Global Forum for Agricultural Research (GFAR)

The GFAR Document Repository

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1.0 Introduction:

One of GFAR’s missions is to: “Facilitate the exchange of information and knowledge among Agriculture Research Development stakeholders”. The GFAR Document Repository has been established to be a key component of this mission. It represents a new GFAR tool for action, an information service that will reach communities of users interested in knowing more about ARD (Agricultural Research Development) by allowing access to all available GFAR Secretariat documents. This document describes the activities undertaken to launch the GFAR Document Repository, the intellectual efforts needed to adapt the technology to the GFAR requirements and the technical knowledge acquired about GFAR programme activities. In the new GFAR Document Repository all documents produced by GFAR are described and indexed in metadata records using agricultural information management standards. It is hoped that other institutions and Regional Fora who are interested in setting up a similar project will benefit from the GFAR experience and begin their own activities.

2.0 What is the GFAR Document Repository?

The GFAR Document Repository is a digital instrument used by the GFAR Secretariat to disseminate its digital collections of documents capturing and preserving the intellectual output of the GFAR Secretariat.

The Repository will be a compelling application attracting more users to the new GFAR website such as: researchers, information owners, content providers and stakeholders who will hopefully move away from traditional publishing process and start sharing their knowledge in the new repository.

Stakeholders and researchers use the web to meet their information needs similarly the GFAR Document Repository uses the web to organize and disseminate documents, streamline and promote information exchange among users and ARD stakeholders. The GFAR Document Repository aims at being the starting point of a bigger mechanism of information services that allow users to share their content and plus give more visibility to their information resources thorough an easy-to use collaborative tool.

Why create the GFAR Document Repository?

1. To provide users with the possibility of searching and retrieving dynamically any document produced by the GFAR Secretariat
2. To enhance language coverage: the GFAR Document Repository contains documents in 3 languages (English, French and Spanish)
3. GFAR Secretariat can apply quality control on the documentation produced
4. Metadata records describe consistently the GFAR documentation and enable the users to retrieve efficiently all information available on a specific topic or related to it.
5. Develop a global mechanism for exchanging information on Agriculture Research Development with other document repositories.
6. To establish knowledge networks
7. To support decision-making
8. The Document Repository represents the right context within which to implement and justify any and all piecemeal or smaller projects.

All over the world many types of organizations are using the dynamic electronic environment to meet the information needs of their addressees. For example:

- FAO’s Corporate Document Repository (www.fao.org/documents)
- AGRIS Database (www.fao.org/agris)
- The National Agricultural Library Digital Repository (http://naldr.nal.usda.gov/)

These services are primarily meant for using the internet as a gateway, thus offering users free access to selected collections of documents.

The main functionalities of the system are:

- Authors can publish their documents and make them visible on the web to all the world
- Documents are inserted in the system following information management standards (i.e. AGRIS AP and terminology standards (i.e. AGROVOC)
- Access to the document is preserved by producing the minimal metadata record
- Electronic documents are saved and preserved in a file server
- The search can be customized according to different needs

The project builds on an initiative of the GFAR Secretariat in collaboration with the Library and Documentation Systems Division of FAO which has provided a customized version of the EIMS (Electronic Information Management System).

The EIMS provided the necessary workflow and the metadata element set needed for describing the digital documents, as well as the implementation of the GFAR taxonomy and the AGROVOC Thesaurus for describing the content of the publications.
The system is still being refined for the efficiency of the data entry and publication and selection policies need time to be fully evaluated by the system users.

Users can have different options in dealing with access and use of materials in the repository, for example not all materials can be made available on the GFAR website. Due to confidentiality restrictions, some materials can be made accessible only to a small group of researchers or to people associated with only one institution.

An information specialist will monitor the system workflow, guarantee the quality of the metadata records and ensure the completeness of the collection.

With the release of the new GFAR website the Document Repository the system will be accessible in the GFAR Knowledge Base section.

The documentation has been organized according the GFAR Taxonomy to which a separate webpage has been dedicated.

The preparation of a glossary to define the main ARD keywords is also planned and special queries will be formulated providing documentation from other electronic databases.
2.1 Activities undertaken:

In the process of establishing the repository a number of activities were undertaken:

1. Analysis of GFAR documentation

   A first analysis identified 3000 electronic documents produced by GFAR Secretariat (1998 to current date). This material had not been previously organized in a database, so priority was given to 1000 items accessible through a full-text search on GFAR’s web site, a selection of GFAR core documents was also produced.

2. Publication policies established according to the institutional context, the scope and purposes of the GFAR Repository.

   The GFAR Document Repository Publication Policies are appropriate for any development institution who may want to use the system and have been inserted in the GFAR document Repository.

3. Design and customization of the data entry interface.

   The data entry interface and the sequence of the metadata elements were established in compliance with standards already promoted and developed by FAO (i.e. AGRIS Application profile) this will allow the system to be immediately interoperable with the AGRIS network.

4. Study of the system workflow.

   The workflow offered by the EIMS was analyzed and customized permitting the inclusion of restricted material, the inclusion of the document in GFAR website, the quality control and the final approval and of the records created.

5. User awareness and promotion.

   Preparation of a newsletter explaining, promoting and advocating the use of the GFAR Document Repository among GFAR Community.

