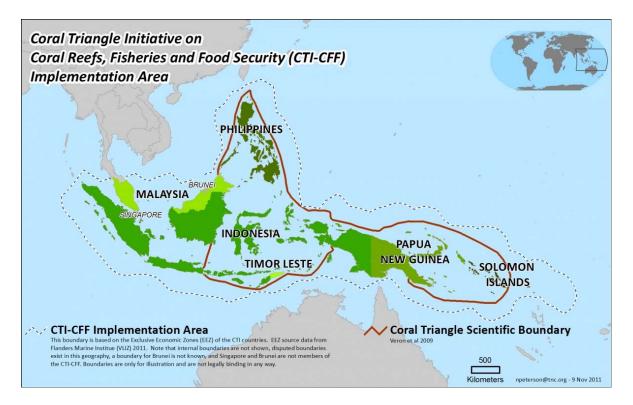
Jeanette Norris Jul. 22, 2013 IAALD World Congress Ithaca, New York The Data
Landscape of
the Coral
Triangle

Coral Triangle Initiative



Multilateral • Ecosystem Approach to Fishery Management •
 Sustainable Food Sources • Biodiversity

Coral Triangle Initiative Objectives

- Strengthening the management of seascapes
- Promoting an ecosystem approach to fishery management
- Establishing and improving effective management of marine protected areas
- Improving coastal community resilience to climate change
- Protecting threatened species.

www.coraltriangle initiative.org/about-us

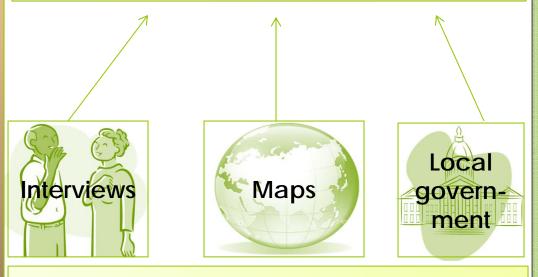
Data & Decision Tools

Data themes

- Easy to use
- Easy to obtain
- Accurate data is important
- Missing data shouldn't halt planning and implementation

Programs

FISH-DA • TURF • COASTPLAN



Data sources

Research on the Coral Triangle

- "Coral Triangle" and Fisheries yields 741 hits from the past 5 years
- "Coral Triangle" and "Marine Protected Areas" yields
 95 hits from the past 5 years



* From ProQuest, as licensed by Syracuse University.

Usability?















cesa CESS











SeaLifeBase



















SOCIOECONOMIC

DMSP-OLS





















B 0 d V e S V



B P Н Y S



















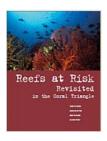
Managing the Data differences

- Variety of Subjects
 - Diversity
 - Interrelations
- Use of Geographic Data
- The variety of products, types of access available.



CTI and Data Tools: Coral Triangle Atlas

- Portal to other sources
 - UNEP-WCMC
 - NOAA
- Geographic Information Science Visualization
 - GIS
 - Interactive Layers
- Access to some raw datasets



Data Modeling: Reefs at Risk Revisited - Coral Triangle

- Treatment of socioeconomic data
 - Creation of aggregated Socioeconomic data products
- Use of GIS
 - Collates information in the process of modeling relationships
- Threats
 - Creates products based on generalized data to take different types of threats into account, without over-complicating the analysis

Effects of Data Curation Practices

- Conserves data
 - Gives it context and structure
- Focuses on individual fields
 - High formalized metadata systems, specialized for particular fields
 - Creates need for crosswalks or other forms of interoperability
- Can to discoverability from external fields

What does this mean for Data Curation and the Coral Triangle?

- Accessing available resources is complex due to the sheer variety
 - Of content, access, and formats
- Differing levels of required technical expertise
 - Can affect ability at access data

How we shape the data landscape of the Coral Triangle

- Affecting the discoverability of data
- Addressing challenges of interoperability
- Ensuring the curation of local survey data
 - Making it discoverable
 - Giving it context
 - Making it interoperable

References

- About Coral Triangle Atlas. (n.d.). *Coral Triangle Atlas*. Retrieved July 16, 2013, from http://ctatlas.reefbase.org/about.aspx
- Burke, L. (2012). *Reefs at risk revisited in the coral triangle*. Washington, DC: World Resources Institute.
- Cabral, Reniel B., David, Eduardo D., Jr., Geronimo, Rollan C., Lim, May T., & Alino, Porfirio M. (2010). Coastal Assessment Tool and Planning Software (COASTPLAN) Tool Demonstration Guide. Quezon City, Philippines: Marine Environment & Resources Foundation, Inc. Retrieved from http://www.coraltriangleinitiative.net/knowledge-hub/tools-and-systems/coastplan/fact-sheet-on-coastplan
- Cabral, Reniel B., Geronimo, Rollan C., & Alino, Porfirio M. (2010). Fishing Industries' Support in Handling Decision Applications (FISHDA) Tool Demonstration Guide. Quezon City, Philippines: Marine Environment & Resources Foundation, Inc. Retrieved from http://www.coraltriangleinitiative.net/knowledge-hub/document-library/decision-support-systems/fishing-industries2019-support-in-handling-decision-applications-fishda-tool-demonstration-guide/view
- Coral Triangle Initiative. (n.d.). About CTI-CFF. Retrieved July 19, 2013, from http://www.coraltriangleinitiative.org/about-us
- Zeng, M. L., Qin, J. (2008). *Metadata*. New York: Neal-Schuman Publishers.

Data Resources

- Defense Meteorological Satellite Program/Operational Linescan System (DMSP/OLS) Products
- COREMAP
- OBIS (Ocean Biogeographic Information System)
- Global Biodiversity Information Facility (GBIF)
- FishBase
- SeaLifeBase
- ReefBase
- NOAA Coral Reef Watch
- Global Observation of Forest Cover and Land Dynamics (GOFC-GOLD)
- GlobCover
- Culture-MERIS
- NASA's Ocean COLOR
- Argo
- SocMon
- SEDAC
- GEO Portal
- GOSIC (included in GEOportal)
- Climate Data Online (CDO)
- <u>United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC)</u>
- FAO- GeoNetwork
- World Meteorological information
- World Bank Data Bank
- REDD
- The Nature Conservancy Conservation Maps and GIS Data

Thank You!

Jeanette Norris Syracuse University jenorris@syr.edu





Email: teeal@cornell.edu Website: http://teeal.org

TEEAL and Access to e-Resources in sub-Saharan Africa

Mary Ochs (Mann Library, Cornell)
Gracian Chimwaza (ITOCA)
Joy Paulson (Mann Library, Cornell)

22 July 2013







What is TEEAL?

- "library in a box" containing 240+ of the world's key agricultural journals
- Offline, via a local network or a single PC
 - no Internet required
- Journals starting from the 1990s
- Updated annually previous year's content















Who Uses TEEAL?

TEEAL is primarily used by students, faculty, staff, and researchers

TEEAL is available to educational and research institutions in countries in Africa, Latin America, the Middle East, Asia, and Eastern Europe

Currently 381 TEEAL sets in place in 87 countries







TEEAL is used around the world









Monitoring and Evaluation

- Multi-faceted approach
 - Surveys
 - Research Paper Contest
 - Gender Equity Assessment
 - Usage statistics (difficult in offline environment!)
 - Bibliometrics

No one approach can tell the whole story







Two Surveys

- 31 institutions in 6 countries (Nigeria, Ethiopia, Kenya, Uganda, Zimbabwe, and Tanzania)
 - Librarians/IT staff to determine e-readiness
 - Researchers at institutions with TEEAL to determine motivators for carrying out research, publishing their work, and incorporating researchbased information into their teaching







E-Readiness Survey: Assess the use and relevance of TEEAL at client institutions

 What is the current and projected state of internet readiness and IT capabilities at TEEAL client institutions?

 What is the degree of TEEAL integration at these institutions? What programs and services are offered by client libraries to support research needs at their respective institutions?







"My institution continues to update (the) TEEAL Database set because: (1) TEEAL users at Obafemi Awolowo University (OAU) increase rapidly due to its academic significance. (2) The TEEAL is absolutely OFFLINE scholarly Database which is highly useful in an environment with epileptic and snail-speed Internet connectivity."

Mr. Olujide Francis Oguntoye, Obafemi Awolowo University in Nigeria







Researcher Survey: Identify factors that motivate scientists to produce greater research output at a better quality

- What are the major factors that motivate African scientists to produce greater research output at a better quality?
- What are the major factors that motivate African scientists to integrate research information into their teaching activities?







Survey 2: Researchers survey

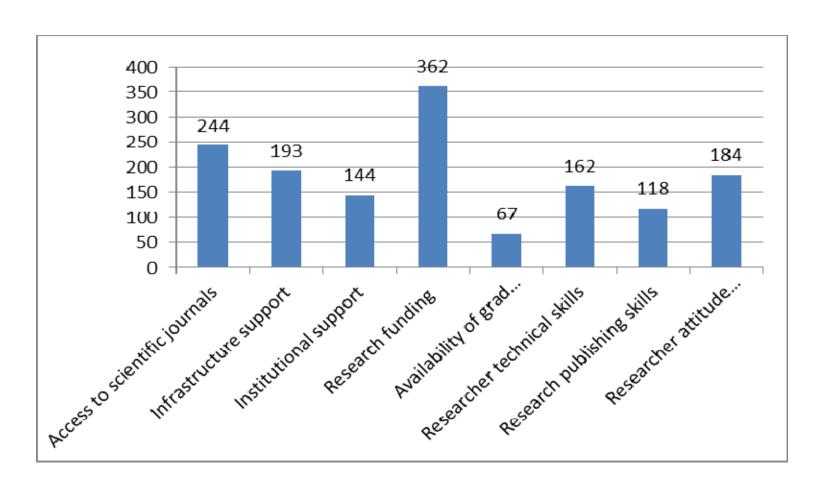
- 730 cases from all 14 countries
 - 267 online
 - 463 in person print survey
- Nigeria · Ethiopia · Uganda · Rwanda · Kenya · Zimbabwe · Zambia · Mozambique · Ghana · Tanzania · Cameroon · Malawi · Lesotho · Swaziland







Ranking of areas of importance to researchers

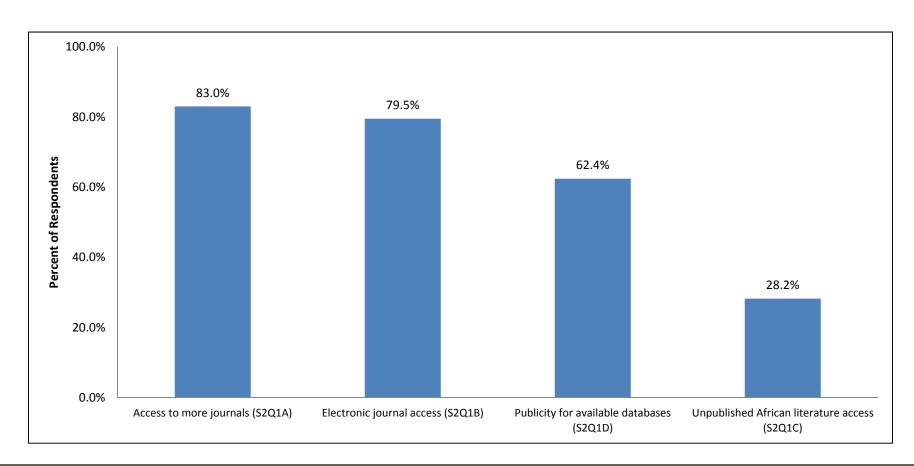








Percentage of respondents reporting "a lot more motivated" with further access to journals.

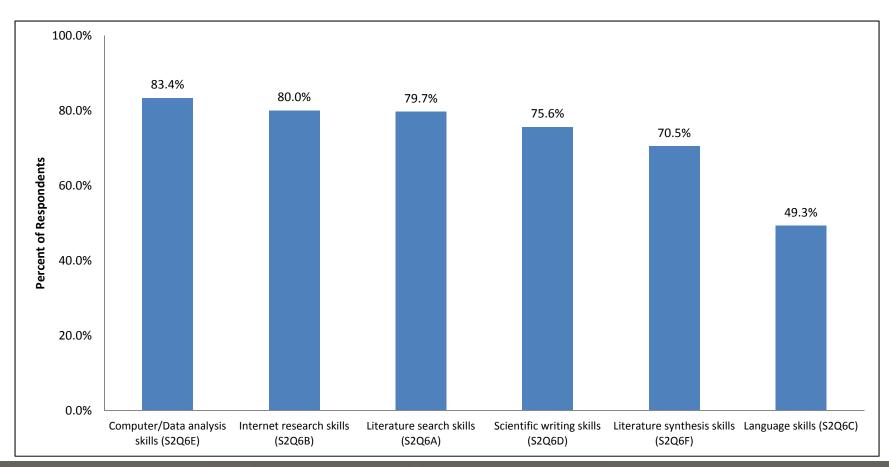








Percentage of respondents reporting "a lot more motivated" with increased technical skills

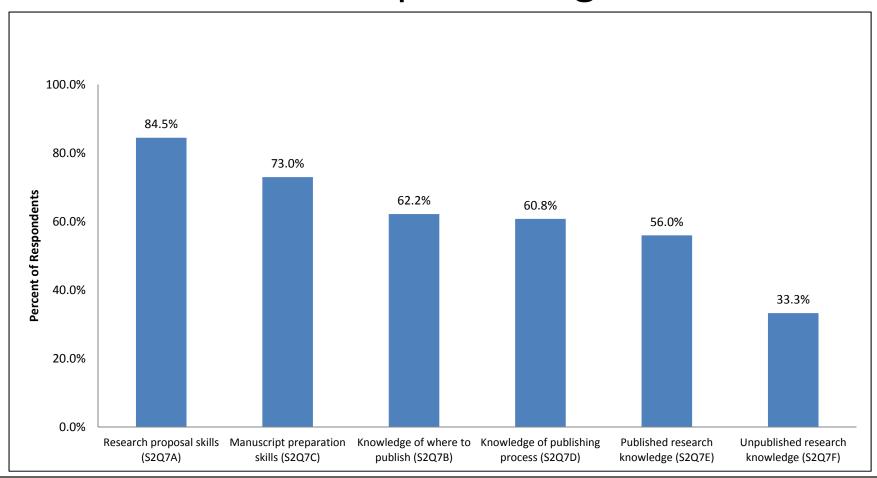








Percentage of respondents reporting "a lot more motivated" with increased skills in publishing









 For further information on TEEAL please visit our website: http://www.teeal.org.

