Final Report

CIARD Activities in the CGIAR

~A report on activities, outputs and lessons from the implementation of the CIARD grant to the CGIAR~

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Glossary

AAA- The CGIAR ICT-KM Program's Triple A approach, looking ways to make data, information and knowledge Available, Accessible and Applicable

CCAFS- CGIAR Challenge Program and now CRP on Climate Change, Agriculture and Food Security

CGIAR- The Consultative Group on International Agricultural Research

CIP- The International Potato Centre of the CGIAR

CRP- Consortium Research Program: The new set of research programs of the 'new' CGIAR

ICARDA- International Centre for Agricultural Research in the Dry Areas

ICT-KM Program- A system-wide program of the CGIAR focused on information and communication technologies and knowledge management to support to the work of the CGIAR

ILRI- International Livestock Research Institute

MP-Mega Programs (the old terminology for the CRPs)

Introduction: The CGIAR and CIARD

The 15 Centers supported by the CGIAR and their many national partners are together creating a wealth of knowledge that can help rural communities in developing countries build sustainable livelihoods. Yet, formidable obstacles to uptake and use of generated knowledge as well as impact of CGIAR agricultural research remain. One of the missing elements which has reduced the effectiveness of our research and development (R&D) efforts, is appropriate and effective knowledge sharing, both within and between Centers and their research staff, but also importantly between them and their partners and the various actors who can and should make use of this valuable agricultural knowledge. There is a longstanding tradition that separates researchers from those that take up their results. The traditional linear, transfer of technology approach has worked at different times for different purpose but does not offer the best solution for agricultural research to contribute to development outcomes. While this approach may have had some success in the past, the ever-changing nature of agricultural products, research development, actors and needs, this approach is no longer appropriate for all the whole of the agricultural research and development arena.

The CGIAR Centers, and their many research partners need to shift towards making the data information and knowledge generated during and from research more available, accessible and applicable. A key requirement for achieving this shift is to strive towards increased and improved coherence in information for agricultural research for development by making use of particular 'pathways' on an institutional, project and individual level which can better facilitate the uptake of research outputs. Given this need and interest, the CGIAR became a partner in the global initiative for coherence in information for agricultural research for development-better known as CIARD, sharing its vision: "To make public domain agricultural research information and knowledge truly accessible to all".

CIARD activities for the CGIAR have been led by the CGIAR ICT-KM program, which has worked closely with scientists, researchers, research managers and information and communication specialists across the CGIAR: Centers, Programs and projects. This document reports on activities implemented by the CGIAR ICT-KM program through a grant (PO245548) from FAO, originally from the DFID CIARD grant, but is based on activities being undertaken by Centres, Programs and projects of the CGIAR. Special acknowledgement and appreciation is given to ILRI for hosting the CIARD CGIAR grant coordinator and its great support to learning, documentation and promotion of CIARD principles and pathways.

The CIARD-related activities within the CGIAR have been based on a number of **beliefs and principles:**

- Due to the nature of our work in the CGIAR it is essential that we find appropriate and effective ways to share our research knowledge with a variety of actors who can and should make use of it for making decisions and actions towards improving agricultural development and livelihoods. [See WHY2Share work]
- There is a strong synergy between the CIARD initiative and the ICT-KM program's Triple A framework
- It is important to think about and implement pathways for sharing knowledge and collaboration, especially with partners and stakeholders, throughout the research cycle, in order to improve uptake of research results and overall impact [See KSinR framework]
- It is vital to consider which pathways can be used to make knowledge and outputs from research available (being able to find references to them), accessible(being able to obtain full content), and applicable(being able to find them in appropriate formats and ones that allow re-use). [See benchmarking guide]
- Different pathways that facilitate sharing of knowledge from research may be used by different actors within the research Institute: managers, information managers, communication personnel, researchers. It is necessary to match the right pathways with the right users, as well as the intended target audiences given their context and capacity. [See Pathways]
- Some pathways should allow users (stakeholders or beneficiaries) to participate in research, allow for knowledge to flow both ways, and to promote interaction and feedback. [See Pathways]

Detailed report: CIARD activities in the CGIAR

What did we do?- A look at the activities undertaken

1. **Raise awareness** of the need for coherence in information for agricultural research for development and options for achieving it in the CGIAR and with partners, by:

- **Developing and showing material highlighting issues and the need for better research communication**
    - [Video] "How science can not only predict but also mitigate the effects of natural disasters"- shown through
        - Blip TV- http://www.blip.tv/file/4095987?utm_source=player_embedded
        - CGIAR ICT-KM blog post 'A moving story- Putting the film into context'
        - Public forum style events around the film
            - 'Making ag knowledge travel' Hard talk at AgKnowledge Africa Share Fair
            - CCAFS data sharing workshop
    - [Blog posts] For example:
        - Why communication and knowledge sharing in our Megaprograms?
        - How to motivate more knowledge sharing in research: using the carrot or the stick?
        - CIARD – The business of putting research into use
        - NEW! A tangible help to improve access to our research: or how to make our pigs fly!

Quote(s) and example(s):

"*As a member of CIARD, the CGIAR fully supports the concept of making research information available, accessible and applicable. The results of our research need to be in the public domain and widely shared*."

"*Very typically as a scientist we are judged based on our scientific publications, so I published my research results in a peer review journal, and that is basically all I did with it. But I believe that publishing results in a scientific journal is not enough. In the first place these journal articles are written in a language, a scientific language, that people who could do something about it are unlikely to understand. Another problem is access to these journals, and not many people have access to them anyway. But even if you would be make it open access, in my opinion, it still would not be enough to get the message through."* Lieven Claessens, Researcher, CIP

"*This is fantastic! I agree that it is the perfect example of why need to work together to do more to help scientists link their research to the rest of the world*." Vanessa Meadu, Communications Consultant, CCAFS

"*Great story! Wish more researchers could become aware of this and it shows the need for integrated approach and need to work in agriculture development networks, including all stakeholders rather than policy, extension or researchers working in isolation*." Willem van Weperen

"*I am no front line researcher but have done adequate research to say that to demand publications in ISI- Thomson Indexed journals as the premier indication of quality is not exactly well placed. The word "impact" isn't quite understood in journal publications the way it is understood in research-for-development. The long-running "innovations" approach has already prepared ground for some kind of self archiving of key research results- documents with analysis or core data sets or both*", Balaji

- **Presenting CIARD /AAA at ARD, Centre, Program and project events, such as:**
    - AgKnowledge Africa Share Fair, October 18-21 2010 [Day 0; Making ag knowledge travel FGD]
    - African Agricultural Geo Spatial week (~100 people; reps from 13/15 CGIAR Centres) [AAGW and CIARD]
    - Open Access Workshop in Bioversity – a summary (~34 participants)
    - Seminar on 'Collaboration and Knowledge Sharing in Research Programs: Working together across blurred boundaries between internal and external communications' at ICARDA
    - Cali Share Fair
    - XIII IAALD World Congress
    - CIARD presentation at GCARD, March 2010

- Seminar on 'Collaboration and Knowledge Sharing in Research Programs
  Working together across blurred boundaries between internal and external communications' for CCAFS meeting , Montpellier, 27 March 2010
- The Information & Communication Management (ICM) and Agricultural Research for Development & Innovation Event, India , December 2009
- CIAT Knowledge Sharing Week- CIAT – AA and social media gain momentum…
- …and more

Quote(s) and example(s):

"*What does it mean to be a researcher today? Research communication is key. Challenge is about how to integrate communications into daily work of African researchers" "Also linked to cultural and professional attitude of researchers, we are still in the kind of researcher who works in labs and doesn't see what is going on elsewhere. It has been said that people are getting better organised, we have integrated communication in our way of working, not impossible to do in other countries. It is possible to change trend in Africa!*" Abdullai, during CIARD session at the African Agricultural Science week

"*There are a lot of results from research that are not used. Is it that people don't know them or that they don't know how to use them? Need to make them accessible and applicable!*" Dominik during CIARD session at the African Agricultural Science week

"*We're coining the phrase Open Access Agriculture, and the philosophy is that of making agricultural research data available. We're starting with data on agricultural trials, whereby new technologies are tested in the field in specific sites. This is standard practice in agricultural research, but unfortunately what is not standard practice is the sharing of that data*" Andy Jarvis, CCAFS Theme 5 Leader, from his blog post

- **Exploring with various groups the constraints, incentives and benefits of sharing knowledge**
  - At Events
    - FARA- African Agricultural Science Week- see 'African 'carrots': Results of a consultation at the African Agriculture Science Week
    - 'Making ag knowledge travel' focus group discussion- see Making ag knowledge travel: Travel tips from the Share Fair
    - CCAFS trial sites workshop- see Open Access Agriculture: opening the gates
  - Through Online discussions
    - Using the CGIAR ICT-KM Blog- see How to motivate more knowledge sharing in research: using the carrot or the stick?
    - Using an online microblogging forum site called 'Yammer' with a dedicated community called 'Making ag knowledge travel'- https://www.yammer.com/makingagriculturalknowledgetravel#
    - By carrying out a Survey [in process- See Annex 1 for draft]

Quote(s):

"I*t is my capital for career progression*" I was told frankly by one researcher at the CCAFS data sharing meeting

"*Today we discussed a range of issues relating to the constraints and solutions to people actual sharing this data, and began to look into the kinds of data we need to document and share. The good news is that there is plenty of acknowledgement that this data has value and should be open access. The difficulty is in managing these complex datasets in an effective and pragmatic way*" Andy Jarvis

"*What about institutional blocks and bans on social media tools, because they think we are using them for personal and fun matters, not for work? How can this be overcome?"* Participant at BecA paper writing workshop in session on 'Beyond the scientific article: making research social'

"*Scientists need to publish their latest results in peer reviewed papers to secure their career. But in many institutes, researchers are paid to produce papers not to really do any kind of sharing beyond this"* Participant in the 'making ag knowledge travel' Hard Talk

"*Let's be honest, effective knowledge sharing can be difficult, with lots of different factors to consider. We need to firstly make knowledge understandable, to make sense of what it is telling us in our native languages. Then we have to think about how we can pass knowledge on to other people within different cultures and societies and through their languages. If this is not complicated enough we also have to think about the resources we hold, the tools at our disposal and the relationships we have formed to help make knowledge travel*." Andrew Clappison from his blog post 'We must look beyond our 'Ivory Tower' to achieve effective knowledge sharing

One researcher openly and honestly commented that "*with the ARD sector changing to a more actor-oriented and outcome-based system, I need to be doing more to share my information, so that I can stay relevant and be able to continue having a job*."

