## FAO's role in facilitating access to the scientific and technical literature in Agriculture in developing countries

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- Constraints of information access in developing countries
- FAO initiatives
- Way forward























#### What is FAO

...a specialized United Nation agency that leads international efforts to defeat hunger...

... acts as a neutral forum where all nations meet as equals to negotiate agreements and debate policy...

... is also a source of knowledge and information







## FAO as a knowledge organization

- Constraints of information access in developing countries
- FAO initiatives
- Way forward























#### Information & Knowledge Management at FAO

- The First Article of the FAO Constitution says "The Organization shall collect, analyze, interpret and disseminate information relating to nutrition, food and agriculture."
- A specific objective of FAO's Strategic Framework In response to the World Food Summit (1996) "improve decisionmaking through the provision of information and assessments and fostering of knowledge management for food and agriculture."
- A new focus on FAO as a "Knowledge Organization" as approved by the FAO Council





# ... facilitating access to the scientific and technical literature in Agriculture in developing countries...



## Recently...

... An Independent External Evaluation of the Food and Agriculture Organization (FAO)...

...Recommendation 3.3...

"... FAO's principle task is to work to ensure that the world's knowledge of food and agriculture is available to those who need it when they need it and in a form which they can access and use ..."









- FAO initiatives
- Way forward























## Why?

- Socio-economic factors in developing countries:
  - Grey literature hardly accessible
  - Lack of adequate ICT/M infrastructure, strategies and policies
  - Unawareness to low cost technologies such as OA
  - Higher emphasise and resource allocation to research than information management activities
  - High Internet costs
- Related to Journals:
  - Permission crisis to use online journals
  - Scientist unable to publish in mainstream journals
  - Unaffordable subscription fees to journals





#### The benefits...

- OA progress in the agricultural sector
  - Researchers from developing countries can benefit in publishing their outputs in OA journals
  - Research outputs can be archived and accessed through OAI framework
- High visibility of agricultural research outputs
  - post-prints & pre-prints / grey literature
- Accessibility to content through networking within agricultural sciences and technologies
- Greater impact on the economic development







- Constraints of information access in developing countries

#### **FAO** initiatives

- AGRIS Network
- AGORA
- FAO Corporate Document Repository
- Way forward























## AGRIS Network

International Information Systems for Agricultural Sciences and Technology

International initiative based on a collaborative network of institutions

http://www.fao.org/agris/

## AGRIS Network. History

- AGRIS, operational since 1975:
  - to build a common and freely accessible information system for science and technology in agriculture and related subjects, especially gray literature.
- Until late 1990's, outputs mainly comprised a centralized bibliographical database [AGRIS DB] and associated products.
- Since 2000, the efforts are increasingly towards building up decentralized capacities in its participating resource centres.
- 2005 new vision and strategy emphasising on partnerships, collaboration and networking
- currently has 100+ active centers all over the world





## AGRIS Network. Objectives

- Decentralised approach with greater emphasis on national partnerships;
- Greater diversity of research-oriented organisations
- Strengthened role in capacity building
- Focus on management and availability of full text digital content in agricultural science and technology;
- Greater availability of associated information about activities, organisations, and people
- Continually improving set of web-enabled AGRIS methodologies and tools (with a focus on the establishment of standards).





#### AGRIS Network. Capacity building activities

- Training: AGRIS/IMARK capacity building workshops and materials
- On-site and online (DGroups) technical support
- Provision of basic IT infrastructure to challenged centers
- Project proposals and funding
- Assistance to institutions that wants to publish through AGRIS central database
- Related services to improve visibility to research output from AGRIS resource centers
- Recommend standard tools and methodologies





#### AIMS. Information Standards & Tools

- Use of standards for exchange of agricultural information
- Assuring quality in metadata creation
  - AGMES: Application Profiles (DLIOs, Projects, Events Organizations)
  - KOS: AGROVOC, AGRIS subject categories
  - Tools: WebAGRIS, Metamaker, Dspace

Agricultural Information Management Standards

Interoperability, Reusability, and Cooperation







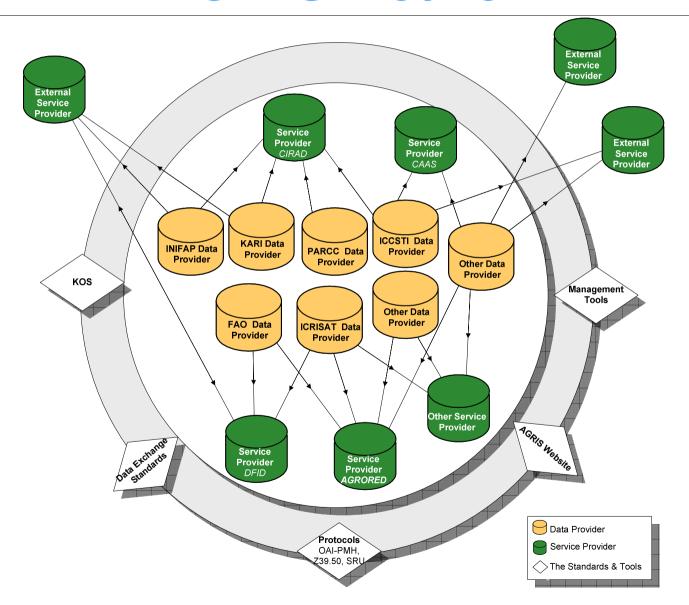
## AGRIS Network. Open Access (OA)

