



GFAR

GLOBAL FORUM ON
AGRICULTURAL RESEARCH

FORUM MONDIAL DE
LA RECHERCHE AGRICOLE

FORO GLOBAL DE
INVESTIGACION AGROPECUARIA

May 6, 1999

Information Initiatives in Agricultural Research: Enhancing Global Cooperation

**Conclusions and Recommendations of the Consultation Organized by
GFAR, with the support of FAO and the World Bank**

Rome, FAO Headquarters, March 29–31, 1999

1. Background

In a world characterized by globalization, and by an increasingly science-based and knowledge-intensive environment, the *access to information*, and the *capacity for converting information into useful knowledge* for different end-users and stakeholders, is becoming of paramount importance. In the Regional and Sub-Regional Fora on agricultural research that have taken place in the last two years (1996-1998) the need to promote the development of *Agricultural Information (or Knowledge) Systems* has been clearly emphasized, as a way of responding to these considerations, and as an important tool for strengthening the National Agricultural Research Systems (NARS) and for improving the effectiveness of agricultural research. Another important consideration that has emerged in all these Fora is the *increasing risk of inequity*, between and within countries, because of their different capacity to access and use information and improved technologies. The risk of exclusion and of increasing technology gaps, is one of the possible consequences of the rapid rate of technical change being faced at present. Here Information and Communication Technologies (ICT) and Information Systems, if well managed, can play an important role.

In recent years important information programs and services have been established by various development organizations, aimed at responding to the information needs of a wide range of users in different sectors and/or topics (i.e. FAO, World Bank, ISNAR and other CG International Centers, regional banks and organizations, advanced research institutes and universities, etc.). The GFAR itself established an electronic forum (EGFAR) to facilitate access to information, and to provide a platform to facilitate debates on global issues critical for broadening and deepening research partnerships.

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The growing importance and complexity of the issues involved are clearly increasing the need for coordination among the various actors, and for seeking to assure greater end-user involvement and responsiveness to real development needs and requirements. This need for greater coordination among the various actors involved was also clearly underlined by the CGIAR External System Review Panel, who recently recommended that the CGIAR, FAO, World Bank, NARS, Advanced Research Institutions (ARIs) and Non-Governmental Organizations (NGOs) develop, in partnership, an effective Global Knowledge System for Food Security.

2. Objectives of the Consultation

The Consultation had three main objectives:

- a) To exchange information on who is doing what, in order to characterize and strengthen current global and regional/sub-regional initiatives on agricultural information, seeking to increase their effectiveness.
- b) To characterize the different categories of end-users and identify mechanisms to better involve them in the assessment of their needs and in the design of information systems which meet their requirements.
- c) To generate ideas on how to improve cooperation and coordination among the various actors that are active in this field, in order to lay the basis for moving in the direction of establishing a *Framework for Global Agricultural R&D Information*.

3. The Consultation in brief

The Consultation was attended by 49 participants and a list of names and addresses is presented in Annex 1. The agenda of the Consultation is presented in Annex 2 and provides the titles and the names of the authors of the different presentations. The documents can be obtained directly from the authors or from the NARS Secretariat.

The two main characteristics of the Consultation have been:

- The commitment of the participants and of their organizations to the Consultation. Only one invited organization could not send a representative but managed to have close interaction with the NARS Secretariat the week before the Consultation. Furthermore, the large majority of the participants attended at the cost of their organization. Only 6 participants received partial or full financial support from GFAR.
- The excellent spirit which prevailed during all the discussions. The participants openly shared their experience and gave their advice without being too defensive regarding their own institution. They basically shared the same concerns, were very positive in their attitude and comments, and succeeded in formulating proposals in the interest of the whole community.

4. Conclusions and Recommendations

The main conclusion was a consensus among the participants on the need to **“Build an Enabling Global Framework for Agricultural Research Information for Development”**, as a first step towards the emergence of a **“Global Knowledge System in ARD”**.

The building blocks for the Global Knowledge System are the national institutions and the various stakeholders of agricultural research. Whereas the national institutions should increasingly be encouraged to organize their information in an electronic mode, strong regional/sub-regional ICT support and coordination should facilitate the display of information in this broader framework. Besides facilitating the display and circulation of national information, Regional/Sub-Regional Information Systems also facilitate the interaction between global information facilities and end-users at the local level. Thus Regional/Sub-Regional Information Systems play a strategic role in the development of a Global Knowledge System in ARD.

Stakeholders participation at the national level will be of paramount importance to provide information content, that can be displayed through the national information facilities, on the regional and global levels. New approaches to digest research information seeking to convert it into useful knowledge, as well as to gather and insert indigenous knowledge and wisdom in the information systems, are clearly needed. The development of a capacity for converting information into relevant knowledge for different types of end-users and stakeholders, was considered to be an essential element in order to take advantage of the opportunities offered by the increasingly science-based and knowledge-intensive environment that characterizes the present globalized world.