"*I feel that by sharing my knowledge better I am making a greater contribution to impact on the ground*"

One researcher who has started using more interactive methods with stakeholders in his project told me that he used to work in biology and produced lots of publications and was well respected in his specific field. But he wondered if any of what he had done had made a difference or mattered now. He proposed that "*the real bottleneck in science for development is making the technologies relevant to the farmers and other stakeholders and finding ways for knowledge to spread*". He concluded by saying that "*what I am working on now is more grounded in reality, more relevant to poverty. I am very convinced that we need to translate technology into things that are useful and enhance farmer livelihoods- and this can only be done by interacting, sharing and working with stakeholders. I am trying different ways to do this more in my research projects and I feel better about my contribution*."

Developing short piece with "unique selling points" aimed at changing attitudes towards making ARD outputs/information publicly accessible, for Research managers and Senior champions and Researchers/Scientists

- See "Selling a new 'brand' of ARD-- "Use new pathways to make your knowledge travel and gain mileage" [Text also available in Annex 2]

Quote(s):

"While scientific publications are common, to have a real impact, researchers need to improve the way they get their messages out. Our research results should have impact on people on the ground, so then it is necessary to try to build it in your projects from the beginning and try to seek help on these communication issues" Lieven Claessens, Researcher, CIP

"*Thus, while fully agreeing that CGIAR scientists can be compared with donkeys, and that in individual cases either carrots or sticks may work, I would draw your attention to the need for more institutional facilitation of the knowledge flows towards stakeholders, and that perhaps the carrots and the sticks should be better served at the level of Center Managements*." Response from Eddy DePauw, ICARDA to post How to motivate more knowledge sharing in research: using the carrot or the stick?

"*I have seen recently few CIMMYT colleagues publishing in open access journals (or paying for open access) and I have asked how did they come to that conclusion … response from the two was 'my peers in states/UK do publish in that way, so I have start to think about it and it entirely makes sense' … Hence my suggestion here would be – lets talk about examples, let those who are already publishing 'open' speak in scientific fora about their experience*." Petr Kosina, CIMMYT

- **Using various communication channels and methods to share knowledge about CIARD and its values, pathways and activities**
  - Through the ICT-KM blog/website- www.ictkm.cgiar.org
  - Making use of social media: Blogging, Microblogging, social networks
  - Articles [see list of outputs below]

2. **Explore, learn, document, share and promote 'pathways'** for achieving coherence in information for agricultural research for development, by

- **Exploring and learning from research Centres, projects and researchers within the CGIAR (as well as outside), ways to share their knowledge, such as:**
  - Online repositories
    - E.g Data from Trial sites and CCAFS
    - Blogging about the use of DSpace at ILRI
  - Roundtables and multi-stakeholder forums
    - E.g documenting experiences of ILRI's Fodder adoption project
    - E.g Facilitating interactions in the CPWF Nile Basin Development program
  - Academic social networking
    - e.g Mendeley (Case study- IFPRI)
  - Online Collaboration sites
    - E.g Contributing to ILRI's support to the CPWF NBDC use of wikis
  - Blogs
    - E.g CCAFS
  - Face to face approaches
    - Facilitating a workshop of the ASARECA/ILRI Napier grass project
    - Facilitating events for ILRI's Index-based Livestock Insurance Project
    - Facilitating a 'Pastoralist conversation' at ILRI (multiple partners working on pastoralist issues)

Quote(s):

"*The roundtable, as well as other approaches, were built into the design and implementation of the **Fodder Adoption Project(FAP)**, as it takes an innovation systems approach, which puts alot of emphasis on conversations and interactions with stakeholders as a key mechanism for conducting project activities and making sure that the knowledge and innovations generated are widely shared*" informed Alan Duncan, project leader of IFAD-funded Fodder Adoption Project(FAP) at ILRI.

"*This is excellent! The topic of this roundtable is what I am working on and is of my concern. In fact it is a big concern for farmers and should be a concern for everyone. I am happy to see people talking about it and exchanging knowledge and ideas. I look forward to hearing the results of studies that have been undertaken in this area. I am sure there will be a lot for me to learn*." **Dr. Emiru Zewudie**, previously head of the National AI Centre (ALPPIS) and now starting up a private sector business

"*Putting people in the same room leads to transfer of knowledge. And in this kind of format they can take bits and pieces which are useful to them. But overall it is exposing people to research, studies and knowledge being generated, especially from the field, which can help all of us in one way or another. After all of these years of research so much technological knowledge has been generated but has not been getting out and generating benefits. The focus needs to be -and is- changing to not more generation of technological knowledge but a focus on how to get it out there, how to encourage and support uptake. Key in this is the need to put knowledge into context and figure out how to apply it. And this type of approach-the roundtable- is one way to work towards this*." Carl Birkelo, Deputy Chief of Party-FEED, ACDI-VOCA

"*One of the first activities is to construct, and make publicly and widely available, a database of the performance of agricultural technologies at sites across the developing world. This will build on the existing **Africa Trial Sites** project which was funded by AgCommons as one of the QuickWin projects and developed by CIAT, ICRISAT, CIMMYT and IITA. Based on the experience gained during the Africa trial Sites project it was decided to take the trials sites concept a step further to include **trial performance data** and **trial protocols** in addition to the basic geographic characterisation of trial sites. This initiative will have multiple benefits, such as ensuring that research results are better disseminated, and would add value by bringing disparate data together*", Andy Farrow, CIAT

- **Documenting these 'pathways' for others to make use of**
  - (Additional) Pathway documents, particularly for researchers developed for the website
    - Pathway on 'Multi-stakeholder forums, dialogues and platforms' for research uptake [See Annex 3]

        - Pathway on 'research blogging' [See Annex 3]
    - Blog posts- http://ictkm.cgiar.org/tag/ciard-pathways/

Quote(s);

"*As a community (CGIAR CSI) and its individuals we have a lot of vast and valuable sets of data, information and knowledge. We would like to make this work more accessible but don't know how. We need ideas, tools and guidance to improve our sharing."* CSI rep at AAGW10

"*Very useful day! However, these methods and approaches should be documented and when possible transformed into didactic materials that can be widely distributed*" Day 0 participant expressing need for and value of materials like the pathway documents

"*Organizations like the CGIAR need to store and manage their data properly so that it can be used beyond the initiatives that generated its creation. A data management policy can give Centers more options for the data generated by researchers*", Mir Matin, former Leader of IWMI's Data Management Unit

- **Sharing and promoting pathways, through**
    - ICT-KM website: 'Primers' section, including information on
        - Consultation activities(in preparation)
        - Integrating social media into your work (in preparation)
    - Blog- some examples:
        - Mendeley
        - Data management policy and procedures : Research Data: One of Our Most Important Assets
        - Creative commons: Happy Birthday Creative Commons!
    - Popular media- some examples
        - Video of multi-stakeholder workshop pathway being used in climate change modeling projects by Lieven Claessens of CIP [in production]
    - Community of Practice via Yammer 'Making ag knowledge travel' community
    - At events-some examples
        - Awareness session at the BecA technical/research paper writing workshop: Session on: 'Beyond the scientific article: making your research social
        - Seminar on 'Collaboration and Knowledge Sharing in Research Programs Working together across blurred boundaries between internal and external communications' for CCAFS meeting , Montpellier, 27 March 2010
        - IAALD XIII Congress CIARD Marketplace- Web 2.0 and social media for research uptake: demos at the CIARD Marketplace
        - The Information & Communication Management (ICM) and Agricultural Research for Development & Innovation Event, India, December 2009
        - CIAT Knowledge Sharing week-CIAT – AA and social media gain momentum…

Quote(s):

"*Starting from the CIARD Pathways, we focused on a specific selection of tools: blogs, microblogs and newsfeeds, the blood of the social Web. But we didn't just want to talk about the tools as such; instead, we wanted to showcase a number of CGIAR projects that make good use of social media to promote uptake of research outputs*." Antonella Pastore on the Web 2.0 and social media for research uptake: demos at the CIARD Marketplace