- The AGRIS network promotes the OA paradigm and applies OAI & AGRIS standards and methodologies
- 2005 October: OA was endorsed in an AGRIS Expert Consultation
- 2006 August: AGRIS Open Archives architecture concept
  - promotes development of Institutional Repositories (data providers)
  - promotes the use of standard tools and methods -- OAI & AGRIS -- for knowledge exchange
  - development of national and regional service providers
- Awareness campaigns on Open Access model at the institutional level





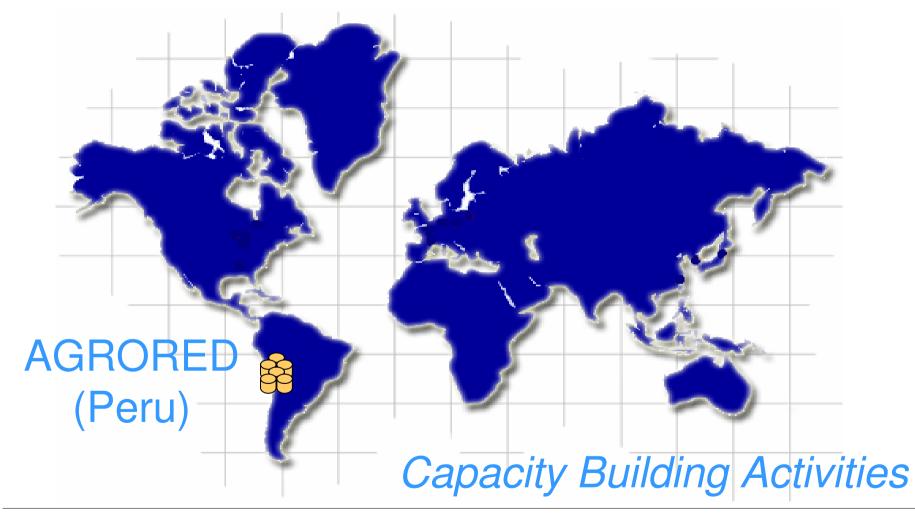
## **AGRIS Network**







## AGRIS Network. Case Studies











- Established in 2005 to facilitate the development of the Peruvian agriculture science and technology
- Collaborative project with 27 national institutions where FAO AGRIS is officially and actively involved.

#### Objectives:

- establish strategies to promote an integrated system for the availability of agricultural metadata and full text content
- strengthen national and institutional capacities to manage, disseminate and exchange agricultural Information
- promote the IR development and the use of standard tools and methodologies









- Establishment AGRORED Peru framework
- 1st Course on Open Access and Open Archives Initiative in Peru, June 2007.
  - "Z101 Declaration" as testimony of their commitment to the global Open Access movement.
  - E-forum on Open Access for information specialists involved in agricultural research in Latin America and the Caribbean.
- Use of AGRIS tools and methodologies established (7 000 documents) and development of policies mandating Open Access in one pilot center.







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#### Avances

#### Declaración Z 101

Los profesionales de la información participantes del Taller "Archivos Abiertos para el Desarrollo" realizado en la ciudad de Lima (Perú) del 11 al 13 de Junio de 2007, en el aula Z101 de la Pontificia Universidad Católica del Perú, deseamos manifestar por el presente documento lo siguiente,

#### Reconocemos que:

- •El acceso a la información científica de forma libre y abierta beneficia y contribuye al desarrollo social y económico de nuestros pueblos, más, si ésta se encuentra disponible en Internet.
- •El movimiento del acceso abierto y la iniciativa de archivos abiertos favorece la integración de los países latinoamericanos al circuito mundial de la información y patrimonio científico.
- Los profesionales de la información somos actores del proceso de democratización de la información y miembros inherentes de las iniciativas de acceso a la información.
- Reconocemos que la creación del repositorio institucional de datos es un valor agregado a la confiabilidad de las publicaciones digitales por cuanto se debe velar por un buen manejo del repositorio.
   En consecuencia nos comprometemos a:
- Promover la filosofía del acceso abierto en nuestras comunidades académicas y científicas.
- Participar, apoyar y desarrollar propuestas de acceso abierto y difundir los beneficios de las iniciativas de archivos abiertos.
- Sensibilizar a los investigadores y académicos sobre la importancia de su aporte en la creación de archivos abiertos para la democratización del conocimiento y la información.
- Promover en los organismos e instituciones académicas y científicas la implementación de políticas a favor del acceso abierto.
- Iniciar esfuerzos para desarrollar localizadores y repositorios temáticos de publicaciones digitales como herramientas que contribuyan al desarrollo del país.
- Apoyar bajo el paradigma del acceso abierto las nuevas opciones de diseminación del conocimiento apoyados en las nuevas tecnologías de información y comunicación.
- Nos comprometemos a fomentar el mejoramiento de las habilidades informativas que faciliten el uso de fuentes de información en formato digital.