In the Rome meeting interesting experiences and approaches were discussed, and concrete projects were presented that may contribute to the achievement of this objective. The use of ICT to support scientific networks was identified as a key element in this process. These ideas and approaches are considered to be important instruments in the development of a knowledge management capacity in developing countries, and as tools that can play an important role in facilitating the emergence of a Global Knowledge System. These two dimensions require and reinforce each other.

All participants agreed on the following points, as basic elements of a strategy for the establishment of this “enabling global framework”.

4.1. Vision

The participants shared and adopted a common vision which can be summarized as follows: *“Knowledge, and an equitable access to it, is essential to achieve food security and sustainable development”*.

4.2. Justification for an “enabling global framework”

The participants considered that the existence of a multiplicity of suppliers of information and of stakeholders, each one with their specific requirements, has created a need for a more user-friendly navigation mechanism for identifying and locating information, for

providing quality control, and for enhancing collaboration. An enabling global electronic framework can play an important role in this respect, facilitating access to documentation, skills, knowhow and experiences, and encouraging a move from information systems to knowledge systems that can be used as decision-making support tools by relevant end-users.

The following factors were also identified by the participants as concrete requirements that the enabling framework can help to address, through closer cooperation and improved coordination:

- The need to avoid overlaps and duplication.
- The need to articulate better the four levels at which information is generated and is utilized: the Global, the Regional/Sub-Regional, the National and the Local/Community level.
- The need to reduce costs and increase efficiency and effectiveness, through economies of scale and through the sharing of tools and approaches.
- The need to develop learning processes and learning networks, through sharing experiences, “best practices” and knowledge on ICT approaches, strategies and applications.
- The need to assure end-user involvement and participation of NARS in the process.
- The need to promote the applications of ICT to agricultural and rural development.
- The opportunities that the new technologies open in terms of developing an information and knowledge space that helps to interconnect the main stakeholders.

4.3. Objectives of an “enabling global framework”

The overall objective of such an “enabling global framework” is: “To promote efficient and effective inter-institutional collaboration through coordinated planning and execution, information flows among stakeholders, and end-user involvement by facilitating access to information and knowledge.”

The following four specific objectives were identified:

- a) Strengthen the knowledge management capacity of the various stakeholders, but mainly that of National Agricultural Info Systems (NAIS).
- b) Develop and Strengthen Regional/Sub-Regional Information Systems for linking global information facilities with end-users at the regional, national and local levels.
- c) Enhance quality and relevance of research and of decision making among global system partners and clients, through broad dissemination of research tools, technologies and results.
- d) Increase awareness of policy-makers and of users on the importance and the value of information, and of the process of converting it into knowledge. This objective aims at increasing investment in information and dissemination systems.

4.4. General Principles

The participants agreed on the following principles in order to establish successfully an “enabling global framework”:

- Consensus building among national, regional and international partners
- Transparency in all procedures and operations
- Bottom-up approach and building of a broad participation through GFAR
- Equity on information access for national, regional and international partners
- Building on existing institutions and mechanisms
- Integrating diversity while at the same time avoiding duplication
- Recognition of the need of a 2-way flow of information, the end-user also being a supplier of information
- Decentralized ownership, but inter-linked mechanisms
- Exploiting opportunities offered by the new media complementing the traditional ones
- Delegation to the partners with the most comparative advantages for executing tasks on behalf of the others (and of the enabling framework)
- Access to all sources of information (public, sponsored or commercial).

4.5. Functions

On the basis of the above considerations, the “enabling global framework” should fulfill the following functions:

- a) Observatory role in order to:
 - Provide information on the development of national and regional information systems
 - Document “best practices” in terms of policy, strategies and mechanisms
 - Assess trends in Information and Communication Technologies for the rural sector
 - Identify opportunities for action and for support mechanisms
- b) Elaboration of a set of user-friendly navigation rules / procedures / standards for facilitating information flows and knowledge generation
- c) Promotion of partnerships
- d) Forum for global agricultural issues, with a special emphasis on policies and strategic issues

4.6. Recommendations

Finally, the participants:

- Endorse the approach for the establishment of an enabling global framework for agricultural research information for development as a first step towards a Global Knowledge System in ARD.

- Recognize the key role the Regional and Sub-regional fora have to play in assessing the information needs of the different categories of end-users at the local, national and regional levels.
- Urge the NARS Secretariat to assist the Regional Fora in identifying and implementing priority actions in Information and Communications Technologies, specially in the formulation of regional information strategies or in the strengthening of Regional Information Systems.
- Consider that EGFAR should take the lead for the “observatory” and “forum” functions defined above and ask the GFAR Secretariat to explore, in consultation with all interested partners, how best EGFAR can fulfill these two functions. The participants also requested the GFAR Secretariat to identify options to host EGFAR in the medium term.
- Ask FAO to identify within its WAICENT program the normative constraints for effective information systems, and to develop, in consultation with all interested partners, a set of guidelines to improve information management and flows, as well as to provide a global facility to interconnect regional information networks.
- Encourage the participants to continue sharing best practices and experiences in knowledge management.
- Request that a progress report be presented at GFAR-2000 along with some concrete examples of best practices in knowledge management and of new partnerships in ICT.