"*Mendeley makes what IFPRI does easier because it provides a space where our researchers can share and collaborate. Increasingly, more and more of our researchers are taking advantage of this tool and we are excited about its current functionality and future prospects!"* Katarlah Taylor, IFPRI

"*The use new media such as radio is key to sharing information and knowledge*, *but the problem is researchers don't know about these services!" Participant of the 'making ag knowledge travel' Hard Talk at AgKnowledge Africa*

"*R*esearchers should work with journalists to sensitize them about the research issues*!"*- A Koda-Traore from the Technical Centre for Agricultural and Rural Cooperation (CTA) at *the 'making ag knowledge travel' Hard Talk at AgKnowledge Africa*

"*What about sharing information with extension and advisory services*", Estibalitz Morras Dimas from the Office of Knowledge, Exchange, Research and Extension at FAO at *the 'making ag knowledge travel' Hard Talk at AgKnowledge Africa*

"*Telecentres are a very useful way of sharing knowledge with people at the grass roots*" Participant at *the 'making ag knowledge travel' Hard Talk at AgKnowledge Africa*

"Just pass information to the people in the villages, they'll find their own solutions. Farmers have knowledge but need a way to express themselves. Farmer Field Schools changed my life. They gave me an opportunity to learn, to try, and to make use of my own knowledge too". Flora Nzambuli, Farmer from Kenya

"TECA is an FAO initiative which has been developed as an information and communication tool for knowledge sharing. TECA provides an opportunity for researchers and end-users to exchange and learn from each other. TECA's uniqueness is the upload of technologies that have been tested with small holder farmers and therefore can be easily replicated. TECA is currently being piloted in Uganda through the Uganda Exchange Group which brings together extension workers, researchers, NGOs, rural entrepreneurs, public institutions, farmers, students and individuals interested in sharing information, knowledge, experiences and network on the TECA platform." Bruce Kisitu informed the 'making ag knowledge travel' Hard Talk at AgKnowledge Africa

3. **Support the identification, implementation, and use of 'pathways'** for achieving coherence in information for agricultural research for development, by

- **Sharing the KSinR framework as a tool for identifying and matching tools and methods to particular work activities, audience, and goals**
    - Online through blog posts and the 'IMPROVING IMPACT THROUGH KNOWLEDGE SHARING IN RESEARCH' page on the KSToolkit
    - At events, such as
        - CCAFS workshop by Antonella Pastore
        - ICARDA seminar by Enrica Porcari
        - Day 0 opening session by Nadia Manning-Thomas [Link to presentation]

Quote(s):

"*I realized that almost all of these tools I have used before only that after this training session, i was able to understand and answer the which, where, when, how and why questions about the application and use of these tools. For example, I was able to know which tool to use where, when, how and why*"

"*This Knowledge Sharing in Research cycle diagram should be shared with those that are writing the Mega Program proposals in the CGIAR at the moment, so open access and knowledge sharing can be considered and budgeted in the new Mega Programs*." Elizabeth Goldberg (Bioversity International)

"Oh now I know how to choose and apply the right tool to make my contents travel", AgKnowledge Africa Day 0 participant

- **Providing support to Centres and projects on Benchmarking their current efforts and using these results to help plan strategic activities to improve their efforts towards making their research AAA**

"*By using an already tested framework, we offered to help measure how many research outputs can be easily accessed, mostly electronically. We offered support in determining their goal in a determined period and the most suitable pathways to get them there. At the end of the period, we will help again benchmark the progress*."

    - Development of Benchmarking, E.g 'Making CGIAR research outputs available and accessible as IPGS" http://ictkm.cgiar.org/document_library/program_docs/ICT-KM%20AAA_complete.pdf
    - Benchmarking activities:
        - Triple-A Benchmarking rolls out
        - CIAT – AA and social media gain momentum… (see presentation from CIAT)
        - The AAA movement gains momentum

Quote(s)/Example(s): E.g from CCAFS data sharing workshop:

*As the type of data and various mechanisms that could be developed for sharing it were being discussed, the Triple A framework became very evident and useful in thinking about what the project wants to achieve and which 'pathways' can achieve which level of sharing: The data can be made **Available** by **publishing the metadata on the datasets** that exist and that will be shared on the platform–so people will know what exists and what they can expect to find at some point. Data is **Accessible** when the datasets are stored in their current formats so that the full content can be obtained but cannot be disaggregated such as with **repositories**. If the system set up to share the data allows for datasets to be taken apart and parts used and re-integrated such as with **databases** then this makes the data **Applicable***

- **Working with research centres, projects and staff to experiment with and integrate knowledge sharing and CIARD pathways into their work, especially through ILRI**
    - CPWF Nile Basin Development Challenge program—support to ILRI KMIS team in using online collaboration platform through wikis, microblogging through Yammer, and a number of face-to-face KS methods
    - ILRI's Index-Based Livestock Insurance project-using a variety of face-to-face KS methods
    - ASARECA-funded Napier grass disease resistance project regional **workshop on** 'Mitigating the impact of Napier grass smut and stunt diseases for the smallholder dairy sector: Sharing results' organized by ILRI June 2nd and 3rd 2010 – using innovative face-to-face KS methods (see: Sharing project outcomes using a "cattle corral"(FishBowl) approach: What's in a name?)
    - CGIAR Mega Program (Now CRPs) stakeholder consultations
        - MP 3.7 'More milk, meat and fish"— contributed to the blog and Survey Monkey used by ILRI and the other Centers for the virtual consultation and to report from the face-to-face consultations.

Quote(s):

"*Nadia, this is a great and true summary of how the innovative facilitation tools that you applied to the workshop created a great environment for knowledge sharing. From the speed dating introduction, the structured and timely presentations, the insightful discussions catalyzed by the peer-assist rotations and finally the creative visual summary that really captured and linked together all the key elements of the workshop brilliantly. Thanks Again*!" Andrew Mude, ILRI

"The Fish Bowl was really effective at getting lots of ideas from the various stakeholders and project team members on what this project may or may not have achieved. Different people could share their ideas and these were discussed in a small enough group to properly examine to what extent such an outcome really was achieved. I am amazed at how much useful information was shared", Dr Shirley Tarawali, Leader of the ILRI Theme on People, Livestock and Environment, from the post Sharing project outcomes using a "cattle corral"(FishBowl) approach: What's in a name?

- Giving and facilitating **trainings** through face-to-face or virtual methods:
    - 1 Social media training organized by ILRI (~20 people)
    - 1 training on Wikis and Yammer for members of the NBDC team
    - Training on social media, popular media, Google Tools, and Face to face Ks methods for more than 300 people on Day 0 learning and training day at the AgKnowledge Africa Share Fair (~330 people; more than 450 training 'seats')
        - Helping us learn: Participants give feedback on Day 0
    - 2 Mendeley webinars (organised with Mendeley) (total= ~ 70 people)
    - Following a request by Peter Ballantyne, delivered 1 short awareness session on social media for research communication at BecA research writing workshop (25 people)

Quote(s):

"There is indeed a need for skills and capacities in order to take on board this new thinking around making research more accessible" Stephen Rudgard

"*I have learnt alot, where else would I have learnt all this if not at the Ag knowledge share fair event*" Day 0 participant

"W*e are not taught how to communicate as we do research- scientists need to be empowered*", Evelyn Katingi

What did we produce?- A list of outputs produced

During the course of the grant we developed a number of outputs in different formats.

- Articles
  - Case study on CIARD for the Cali Share Fair magazine [in press]
  - Article on CIARD for the New Agriculturalist [in press]
  - Section of paper on "Knowledge Management and Biodiversity"
- Blog posts (See list in Annex 4-- from most recent to least recent)
- Documents for CIARD website
  - Pathways for researchers [Annex 3]
  - Unique selling points for researchers and for research managers [Annex 2]
- Powerpoint presentations- see some on our SlideShare account (http://www.slideshare.net/ictkm/edit_my_uploads)
- Seminars/Webinars
  - "Beyond the scientific article: making your research social"
  - Seminar on 'Collaboration and Knowledge Sharing in Research Programs Working together across blurred boundaries between internal and external communications'
  - Webinar on 'Knowledge sharing in research' [being developed]
- Videos
  - "How science can not only predict but can mitigate the effects of natural disasters"
  - Follow-up video on pathways being used by Lieven Claessens in his next project [in production]

Reflection: What did we learn?- Extracting the lessons

'There are still a lot of constraints, concerns and fears to sharing knowledge in the research arena, which need to be overcome to achieve improved accessibility to research knowledge'

- There are a number of constraints on the institutional level which hinder better sharing of research knowledge and outputs. Many institutes continue to have unsupportive policies which restrict use of particular tools and create barriers to sharing knowledge, while other Institutes have not yet adopted particular supportive policies which would provide the right incentives and benefits to its staff to make knowledge accessible.
- Researchers rely on their data for publications and on their publications for recognition and career progression, therefore they are reluctant to share data and published materials in fear of them being used by others.
- The research process is such that until finished (which many be multiple phases of work), projects and individuals are fearsome of sharing information which may still have many questions and uncertainties surrounding it.
- But as this report shows, a lot of fears can be overcome.

