1999 Report of Activities of the NARS Secretariat

Initial Steps and the Road Ahead

Rome, October 12, 1999
Introduction

The Global Forum on Agricultural Research (GFAR) has to do with networking. It has to do with linking stakeholders of agricultural research for development (ARD) around the discussion and implementation of a common global strategic agenda that may orient their efforts in this field, and that may integrate them into learning networks and knowledge systems that may facilitate the generation and flow of relevant knowledge, and its application to development. Three factors are making instant connectivity, networking, and much quicker information flows among researchers and among stakeholders possible: improved information and communication technologies, increased information and knowledge management skills and decreasing communication costs. In this context, research partnerships and networking can be utilized as tools for empowering people through the exchange of information and of knowledge, and through the interrelation of their research capacities. This is one of the main distinguishing characteristics of the “networked economies” that predominate at the turn of the century. These are the building-blocks that the GFAR is seeking to promote among its stakeholders.

In the first nine months of this year very significant progress has been made in the initiation of the Global Forum. The first Programme of Work (PW) 1999-2000 was prepared, discussed and adopted by both the GFAR and the NARS Steering Committees, building on the proposals that have been generated by the Regional/Sub-regional Fora (RF/SRF) of agricultural research in the last two years. This PW was discussed and approved at the Beijing meeting of the two Steering Committees mentioned above (at MTM), and we are now advancing quite quickly in its implementation. At the Beijing meeting the GFAR Support Group approved the budget necessary to implement the various activities contemplated in the Programme of Work. This budget is presented in the document “Activities of the NARS Secretariat 1999-2000: Implementing the Programme of Work.”

In the process of implementing the PW we already have a draft Global Shared Vision that is presently being discussed by all stakeholders, which in itself is leading to a dynamic process of generating a common framework for action. In the last three months the various stakeholders of the Global Forum have initiated a clear process of implementing the Programme of Work through concrete activities that are described in this report. Among them we should highlight the following ones: (a) an experimental new practical approach to negotiation of IPRs as a tool for developing public/private sector strategic alliances, that is being developed with IRRI (in rice); (b) the development of Regional/Sub-regional Agricultural Information Systems (through the Regional/Sub-regional Fora), as part of a broader process of facilitating the emergence of a Global Knowledge Framework for ARD (being carried out as a follow-up to the Rome Consultation meeting of March of this year); (c) a "virtual community of agricultural research institutions” around the world is developing quite dynamically from the continuous interactions we are having through multiple channels, bringing together IARCs, NARS, ARIs and other actors; (d) all stakeholders are contributing to the identification of successful research partnerships that are being analyzed in terms of what can we learn from them, and what are the "factors of success” (case studies that will be presented at GFAR-2000 in Dresden); and (e) identification of new opportunities for what we are calling the "new innovative research partnerships”. These innovative research partnerships have various characteristics: they bring together the new and old actors of
agricultural research for development (ARD), they seek to integrate the new potential of information and communication technology (ICT) and of the "networking" this makes possible, and they take an innovative approach based on commodity chains that seeks to link poverty-alleviation efforts to market-oriented considerations. The promotion of innovative research partnerships is an activity of particular interest, and potentially could be one of the most important contributions of the Global Forum.

On the other hand, we have important challenges that confront us in the process of building-up the Global Forum. One of the main tasks that should be pursued is that of strengthening the sense of ownership of the GFAR by all its stakeholders. In the case of the NARS Secretariat this mainly refers to NARS and to Regional/Sub-regional Fora (RF/SRF). The discussion and adoption of the Global Shared Vision can clearly advance in this direction. The formulation of a common strategic agenda, and the involvement in joint efforts or research partnerships that generate mutual benefits, are two powerful instruments that will advance this process.

A second challenge is that of strengthening the RF/SRF organizations themselves. With respect to this second task, one of the concrete activities discussed in Beijing is to analyze the experiences (strengths and weaknesses) of existing RF/SRF, and see if this confirms or modifies the concrete proposals that the April document on RO/SROs proposes.

A third challenge is that of gaining "legitimacy" for the GFAR as a framework that facilitates cooperation and research partnerships in international agricultural research, at the regional level (RF/SRF), or at the global level, and of operationalizing the "modus operandi" for the Global Forum, based on the idea that the GFAR acts, or implements any initiative, through a "lead stakeholder" that takes the responsibility for developing and implementing each activity, with the active collaboration of the other stakeholders and the support of the secretariat. This is the mode of operation that was discussed and adopted at the Rome meeting of March in the case of ICT-related activities. It is interesting to point out that this is the way virtual organizations function.

The GFAR-2000 meeting that will take place in Dresden, Germany, in May of 2000, will provide a good opportunity to take stock of where we are in terms of advancing towards the objectives of the Global Forum. Almost all the activities that are covered in this report are related in one way or another to GFAR-2000. This provides a clear time horizon to all our activities in terms of presenting the initial results that are being generated.