6. Records production

   Creation of 750 metadata records applying description guidelines, local controlled vocabulary and standard vocabulary (e.g. GFAR taxonomy and AGROVOC Thesaurus)

7. System output to the AGRIS Repository

   Preparation of a mapping table of all GFAR metadata elements from the FAOInfofinder XML to AGRIS AP XML, this allowed the export of a selection of GFAR Records to the AGRIS Repository.
3.0 The GFAR Taxonomy:

The GFAR Taxonomy was developed during the establishment of the GFAR Document Repository and is implemented in the system. It was set up with the intention to provide the Secretariat with a list of ARD keywords to be used as descriptors for classifying all types of GFAR documents.

The GFAR taxonomy is composed of terms which cover cross-cutting subjects and can be applicable not only to documents, but to all kinds of information objects in the GFAR website.

The taxonomy is primarily meant to assist the users in searching, locating and retrieval of information by linking similar documents and resources with a unique term.

It standardizes the content description of documents, and assists in efforts to make information more interoperable.

The taxonomy also provides a basic subject map about the GFAR activities which is necessary for understanding the content of the documents, therefore the GFAR taxonomy should be firstly considered an information access tool providing insight to GFAR’s documentation.

The figure below illustrates the four major steps and information flow in the taxonomy building process.

The 6 subject areas identified are:

1. Programme Activities
2. GFAR Mission
3. Stakeholders
4. Capacity development
5. Information and Communication Management
6. Knowledge sharing

The structure of the GFAR taxonomy has two hierarchical levels, a future initiative is to identify different types of relations between the terms and the 6 subject areas.

The taxonomy has been mapped to the AGROVOC Thesaurus, a tool developed and maintained by the Library and Documentation Systems Division of FAO currently used to index information resources in all major information systems of FAO.
The mapping to AGROVOC has been implemented in the GFAR Document Repository.

The GFAR taxonomy is a work in progress, and will be updated with new terms as required by the system users. It is hoped that users will provide feedback and contribute to the enhancement of the taxonomy.

The GFAR taxonomy is attached to this document in Annex I.

4.0 Conclusion and Future Steps:

There is a broad consensus that the Internet is still difficult to access in some developing countries, however this does not imply that information cannot be disseminated. The GFAR Document Repository should serve as a platform from which communities of users can easily learn and share their knowledge with other groups within rural areas.

But how does this project differ from what development organizations and other institutions have been doing for years: collecting and disseminating information agriculture development?

What will make the difference is that GFAR staff members and stakeholders can participate together in the enhancement of the Document Repository.

GFAR offers researchers the opportunity to publish their documents in the Document Repository, by just doing that, they will:

- exchange their knowledge with other researchers
- organize their own publications consistently
- disseminate their own publications
- acquire more visibility and be cited
- allow development workers and farmers to access these publications and build on their capacities

Publication guidelines will be provided to the researchers which will assist easy input of their documents into the database. A study of other information management standards and protocols is also planned to enhance the interoperability of the Document Repository.

Exchanging information promotes local innovation, partnerships and planning strategies, but this needs to be a collective effort to ensure success.
ANNEX I

The GFAR Taxonomy

Capacity Development
Capacit y building
Capacity development
Change management
Distance learning
Institutional development
Learning
Learning exchanges
Organisational learning
Stakeholder Empowerment
Training

GFAR Mission
Advocacy
Advisory services
Community involvement
Collaboration
Decision making
Governance
Incentives
Inclusiveness
Innovation
Integration
Linkages
Organisational development
Poverty Alleviation
Resource development
Stakeholder negotiation and mediation
Subsistence
Sustainable development

Information and Communication Management
Communication
Documents
ICTS (Information and Communications Technology Services)
Information dissemination
Information management
information objects
Internet
Intranet
Libraries
Knowledge sharing
After action review
Awareness
Communities of practice
Content management system
Cross-culture knowledge
Formal networks
Group facilitation
Knowledge and development
Knowledge capture (i.e. capturing)
Knowledge fairs
Knowledge mapping
Knowledge processes
Knowledge sharing practices
Network analysis
Networks
Online facilitation
Participation
Peer assist
Sensitization
Social network analysis
Storytelling

Programme Activities
Agricultural research
ARD priority setting
ARD strategy (Agricultural Research for Development Strategy)
Case studies
Commodity networks
Evaluation
Food Security
GAP analysis
Institutional support
Leadership
Management
Market linkages
Markets
Monitoring
Natural resource management
North-South collaboration
Partnerships
Planning
Post-harvest technologies
Project management
Research
Research Needs Assessment
Research partnership
Resource development
Rural development
Social Analysis Systems
South-South collaboration
Stakeholder Analysis
Stakeholder mobilization
Strategic thinking
Strategies
Success stories
Sustainable development

**Stakeholders**
Advanced Research Institutions (ARIs)
Agricultural Research Centres
Agricultural Universities and colleges
Civil Society (CSOs)
Community based organizations (CBOs)
Developed Countries
Developing Countries
Development Organizations
Donors
Educational institutions
Entrepreneurs
Family farmers
Farmers
Farmers’ organizations (FOS)
Financial institutions
Institutes
International Agricultural Research Centres (IARCs)
International NGOs (INGOs)
Landless movements
Multi-stakeholder
National Agricultural Research Institutes (NARIs)
National Agricultural Research Systems (NARS)
National Organizations
Non-Government
Nongovernmental organizations (NGOs)
Organisational profiles
Organizations
Peasant organizations
Private Sector
Public institutions
Regional Fora (RF)
Regional Organizations
Rural institutions
Rural producers
Stakeholders
Sub-regional Forums (SRF)
Sub-regional Organizations (SRO)