Email TEEAL at <u>teeal@cornell.edu</u>

 Email Joy Paulson (<u>jp243@cornell.edu</u>), Mary Ochs (<u>mao4@cornell.edu</u>), or Gracian Chimwaza (<u>gracian@itoca.org</u>).





XIVth IAALD world congress: Emerging priorities for scientific & agricultural Information

July 21-25,2013; Cornell University, NY USA

AGRICULTURAL INFORMATION ACCESS AMONG SMALLHOLDER FARMERS: COMPARATIVE ASSESSMENT OF PERI-URBAN AND RURAL SETTINGS IN KENYA

Dorine Odongo

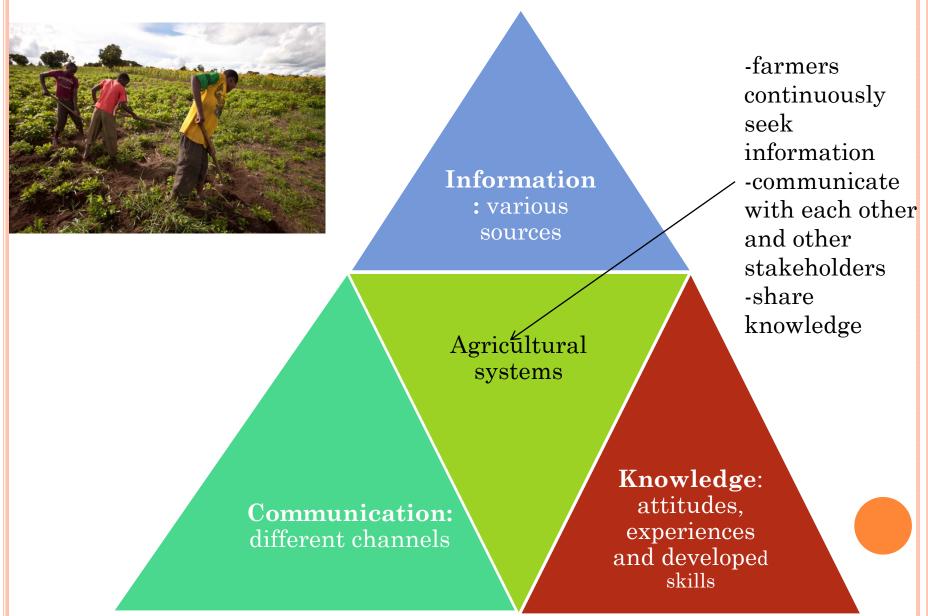
Odongo.dorine@gmail.com

The Scinnovent Centre

PRESENTATION OUTLINE

- Introduction
- Status of extension and advisory services in Kenya (extension system Landscape)
- Study design
- Results
- Explaining the results
- Conclusion and recommendations

KNOWLEDGE, INFORMATION AND COMMUNICATION IN AGRICULTURE



OVERVIEW OF KNOWLEDGE MANAGEMENT IN AGRICULTURE SECTOR (WITH RESPECT TO

GENERATION AND DISSEMINATION)

- 28 agencies that engage in agricultural research (SRA, 2004)→ public-funded, commodity funded and international institutions
- Universities and other technical institutions
- Agricultural extension and advisory service providers→ government and non-government
- o ICT-based innovations→ Kenya an ICT hub
- Indigenous Knowledge

EXTENSION AND ADVISORY SERVICES

- Research and extension → some of the most knowledge intensive elements of agricultural innovation systems
- Extension services improve the knowledge base of farmers through a variety of means
- Agricultural extension operates within a broader knowledge system that includes research and agricultural education (*Rivera et al., 2001*).

EXTENSION SYSTEM LANDSCAPE

-Government extension system→ constrained: ration of extension officer to farm households→ 1: 1093

New policy → National Agricultural Sector Extension Policy (NASEP, 2008)

NASEP 2008, → Innovative approaches:

potential for enhancing access to information

- pluralistic approach in extension service provision, →various actors involved
- •ICT-based services facilitated



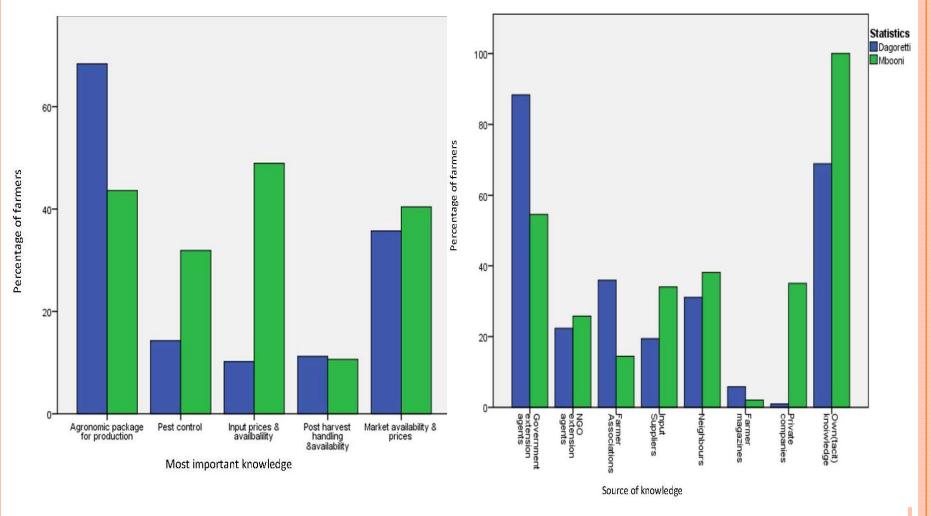
- To what extent has this potential been tapped?
- What is the status of adoption of the innovations?

CASE STUDY

- Comparative study between peri-urban and rural settings of Kenya (February –May 2012)
 - Dagoretti district (outskirts of capital → 11.9 km)
 - Mbooni district (rural Eastern Kenya)
- Purposive sampling
- Questionnaires
- Focused group discussions
- Key informant interviews
- SPSS

RESULTS

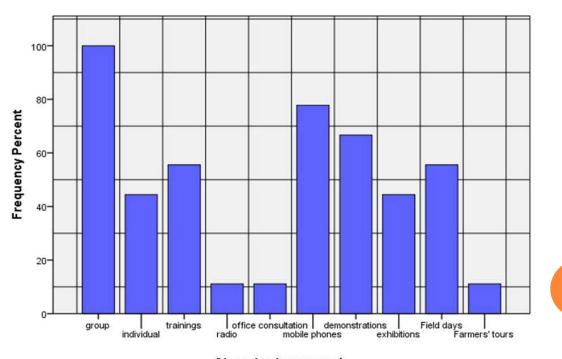
 Farmers' information needs differ significantly between the two settings agronomic package, p=0.002; pest control, p=0.003;inputs, p=0.000) → influences the sources of knowledge commonly used



Sources used most often differs:

District	Source used most often							
	government extension agents	NGO extension agents	farmer associations	input suppliers	neighbours	own knowledge	farmer magazine	private companies
Dagoretti	76.7%	1.0%	4.9%	2.9%	5.8%	7.8%	1.0%	0.0%
Mbooni	28.9%	1.0%	3.1%	10.3%	12.4%	17.5%	0.0%	26.8%

 Tools and approaches used by extension agents are not significantly different:



Dissemination approach

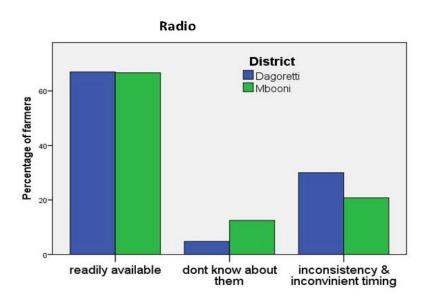
DIFFERENT ICT TYPES USED BY FARMERS:

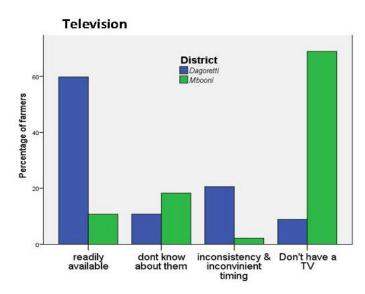


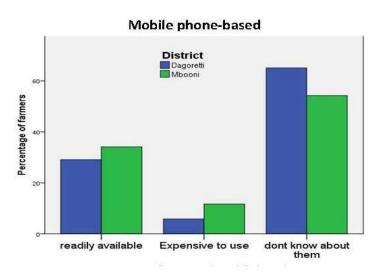
Radio → most popular in both settings, mobile → more popular in rural than peri-urban setting, TVs → more popular in peri-urban; internet use → very low

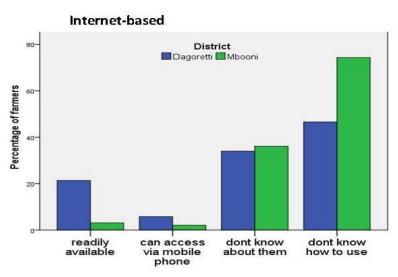
District		types of ICT used to acquire knowledge					
		Radio	Television	Mobile phones	Internet		
	Count	65	43	17	19		
Dagoretti	% within district	87.80%	58.10%	23.00%	25.70%		
	Count	58	11	25	3		
Mbooni	% within district	90.60%	17.20%	39.10%	4.70%		
	Count	123	54	42	22		
Total	% of Total	89.10%	39.10%	30.40%	15.90%		

REASONS INFLUENCING FARMERS' ACCESS OF ICT-BASED INNOVATIONS:









EXPLAINING THE RESULTS

- Difference in information needs and subsequent difference in knowledge source used, → influenced by setting and is local/context specific:
- → higher percentage of farmers in peri-urban setting (76.7%) use government extension agents most often, only 28.9% of those in rural setting.
- → Use of neighbours and own (tacit) knowledge as main sources of knowledge is significant in both settings →
 - importance of face to face interaction of individuals in knowledge acquisition and sharing,
 - importance of implicit knowledge in agricultural production.

- Ease of accessing different sources and ICT-based innovations, influences their use:
- No significant difference in ease of access of input suppliers (p=0.188)
- Significant difference in ease of accessing government extension agents(p=0.001), farmer associations (p=0.000) and private companies (p=0.001)



- o presence of private commercial companies in Mbooni district, → readily available through weekly farm visits, as well as through mobile phone communications
 - Locations and accessibility: long distances in rural areas vs high proximity in peri-urban

- Radio → widely use by most farmers, traditional forms of ICT such as radio more prevalent in advisory service provision (Nyirenda-Jere, 2010),
- only a simple majority, (54.4% and 52.2% of farmers in periurban and rural setting respectively) have easy access to these programmes.
- → Inconsistency and inconvenience in the timing of the programmes.

Widespread use of mobile phones in Kenya; however, → mobile based technologies are not easily accessible to most farmers mainly due to lack of information about these technologies.

 FARA (2009) despite the many initiatives on ICTs and smallscale farmers in Africa, information on the different initiatives are not easily accessible

CONCLUSION

- The entry of non government stakeholders in the extension and advisory services sector has increased the farmers' sources of knowledge →easier to access knowledge
- Significant difference in channels used to obtain information in rural and peri-urban setting:
- Use of different sources of information is influenced by setting and context, based on information needs→ accessibility
- Use of ICT → influenced by nature of business with respect to types of crops grown, information needs and infrastructure

RECOMMENDATIONS

- Government → ensure harmonization /structures for collaboration among different stakeholders in extension service provision
- Create more awareness among farmers regarding the newly developed mobile and web based technologies
- Train farmers and the extension workers on ICT usage to promote the adoption of these technologies
- Ensure consistency in timing and airing of these programmes for maximised uptake and use of the innovations
- Further surveys to establish the situation in different peri-urban and rural areas, with respect to adoption levels of the ICT-based innovations



odongo.dorine@gmail.com



Local radio stations as proven channels to disseminate agricultural training videos and technical information in Benin

Florent Okry, Paul Van Mele & Felix Houinsou

Access Agriculture, Agro-Insight & Africa Rice Center



Introduction

Current local rice production cannot keep pace with increasing demand for consumption →

supporting farmer training through the dissemination of knowledge and adapted technologies

- Video-mediated learning has gained importance across Africa:
 Good quality videos merge theoretical notions contained in books,
 booklets, research notes with farmers' knowledge and practices by
 having farmers show and explain how the technology works
- Videos proved more powerful than traditional face-to-face training workshops in triggering change (<u>Zossou et al.</u>, <u>2009b</u>)



Two important questions remain:

- How to reach as many extension workers and farmers as possible?
- Which institutional arrangements are needed to sustain the use of videos by farmers?