'Incentives-or the carrots- for sharing knowledge are a very important component for motivating actions and activities, especially for individuals. For Institutes it is necessary to have an appropriate balance of carrots and sticks (penalities) to achieve goals'

- Since data collection and publications are directly linked to career progression of researchers, it is necessary to also link good knowledge sharing to career progression through performance evaluation mechanisms
- Researchers cannot be expected to do this alone as they need to do research and are not always trained to do knowledge sharing. It is necessary to create structures and incentives which bring together the right skills and support within an institute to achieve this. It is necessary to not only find good models but also to better understand why in existing structures knowledge still does not travel.

'What's in for it me/you/institute is still a very key question that needs to be considered when advocating and promoting greater sharing of knowledge. What benefits can be expected and accrued are key drivers'

- Benefits to the individual: people need to see what benefits they themselves will gain for doing this type of knowledge sharing. Particular direct benefits of financial reward, career progression as well as increased credibility and reputation have been often mentioned.
- Benefits to the project or institute: People have also mentioned the kind of benefits to their project and institute which should be gained and these include improved reputation and funding.

'How to share knowledge is not a blue print approach. Choosing what tools and methods to use requires careful consideration, and implementation should vary by context, group and intended users'.

- The various pathways for sharing knowledge can help achieve different levels of availability, accessibility and applicability, and this should be considered when choosing a pathway what it is you want or need to achieve from it.
- While we promote that knowledge should be made available, accessible and applicable, many Centres still need to improve on the first A-making their knowledge available, and the rest of the second A-making their knowledge accessible. Very few are at the point where they can focus on making their knowledge applicable. It is necessary to work with individual Centre, program, projects to see what stage they are at and to support them to achieve goals relevant to their stage.

- To make knowledge applicable may often require a different set of processes which may be carried out by a different set of people.
- The pathways for making research outputs accessible vary in appropriateness and feasibility by different groups within Institutes. Researchers can also have a key role to make research outputs more accessible but require particular pathways which they can implement. Research leaders and managers are also critical actors in this as they stimulate behavior change in their teams.
- Choosing the right pathway (tool, method, etc) for making research accessible is key. To identify and choose the right pathway requires considering the particular activity/stage of work, the intended target audience and their context and capacity, as well as the functionality offered by particular tools and methods. Undertaking this process for identifying the right pathway is vital for appropriateness, success and sustainability.
- Research produces data, information, knowledge and outputs are various stages throughout its cycle which are valuable for others to access and make use of. Therefore it is necessary to see making research accessible as an ongoing process at various stages and activities of the research cycle and not only at the end. Various pathways can be used at different points in the research process to make the outputs, the research process itself and the people involved accessible to others.

Some other lessons learned- documented in blog post, include:

• That IPGs need to be able to travel; with investment and wide commitment, we can give them this capability, certainly much more than is now the case;
• Traditional outputs as publications and reports are much less accessible to development communities than we wish;
• Publishing peer reviewed articles and books offers excellent pathways to reach into international science communities and a guarantee to science excellence. Alone, this is not a guarantee that the outputs will serve the developmental goals of the CGIAR;
• Using 'accessibility' indicators alongside 'quality' indicators would help focus attention on the need for uptake as well as production.
• Many outputs are not as permanently accessible as posterity may require;
• The licenses and permissions used by CGIAR centers for their outputs often do not encourage use and re-use of the outputs;
• Open access can be provided in different ways that do not compete with peer review;
• Capable partners are essential to spread the word beyond the reach of the CGIAR;
• The CGIAR should continue to work with other organizations – like GFAR, FAO, CIARD … and specialized communities.

Quote(s) and example(s):

"*I believe we should be specifically think about sharing raw (unanalysed) data, not just downstream knowledge products*", Richard Coe, Principal Scientist – Research Methods, World Agroforestry Centre (ICRAF) in response to post How to motivate more knowledge sharing in research: using the carrot or the stick?

"*The focus of KS seems to be often on sharing research results (which is undoubtedly very important).However, as you say, the CGIAR 'is continuously being told that it needs to do a better job at sharing its vast wealth of research-generated knowledge, so that this knowledge can be applied to solving real problems.'*
I think that the first step to make research applicable and useful to solve real problems is to develop KS approaches and tools to formulate the research problem and explore solutions directly with the stakeholders (a gender component is important in this respect). This will increase the relevance, usefulness and arguably quality of the research and its outputs. This alone is an important aim for the researchers." Alessandra Galie, ICARDA in response to post How to motivate more knowledge sharing in research: using the carrot or the stick?

"*We should be* getting farmers involved *in developing solutions together with researchers – not just bringing them 'THE' solution! We need to appreciate and empower farmers to be part of the process"*

"*There is no silver bullet*. O*ne tool, method or pathway cannot necessarily achieve it all or by itself, we should* merge technologies *such as community radio, social media, and others depending on the situation".*

Annex 1: Draft survey on incentives, challenges and benefits

1. Understanding who you are

The reasons why people share knowledge and the ways in which they do so often vary by sector, position, and context. In order to better support the various actors of ARD in sharing their valuable knowledge it is essential to get to know the various people invovled.The questions on this page are meant to help us understand more about who you are, what you do and what context you come from

Q1 1. What is your name?

Q2 * 2. How would you describe your main role or activities in your work?

- ☐ Knowledge Sharing
- ☐ Capacity Building
- ☐ Research
- ☐ Information Management
- ☐ Management
- ☐ Extension/Advisory services
- ☐ Communications

Tell us your position or job title

Q3 * 3. What type of organisation do you work for?

- [ ] Information/Communication organisation
- [ ] Donor/funding agency
- [ ] National Agricultural Research System (NARS)
- [ ] International organisation
- [ ] Consultative Group on International Agricultural Research (CGIAR)
- [ ] Extension or Advisory Service
- [ ] University/Academic Institute
- [ ] Government Ministry or Department
- [ ] Non-Governmental Organisation (NGO)
- [ ] Advanced Research Institute (ARI)

Please indicate the name of your organisation

Q4 * 4. In which geographic region are you based or do most of your work?

- [ ] Central Asia
- [ ] Europe
- [ ] Global
- [ ] Latin America and the Caribbean
- [ ] Middle East
- [ ] North Africa
- [ ] North America
- [ ] Pacific
- [ ] South Asia

☐ South-east Asia

☐ Sub-Saharan Africa

Please give a specific country or sub-region where you are based or do most of your work

Q5 5. How do you feel about sharing agricultural knowledge? Give us your thoughts on this...

PAGE 2

2. Incentives for sharing knowledge

People have to have reasons to do things--especially when it may be time consuming, out of their usual field of work, and concerning something valuable--such as with sharing agricultural knowledge.
The questions on this page are meant to explore with you what incentives you have or would like to have to share (your) knowledge.

Q6 * 1. We have gathered a number of ideas of 'incentives' that would encourage more and better sharing of knowledge, through various workshops, interactions and events...but want to know from you:

A. How important are each of these as incentives for YOU?
B. Are you experiencing any of these incentives in your work- and to what degree?

	Importance of this incentive for you	To what degree do you have this as an incentive
1. Greater practical support in research communication from your institution		
2. Enhanced access to ICT tools (internet, computer, applications)		
3. Sound institutional policies for protection of ownership of intellectual property		
4. Provision of enhanced opportunities for career and personal (training) development		

5. Factor for promotion		
6. Linked to Financial reward (salary, benefit increases)		
7. Opportunity for National/institutional prize/awards		
8. Payment of proportion of royalty to individual scientists for IPR bought by companies		
9. Insistence on fulfillment of obligatory requirements for reporting and communication of research outputs of the institution, national government/stakeholder, and/or foreign donors		

Q72. What other incentives do you think are necessary or desirable for encouraging sharing of knowledge?

1.

2.

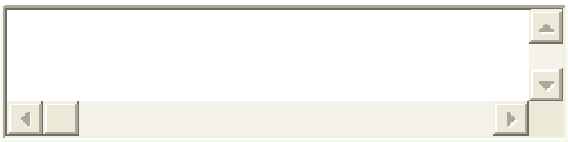
3.

Q83. Do you have an example from your own experience of what has incentivised or would incentivise you to share?

PAGE 3

3. Challenges and constraints to sharing knowledge

Q91. When you are told, showed or encouraged to make use of more ways to share (your) knowledge-what are the challenges and constraints that first come to your mind?



Q10 * 2. There are many reasons why people don't share their data, information and knowledge- we hear them all the time! Below are a list of some of the challenges and constraints that we have heard through interviews, events and interactions. But we want to know how much of a concern these are to YOU...

