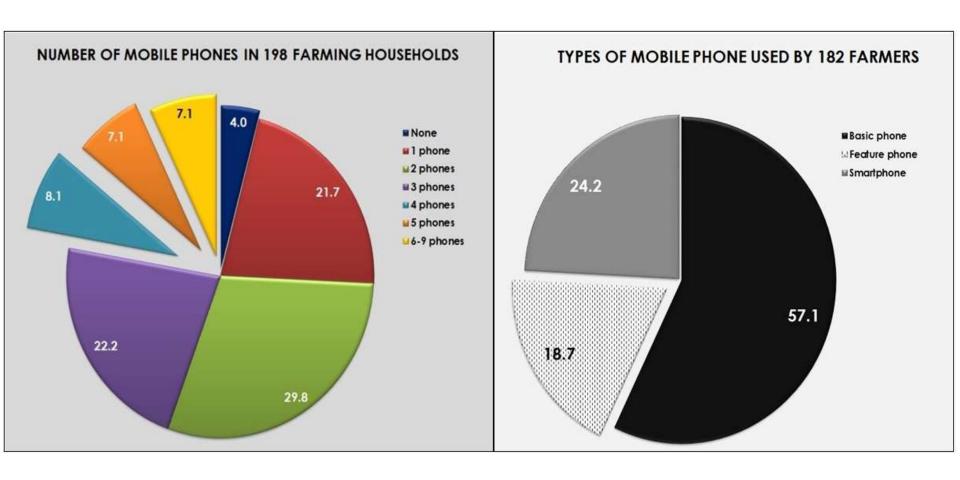




Out of 198 respondents, 182 farmers or 92% reported ownership of and having access to mobile phones