Our experience



Starting points

1- AfricaRice + IRRI+ NARS + NGOs developed 11 training videos (from seed to crop production to postharvest and processing)

2- Videos translated into 40 local languages of Africa

3- Large dissemination of videos across Africa

Case Benin: 2000 VCDs distributed in 2009 to several organisations including 25 radio stations located in 25 municipalities





Our basic assumptions

- It was expected that farmers, farmers associations and extension services would receive VCDs from the radio stations
- "hands-off experiment": the initiator (AfricaRice) limited its role to delivery of quality learning videos. No formal agreements or written contracts were made

This loose experimental set up allowed us to analyse positive deviants within systems: understanding "champions" who emerged in unplanned developments (<u>Biggs, 2008</u>).



Outputs

Profile of the studied radio stations

Name of radio (Location)	Type of radio	Funding sources
Alaketu (Kétou)	Community	International partners (e.g Swiss cooperation), advertisements, contracts for radio programmes
Tonasse (Cove)	Community	Private, advertisements, contracts for radio programmes
Ilèma (Dassa)	Community	Private, advertisements, contracts for radio programmes
Collines FM (Glazoué)	Commercial	Private, advertisements, contracts for radio programmes
Radio Comé (Comé)	Commercial	Private, advertisements, contracts for radio programmes
FM Kouffe (Bassila)	Community	International partners (Swiss cooperation), local community, advertisements, contracts for radio programmes
Solidarité FM (Djougou)	Community	International partners (Swiss cooperation), advertisements, contracts for programmes
Radio Rurale Locale Ouaké (Ouaké)	Community radio	International partners, radio advertisements, contracts for programmes
Radio Rurale Locale Tanguiéta (Tanguiéta)	Community radio	International partners, radio advertisements, contracts for programmes

Name of radio (Location)	Agriculture related programmes			
	Name programme (Year 1 st broadcast)		Sources of technical information	Air slots (per week)
Alaketu (Kétou)	Echange thématique agro-pastoral "Agro pastoral thematic discussion" (1999)	Nagot, Holi Fon	CeCPA, farmer association of Kétou, progressive farmers	Thrice
Tonasse (Cove)	Toglédji "On the field" (2002)	Fon	CeCPA, NGO (CEBEDES), AfricaRice (video)	Once
Ilèma (Dassa)	La terre ne ment pas "Land does not lie" (1999)	Idaatcha	CeCPA, FA (UNIRIZ), NGO (RAPIDEL), AfricaRice (video), retired CeCPA	Once
	Glé xo "Agriculture related business/issue" (2008)	Mahi	Farmers and CeCPA	Once
	Wakplon nu gnonyin "Come acquire knowledge" (2009)	Idaatcha Mahi	CeCPA, projects (e.g. ProCoton) FA (UNIRIZ), AfricaRice (video)	Twice
Collines FM (Glazoué)*	No specific programme. Only on demand. (2004)	Variable	CeCPA, market-oriented farmers	Once/ twice
Radio Comé (Comé)*	Agblédétowo bé gapo "The time of farmers" (2008)	Watchi	CeCPA	Twice

Name of radio (Location)	Agriculture related programmes			
	Name programme (Year of first broadcast)	Language of broadcast	Sources of technical information	Air slots
FM Kouffe (Bassila)	Mieux produire "Increase production" (1999)	Anni, Nago, Kotokoli, Lokpa, Ditamari	CeCPA, FA (e.g. Rice growers and cashew growers), NGOs (e.g. AGEDREN), projects (e.g. GiZ funded projects)	Four times
Solidarité FM (Djougou)	L'heure de l'enseignement agricole "Agriculture teaching hour" (1998)	Dendi, Yom, Lokpa	FA, projects (e.g. PAFIRIZ) literature search, internet, CeCPA	Thrice
Radio Rurale Locale Ouaké (Ouaké	Le paysan au champ "Farmer in the field" (1999)	Lokpa Foodo Peulh	CeCPA, INRAB, literature from PADSA and MAEP, internet, AfricaRice (videos), retired staff of CeCPA	Thrice
Radio Rurale Locale Tanguiéta (Tanguiéta)	Techniques agropastorales "Agro pastoral techniques" (1994)	Biali Waama Gourmantché Naténi N'Bermè Dendi	Projects (any asking for a programme), CeCPA, progressive farmers, IITA (PICS project)	Six times



Use of videos by radio stations

Name of radio (location)	Video show to people at radio station	Video show to staff and group discussion	Special events around themes extracted
Alakétu	No	Yes	No action taken
Tonassé (Covè)	No	Yes	Debate, interactive broadcast, quiz
Ilèma	Yes (once)	Yes	Debate,
(Dassa)	Att. 10		Round table with guest speakers,
			Video show on laptop on campus to small group of people, Air VCD at slots normally devoted to music.
Collines FM	No	Yes	Quiz (questions were extracted from videos)
Mono FM	No	Yes	No action taken
FM Kouffé (Bassila)	No	Yes, followed by a summary in Anni &Kotokoli	The entire VCD (in Dendi and French) was aired when there was a lack of content to fill a programme
Solidarité FM	No	No	No action taken
Radio Ouaké	Yes (Twice)	Yes	Debate
	Att. > 200		Interaction thematic discussions
Radio Tanguiéta	Yes (Once) Att. 9	No	Play version Dendi of the VCD during Dendi air time (when lacking programme content or to replace agriculture programme in Dendi). Technical notes developed by staff member was aired in all 6 languages



Methods of VCD distribution and feedback collection by rural radios

Name of radio	% VCD distributed	Method of awareness raising	Mode of VCD distribution
Alaketu	94	Announcement	Sales: 6
	(n = 150)		Gift: 135 (120 to FA, 10 to farmers and 5 to staff)
Tonassé	92	Announcement	Sales: 5
(Covè)	(n = 120)		Gift: 105 to winners of quizzes on agriculture and to individual farmers
Ilèma	64	Announcement	Sales: 0
(Dassa)	(n = 120)		Gift: 77 (farmers, farmer associations and NGOs)
Collines FM	100	Advertisements in three	Sales: 150
(Glazoué)	(n = 240)	languages (Mahi, Idaatcha, French) at least three times a day	Gift: 90 to winners of quizzes and to individual farmers who requested copies after they participated in quiz
Mono FM	0	No action taken	Na
(Comé)	(n = 40)		
FM Kouffè	100	Announcement	Sales: 6; Gift: 14 (farmer associations and
(Bassila)	(n = 20)		individual farmers)
Solidarité	100	Transferred VCD to the chairman	Sales: 0
FM (Diougou)	(n = 20)	of the federation of the farmer associations of Djougou	Gift: 20 (CeCPA, NGO, farmers and farmer
(Djougou) Radio	100	Chairman federation of FA sold	association) Sales: 30
Ouaké	(n = 100)	most of them	Gift: 70
Radio	100	Announcement	Sales: 0
Tanguiéta	(n = 100)	President of one farmer group	Gift: 100
(Tanguiéta)		collected a copy. Radio staff	



Method of feedback collection from acquirers

- Phone calls (during interactive broadcasts)
- Witnesses (during interactive broadcasts)
- Quizzes
- Surveys
- Letters from farmers

As no formal contracts were signed with radio stations, there was no systematic feedback collection that could be scientifically valued



Concluding remarks

- Radio & TV stations (journalists) are proven channels for the dissemination of technical information
- The request of station managers to sign formal contracts with organisations promoting video-mediated learning deserves consideration when systematic feedback has to be collected.
- The farmer-to-farmer rice videos have created a momentum in Benin and across Africa, but more is needed.
- The international NGO Access Agriculture
 (www.accessagriculture.org) aims at boosting video-mediated
 learning in developing countries. Radio broadcasters and other
 service providers can freely download agricultural training videos
 and related audio files, in any local language available.



Welcome to Access Agriculture



About Access Agriculture

Access Agriculture is an international NGO which showcases agricultural training videos in local languages. Here you can see examples of videos, download them or order a DVD copy. The audio tracks can also be downloaded by radio stations.

This is a platform for agricultural R&D staff, service providers, extension agents, communication

About AgTube



Agtube is where you can upload videos about agriculture for sharing with the agricultural community. This will be

launched in 2013. Keep checking our news section for the latest.

Categories

- + Cereals
- + Roots, Tubers & Bananas
- + Vegetables
- + Pulses
- + Fruits & Nuts
- + Other Crops
- + Livestock
- + Fish
- + Integrated Pest Management
- + Sustainable Land Management Mechanisation
- + Business Skills
- + Methods
- + Other Agtube

"I have been impressed by the website of Access





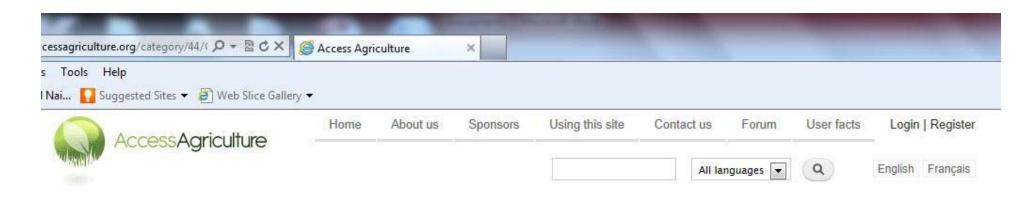
















Grow more, earn more Crop intensification may require

farmers to modify various aspects of their cropping system



SLM12 Conservation agriculture

A technique which has minimum mechanical soil disturbance, permanent organic soil cover and diversification of crops

+ list options



Strip tillage

Strip tillage keeps crop stuble and helps to conserve soil moisture



Bed planting

Bed planting significantly reduces the amount of water needed for irrigating wheat



Urea deep placement

Urea deep placement involves putting urea super granules at a certain depth a week after the paddy is transplanted



Reviving soils with mucuna

Mucuna is a creeping legume that produces abundant vines and leaves that fix nitrogen from the air. How to use it in maize-cassava based systems



Contour bunds

Contour bunds are permanent ridges of earth that follow positions located at the same altitude.



Cashing in with Parboiled Rice

How to improve profitability of rice by producing parboiled rice

Categories

Cereals

Barley

Maize

Oats

Other

Rice

Sorghum & Millet

Wheat

- + Roots, Tubers & Bananas
- + Vegetables
- + Pulses
- + Fruits & Nuts
- + Other Crops
- + Livestock
- + Fish
- + Integrated Pest Management
- + Sustainable Land Management Mechanisation
- + Business Skills
- + Methods
- + Other Aatube



15:00

















Thank you!

Merci!

Mi wanou!

Florent Okry, PhD
Regional coordinator West and Central Africa
Access Agriculture
florent@accessagriculture.org
www.accessagriculture.org

Emerging Trends in Seedbanking: An International Perspective

Deva E. Reddy
Texas A&M University

Presented at IAALD World Congress July 21-24, 2013, Ithaca, NY USA dereddy@tamu.edu

Genesis 1:29NIV



Then God said, "I give you every seed-bearing plant on the face of the whole earth and every tree that has fruit with seed in it. They will be yours for food"

Life without plants



It is conceivable that humans can live without animals but it is inconceivable that animals and humans can live without plants

All Life Depends on Plants

- Provisioning services
- Regulating services
- Cultural services
- Supporting services

- Food, medicine, fuel, construction, clothing, etc.
- Climate moderation, disease regulation, flood regulation
- Spiritual, recreational, aesthetic, inspirational, educational
- Soil formation, nutrient cycling, primary production

SEEDS OF LIFE

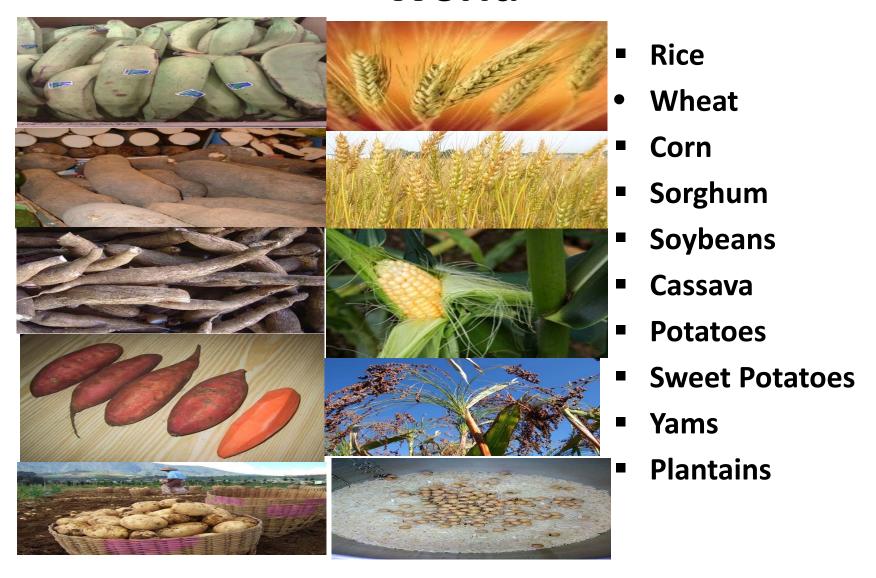
Variety of Seeds



Innumerable plants

- 270, 000 plants are known to science
- 7 000 have ever been used for food
- 120 are cultivated today.
- 90 cultivated plant species provide 5% of human food
- 21 species provide 20%of human food
- 9 species provide 75% of human food

The 10 Most Important Crops In The World



Seeds defined

- Seed is defined as the part of a plant from which a new plant can be grown. It can be:
- generative such as grain or fruit seed

vegetative - consisting of any propagative part
 of a plant such as a stem, tuber
 or bulb

Big Mac



 A fast food meal McDonald's Big Mac contain 20 different species that originate from all around the world- potatoes, mustard, onions, wheat, pepper, lettuce etc

Longevity of seeds



Seeds may be viable for hundreds and even thousands of years. The oldest carbon dated seed that has grown into a viable plant was a Judean date palm seed about 2,000 years old, recovered from excavations at Herod the Great's palace in Israel.