	This strongly hinders me from sharing	This is something I have to think about	This does not affect me sharing knowledge
Finances/budget	There are many reasons why people don't share their data, information and knowledge- we hear them all the time! Below are a list of some of the challenges and constraints that we have heard through interviews, events and interactions. But we want to know how much of a concern these are to YOU... Finances/budget Finances/budget	Finances/budget	Finances/budget
People 'stealing' your data/information and (re)using it	People 'stealing' your data/information and (re)using it People 'stealing' your data/information and (re)using it	People 'stealing' your data/information and (re)using it	People 'stealing' your data/information and (re)using it
Institutional policies (e.g against use of social media)	Institutional policies (e.g against use of social media) Institutional policies (e.g against use of social media)	Institutional policies (e.g against use of social media)	Institutional policies (e.g against use of social media)
Access to tools and methods	Access to tools and methods Access to tools and methods	Access to tools and methods	Access to tools and methods
Skills/capacity/know-how	Skills/capacity/know-how Skills/capacity/know-how	Skills/capacity/know-how	Skills/capacity/know-how
Support from other teams in Institute	Support from other teams in Institute Support from other teams in Institute	Support from other teams in Institute	Support from other teams in Institute
Time	Time Time	Time	Time

Poor internet (bandwidth, etc)	Poor internet (bandwidth, etc) Poor internet (bandwidth, etc)	Poor internet (bandwidth, etc)	Poor internet (bandwidth, etc)

Q113. What are some suggestions of how challenges and constraints you find to sharing knowledge can be overcome or addressed?

1.

2.

3.

PAGE 4

4. Benefits of sharing knowledge

But there are a number of benefits that are and can be gained from sharing of data, information and knowledge--people have shared many of them with us as well. What about for you...?

Q12 * 1. Below is a list of benefits which we have been told.
Are these benefits gained by: (can choose both if appropriate)
a. The individual (e.g researcher)
b. The institute

	a. the INDIVIDUAL	b. the INSTITUTE
Recognition	Below is a list of benefits which we have been told. Are these benefits gained by: (can choose both if appropriate) a. The individual (e.g researcher) b. The institute Recognition Recognition	Recognition
Increased access to resources	Increased access to resources Increased access to resources	Increased access to resources
Reputation/credibility in science	Reputation/credibility in science Reputation/credibility in science	Reputation/credibility in science
Reputation/credibility in 'impact'	Reputation/credibility in 'impact'	Reputation/credibility in 'impact'

Reputation/credibility in 'impact'

Q13 * 2. If we loook at benefits that can be gained from sharing knowledge...what is the importance of each of these for you?

	This benefit is vital for me to share	This is a valuable benefit	This benefit is a nice extra to have	This is not enough of a benefit
Increased personal recognition	If we loook at benefits that can be gained from sharing knowledge...what is the importance of each of these for you? Increased personal recognition Increased personal recognition	Increased personal recognition	Increased personal recognition	Increased personal recognition
Increased recognition of your Institute	Increased recognition of your Institute Increased recognition of your Institute	Increased recognition of your Institute	Increased recognition of your Institute	Increased recognition of your Institute
Increased personal Reputation/credibility in science	Increased personal Reputation/credibility in science Increased personal Reputation/credibility in science	Increased personal Reputation/credibility in science	Increased personal Reputation/credibility in science	Increased personal Reputation/credibility in science
Increased personal Reputation/credibility in partnerships and impact	Increased personal Reputation/credibility in partnerships and impact Increased personal Reputation/credibility in partnerships and impact	Increased personal Reputation/credibility in partnerships and impact	Increased personal Reputation/credibility in partnerships and impact	Increased personal Reputation/credibility in partnerships and impact
Increased Reputation/credibility in science of your Institute	Increased Reputation/credibility in science of your Institute Increased Reputation/credibility in science of your Institute	Increased Reputation/credibility in science of your Institute	Increased Reputation/credibility in science of your Institute	Increased Reputation/credibility in science of your Institute
Increased Reputation/credibility in partnerships and impact of your	Increased Reputation/credibility in partnerships and impact	Increased Reputation/credibility in partnerships and impact	Increased Reputation/credibility in partnerships and impact	Increased Reputation/credibility in partnerships and impact

Institute	of your Institute Increased Reputation/credibility in partnerships and impact of your Institute	of your Institute	of your Institute	of your Institute
Increased access to resources for work activities	Increased access to resources for work activities Increased access to resources for work activities	Increased access to resources for work activities	Increased access to resources for work activities	Increased access to resources for work activities
Increased personal resources (salary, benefits, prizes)	Increased personal resources (salary, benefits, prizes) Increased personal resources (salary, benefits, prizes)	Increased personal resources (salary, benefits, prizes)	Increased personal resources (salary, benefits, prizes)	Increased personal resources (salary, benefits, prizes)
Career progression	Career progression Career progression	Career progression	Career progression	Career progression
Making a contribution to science	Making a contribution to science Making a contribution to science	Making a contribution to science	Making a contribution to science	Making a contribution to science
Making a contribution to alleviating poverty	Making a contribution to alleviating poverty Making a contribution to alleviating poverty	Making a contribution to alleviating poverty	Making a contribution to alleviating poverty	Making a contribution to alleviating poverty

What would your preference be?

Q143. Share with us any example or experience of benefits gained from sharing knowledge...

PAGE 5

5. Pathways for sharing knowledge

There are many ways to share data, information and knowledge that make them available, accessible and even applicable. Different people use different pathways in different contexts--we want to learn more about this!

Q15 * 1. Do you use or been involved in any of the following 'CIARD Pathways'?

	Yes	No
•Advocate the benefits of the digital accessibility of content	Do you use or been involved in any of the following 'CIARD Pathways'? •Advocate the benefits of the digital accessibility of content •Advocate the benefits of the digital accessibility of content	•Advocate the benefits of the digital accessibility of content
•License Content to Encourage Use and Re-use	•License Content to Encourage Use and Re-use •License Content to Encourage Use and Re-use	•License Content to Encourage Use and Re-use
•Work with Publishers who have Flexible Policies on Open Access	•Work with Publishers who have Flexible Policies on Open Access •Work with Publishers who have Flexible Policies on Open Access	•Work with Publishers who have Flexible Policies on Open Access
•Digitize older outputs, to be 'born again' digital	•Digitize older outputs, to be 'born again' digital •Digitize older outputs, to be 'born again' digital	•Digitize older outputs, to be 'born again' digital
•Put in place institutional policies that enable the sustainable development of a repository	•Put in place institutional policies that enable the sustainable development of a repository •Put in place institutional policies that enable the sustainable development of a repository	•Put in place institutional policies that enable the sustainable development of a repository

•Preservation of digital documents and data	•Preservation of digital documents and data •Preservation of digital documents and data	•Preservation of digital documents and data
•Develop a Repository for Digital Content	•Develop a Repository for Digital Content •Develop a Repository for Digital Content	•Develop a Repository for Digital Content
•Maintaining web links and managing broken links	•Maintaining web links and managing broken links •Maintaining web links and managing broken links	•Maintaining web links and managing broken links
•Disseminating research outputs – international databases	•Disseminating research outputs – international databases •Disseminating research outputs – international databases	•Disseminating research outputs – international databases
•Making a website's content visible on the Web	•Making a website's content visible on the Web •Making a website's content visible on the Web	•Making a website's content visible on the Web
•Set up added value services that query across platforms	•Set up added value services that query across platforms •Set up added value services that query across platforms	•Set up added value services that query across platforms
•Publish and promote outputs with newsfeeds	•Publish and promote outputs with newsfeeds •Publish and promote outputs with newsfeeds	•Publish and promote outputs with newsfeeds
•Using social media to communicate research outputs	•Using social media to communicate research outputs •Using	•Using social media to communicate research outputs

	social media to communicate research outputs	
•Using video to communicate research outputs	•Using video to communicate research outputs •Using video to communicate research outputs	•Using video to communicate research outputs
•Using Web 2.0 solutions for your Website	•Using Web 2.0 solutions for your Website •Using Web 2.0 solutions for your Website	•Using Web 2.0 solutions for your Website
•Analyse how your websites are being used. Put this knowledge to use	•Analyse how your websites are being used. Put this knowledge to use •Analyse how your websites are being used. Put this knowledge to use	•Analyse how your websites are being used. Put this knowledge to use
•Using online repositories for making research available, accessible and applicable	•Using online repositories for making research available, accessible and applicable •Using online repositories for making research available, accessible and applicable	•Using online repositories for making research available, accessible and applicable
•Using blogs to share research outputs	•Using blogs to share research outputs •Using blogs to share research outputs	•Using blogs to share research outputs

Are you using other 'pathways' for sharing knowledge? Tell us

Q162. If you have used or are using any 'pathways' for sharing knowledge...please share with us how you are using it, in what context, and how it has worked. Please provide any links to further information or the pathway itself.

Annex 2: (Draft) Unique Selling Points piece (as a blog post)- Selling a new 'brand' of ARD-- "Use new pathways to make your knowledge travel and gain mileage"

But the challenge is how to promote these principles and the pathways to achieving them amongst research organizations and scientists- many of you out there? And this is where the USPs come in.

We have something to 'sell'- a new 'brand' of agricultural research for development which makes data, information and knowledge available, accessible and applicable to the many stakeholders who can and should make use of it. Our 'customers'-the managers, researchers, information managers and communication personnel of research organizations- need to know why to 'buy' this new brand, what it will do for them and how to 'buy' it.