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GFAR
1. Programme of Work 1999-2000

1999 has been the first year of operation of the Global Forum on Agricultural Research (GFAR) and of the NARS Secretariat of GFAR. The secretariat was established during the last three months of 1998, but it started to operate in the present year. In the first four months of this year three important steps were taken: (a) The first and most important one was the preparation and the approval of the "GFAR Programme of Work (PW) 1999-2000", and of the budget required to carry out the various activities. This provides GFAR and the NARS Secretariat with a clear framework for action. (b) The second one is the detailed planning of the preparation activities for the GFAR-2000 meeting that will take place in Dresden (May, 2000), and of the support the NARS Secretariat can provide to the various preparatory activities. This is explained in detail in the document that was tabled and approved in Beijing on "Support Provided by the NARS Secretariat to the Preparation of GFAR-2000" (Rome, NARS Secretariat, April 1999). (c) The third important step is constituted by the process of initiating a series of concrete activities through which the "Programme of Work 1999-2000", is being implemented. These are explained in the document “Activities of the NARS Secretariat 1999-2000: Implementing the Programme of Work". This third document is formally part of the present report, and throughout the text references will be made to the respective section of this document where each activity is described in more detail. This document also has the budget for the activities being carried out.

The first two documents were discussed and approved at the NARS and the GFAR Steering Committee Meetings that took place in Beijing in May of this year. The third one is the product of the Beijing meetings, where the range of activities to be carried out were discussed and approved. The purpose of this report is to highlight how each of these activities is being implemented, and the stage at which it is.

On the basis of the Programme of Work that was approved, the activities of the NARS Secretariat are articulated around the five following themes: (a) the formulation of a Global Shared Vision; (b) the development of a strategic agenda starting with the topic of IPRs and agricultural research; (c) the preparation of successful cases of research partnerships; (d) the development of new innovative cases of research partnerships, in which the approach that is being developed around the concept of "commodity chains" is playing an important role; and (e) the various activities related to the follow-up to the Rome consultation meeting on ICT, and the efforts aimed at constructing a "Global Knowledge System in ARD". This report briefly describes the activities that are being carried out within each of these five themes.

2. Formulation of a Global Shared Vision (GSV)

One of the first tasks of the Global Forum has been to embark upon the formulation of a "Global Shared Vision (GSV) 2025" that can mobilize the global community of agricultural research for development (ARD) around a common set of shared perceptions and objectives, as well as a Vision of the future, and of the role both agriculture and ARD play
in constructing that future. As such, the GSV may provide a sense of purpose to GFAR efforts, a sense of urgency for action, and a common framework that may orient that action.

Three products are coming out of this strategic thinking process. The first one is the GSV Statement as such which is a short 2-page statement that will be discussed in detail in GFAR-2000 (May 2000) and collectively adopted at that meeting. The second one is an "Issues Paper" that will provide the background to the Global Shared Vision Statement, with the objective of giving a better idea of the scope of the shared vision and of analyzing the key trends and significant changes that are taking place in the context in which GFAR operates. The third product is a brief description of the implementation strategy that will be used in implementing each of the five areas of collaboration that is being suggested in the GSV. Section 1.1 of the attached document on the implementation of the PW describes in detail the nature of both the GSV Statement, as well as the Issues Paper that is being prepared.

The first draft of the GSV Statement has been circulated to all stakeholders on July 20, 1999. The first draft of the Issues Paper, that is being prepared with the support of the CEO Group of Buenos Aires, will be sent in early October.

3. **IPRs and Agricultural Research (Strategic Agenda)**

Besides formulating a Global Shared Vision, a process was initiated in Beijing of gradually developing a Strategic Agenda that will be addressing major global issues of interest to all Stakeholders of ARD. These topics will be changing over time. The first topic that has been chosen is that of the management of Intellectual Property Rights (IPRs) in agricultural research, with the objective of seeing how to improve the management of IPRs in agricultural research institutes in the developing countries. Section 1.2 of the attached document describes this project in detail.

One of the interesting dimensions of the approach that has been adopted is that of looking at the interaction between the management of IPRs and the design and emergence of research partnerships. The cases chosen will be such that, through the negotiation of the IPR involved, a joint research programme (or research partnership) between the stakeholders involved may emerge. This is a novel approach to the issue of IPRs, that goes beyond the legal and economic aspects that normally attract all the attention. The emphasis here is on seeking areas of common interest and on facilitating the emergence of win/win joint ventures or research partnerships, based on the comparative advantage of the partners involved, and constructed around a process that involves the negotiation of IPRs. Within this context, the first case that has been, in principle, selected, is that of hybrid rice. This activity is being carried out in close coordination with IRRI, with ISNAR and with other relevant organizations. The timetable and the approach that is being followed is described in detail in the discussion paper “Proposed Action Plan on IPRs in Agricultural Research for Development”.
4. **Other Topics of the Strategic Agenda**