How long



In 2012, Russian scientists announced they had regenerated a narrow leaf Campion from a 32,000 year old seed. The seed was found in a burrow 124 feet under Siberian permafrost along with 800,000 other seeds. Seed tissue was grown in test tubes until it could be transplanted to soil

Seed-basic and critical input

- Response of other inputs such as fertilizers, fungicides, insecticides depends on quality of seeds
- Direct contribution of quality seed about 15 –
 20%
- It can be further raised up to 45% with efficient management of other inputs.

Threat of extinction

- Threats extinction include destructive habitat changes, urbanization, climate change, invasive species, over-harvest, and pollution.
- For every 1% reduction in seed moisture content and every 5°C reduction in temperature, the lifespan of a seed is doubled

Climate change

Extreme weather conditions cause new pests which could cause certain species of plants to go extinct

Natural Disasters

After the 2004 tsunami destroyed rice paddies in Malaysia and Sri Lanka, international seed banks provided local farmers with varieties of rice to begin growing their crops again

Disease

Disease quickly and easily wipes out crops. Stem rust has the capability to infect up to 25% of the world's wheat supply



Man-made disaster

One of Iraq's vital seed banks was looted during fighting

Soil Seed Bank



- All viable seeds present in the soil or mixed to soil debris constitute soil seed bank.
- The deposition of seeds spread by bird, wind, humans, and animals, usually pertaining to invasive seed sources degrading natural ecosystems.
- They have been studied in various ways in various habitats

Organized Seed Banks

- They operate formally and are made up of individually and collectively stored seeds
- Seed banks (general)
- Community seedbanks

How many Seedbanks

- There are about 6 million accessions, or samples stored as seeds in about 1,400 gene banks throughout the world
- They store about 0.6 percent of the world's plant diversity
- Seed banks great and small

Vavilov Institute of Plant Industry



- This seedbank was established in 1894 in Leningrad (St. Petersburg), Russia
- Only facility of its kind in Russia
- Its global collection contains hundreds of thousands of specimens

Millennium Seed Bank Project



- Location: Royal Botanical Gardens, Kew, U.K.
- Goal: store and protect more than 24,000 global species of plants
- Collaborates with other seed banking organizations around the globe by sharing information or assisting in seed collection
- Seeds remain in their country of origin, but the Kew location stores duplicates for backup

Svalbard Global Seed Vault



- Built inside a sandstone mountain in a man-made tunnel on the frozen Norwegian island of Spitsbergen, which is part of the Svalbard archipelago, about 812 miles from the North Pole.
- Designed to survive catastrophes such as nuclear war and world war.
- It is operated by the Global Crop Diversity Trust.
- The area's permafrost will keep the vault below the freezing point of water, and the seeds are protected by 1-metre thick walls of steelreinforced concrete.
- http://www.globalresearch.ca/dooms day-seed-vault-in-the-arctic-2/23503

A View of One Storage Chamber



NSW Seedbank





- The NSW (New South Wales region) Seedbank focuses on native Australian flora, especially NSW threatened species.
- The NSW Seedbank has collaborated with the Millennium Seed Bank since 2003
- Focus on NSW native species and threatened species.

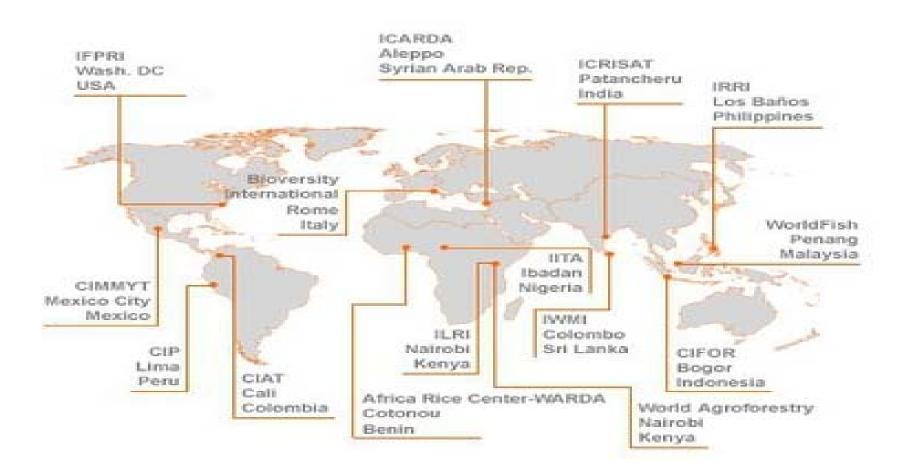
Dixon National Tallgrass Prairie Seed Bank



Bison grazing on Tallgrass Prairie
Nature Preserve

Located at Chicago
Botanic Garden this is the only seed bank in the world that focuses conservation efforts on the native species of the tallgrass prairie, one of the most endangered habitats in the world.

CGIAR and Gene banks



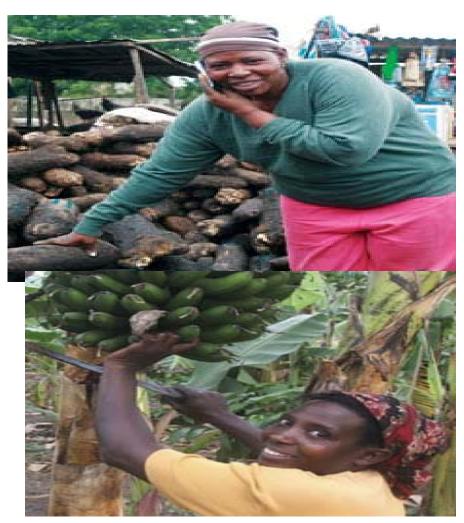
International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)



Five mandate crops – sorghum, pearl millet, chickpea, pigeon pea and groundnut; and six small millets – finger millet, foxtail millet, little millet, kodo millet, proso millet and barnyard millet.

Over 120,000 germplasm accessions from 144 countries, it is one of the largest international genebanks.

International Institute of Tropical Agriculture (IITA)



IITA's genebank holds over 28 000 accessions of major food crops of Africa, namely cowpea cassava, yam ,soybean, bambara groundnut, maize, and plantain and banana

International Potato Center (CIP)







- CIP maintains the largest collections of potato and sweetpotato in the world.
- The genebank holds over 80% of the world's native potato and sweetpotato cultivars and over 80% of the known species of wild potato.
- It also maintains more than 1,500 accessions of native Andean root and tuber crops (ARTCs).

Seed Collection



Collecting seeds in the Republic of South Africa

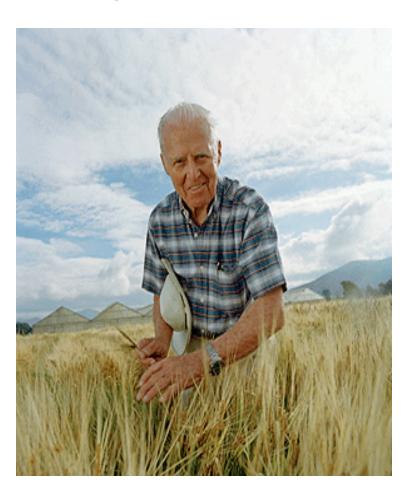


International Rice Research Institute (IRRI)



- The IRRI Genebank holds more than 117,000 types of rice.
- Biggest collection of rice genetic diversity in the world.
- Countries from all over the world sent their rice to IRRI for safe keeping, and sharing for common public good.

International Maize and Wheat Improvement Center (CIMMYT)



- World's largest maize and wheat seed bank.
- Over 175,000 accessions
- Seed is made freely available to researchers and agriculture institutions

ICARDA



The Center's genebank, holds over 133,000 accession of cereals, legumes and forages, collected from dryland areas around the world.

The genebank also holds over 1450 accessions of Rhizobium strains.

Distributes over 25,000 accessions a year to collaborators inside and outside ICARDA for identification of valuable traits

International Center for Tropical Agriculture(CIAT), Cali, Columbia



- CIAT has global responsibility for the improvement of beans, cassava, and tropical forages
- Holds 65,000 crop samples from 141 countries

Global Crop Diversity Trust

- The Global Crop Diversity Trust is an independent international organization working to guarantee the conservation of crop diversity.
- This was established in October 2004 as an independent international organization under international law.
- It was established through a partnership between the FAO and the CGIAR

Community Seedbanks

- Most small-scale farmers save their seed from one harvest to the next. 60-70 per cent of seed used by these farmers is the saved ones. The remaining seed is obtained from local sources
- Factors such as droughts, crop failure, conflict, difficult storage conditions, and poverty are impacting quantity and plant varieties available to farmers.
- Bought-in seed replaces older, local varieties unavailable in many communities.
- The result is emergence of informal seed supply systems, such as establishing seed banks

Seed Libraries

The Seed Library Of Los Angeles: checking out seeds at a monthly meeting.



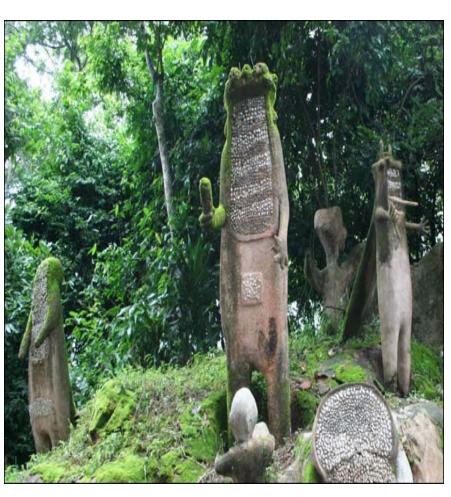
- Seed libraries use varied methods for sharing seeds:
- Seed swaps, library members or the public meet and exchange seeds
- seed lending, people check out seed from the library's collection, grow them, save the seed, and return seed from the propagated plants to the library

Seed savers' networks



- Networks organized storage and distribution of seed, mainly farmers' and non-commercial varieties
- The Seed Savers' Network facilitates the collection, multiplication and public access of a wide range of local seeds and other planting material for food and agriculture

Ceremonial Seedbanks

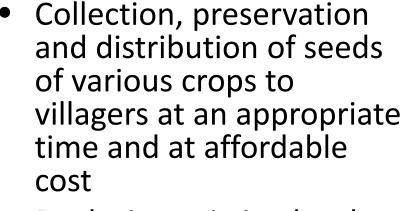


- Sacred groves and reserves
- Seed is a common property
- Seed conservation is not the primary function but occurs as a matter of routine

Seed Village











- Replacing existing local varieties with new high yielding varieties
- Seed is available at the door steps of farms at an appropriate time

Development of Seeds

- Role of Seed development organizations
- Breeders seed
- Foundation seed
- Certified seed



"We Must Mine the Wealth of the World's Seed Banks"



Susan McCouch, Plant **Genetist of Cornell** University in the Comment feature of the July 4 issue of **Nature** argues that with fewer than a dozen flowering plants out of 300,000 species accounting for 80 percent of humanity's caloric intake, people need to tap unused plants to feed the world in the near future

Thank YOU

Questions



CABI's Leisure, Recreation and Tourism Abstracts and EBSCOHost Hospitality and Tourism Index:

Evaluation of Coverage, Overlap and Uniqueness

Lutishoor Salisbury

IAALD World Conference, July 22, 2013



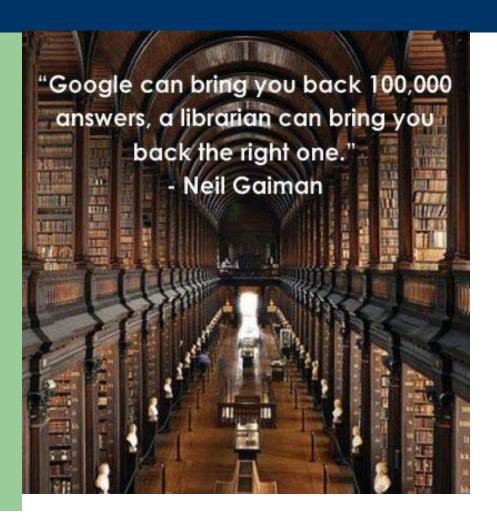
Overview

- Why this evaluation
- Product description
- Methodology
- Critical Evaluation
 - Content
 - Fields for Searching
 - Retrieval Examples



Boracay Island, The Philippines, http://johnib.wordpress.com/2013/04/05/chi na-newspaper-philippines-best-leisuredestination/

Why this study?