Three important elements of USP's

But selling brands is easier said than done. From the Wikipedia page on USP it quotes "In *Reality in Advertising* (Reeves 1961, pp. 46–48) Reeves laments that the U.S.P. is widely misunderstood and gives a precise definition in three parts:

1. Each advertisement must make a proposition to the consumer. Not just words, not just product puffery, not just show-window advertising. Each advertisement must say to each reader: **"Buy this product, and you will get *this specific benefit*."**
2. The proposition must be one that the competition either cannot, or does not, offer. It must be unique—either a **uniqueness of the brand** or a claim not otherwise made in that particular field of advertising.
3. The proposition must be so strong that it can move the mass millions, i.e., **pull over new customers to your product."**

So why should YOUR Institute/project be trying to make your outputs more accessible and using such pathways?

(Public) Funding opportunities are being more and more tied to outcomes and impacts which requires that research results be more widely and openly shared.

- Your Institute/project is doing great research and producing lots of outputs-but no one knows about it.
- **It's just NOT enough...:** Current channels of documenting, storing and sharing research results-such as Journal articles, protected repositories, etc- are not extending the data, information and knowledge from research activities in ways which different actors can access them. Without access to this vital information, ...
- **It's easier now...**
- We're all doing it!

1. "Buy this product, and you will get this specific benefit."

While the list of reasons above are good rationale for adopting new and better ways to share and make openly accessible your research knowledge--you probably are thinking... "But it is more time consuming", "I don't know how", "I am worried about who will take or use my data and information".

These 'costs' may be very real, therefore it is necessary to point out to you what the benefits are-which can outweigh some of these costs. And this is again the role of good USPS...

Some good examples of products with a clear USP were also provided on the Wikipedia page:

- Head & Shoulders: "You get rid of dandruff"
- Olay: "You get younger-looking skin"
- Domino's Pizza: "You get fresh, hot pizza delivered to your door in 30 minutes or less -- or it's free."
- FedEx: "When your package absolutely, positively has to get there overnight"
- M&M's: "Melts in your mouth, not in your hand"
- Wonder Bread: "Wonder Bread Helps Build Strong Bodies 12 Ways"

So what would be some good USPs for coherence in information for agricultural research for development and the pathways to achieve this?

"You get visibility like never before"

Peter Ballantyne suggests using a parody of the hold beer ad: "'Heineken reaches parts other beers cannot reach" … Research reaching parts other researchers cannot reach" … "research reaching people others cannot reach"… etc

" Freely available pathways, priceless impact"

- "You will be seen, like you've never been seen before" [Increased visibility and recognition]
- "You get more knowledge, collaboration and cooperation from others"
- "When your knowledge absolutely, positively has to be put into use""Creating a global network of truly accessible outputs of research and innovation greatly increases the chance that they can be put to use, locally, nationally and globally."

2. Uniqueness of the brand

While there are many fields out there advocating for improvements in agricultural research for development- capacity building, innovation systems, participatory research, impact pathways- CIARD and its counterpart AAA are not competing with each directly. The uniqueness of this 'brand' is in its holistic nature. According to CIARD website, "*The CIARD partners coordinate their efforts, promote common formats for information sharing and exchange, and adopt open information systems approaches*"

Also providing real practical ways to do this through the Manifesto, Checklist and Pathways

CIARD will have most impact when organizations and individuals all over the globe work together to dismantle the barriers that prevent information being truly accessible to all.

3. Pulling new customers over

From some initial benchmarking work done by the ICT-KM program of CGIAR centre's status of making its outputs available and accessible. We found that while output titles and citations could be easily found on library catalogues, publications catalogues centre website, full content of most outputs was hardly accessible from popular avenues such as Google, international databases and open online repositories.

The Independent Review of the CGIAR (2008) encouraged Centers "to make their research available and useful for development" – as well as for international science. But how can people from policy, extension, development or even science put them into use if they cannot find them or access them?

So a number of Institutes and projects have been trying out 'pathways' to make their knowledge more available and accessible, with some positive results. So take a look what others are doing and achieving:

At the International Livestock Research Institute they have adopted a number of social media and open online tools to make their research outputs more accessible. They are using:

- Using social media to communicate research outputs
- blogs
- an online open repository system called 'Mahider' (using Dspace)

...and this has lead to increased traffic to ILRI outputs (see graph in photo).

At the International Food Policy Research Institute, researchers are making use of an academic social network tool called Mendeley which helps them to share research papers and collaborate with other researchers , which is helping them to make a difference in the developing world.

Using information from the IFPRI website (www.ifpri.org/pubs/articles/articles.asp), the improving accessibility of journal articles and book chapters can be seen:

- In 2006 240 items 40% full text open accessible
- In 2007 212 items 71% full text open accessible

In 2008 (to February) 24 items 92% full text open accessible

But this needs to be continuously checked to make sure that this trend is continuing.

CIAT is also using social media to gets its message out through blogs, slideshare, videos and more.

According to research commissioned by ICT-KM and documented in a report' Making CGIAR Research Outputs Available and Accessible as IPGs (http://ictkm.cgiar.org/document_library/program_docs/ICT-KM%20AAA_complete.pdf):

"In recent years, Centers have begun to use more 'social media' – like blogs and wikis. These are often referred to as 'web 2.0' applications. IFPRI's World Hunger Blog was launched in June 2005. The number of visitors grew from 52 visitors a month in June 2005 to 5,953 visitors a month in October 2006. Page views rose from 119 per month in June 2005 to 7,234 per month in October 2006. In recent years, IFPRI's RSS feed has become one of its most frequently viewed pages, with monthly "hits" increasing by more than 300 percent since January 2006.

Other examples of the use of this web 2.0 in the CGIAR include:

- The ICT-KM Program runs several blogs as vehicles to distribute news and updates.
- The Bioversity news service is produced on a blogging platform; the IRRI, IFPRI and Bioversity libraries have blogs highlighting developments.
- IRRI has loaded thousands of its photos to Flickr – the free photo-sharing space.

- Almost all Centers have introduced RSS feeds on their web sites that allow readers to subscribe to automatic updates on news of each Center.
- WARDA, IRRI and other Centers share more popular – and more applicable - introductions to some of their research work as video's on You Tube.
- Several Centers have descriptive pages on Wikipedia.
- The IRRI-CIMMYT 'good practices in research data management' project uses a wiki."

A number of research projects and programs are also making use of pathways for sharing knowledge and seeing good results.

At both ILRI and CIP some research projects are making use of structured face-to-face methods to bring together multiple stakeholders and share with them results of their research, as well as to learn from them too. The ILRI Fodder Adoption project is using the roundtable approach, while at CIP one researcher, after learning about the tragedies of not sharing data and information, is now using multi-stakeholder workshops in his climate change modeling project to share valuable information.

Time for you to join the club

So what is your Institute or project doing? If you are not adopting some of these pathways above you are missing out on some real visibility and use of your research.

So you're sold--but don't know how to get started? It's as easy as ABC

ASSESS:

- Examine your Institute and the ways it makes its outputs available and accessible to others. Also look at what policies, structures, and capacities support or hinder this. [See our benchmarking work]
- Identify areas for improvement and goals, considering target actors, contexts and capacities[Link to KSinR work]
- Explore what pathways can be adopted or enhanced to achieve those goals [See some Pathways documented]

BEGIN

- Start with a few people who might want to use some tools and methods in your Institute and in research projects
- Many of these pathways are freely available and easy to use . However implementing these pathways may require new policies, different skills sets, and specific allocation of budget.
- Keep reviewing and learning along the way
- Add more 'pathways' to the portfolio as you go along

CHAMPION

- Devise/Provide the right (for you) policies to support the adoption and use of pathways in the Institute and in projects
- Provide the right incentives, benefits and rewards for research and communication/information staff to undertake
- Share what you are doing with others

So are you going to 'buy' it? You should, it's worth it!

Annex 3: 2 'New' pathways

Group 3: Making Content Widely Accessible on the Web

Using blogs to communicate research

Intended audience: Scientists/researchers, research managers

From the Pathway on "Using social media to communicate research outputs" we have seen that while conventional methods for sharing data, information and knowledge, such as conferences, seminars, journal articles and reports, and now institutional repositories, are an important part of the communication of research and development, the way people source information has been changing. Social media has been growing in importance and steadily breaking down barriers to communication, allowing people to connect, engage and share in a more informal way. Agricultural research and development organizations can now leverage the power and popularity of social media to give their research outputs more mileage.

This Pathway on "using blogs to communicate research" looks at one particular type of social media that can and is being used by research projects themselves as ways to better collaborate, share research knowledge and get feedback. We will explore in greater depth how blogs can be used by research projects and programs to improve the communication of their research knowledge and outputs.

What do you need to know?

The following definition is given by Wikipedia (http://en.wikipedia.org/wiki/Blog). "A **blog** (a blend of the term ***web log***)[1] is a type of website or part of a website. Blogs are usually maintained by an individual with regular entries of commentary, descriptions of events, or other material such as graphics or video. Entries are commonly displayed in reverse-chronological order. *Blog* can also be used as a verb, meaning *to maintain or add content to a blog*. Most blogs are interactive, allowing visitors to leave comments and even message each other via widgets on the blogs and it is this interactivity that distinguishes them from other static websites.[2] Many blogs provide commentary or news on a particular subject; others function as more personal online diaries. A typical blog combines text, images, and links to other blogs, Web pages, and other media related to its topic. The ability of readers to leave comments in an interactive format is an important part of many blogs. Most blogs are primarily textual, although some focus on art (Art blog), photographs (photoblog), videos (video blogging), music (MP3 blog), and audio (podcasting). Microblogging is another type of blogging, featuring very short posts."