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Annex 2: Agenda of the Consultation

March 29, 1999

SESSION 1 : OPENING (Chair: *Fernando Chaparro*)

09:30 - 10:00 Welcome and opening remarks
Henri Rouillé d'Orfeuil, Vice-Chairman, GFAR
Doug Forno, RDV, World Bank
Henri Carsalade, FAO, Rome

10:00 - 10:15 Objectives and agenda of the meeting
Alain Derevier, GFAR Secretariat, World Bank, Washington, DC

SESSION 2 : NARS AND REGIONAL PRIORITIES (Chair: *Rodney Cooke*)

10:15 - 10:45 Reflections on agricultural information systems from a NARS perspective
Fernando Chaparro, NARS Secretariat, FAO, Rome

10:45 – 11:15 Break

Presentations by the regional fora on information needs, constraints and expectations:

11:15 – 11:45 1. Asia-Pacific Region
Brian Lee & S.S. Tomar, APAARI

11:45 – 12:15 2. Latin America & Caribbean Region
Frederick Schieck, IDB
Vladimir Quintero, FORAGRO

12:15 - 12:30 Discussion

12:30 - 14:00 **Lunch**

14:00 – 14:30 3. Sub-Saharan Africa Region
Moïse Houssou, FARA & Dady Demby, CORAF

14:30 – 15:00 4. West Asia & North Africa Region
Miltiades Hadjipanayiotou, Executive Secretary, AARINENA

15:00 - 15:30 Discussion

15:30 – 16:00 **Break**

SESSION 3 : GLOBAL AND REGIONAL INFORMATION SYSTEMS
(Chair: *Brian Lee*)

GROUP I : Global Initiatives

16:00 - 16:30 WAICENT presentation
Anton Mangstl & Francisco Perez-Trejo, FAO, Rome

16:30 - 17:00 EGFAR presentation
Reza Firuzabadi and Peter Gregory, World Bank, Washington, DC

17:00 - 17:30 CGIAR presentation
Elizabeth Goldberg, CGIAR

18:00 - 20:00 **Cocktail**

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SESSION 3 : **GLOBAL AND REGIONAL INFORMATION SYSTEMS (Cont'd)**
(Chair: *Ruben Nuñez*)

GROUP I : Global Initiatives (cont'd)

08:30 - 08:50 ISNAR presentation
Stein Bie, Director General, ISNAR

08:50 – 09:10 Global Knowledge System for Food Security
Mahandra Shah, Executive Secretary, CGIAR External Review

09:10 - 09:30 InfoDev Program Presentation
John Daly, Consultant InfoDev

09:30 - 09:50 CAB International presentation
Colin Ogbourne, Deputy Director General

09:50 - 10:10 CTA presentation
Dorothy Barasa & Kevin Painting, Director

10:10 - 10:30 Discussion

10:30 - 11:00 **Break**

GROUP II : Global Thematic Networks
(Chair: *Miltiades Hadjipanayiotou*)

11:00 - 11:20 IPM presentation
Malcolm Iles, Secretary IPMForum/IPMEurope

11:20 - 11:40 SINGER presentation
Sami Gajji, IPGRI

11:40 - 12:00 Forestry Global and Regional Information Systems
Michael Martin, FAO

12:00 - 12:30 Discussion

12:30 - 14:00 **Lunch**

GROUP III : Regional Initiatives
(Chair: *Moïse Houssou*)

14:00 - 14:30 EIARD/InfoSys presentation
Hans-Georg Lutzeyer, Executive Secretary of EIARD & Hubertus Franzen, Zadi/InfoSys

14:30 - 15:00 APAN/AG (A/P)
Seishi Ninomiya, Japan

Enhancing Global Cooperation among Information Initiatives in ARD

15:00 - 15:30 CRIIA: Towards a Regional Information System (LAC)
Ruben Nuñez, IICA

15:30 - 16:00 **Break**

16:00 - 18:00 Round Table on gap analysis
Moderator: Jean-François Giovannetti

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SESSION 4 : CHARACTERIZATION OF THE DIFFERENT CATEGORIES OF END-USERS (Chair: *Alain Derevier*)

08:30 - 09:00 A conceptual framework
Bob Hart, SANREM

09:00 - 09:20 INTERDEV, "Linking Global Knowledge with Local Wisdom"
Didier Pillot, GRET

09:20 - 09:40 VERCON, an Internet-based tool to improve research-extension linkages
Riccardo DelCastello & Wendy Truelove, FAO

09:40 - 10:00 Discussion

10:00 - 10:30 **Break**

SESSION 5 : TOWARDS A GLOBAL INFORMATION SYSTEM FOR ARD (Chair : *Stein Bie*)

10:30 -13:00 Round Table on how to improve cooperation and coordination among the various actors
Moderator: Fernando Chaparro

13:00 -15:00 **Lunch**

15:00 - 16:00 Discussion and approval of the draft conclusions and recommendations

16:00 - 16:30 Closing remarks