- Librarians should have knowledge of database coverage, unique characteristics, etc.
- Beyond Google, added value
- Best database for patrons
- Limited funds, does it add substantial information to warrant subscription?
- Substantial resources in CABI database -- not widely known

Product Description

CABI's Leisure Tourism Abstracts

1976 to present, scholarly research

Subset of the CAB Abstracts database

EBSCOHost Web of Knowledge Ovid, etc.

Independently as online database

- Uses CABDirect interface
- Printed quarterly database





EBSCOHost Hospitality & Tourism Index



Scholarly research and industry news, 1965- majority of records from 1994-

Three collections combined:

- Cornell University's formerly Hospitality database (not previously for public use)
- Articles in Hospitality and Tourism (University of Surrey and Oxford Brookes)
- Lodging, Restaurant & Tourism Index (Purdue University)



Methodology

Lists from the databases were exported in Excel format



CABI Leisure Tourism index (http://www.cabi.org/leisuretourism/)

EBSCOHost *Hospitality & Tourism index* (http://www.ebscohost.com/titleLists/hjh-coverage.htm)

Manipulated to get the common and unique titles and materials

The common titles were checked against each database

- **2007-2012**
- UlrichsWeb Global Serials Directory (https://ulrichsweb.serialssolutions.com/)
- document types, history of serials

Summary – Databases

		CABI	EBSCOHost
		1952-2012, majority	1965-2012, majority after
Years of coverage		after 1976	1994
Document Types		No. of Records	No. of Records
	Academic articles	100,409	51,538
	Magazines	1,216	370,510
	Trade publications		417,145
	Newspapers		2,571
	Bibliographies (list of resources		
	from various publications)		294
	Dissertations/Theses	199	
	Books, book chapters	10,311	1,393
	Book Reviews		9,901
	Conference Papers	10.132	
	Case Studies	7,450	502
			50 companies (1,250
	Company Reports		records)
			130 countries (23,728
	Country Reports		records)
	Reports	148	
	Letters	107	
Lanugage			
	English	82%	99.70%
	French	4.10%	0.01%
	German	3.10%	0.16%
	Spanish	2.10%	0.04%
	Chinese	1.50%	0.02%
		2,927 articles , links to	
Full-Text		open access materials	

Unique Materials in EBSCOHost and Their Characteristics

Trade Publications (n=417,145)

17 titles = 307,915 (74%)

Travel weekly (55,773)

Nation's Restaurant News (44,788)

Travel Trade Gazette UK and Ireland (35,133)

Travel Agent (28,591)

Caterer & Hotel Keeper (23,033),

Travel Weekly (19,141)

Hotel & Motel Management (15,824)

Travel Weekly (UK) (12,474)

Food Manufacture (11, 189)

Meetings & Conventions (10, 884

Foodservice Director (10,071),

Restaurant Business (9,611)

Beverage World (7,529)

Beverage Industry (6,473)

Meeting News (5,907)

Hotel Business (5,841 records) and

Prepared Foods (5,653 records)

Magazines (n=370,510)

17 Titles - 143,275 (39%)

Duplication of records with Trade Publications

Airguide Online.com (15,871),

Successful Meetings (15,022)

Nation's Restaurant News (14,069)

Travel & Leisure (10,540)

Restaurants & Institutions (10,271)

Canadian Travel Press (9,595)

Wine Spectator (7,956)

Pizza Today (7,907)

Lodging (6,842)

Meeting News (6,239)

Restaurant Business (5,770)

Travel Industry Monitor (5,677)

Hotel & Restaurant (5,659 records)

Travel Courier (5,545)

Indian Gaming (5,520)

Foodservice Director (5,515) and

Parks & Recreation (5,277)

Unique Materials in EBSCOHost and their Characteristics

Reports (2003-2012)

N = 9,292 records

Economic Intelligence Unit -- Country Reports for various countries (www.eiu.com)

Business Monitor International Tourism -- Country Reports (www.businessmonitor.com)

Marketline Industry Country Profiles (www.marketline.com) and

101 entries are from the Restaurant, Food & Beverage Market Research Handbook, 2012.

Newspapers (1989 - 2009)

N = **2,471** records

New York Times, late city edition, (1,487)

Wall Street Journal, and Eastern edition (590)

New York Times, front page, morning edition (362)

Unique Materials in EbSCOHost and their Characteristics

Books (1991 – 2008)

N = 1,309 records

Railway directory (2003) edition contributed 747 (i.e. 57%) records

Golf Resorts: Where to Play in the U.S., Canada, Mexico & the Caribbean, 2001, 3rd edition contributed 95 records (i.e. 7%)

Bibliographies (1980 -2012

N = **294** records

Primarily short list of references or list of resources found in articles from:

academic journals (73 records)

trade publications/magazines (141 records) Reports (62 records)

books (16 records).

Unique Materials in EbSCOHost and their Characteristics

Company Reports (2003-2012)

SWOT analysis for 50 companies (1,270 records).

74 industry and market analyses (5,184 records, 76% for 2007-2012)

Country reports (23,728 records, 130 countries, 34% for 2007-2012 and 2% for 2012)

Academic Journal Indexed in Both Databases n= 99 titles with more than 10 records

CABI

Total records = 27,235 11,435 (42%) from 2007-2012 No book reviews

Most of the journals are indexed cover – to – cover Relevant ones only tagged

EBSCOHost

Total Records = 47, 596 16,764 (35%) from 2007-2012 Includes book reviews

Includes peripheral material
Meat science (374 records)
Food Biophysics (134 records)
Nutrition Reviews (2,124 records)

Unique Academic Journals in Both

EBSCOHost

CABI

N = 50 records -> 10 records 5 ceased publication

Total Records = 27,680

2007-1012 = 13,301 (48%)

N = 505 -- > 10 records

Total Records = 35,560

2007-2012 = 20,946 (59%)

Differences and Similarities the Databases

EBSCOHost

Available only through this vendor

A full text option available

Combine with several other databases on this platform

EBSCOHost academic Search
Complete and Business Source
Complete --- subscription, full-text

Only 16 fields

CABI

Available from several vendors: CABDirect, EBSCOHost, Ovid, Web of Knowledge, etc.

May be difficult for end users to remember the substantial resources

Resources include full-text access to all CABI e-books and other full-text materials

25 fields, fields specific to industry search not included

Searching Example: Ecotourism

CABI

3,176 records

Refined by full-text:

327 from two subscribed EBSCOHost databases

146 from CABI Electronic Resources

Records could be refined by:
Subject Thesaurus Term, Subject -- Major
Heading, Subject, Publication and
Geography

EBSCOHost

3,475 records

Refined by full text:

736 records from two subscribed EbSCOHost databases

Records could be refined by: Source Types, Subject Thesaurus Terms, Subject, Publication, Company, Geography and NAICS/Industry

Search for "Hospitality Industry" as a Subject Term

CABI

- 5,707 records
- Academic journals (5,057)
- Books (430)
- Conference materials (296)
- Magazines (22)
- Reports (6)
- Dissertation (1)

EBSCOHost

- 66,611 records
- Trade publications (43,631)
- Magazines (17,461)
- Academic journals (4,800)
- Reports (883)
- Newspapers (430)
- Books (249)
- Reviews (125)

Search for Publications with Authors Affiliated with Cornell University, Ithaca

CABI

363 records

Academic journals (344)

Conference papers (16)

Magazines (9 records)

Books (7)

EBSCOHost

Does not include an author affiliation field from its drop-down menu

Command search as:

AF "(cornell university)" and AF "(ithaca)" = 84 records.

Search as "cornell university" and Ithaca was performed in the All Text field = 446 records

Academic journals (259 records)

Magazines (97 records)

Trade publications (86 records)

Reviews (4 Records)

Conclusion

CABI *Tourism & Leisure Database* primarily includes scholarly material from a broad range of academic/scholarly journals

Journals are comprehensively indexed in CAB Abstracts but only relevant items added to this section

Compete abstract and excellent indexing

Conference proceedings and wide range of scholarly books

Complemented with access to business databases such as *EBSCOHost Business Source Premier* and/or *ABI Inform*, these may suffice to support an undergraduate and research program in this area.

Conclusion

EBSCOHost *Hospitality and Tourism Database* includes records from a much smaller number of academic journals

The ones that are included are more comprehensively covered and focused to the hospitality and tourism industry

Greater emphasis is on the area of hospitality and tourism rather than on recreation

Book reviews useful for undergraduate students

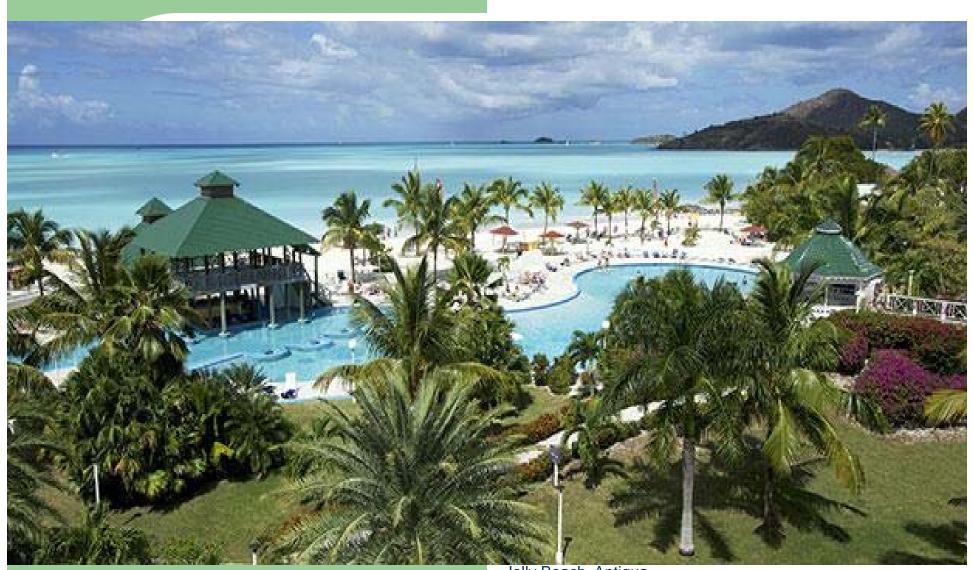
Uniquely includes a substantial number of records from magazines, trade publications, country reports, SWOT analyses and industry reports

Unique materials may be duplicated in *EBSCOHost Business Source Premier*, ProQuest *ABI / Inform Complete and* other business databases (ValueLine, S&P NetAdvantage, Mergent Online, etc).

Reference: Salisbury, Lutishoor. 2013. CABI Leisure and Tourism Abstracts and EBSCOhost Hospitality and Tourism Index. *The Charleston Advisor*, vol. 14(4), p5-11.



Questions!!!



Jolly Beach, Antigua

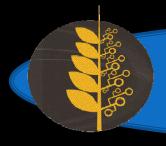


Transformation of Indian Agricultural Libraries in Digital and Collaborative Era

Dr Neena singh (G B Pant University of Agriculture & Technology and UUHF, Uttrakhand, India)

IAALD World Congress 21-25 July, Cornell University, Ithaca, USA



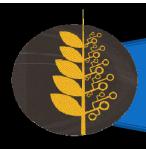


out line





- Back ground
- Approach to capacity development in digitization
- Collaborative digitization projects
- Application of Social Network tools



IT based Services

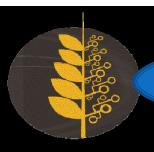


Indian IT industry - Played eminent Role in all Service Sec

Instances of bridging divide through projects of e-agriculture, e-governance, e-business are in progress

Penetration of IT enabled services - Degree Granting Organizations/ Universities is diverse/mixed

Indian Agricultural libraries – Are in <u>transition</u> to era of Collaboration & Digitization



Indian National Agricultural System (NARS)



- Indian National Agricultural system (NARS) consist of 56 State
 Universities & 99 ICAR Research Institutes spread across the country.
 One of the largest NARS in the world.
- Agricultural University <u>libraries</u> and <u>Research institute libraries of ICAR</u> are integral part of education process and play a vital role in shaping future of Education Research and Extension activities of the Country
- ICAR Is apex body coordinating, guiding & managing research in agriculture. It plays pioneering role in national Food security.





Technology and Libraries...



Indian Agricultural libraries have taken on technology & using no . of IT & web based tools to disseminate Digital Information.

World Bank Aided project -



- NATP National Agricultural Technology Project -1998
- NAIP National Agricultural Innovative Project -2006

Provided boost to <u>Digitization & Collaborative</u> break through movement

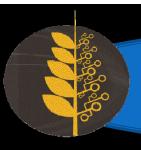
and

New Chapter

In Agriculture Information Management &







Automated functioning at a glance



- 66.5 % Agriculture university libraries function in Automated environment
- 19 % Libraries have Web OPAC accessible 24x7
- 92% Provide Internet browsing facility & have separate section for e-resources within library as "E-library"



The collaborative digital activities......



Most libraries were working individually on digitization on their in-house research material, thesis, rare books

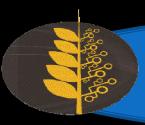
viz. IARI, GBPU&AT, IVRI

Collaborative initiative in digitization stared with World Bank funded project NAIP launched from 2006 to enhance food security & agricultural innovation.