There are now a number of software options for blogging including WordPress, Blogger, Typepad. It is necessary to think about whether you will keep your blog hosted by the blog software itself or want to have it stored on your institutional server.

Also note that some blog software can not be accessed in certain countries.

Why research projects should consider using blogs

While institutional blogs can provide a regular source of information, this is usually focused on Institutional activities and events, major achievements and news-often very general. Research projects, therefore, have the opportunity to make use of blogs in a more defined and impactful way. If you consider outputs from research projects in the broadest form, then research has a lot to offer throughout the project cycle. A blog is a great mechanism for documenting and sharing this wide variety of knowledge assets from the formal to the non-formal. Since blogs can act as a form of website, it is possible to use a blog as a way to

store, preserve, document and share knowledge from multiple sources in the project. Due to its social media nature, blogs can also form as a mechanism for collaboration in order to engage with others, gather additional knowledge on topics and capture feedback on research activities as well as products. Blogs are thereby able to facilitate the necessary conversations which are being increasingly required of research projects these days.

Blogs are very popular sources of information and forms of communication for a growing number of people, so using blogs can help your project to gain greater visibility and reach a wider set of people.

Blogs can be used by research in a number of ways.

- By research department, units, themes, disciplinary groups or teams
- By research projects and programs
- By individual researchers

They can be used by research projects and researchers for:

- As informal ways to interact and share information on a project or piece of research
- Extend the reach of a research output such as an article
- Blogs can attract people with **similar thoughts** and questions, people who can **validate** your ideas and also **challenge** you by sharing varying opinions.
- **Blogging** is a good way for researchers to share their research ideas with others and gain feedback from a wider, online audience

What do you need to do?

Use blogs to share your research better. It can be used to:

Increase visibility

• **Create awareness of your research via your blog.** Let people know what your research is about, what you are doing and achieving, results and what outputs are/will be available.
• **Use your blog to highlight your project's contributions, achievements and impact**. Announce awards, achievements and successes.
• **Promote your name.** Use social media to establish your reputation in the research and development arena. Blogging (http://ictkm.wordpress.com/2009/04/23/blogging-for-impact/) is a good way for researchers to share their research ideas with others and gain feedback from a wider, online audience. Well-thought-out blogs attract people with similar thoughts and queries, people who can validate your ideas and also challenge you by sharing varying opinions.

Engage people

•Interact and discuss with people about your research and outputs-use this tool to hold conversations
•Seek feedback on your research
•Use your blog to provide opinions, insights and analysis which may interest people
• Ask questions and seek ideas and knowledge from others through the blog

Share knowledge

• Use your blog to inform people throughout the research cycle

- Use your blog to share links and files to your research outputs
- Use your blog to provide further insights and information from your research
- Use your blog to advertise and document any research project events

•Think about what you blog: provide useful, informative information as well as evidence, data etc along with your insights and opinions.
• Embed photos, videos, and powerpoint presentations into your blog posts to share with people various outputs from your research from which they can learn and benefit

- Ask your webmaster/communciation department to link feeds from your blog to your Institute's website and other social media tools to create more visibility for your blog and make its content travel further.

How to get started

• Think about the stage of the research cycle/project and what you want to achieve from better sharing and interaction—this will define your goal
•Identify who you want or plan to share or interact with, Consider their capacity, context and interest.
•Explore the various functionalities of a blog or of blogging
•Start small: use an open source blog software which is hosted on the web. Try writing blog posts for yourself to develop a style and practice before making it public.
•As your confidence in and style of blogging grows, become more active. Consider this as a key place to announce things, share information, report on events, etc
•If using a blog in a project, get others involved.
•Keep your blog active!
•As your blog becomes more populated, interactive and useful, consider having it hosted on your institute's server and embedding it into your website
•Link your blog with other tools and methods. For example, embed photos, videos, slides into your blog posts. Also share your blog link and links to specific posts with other social media tools such as Twitter, FaceBook, etc for increased visibility and traffic.
•Look at your blog stats/analytics and comments to evaluate your blog traffic and participation

The following research blogs are some examples:
• Agricultural Biodiversity blogs (http://www.biodiver.se/) Insightful blogs on biodiversity in agriculture by Luigi Guarino and Jeremy Cherfas. Version 0.1 October 2009
• ICT-KM Blogs (http://ictkm.wordpress.com/) showcases blogs and blogging within the research arena
• Rural Climate Exchange (http://cgiarclimatechange.wordpress.com/) New CGIAR blog connecting agricultural and environmental science to the climate change agenda.
• The following research blogs are some examples:
• Agricultural Biodiversity blogs (http://www.biodiver.se/) Insightful blogs on biodiversity in agriculture by Luigi Guarino and Jeremy Cherfas. Version 0.1 October 2009
• ICT-KM Blogs (http://ictkm.wordpress.com/) showcases blogs and blogging within the research arena
• ILRI Fodder Adoption project blog (http://fodderadoption.wordpress.com/)

Resources

• Web2forDev (http://www.web2fordev.net/) Articles and examples on blogging in the context of development work.
• Knowledge Sharing Toolkit (http://www.kstoolkit.org/Blogs) Learn how to blog and experiences in using blogs in the research and development context.
• ICT-KM Social Media Blog series (http://ictkm.wordpress.com/2009/07/02/and-then-there-were-ten/) Blogs on using social media tools in research and development organizations.
http://ictkm.cgiar.org/2009/04/23/blogging-for-impact/

• Blog Tips (http://www.blogtips.org/)On blogging and social media for non-profits.

Multi-stakeholder processes to communicate research

Intended audience: Research managers, Scientists, Communication professionals

While the new and growing range of online, web-based and social media tools offer great opportunities for improved research communication and uptake, there are still some limitations in the use of these. In certain contexts access to and capacity to capture and process online mechanisms is very little if not non-existent. This should not however stop research projects from thinking about improved ways to make their research knowledge more available and accessible.

Additionally, research insitutes and projects are being called upon to find ways in which their International Public Goods can be produced "in partnership" with other actors in an R for D (research for development) continuum, perhaps as part of an 'innovation systems' approach (http://ictkm.cgiar.org/document_library/program_docs/ICT-KM%20AAA_complete.pdf).

This Pathway introduces the concept of multi-stakeholder processes- a set of structured processes for engaging, learning and sharing with multiple stakeholders in face-to face environments. These processes, which can implemented in a numbe of forms, can be used by research projects to communicate research results and knowledge and share products and outputs coming out of the research activities.

What do you need to know?

What are multi-stakeholder processes?

According to the Wageningen University Multi-stakeholder Process portal(http://portals.wi.wur.nl/msp/?page=1184), MSPs are:

"*Multi-stakeholder processes and social learning are about setting up and facilitating long term processes that bring different groups into constructive engagement, dialogue and decision making. Sustainable development requires questioning and changing deeply embedded social institutions related to how we govern ourselves nationally and globally, the way markets work, the attitudes we hold and the way we use and integrate scientific understanding into political decision making. Bringing about such change and innovation is not something governments can do on their own. We have also learned that leaving social change purely to the forces of the market is no recipe for sustainability. This leaves little option other than to work out how business, civil society groups, and government can work in partnerships to guide society towards a more sustainable future*."

Multi-Stakeholder Processes (MSPs) are:

- processes that aim to involve stakeholders in improving situations that effect them
- forms of social interaction that enable different individuals and groups, who are effected by an issue, to enter into dialogue, negotiation, learning, decision making and collective action
- about getting government staff, policy makers, community representatives, scientists, business people and NGO representatives to think and work together

Multi-stakeholder processes can be implemented in a number of different formats, such as:

- Platforms at local, regional or National level (e.g Learning and Practice Alliances)
- Dialogues
- Roundtables

Why you should consider multi-stakeholder platforms

The MSP portal (http://portals.wi.wur.nl/msp/?page=1184) suggests that "Complex problems require innovative solutions. Innovative solutions are created when diverse stakeholders are able to meet, share experiences, learn together and contribute to decisions. Ultimate success lies in developing the collective commitment and capacity to turn ideas and plans into action. This can be achieved through facilitating multi-stakeholder processes (MSPs) and social learning."

While there is a lot of emphasis on the interaction and dialogue-these processes can be excellent ways to share knowledge from research projects and institutes with a wide variety of stakeholders, with one effort all at once.

Because there are many different types of MSPs, Institutes and projects can choose formats which they feel comfortable with and which work with both the project goals an knowledge as well as the stakeholders and their contexts and capacity.

Multi-stakeholder platforms allow research projects to share data, information and knowledge throughout the whole research cycle, thus helping to achieve Availability, Accessibility and Applicability of research outputs.

What do you need to do?

Integrate multi-stakeholder activities into your research projects to share your research better.