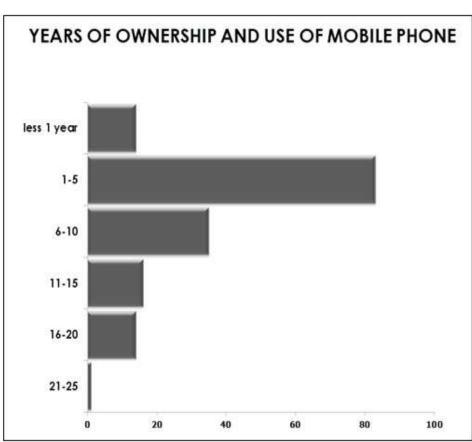


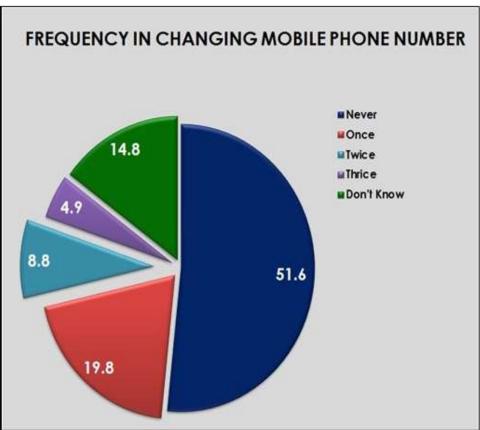






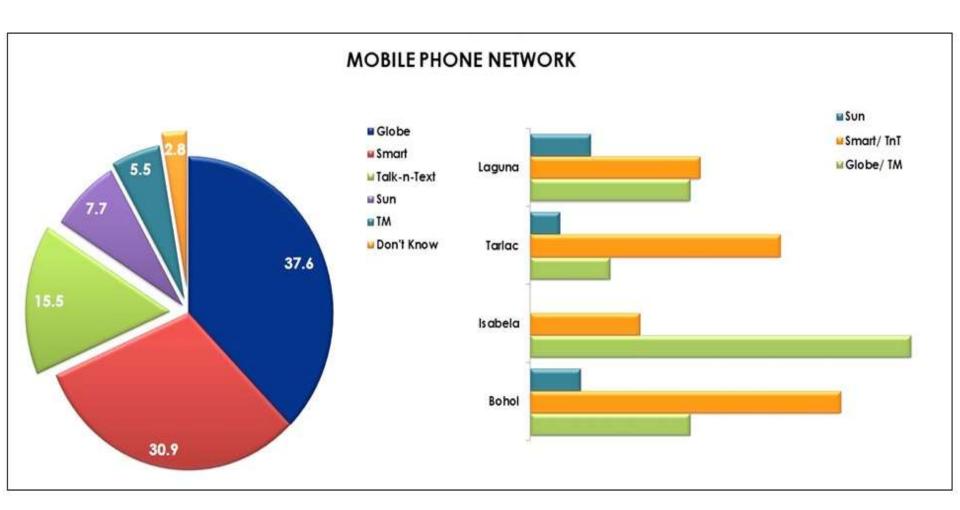






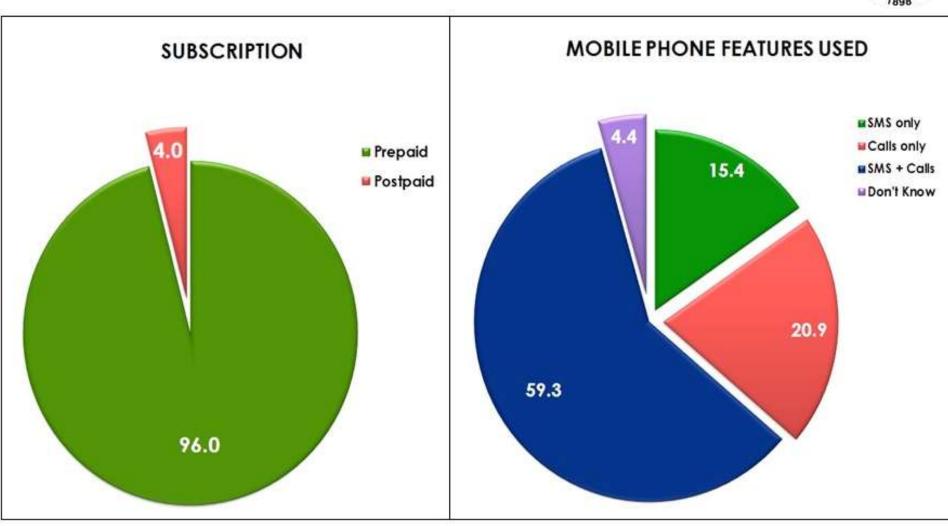








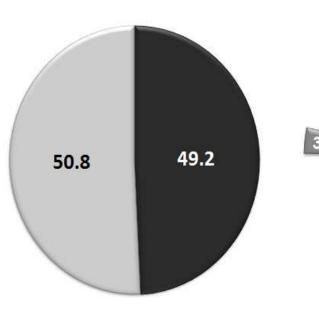




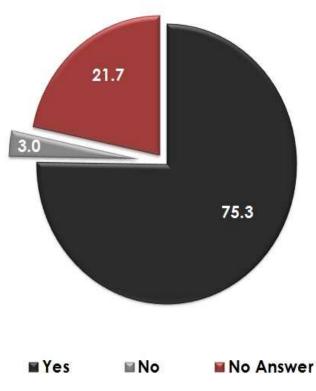




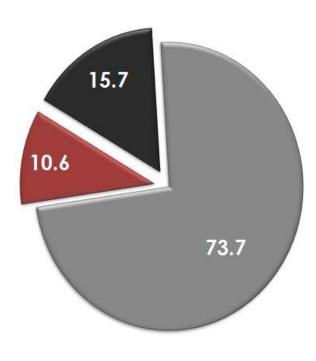




FARMERS' WILLINGNESS TO RECEIVE FARMING INFO



USE OF MOBILE PHONE FOR WEATHER FORECASTS



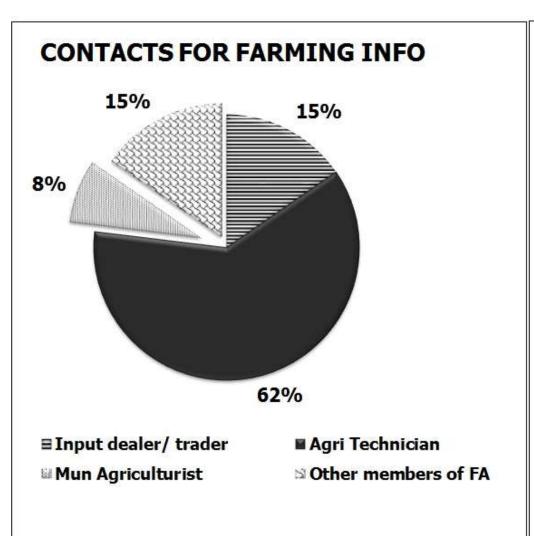


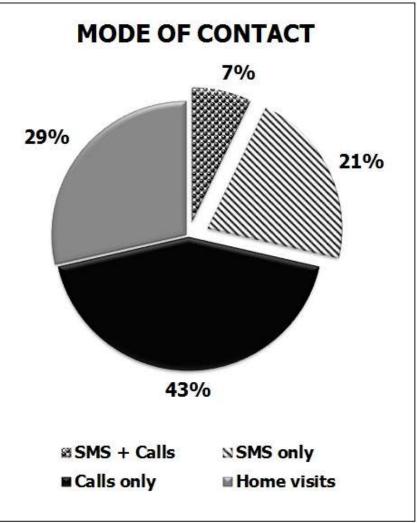


Farming Information	Rank
seed/variety selection	1
land preparation	5
water management	4
fertilizer management	2
weeds, pests	3
harvest, postharvest	6



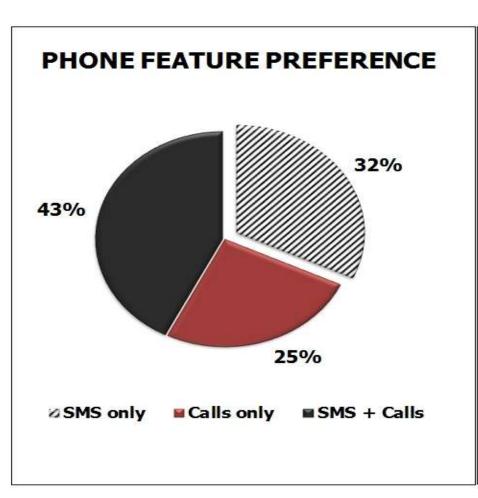


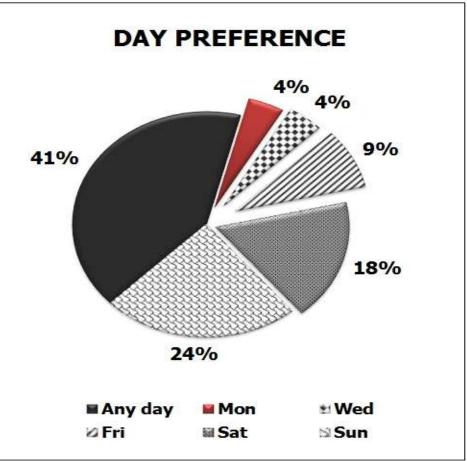












All respondents prefer to receive farming information through SMS and/or calls in the **evening**, after 5:00PM to 10:00PM



From the survey.....



Out of 198 farmer respondents,

- √ 92% own or have access to mobile phones
- √ 75% are willing to receive information

Significance

Opportunities for SMS reminders and sending of farming/ weather information

- Frequency of sending SMS
- Mobile networks with strong signals



From the survey.....



Out of 198 farmer respondents,

50% requested farming info using phones 16% requested weather updates using phones

What

seed/ variety == adaptable varieties; seed availability
fertilizer management == RCM

<u>How</u>

Enhance capabilities of info sources agricultural extension worker (MAO, PAO) co-members of FA == FLEs, LFTs input dealers/ suppliers



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Pakistani farmers to be given five million smartphones

By Chris Baraniuk Technology reporter

31 August 2016 Technology





Five million smartphones will be given to farmers in Pakistan in an effort to improve knowledge of modern farming techniques, an official has said.

The first phones would be delivered in October, said Punjab Information Technology Board chairman Dr Umar Saif.

Advice from experts would also be distributed via the devices.

"The farmers will receive free alerts about the use of pesticides for their yields," said Dr Saif, according to the Associated Press of Pakistan.





Thank You