CeRA
E- Granth
Krishi Kosh

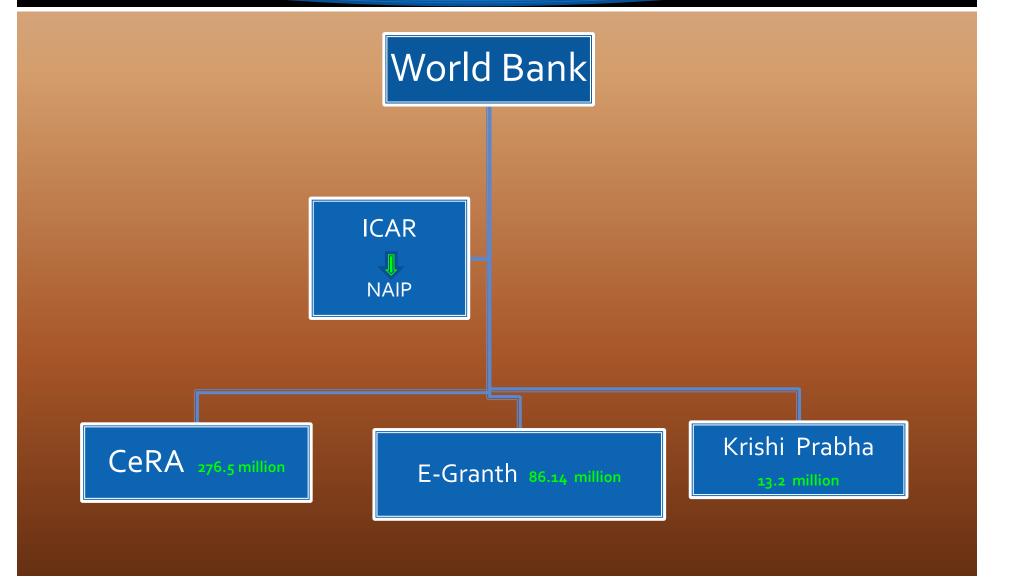
- Consortium for e- resources in Agriculture
- E-Granth Digitization and Union catalogue
- Krishi Kosh Agricultural Digital repositories
- Krishi Prabha Digital Repository of dissertations

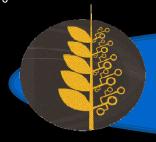




Collaborative Projects in Indian Agricultural libraries

IAALD/2013 World Congress





CeRA .Consortium for E-resources in Agricultur IAALD/201

World Congress

Rising Cost - Lead to consortium mode online subscription

CeRA

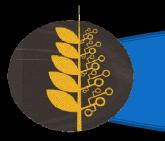
- Started with support from NAIP project in 2007 functional from 2008.

More than 3000 e-journals available online from Springer, Tailor Francis, Elsevier and lately <u>added</u> Biological database (JABS)

Accessible 24x7 to all State Agril Universities and ICAR Institutes through IP address and

Common Platform www.cera.Jccc.in





.....CeRA....



Key Objectives:

Advance R&D information resources to leading world class institutions.

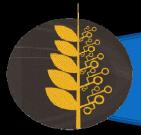
Evolve NAAS (National Academy of Agril Sciences) Rating and Citation Index for evaluation of agricultural Scientific publications http://www.naasindia.org/

CeRA - Is most sought after facility for access to online journals by Researchers

More than 4.0 Million full text articles have been downloaded (NAIP project report 2011-2012)

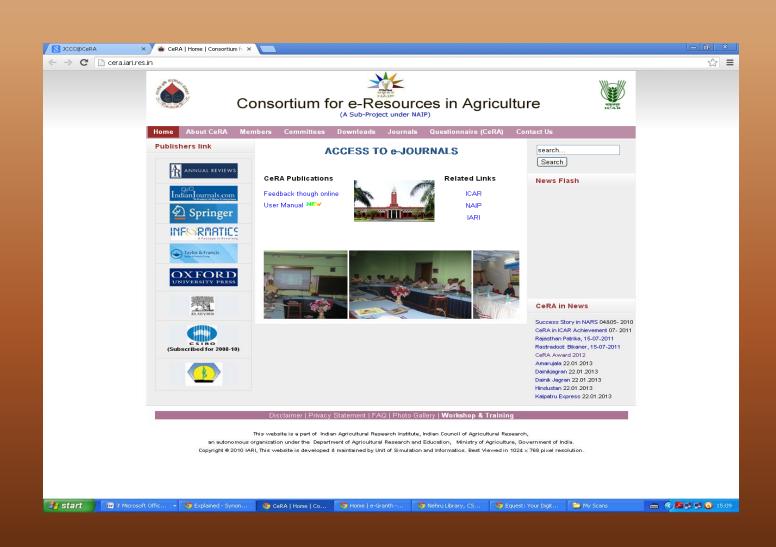
Most Library's home page have links to CeRA some provide through campus LAN

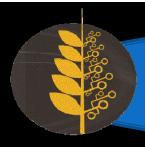
NATIONAL ACADEMY OF AGRICULTURAL SCIENCES



A View on CeRA ...web







Prominent Digitization Activities..... E – Granth



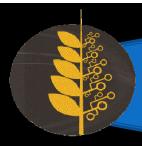
E- Granth - Was conceived in 2009 for strengthening digital library and Info management



Provide digital access to library resources

Create Union Web OPAC with partnership of OCLC & Merge Indian collection with World Cat for sharing International literature and visibility.

- Create Institutional Repositories (rare books, old journals, gray literature)
- Digitize exiting Institutional repositories of select libraries IARI, IVRI,



.....E- Granth



12 partner Institutions, including 7 State Univ. and 4 deemed Univ. & ICAR library are collaborating with OCLC to create "Agri Cat"

Aims to complete conversion of records to MARC 21 complaint UNION catalogue, the Indian Agri Cat using KOHA

AgriCat is subset of World Cat largest Union Catalogue in world held by OCLC (existing catalogue were batch uploaded & processed by OCLC)

This project has initiated & built digitization capacity in 12 collaborating libraries which will be replicated to other libraries in future













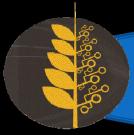




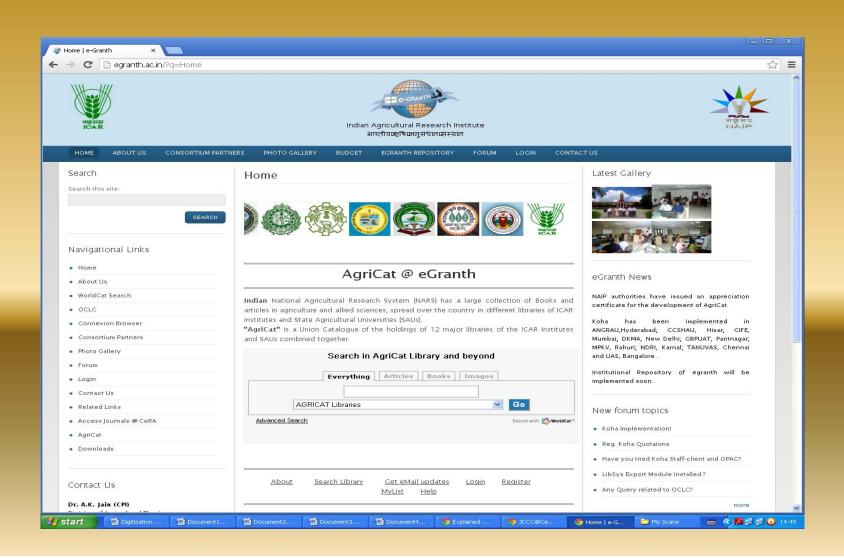


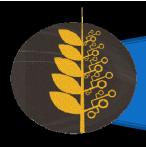






View on E – GRANTH





E-Granth, AgriCat Searches



Agricat (subset of World Cat) provides versatile searches & share resources 24x7 at

http://www.egranth.ac.in

http://www.agricat.org

Currently 7 lakh / 0.7 million records have been uploaded in OCLC

Searches can be made at three levels

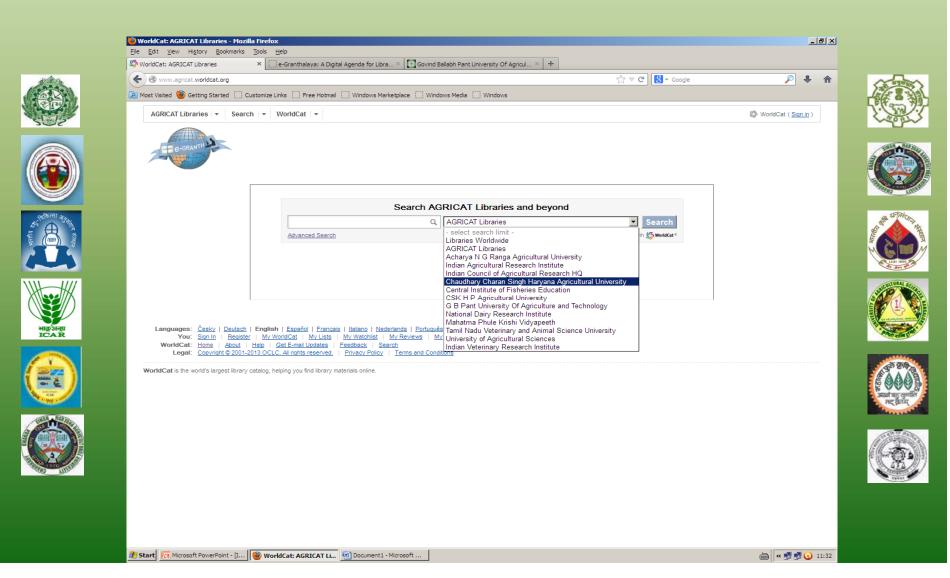
- 1. Global Search libraries world wide
- 2. **AgriCat** for holding at group level
- 3. Individual Library at local partner level

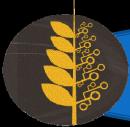
Patrons can register & create mini library using features, My Watch List, My Saved Searches etc



Agricat Search View.....



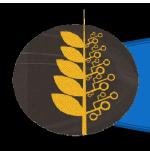




AgriCat Search view.....

IAALD/2013 World Congress

Search results for 'su: hortculture 'ti-hortculture' e-deantwayer A Digital Agenda for Libra Search Worldoor Search Search Worldoor Search Search Worldoor Search Worldoor Search	Results for 'su: horticulture ti:horticulture su:horticultu	re' [AGRICAT Libraries] - Mozilla Firefox	_F×
Search results for 'su: horticulture the search Wordcat Search	the second secon		
Most Visited Cetting Stated Customae Links Free Hotmail Windows Meninstrate Windows Media Windows Me			
AGRICAT Libraries Search WorldCat Search results for 'ssu: horticulture ti:horticulture su:horticulture Fearch GRICAT Libraries Fearch GRIC			S → Google
Search Libraries to search AdRICAT Libraries Advanced Search	Most Visited 🥝 Getting Started 🔝 Customize Links 🤝 Fr	ee Hotmail [] Windows Marketplace [] Windows Media [] Windows	
Search results for 'su: horticulture ti:horticulture su:horticulture' limited to AGRICAT Libraries Format Format Results 1-10 of about 562 (-15 seconds) Results 1-10 of about 562 (-15 seconds) Second 15 seconds (-15 seconds) Seconds 15 seconds (-15 seconds)	AGRICAT Libraries ▼ Search ▼ WorldCat	[*]	₩ WorldCat (Sign in)
Search results for 'su: horticulture ti:horticulture su:horticulture' limited to AGRICAT Libraries Format		su: horticulture ti:horticulture su:horticulture	Q Search
Search results for "su: horticulture ui:horticulture su:horticulture limited to AGRICAT Libraries Format	e-granto	Libraries to search AGRICAT Libraries	ced Search
Results 1-10 d about April 1-10	Search results for 'su: horticulture ti:horticultu	ure su:horticulture' limited to AGRICAT Libraries	Print Share
Book (467) Article (73) Book (467) Book (46)	Format Results 1-10	of about 562 (.15 seconds)	≪ First < Prev 1 <u>2</u> <u>3</u> Next >
The side dissertation (13) Electric (13)		Save to: [New List] Save	Sort by: Library and Relevance Save Search
□ Refine Your Search Author K L Chadita (12) H P Sinch (11) L H Balley (77) Julias Jenick (6) Show more Year 2012 (28) 2011 (62) 2012 (48) 2002 (49) 2002 (49) 2002 (49) Show more Language Enoish (560) Hhad (1) Language Enoish (560) Had (1) Language Enoish (560) H	- ☐ Thesis/dissertation (13) ☐ 1. ☐ eBook (4) ☐ ☐ Large print (1) ☐ Article (73)	by Mahmood Niaz Malik ■ eBook : Document Language: English	
Author K.L. Chadha (12) H.P. Singth (11) P. Denvatha Reddy (10) L.H. Balley (7) Julies Jeniski (5) Show more Year 2011 (82) 2011 (82) 2020 (48) 2009 (30) 2008 (48) Show more Language Enaish (60) Hindi (1) Undetermined (1) Audience Personth (12) H. Horticulture by R. Gordon Halfacre; John A. Barden D. R. Gordon Halfacre; Jo	□ Visual material (1)	Libraries that own this item: AGRICAT Libraries	
Second Part			
Year 2012 (28) 2011 (52) 2019 (48) 2009 (30) 2009 (48) 2008 (48) Show more Language English (560) Hindi (1) Undetermined (1) Audience Language Book Introductory horticulture by Rajendra Reddy; J P Abhay Shankar by Rajendra Reddy; J P Abhay Shankar by Rajendra Reddy; J P Abhay Shankar coverable by Rajendra Reddy; J P Abhay Shankar by Rajendra Reddy; J P Abhay Shankar coverable by Rajendra Reddy; J P Abhay Shankar by Rajendra Reddy; J P Abhay Shankar coverable by Rajendra Reddy; J P A	K L Chadha (12) H P Singh (11) P Parvatha Reddy (10) L H Balley (7) Julea Janick (5)	by R Gordon Halfacre; John A Barden Book Language: English Publisher: New York : McGraw-Hill, ©1979. Libraries that own this item: AGRICAT Libraries	
2012 (28) 2011 (52) 2011 (52) 2019 (48) 2009 (30) 2008 (48) Show more Language English (560) Hindi (1) Undetermined (1) Audience Politiculture by Rajendra Reddy; J P Abhay Shankar commonwealth Publishers, 2008. Language English (560) Hindi (1) Undetermined (1) Audience		Catality on tornata y	
English (560) Hindi (1) Undetermined (1) Audience Introductory horticulture by Everett P Christopher Book	2012 (28) 2011 (52) 2010 (48) 2008 (30) 2008 (48)	by Rajendra Reddy; J P Abhay Shankar Book Language: English Publisher: New Delhi : Commonwealth Publishers, 2008.	
Hindi (1) Undetermined (1) Audience Unitroductory horticulture by Everett P Christopher Book			
Audience Book	Hindi (1)		
	Audience		
	Juvenile (32)	Language: English	
Start G Microsoft PowerPoint - [Results for 'su: hortic Document1 - Microsoft Incomplete the control of t			