Consider your needs and goals

- Think about what your project and/or Institute wants to achieve in terms of sharing research knowledge with stakeholders
- Identify the multiple stakeholders of the project. Consider the context and capacity of the stakeholders to share with
- Look at project/institute budget, staff, skills and timing

Choose your process

1. Look at the different options of multiple stakeholder processes

According to the MSP portal "There is a lot of diversity between MSPs:

- in *Purpose*: Input for policy making, Conflict management, Decision making, Project or programme design, Empowerment, Resource management, Economic development
- in *Subject* : Environmental Management, Health, Rural development, Cross sectoral
- in *Scale*: Local to Global
- in *Participants*: Government, Business, Civil society, Scientists
- in *Process*: Long or short term, Use of many different methods"

2. Consider the functionality of the different types of MSPs and how these can help to achieve your particular purpose and needs, and of course keeping in the context and stakeholders involved.

3. Identify your target audience. You may want to reach out to several different groups with your process, so it is important to think carefully about who you want to target with what particular content and how. You may require a mixed approach to reach various stakeholders within the same process.

Decide on content and format for sharing

1. Think about the knowledge content and products you may want to share. Remember this can happen throughout the research cycle and doesn't have to only be at the end with formal outputs.
2. Depending on the information you want to disseminate, you can use various tool and methods within your particular MSP-both during the face-to-face events as well as in between, including
    a. Face to face knowledge sharing techniques
    b. Presentations
    c. Photo, Video and audio presentations
    d. Online tools use tools like blogs, social bookmarks, online repositories, and websites to engage and share with your stakeholders between meetings.

Other things to consider

- Keep your MSP active. Make sure there is information to be shared by your project as well as by others.
- Share relevant and useful information including key data, results, graphics and background information. This process doesn't have to make sharing your outputs any less evidence-based or formal.
- Make it an interactive process. Even if sharing outputs- allow for feedback and discussions
- Make use of other tools and methods for innovative sharing during the meetings as well as in between.
- Monitor and evaluate your process, and adjust as necessary.

Resources

• Wageningen MSP Portal (http://portals.wi.wur.nl/msp/?page=1184)
• ICT-KM Blog post: Want to make knowledge move around: Is the roundtable approach applicable? (http://ictkm.cgiar.org/2010/06/29/want-to-make-knowledge-move-around-is-the-roundtable-approach-applicable/)

• For tools and methods to use in your MSP Use the Knowledge Sharing Toolkit (http://www.kstoolkit.org/)

Annex 4: List of blog posts related to CIARD

- "Sharing knowledge and connecting researchers is what we do": Mendeley and the CGIAR what a good match! (Posted on 22 November 2010)
- Over the rainbow: Seminar on "Beyond the scientific article – making your research social" (Posted on 18 November 2010)
- A moving story-Putting the film in context (Posted on 5 November 2010)
- Helping us learn: Participants give feedback on Day 0 (Posted on 2 November 2010)
- Making ag knowledge travel: Travel tips from the Share Fair (Posted on 31 October 2010)
- Open Access Agriculture: opening the gates (Posted on 27 October 2010)
- Why communication and knowledge sharing in our Megaprograms? (Posted on 21 August 2010)
- African 'carrots': Results of a consultation at the African Agriculture Science Week (Posted on 26 July 2010)
- How to motivate more knowledge sharing in research: using the carrot or the stick? (Posted on 5 July 2010)
- Want to make knowledge move around: Is the roundtable approach applicable? (Posted on 29 June 2010
- XIII IAALD World Congress Roundup (Posted on 25 June 2010)
- Sharing project outcomes using a "cattle corral"(FishBowl) approach: What's in a name? (Posted on 21 June 2010)
- Part 2 – My first back-to-office blog: 'AAGW and CIARD- a match made in space!" (Posted on 18 June 2010)
- "Please make all CGIAR research Open Access" an open response (Posted on 26 May 2010)
- Web 2.0 and social media for research uptake: demos at the CIARD Marketplace (Posted on 28 April 2010)
- Research Data: One of Our Most Important Assets (Posted on 7 April 2010)
- Agriculture Information Access Marketplace: join us in Montpellier (Posted on 16 February 2010)
- Happy Birthday Creative Commons!(Posted on 17 December 2009
- Using ICTs to their advantage: Agricultural R4D community branches out (Posted on 7 December 2009)
- Listening to the Voices (Posted on 27 November 2009)
- CIARD – The business of putting research into use (Posted on 23 November 2009)
- NEW! A tangible help to improve access to our research: or how to make our pigs fly! (Posted on 25 October 2009
- Making agricultural research accessible: CIARD steps up (Posted on 4 June 2009)
- CIAT – AA and social media gain momentum…
- The AAA movement gains momentum
- Now the question is…how do we make agricultural research outputs useful?
- Opening access to agricultural research – as discussed in Maputo
- Making the most of our research outputs…or making our pigs fly!

Annex 5: More Quotes

“Knowledge multiplies by sharing...and dies if kept to oneself... agricultural knowledge is shared to inform, to cooperate, to solve, to compete, for peace, to know what works and what does not.” Sapna Jarial, Research Associate ELKS, International Livestock Research Institute

“You need managers to push and encourage scientists to go for open access... justification of needed investment... show them the CIARD pathways as opportunities for increasing access that would be reachable/feasible.... demonstrate to management that if we're sitting at some point, show them that they can get at a higher/better position... use existing cases, evidence data” Antonella Pastore, CGIAR ICT-KM program

“How to approach management about repositories?: show them that document repository is actually a management information tool for them to know what is going on with their centers, by departments, and also be able to know who is actually viewing their information: summary: Open Access produces more: visibility, usage, citations (impact)...” Tania Jordan, ICT-KM Program

"KM is systematic approach to capture,store & share knowledge in order to increase use of K for econ benefit-K is central to development. But if we have no access to knowledge, how can it be used?" asked Dirk Hoekstra in #ilri #ipms workshop

“I think a gender-balanced project can be more effective in achieving its expected outcomes. In the case of participatory plant breeding, for example, the inclusion of women farmers can help to better target varieties to local and also gender-specific needs. Therefore, a gender-balanced communication can help identify better needs and priorities that inform agricultural research and development.” Alessandra Galie, ICARDA

“Any researcher that has gone through an EU project audit will also know how much anguish and time can be saved by knowing exactly where all the project documents are and not having to search in project offices around the world for the final version of documents to submit to the auditors” Ian Moore, ILRI/ICRAF

“Some of the incentives for sharing research knowledge for scientist would include, greater visibility - mentioning where and how far this knowledge is spreading, preserving information in a more structural way, reporting back on collaborative results that are as a result of sharing knowledge so as to encourage more sharing and also organization & personal gratification” Evelyn Katingi, CGIAR Collective Action

“Knowledge management requires dedicated staff, financial commitment and leadership commitment to realize significant results”, Ermias, ILRI IPMS

“Our discussions recently have centred around the part of the iceberg that is below the water in terms of research data management. In other words how to make knowledge available when you might not even know that it exists. Once the knowledge is available we seem to have the situation in hand on how to make it accessible with lots of people coming up with new ideas on accessibility all the time” Ian Moore, ILRI/ICRAF

“Within the CGIAR research environment we feel we need to think much more about making knowledge available right from the beginning, during the project's conception. There is information produced at the proposal stage and for the research protocol or other documents that can be harvested and used to describe the information objects produced by the project at a later stage. This can simplify the creation of metadata for information objects that many researchers find so difficult and time consuming. It also means that we can track projects and know that knowledge should be being produced and when it should be made accessible. I totally agree that making sure people know the benefits of Why2Share is the main motivation to making sure information is made available. After that the simpler we can make the process the better.” Ian Moore, ILRI

“I think research institutions are still the primary source of information which other stakeholders can use in decision making. From the M&E perspective research institutions provide timely info on project progress, reflection and learning” Pamela Pali, ILRI

“Managing programs for outcomes. This entails planning for and sharing resulting outcome stories, because that is the CG can demonstrate how research contributes to development. It is where and how the world reacts to research processes and findings. That is how to make ... knowledge travel. And create its own demand.” Julius Nyanganga, ILRI

"Need to keep in mind the possible, future changes in connectivity when thinking about ICTs to use for ag and rural dev--it is already changing in many African countries; more promised for 2012" Anon

“ I agree. A lot of people rely on mass media channels like newspapers for information on science and technology. Working with the media would call for repackaging of research outputs to create messages specifically tailored for general audiences” Tezira Lore, ILRI

“We need you to share your research findings with our researchers, policy makers, extension agents, and our farmers" urged Dr. Abera, State Minister of Min of Ag , Ethiopia, at launch workshop of the Nile Basin Development Challenge program

For the same reasons we all know we should exercise regularly and that we should maintain a certain Body-Mass-Index etc. because its good for us, but we do not do it (at least I don't).similarly doing 'social good' is something one has to start doing (by whichever trigger mechanism) and it works better if your peers notice and compliment you. You personally feel more motivated if you have been able to get someone else to join you (at the same time you feel responsible to keep going, expand »to serve as an example). Soon it spreads, especially if you have a group of peers who motivate each other. On that last point I would like to say that the culture of 'recognition' of people's contribution to the community is quite prevalent in the USA e.g. "stand up and be recognized for." but this is not strong in the cultures of other parts of the world, where one is rather expected to help out of one's commitment to the 'family'. Food for thought on the approaches that may apply in different contexts. Furthermore, perhaps we have something to learn from the pyramid schemes and religious groups and adapt them to our needs, because we are not only in the business of 'making information travel' but also keeping the channels flowing”, Krishan Bheenik, SADC