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## AGRIS Network. Case Studies







## KAINet. Kenya



- The Kenya Agricultural Information Network (KAINet) is a national AGRIS project born out of the new AGRIS vision
- A three year pilot project funded by DFID, UK (Department for International Development)
- Collaborative project with FAO, ASARECA-RAIN, CAB International, and selected 5 national institutions
- Objectives
  - strengthen national and institutional capacities to manage, disseminate and exchange agricultural Information
  - availability of full text content through the IR development
  - promote use of standard tools and methodologies
  - document the process and develop lessons learnt case study





#### KAINet. Achievements



- Establishment KAINet framework & action plan
- Development of Institutional ICT/M strategies and policies including mandating Open Access in the pilot centers
- Institutional Repositories in the pilot centers using AGRIS tools and methodologies established (400 documents)
- Improved capacities at 5 pilot institutions to manage and disseminate their research output
- Identified a framework for knowledge sharing
- Training activities including seminars on OA held and others scheduled for 2007-2008





#### Lessons learnt

- high enthusiasm by the Institutions to improved capacities to manage information
- willingness to collaborate and to adopt new ideas that facilitates the project's success
- sustainability of activities after project cycle should be build in from the on set







A global partnership to provide free or reduced price Online journal access to developing Countries

http://www.aginternetwork.org/en/

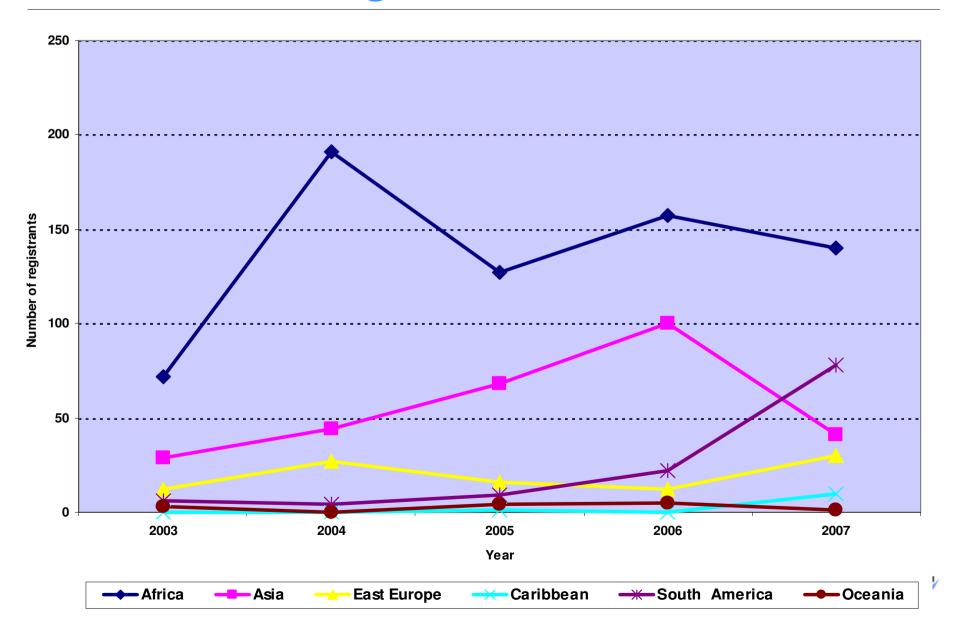
#### **AGORA**

- Objective: to provide free or low cost access to scientific journals in agriculture and related sciences to 107 developing countries
- Facilitated by FAO
- 1150 journals from over 40 major publishers
- Index from CAB International
- 1250 subscribing institutions
- Major capacity building efforts required
- Persistent connectivity constraints on usage





## AGORA usage



## FAO Repository

Online access to FAO documents and publications, as well as selected non-FAO publications, in electronic format

http://www.fao.org/documents/

## **FAO Document Repository**

- Since 1998, the FAO Corporate Document
  Repository houses FAO documents and publications, as well as selected non-FAO publications, in electronic format.
- It enables users to easily access the accumulated knowledge and information produced by FAO on Internet and CD-ROMs.
- Efforts are undergoing to achieve OAI compliancy.
- At present, more than 23 000 full text documents are available through the CDR.







- Constraints of information access in developing countries
- FAO initiatives
- Way forward



## Way forward

- Seek donor funding and collaborative partnerships for capacity building initiatives
- Encourage review and development of institutional ICT/M strategies that promote management, availability and access to knowledge
- Develop awareness campaign programmes on OA and other low cost technologies
- Promote mandating of OA
- Ensure sustainability in the projects for activities to continue once the funding is over





#### For more information...

- AGRIS Network http://www.fao.org/agris/
- Agricultural Information Management Standards http://www.fao.org/aims
- AGORA http://www.aginternetwork.org/en/
- FAO Document repository http://www.fao.org/documents/

http://www.fao.org/kce/





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