KRISHI KOSH .. Open Access IR

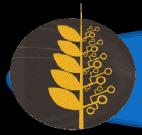


Krishi Kosh - Is Open Access Institutional repository developed as part of E-Granth for sharing knowledge

State Agricultural Univ. & ICAR Institutes - have vast collection of rare books, gray literature, in-house publications, extension literature these have been digitized using <u>D Space</u>

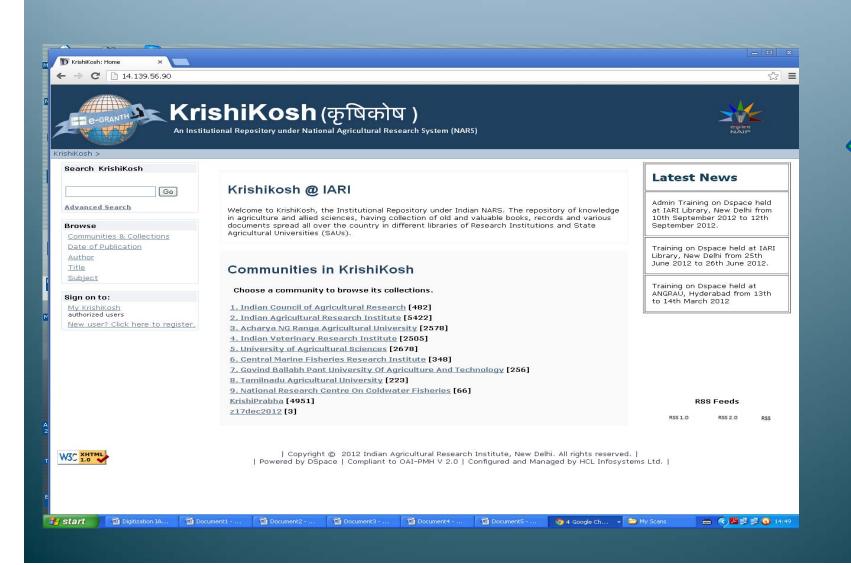
Initiated with 4 universities (UAS Bangalore, ANG Ranga Agril Univ Hyderabad, IARI, New Delhi and IVRI, Izatnagar) Lately 5 more Universities have been added

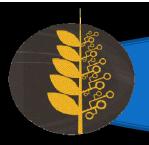
Repository is accessible 24x7 at http://www.egranth.ac.in



View of KrishiKosh IR







Krishi Prabha .. digitization of

dissertations



Krishi Prabha - Digitization of over 6000 Full Text doctoral dissertations available in 45 Indian State & Deemed Agril universities. from the year 2000-2007.

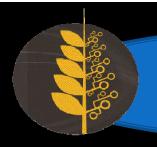


Developed by library of Haryana Agril University with grant in support from ICAR under world bank supported NAIP project in the year 2007-2011



NEHRU LIBRA CCS Haryana Agricultural University, Hisar





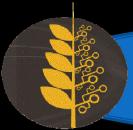
Krishi Prabha...



KrishiPrabha database - Can be searched online over Web

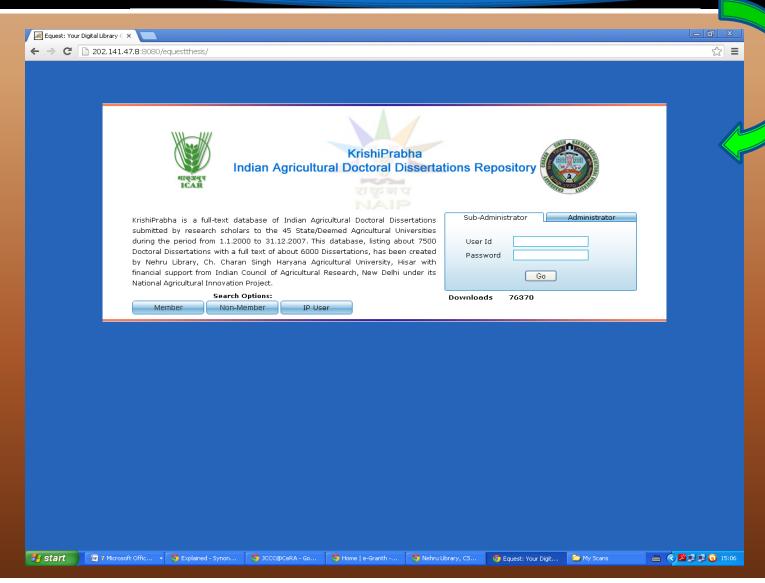
- 1. Free online access has been given to users of all libraries through <u>IP address</u> as well as <u>Password</u>
- 2. Copying & printing of Full text is restricted for preventing plagiarism.
- 3. Non members can access metadata and abstract only
- 4. Searches can be made through -students name supervisors name disciplines, year let of key works
- 5. Google has proposed to index in Google scholar





Krishi prabha As viewed in Web

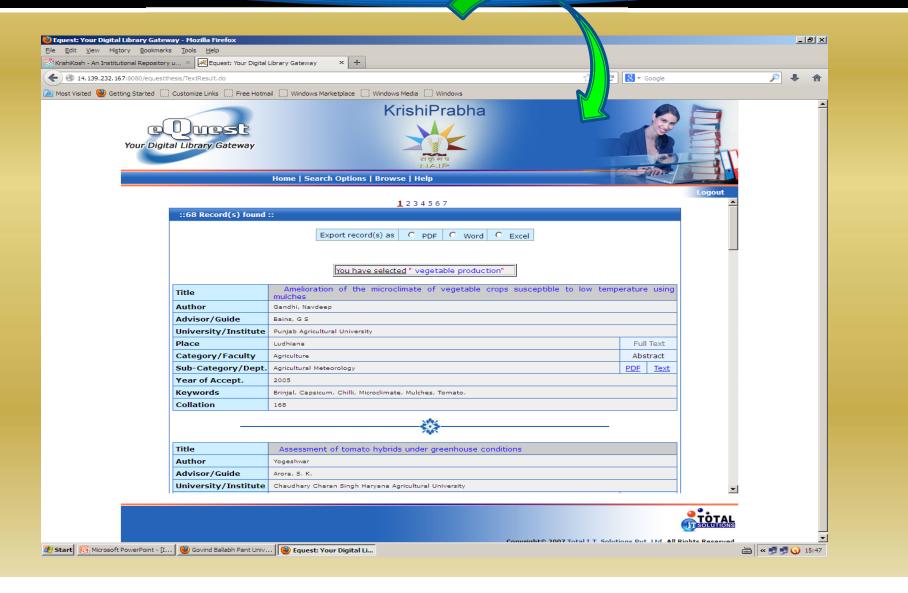
IAALD/2013 World Congress

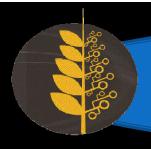




...Typical Krishi Prabha Search record..

IAALD/2013 World Congress





Moving libraries to web....

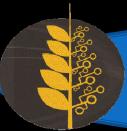


Websites have become important areas of communication & visibility. Indian libraries are exploiting Internet services.

Digitization is picking up purposely with 4 country wide collaborative project (E-Granth Agicat, Krishi kosh, Krishiprabha, CeRA)

Examples of Exploiting Web based tools is notable from Union Web Catalogue created by E Granth's <u>Agrical / World Cat</u> and <u>Krishi Kosh</u> and <u>Krishi Publia</u> digital repository.

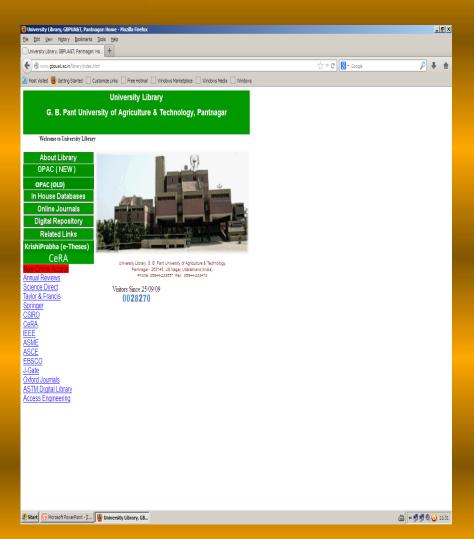
<u>Twelve State</u> Univ. libraries have hosted their catalogue over Web / have WebOPAC, others are in process, <u>have in-house OPAC</u>.

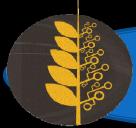


View of Web searchable OPAC....

IAALD/2013 World Congress

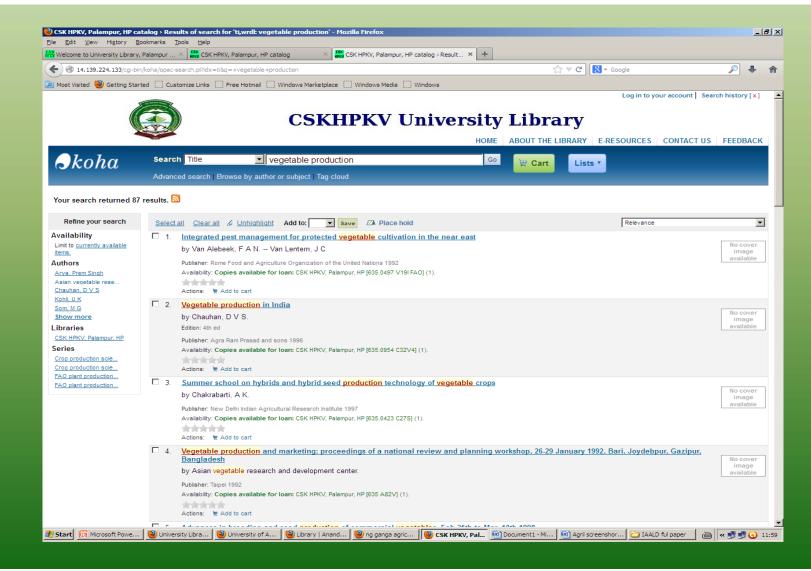
	History Bookman					
	d University Central			A - a la		<i>P</i> •
		arch.php?tt=horticulture&ar=&ct=&sj=		☆ ▽ ୯ 🔞 -	Google	₽
ost Visited 🥙	Getting Started	Customize Links Free Hotmail Windows Market,	place Windows Media Windows			
			AGRICULTURAL UNIVERSITY L RAL LIBRARY - KERALA AGRICUL Vellanikkara, Thrissur, Kerala, IN		f 8+	
	Ho	me About us Library	Photo Gallery Downloads	Catalog Useful Links	Contact	
			Advanced Search			
		Title : horticulture	Author:			
		Category: All materials	Subject: Any subj	ect 🔻		
			Search	_		
			Jealcii			
	Α	B C D E F G H I	J K L M N O P	Q R S T U V	W X Y Z	
	SI. No.	Title		Author / Holdings	Туре	
	1	Indian Journal of Horticulture			E-Journals	
	2	Management of horticulture		H P Stuckey	Hard copy Books	
	3	Vanijya pookrishi : Horticulture		T P Murali	Hard copy Books	
	4	Biotechnology and its application in horticulture		S P Ghosh	Hard copy Books	
	5	Introductory ornamental horticulture		J SArora	Hard copy Books	
	6	Text book of general horticulture		Julian Claude Schilletter, Garry Wyatt Rchey	Hard copy Books	
	7	Encyclopaedia of horticulture		Roy E Biles, E L D Seymour	Hard copy Books	
	8	Encyclopaedia of horticulture v. 2		J Coutts, A Osborn, A Edwards	Hard copy Books	
	9	Gardener's assistant; an encyclopaedia of horticulture v.2		William Wetson	Hard copy Books	
	10	Sardener's assistant; an encyclopaedia of horticulture v.3		William Watson	Hard copy Books	
	11	Gardener's assistant: an encyclopaedia of horticulture v.5		William Watson	Hard copy Books	
	12	Gardener's assistant: an encyclopaedia of horticulture v.6		William Watson	Hard copy Books	
		Encyclopaedia of Horticulture v.3		John Weathers	Hard copy Books	
	13					
	13 14	Agro's dictionary of horticulture		Surendra Prasad	Hard copy Books	
				Surendra Prasad S P Singh	Hard copy Books Hard copy Books	
	14	Agro's dictionary of horticulture				
	14 15	Agro's dictionary of horticulture Scientific horticulture. V. 1		S P Singh	Hard copy Books	

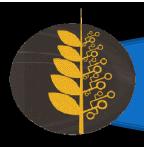




View of searchable WebOPAC...

IAALD/2013 World Congress





And.... Social Network tools

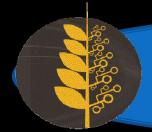


Though evidence of Indian Agril. libraries exploiting web technology is promising, use of social network tools like face book, twitter still need to be exploited extensively.

12 libraries collaborating in E-Grant-AgrCat project are using Flicker tools to display books /view collection facilitating readers interest

pages of Indian libraries with few exceptions

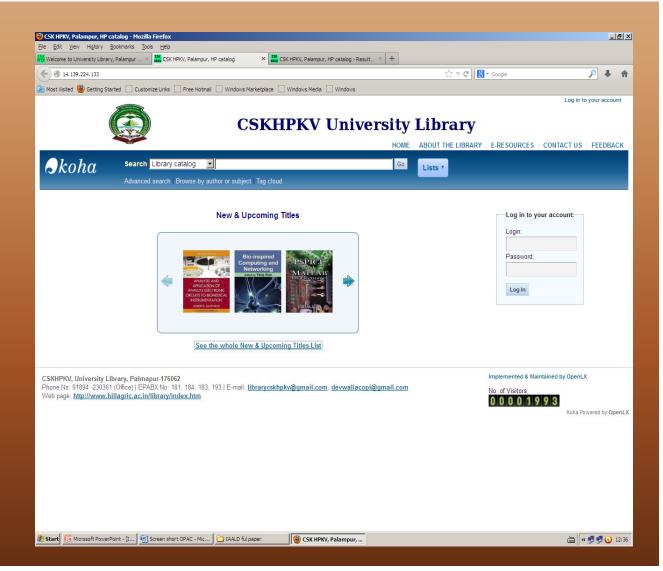
Most Libraries are in <u>Static websites</u> to <u>interactive web</u> <u>oriented</u> services using web based tools



Use social network tools

IAALD/2013 World Congress

Flicker tools used to display books



Digitization and collaborations between Indian Agril libraries shows that professionals have taken well on the technology front.

Contents are being opened to flow over web and being shared among agriculture community.

Through world bank –ICAR funded project (NAIP) a beginning has been made to develop <u>capacity in digital Information Mgt</u>. leading to further growth and development......







Thanks for your attention !!!













Collaboration for Impact

Indira Yerramareddy Luz Marina Alvare

Thesis

- Research results are a vital, fundamental public resource
- Organizing the information and disseminating it in a timely fashion has an enormous impact in addressing challenging problems
- IFPRI can create sustained impact by enabling and cultivating dynamic transfer of relevant information between researchers, academics, and policy makers

Collaborative Impact Test Case

- February 2011 in New Delhi, India
- 2020 Conference: Leveraging Agriculture for Improving Nutrition and Health
- Conference main objectives:
 - Bring together information and ideas to strengthen linkages among agriculture, nutrition, and health
 - Identify "best practices" in policies and programs
 - Facilitate networks among stakeholders

Social Network for Conference

- Spreading awareness
- Enabling dynamic exchange of information
 - Improving the relevance of research
 - Enhancing the impact of research
- Mendeley
 - Reference manager
 - Academic social network
 - Collaborative bibliography
 - Online space to share publications and have discussions

How and Why We Picked Mendeley?

♦How:

 Brainstorming sessions to identify factors to guide us in our choice

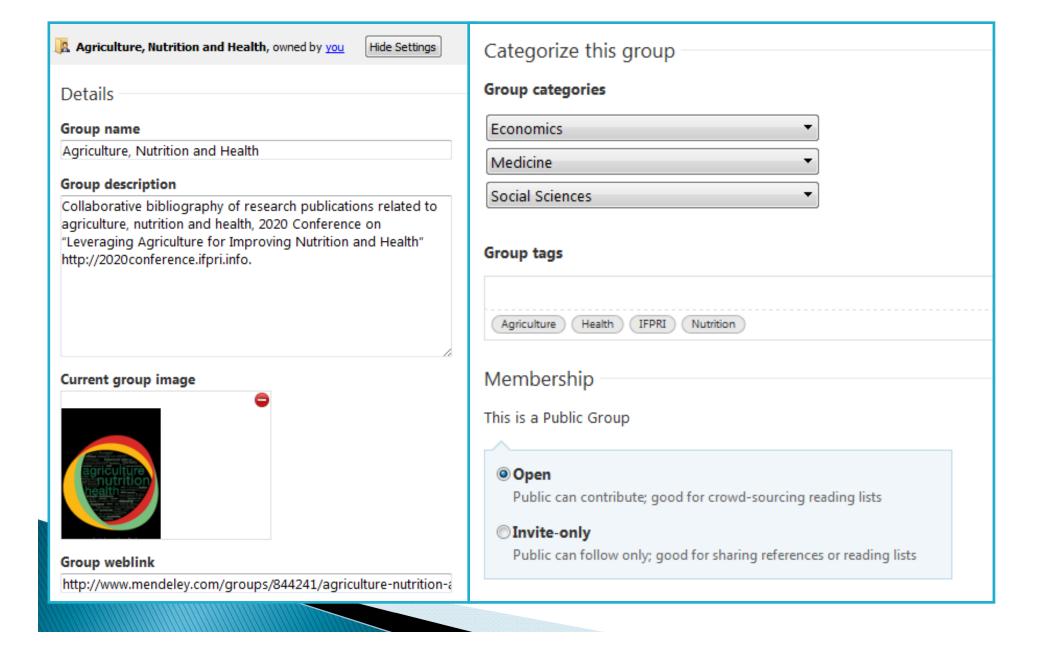
Why:

- Cross-platform compatibility: desktop, web, mobile devices
- Storage space
- Cost
- Ease of use

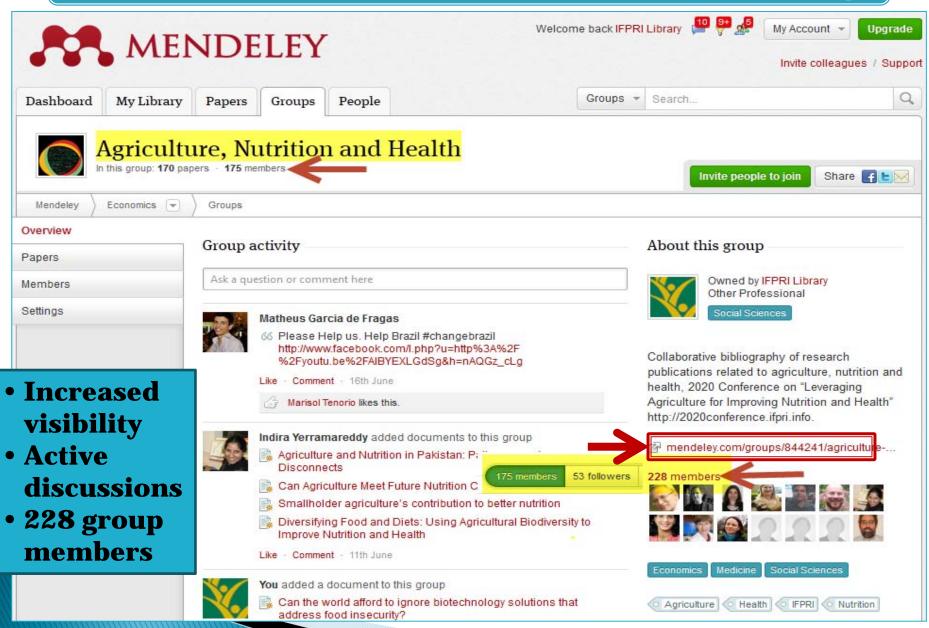
Why We Picked Mendeley?

Comparison	Mendeley	EndNote	RefWorks	zotero
Software	Free	\$250	\$100	Free
Free web storage space	2GB	1GB	NA	100MB
Annotations/Highlighting in PDFs	Yes	Yes	No	No
Cross-platform synching across desktop, web and mobile devices	Yes	No	No	Yes
Free and open database approaching 100 million documents	Yes	No	No	No
Personalized paper recommendations	Yes	No	No	No
Readership statistics & community tags	Yes	No	No	No
Open Web API	Yes	No	No	Yes
Full text search across all your papers	Yes	Yes	No	Yes
Search across external databases	Almost there!	Yes	Yes	No
Social network	Yes	No	No	Yes
Compatibility with all modern web browsers	Yes	No	Yes	No
Mobile & iPad	Yes	No	No	No
Extraction of citation details from PDFs without embedded metadata	Yes	No	No	Yes

Setting up a Discussion Group is Easy



Increased Conference Visibility



Membership Diversity

- Economists
- Researchers
- Academicians
- Librarians
- OtherProfessionals
- Students
 - Ph.D. Students
 - Masters
 - Bachelors

Group Member

Africa

- Asia
- Europe
- Middle East
- North America
- South America

Continued Usage for Sustained Impact

- Assists cataloguing and managing academic papers and articles
- Shares academic and scientific knowledge with selected colleagues
- Discovers academic knowledge and allows detailed search of papers
- Puts in touch with like-minded people and facilitate research projects

Cross-linking to Social Media



- Documents added by different users
- Links to social media sites
- Provides feedback through useful comments
- Provides feedback on interest through, for example, how many liked it

Cross-linking to Social Media (cont.)



Soliciting Constructive Criticism



Keiron Audain

Greetings all, by chance if anyone with an Environmental and/or Public Health background would be interested in reading and commenting on an article I submitted for publication it would be most appreciated. The title is "A Drastic Measure for a Drastic Time: why restricting meat production might be considered as a means of reducing environmental and public health degradation"

You can send me a message, or email me at keiron.audain@gmail.com - Thanks!

27th January

Rapid and Wide Dissemination of Research



IFPRI Library

66 2012 Global Hunger Index is out!



For the 2012 GHI, IFPRI found new ways to communicate its Disseminated TRPRI Publication widely message. This year we built on the 2011 GHI's Linked Open Data (LOD) http://data.ifpri.org/lod/ghi work to offer another data format, OWL Version http://data.ifpri.org/lod/ghi.owl, in addition to RDF Version http://data.ifpri.org/lod/ghi.rdf; we have added a Data Visualization http://public.tableausoftware.com/views /GHIDashboard/GHI Dashboard?:embed=y using Tableau; and partnered with World Data Atlas http://www.worlddata-atlas.com to display GHI data using their collaboration mapping tool.

Get different forms of data from http://b /18959

Full reports

English: http://ebrary.ifpri.d /id/127150

Italian: http://ebrary.ifpri.org/com/

/id/127151

French: http://ebrary.ifpri.org/cd

/p15738coll2/id/127154

German: http://ebrarv.ifpri.org/cdm/ref/collection/p15738coll2

/id/127152

Issue Brief: http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2

/id/127155

11th October, 2012

Monitor Usage Statistics to Make Research More Relevant

2011 Global food policy report

International Food Policy Research Institute (IFPRI) (2012)

The 2011 Global Food Policy Report is a new annual IFPRI publication that provides a comprehensive, research-based analysis of major food policy challenges at the global, regional, national, and local levels. It highlights important developments and... 37 readers Readership Statistics 37 Readers on Mendeley by Discipline 30% Social Sciences 30% Economics 14% Environmental Sciences by Academic Status 24% Researcher (at an Academic Institution) 22% Student (Master) 16% Ph.D. Student 37 Readers by Country 24% United States 8% Switzerland

8% South Africa

Published Biographies Help Facilitate **Collaborative Communities**

Rajul Pandya-Lorch

Head 2020 Vision Initiative and Chief of Staff

Division:	Director General's Office
Email:	r.pandya-lorch@cgiar.org
Office:	IFPRI-Washington, DC
Position:	Senior Management Team

Rajul Pandya-Lorch, a Kenyan citizen of Indian origin, is head of IFPRI's 2020 Vision for Food, Agriculture, and the Environment

Initiative, a global initiative that seeks to identify solutions for meeting world food needs. while reducing poverty and protecting the environment. She concurrently Staff in the Director General's Office.

Publications

2009 Global Hunger Index: The challenge of hunger: Focus on fin crisis and gender inequality.

K. von Grebmer, B. Nestorova, A. Quisumbing, R. Fertziger, H. Fritsch Pandva-Lorch.

2009 Global Hunger Index: The challenge of hunger: Focus on financia crisis and gender inequality.

K. von Grebmer, B. Nestorova, A. Quisumbing, R. Fertziger, H. Fritschel, R. Pandya-Lorch.

IFPRI Brief., (2009)







View group



Conclusion

- Online collaborative groups are highly effective in creating sustained impact
- Conference was in 2011, but after two years the message is still passing to different audiences
 - People still join/contribute to the group
 - Researchers/Students use this library for research/thesis
 - Policymakers read and learn how to improve the lives of poor people in the developing countries
 - Effective tool for literature management
 - Platform to bring subject matter experts

Thanks...

Anyone can join/contribute a recent/relevant publication through our group Agriculture, Nutrition and Health, which collects all the latest work and research on the intersection of agriculture, nutrition, and health

Knowledge is a live process ...please share