Other topics will be developed in the near future, as part of this Strategic Agenda. Three topics have emerged, and were identified in the Beijing meeting: (a) the institutional development of the National Agricultural Research Systems (NARS): from the NARIs to the NARS model, NARS reform, and adapting to changing needs and circumstances; (b) changing research patterns in the national and global ARD communities: nature and scope of research networks; and (c) facilitating access to genetic resources. Of these three topics, a special effort will be made to start developing the first two topics this year. In section 1.3 of the attached document there is a preliminary discussion of the issue of NARS development. This topic, which will be developed in cooperation with ISNAR and with FAO/SDRR, has been identified as one of high priority by all RF/SRF because of the major organizational reforms that are taking place in many countries of the developing world. This is a topic in which there are no simple answers to the complex issues related to the effectiveness and the sustainability of NARS. It is a topic in which it is strongly felt that an exchange of experiences among stakeholders, and the identification of emerging “best practice”, could be very useful. It is also an issue of committing the stakeholders of ARD to new organizational approaches, a process that requires a clear ownership of these ideas. This activity will basically be in the hands of the interested RF/SRF, with the NARS Secretariat only facilitating the inter-regional exchange of experiences. In the European Forum on ARD that took place in Wageningen (April, 1999), the issue of NARS reform and modernization also received much attention.

5. **Strengthening RF/SRF: Establishment of MIS and of Regional Web Pages**

The NARS Secretariat is providing support to the RF/SRF in the establishment of their Management Information Systems (MIS) and their Web Pages, as part of their Regional Agricultural Information Systems (RAIS). This is described in section 2.1 of the attached document. Since the support provided to the establishment of RAIS is described below, the support for MIS and for Web Pages will be presented in that section (see point 10 below).

Other ideas with respect to the strengthening of RF/SRF are presented in the document “Strengthening Regional/Sub-regional Organizations of Agricultural Research for Development” (NARS Secretariat, Rome, May 17, 1999).


Through the case-study analysis of existing successful research partnerships, a better understanding is sought of the factors that lead to their success, and to the benefits that can be generated by such partnerships. Thus the analysis is oriented at identifying what works, and what doesn’t. Section 3.1 of the attached document summarizes where we are in the process of identifying and preparing such case studies, as well as the pending steps. As can be seen in the attached report, 16 cases have been pre-identified by the various RF/SRF, and
the respective reports are being prepared by them. Other stakeholders are engaged in the same process (i.e. the Private Sector, the CGIAR, NGOs). These cases will also be presented in GFAR-2000.

Guidelines were prepared for the analysis of the successful cases of research partnerships in order to assure that comparable data will be included in each case. Besides the preparation of the Guidelines, the NARS Secretariat has made available to each Regional Forum US $ 15,000 to finance the specific studies/reports each region wants to prepare. A detailed timetable is also presented with the steps from here to Dresden in the attached document. The work is well underway.

The NARS Secretariat is coordinating this effort with a similar analysis that TAC is carrying out, in looking at successful cases of research partnerships that involve IARCs (the CGIAR) as one of the partners, and with IAEG in terms of the work they are doing on evaluation of research partnerships. The evaluation of research partnerships is more complex than the evaluation of research projects or programmes carried out by one institution. This is a topic that the NARS Secretariat is jointly analyzing with IAEG. Many of the cases that are being prepared for GFAR-2000 involve NARS/NARS research partnerships, at the regional or sub-regional level.


New modes of research collaboration are emerging, as part of the gradual shift in the organizational structure of science and of research towards more collaborative modalities. In the new context that is emerging at the turn of the century, the strategic importance of cooperation, of networking and of research partnerships is significantly increasing. The Global Forum was established precisely to facilitate and promote the emergence of these "new and innovative" research partnerships, that can play a key role in the process of building the emerging "Global Agricultural Research System in ARD". So far, we have received information on five "project ideas" that are presently being developed into project proposals for new and innovative research partnerships (see section 3.2, p. 14, of the main attached document). It is interesting to point out that the "commodity-chain" approach is receiving particular attention, as well as the issue of "orphan crops" (under-utilized crops). In the GFAR-2000 meeting in Dresden we hope to be able to present a handful of interesting cases of this type. By May of next year it will be too early to show results, but we can learn from the ongoing experiences of constructing them, and of putting them together. This is the purpose of presenting them in GFAR-2000.

In the attached document on the implementation of the Programme of Work there is an interesting discussion on the characteristics that are being sought in the new innovative research partnerships (see section 3.2). The NARS Secretariat has made available to each Regional Forum US $ 15,000 to finance the development of concrete proposals for innovative research partnerships. The preparation of these cases is well underway.

An interesting dimension that is appearing in the new approach to research partnerships is the issue of "regional/sub-regional integration" and its impact on agricultural research. The issue here is a very interesting and challenging one: How to re-
think the national research agendas of NARS (i.e. in concrete national research programmes) in the context of regional/sub-regional integration, where through collaboration and exchange of research results and materials, it may be possible to avoid repeating the work that is being done in neighboring countries, in a similar ecosystem and in the same crop (or production system). Or design joint sub-regional research programmes in order to tackle the same set of issues through collaborative research programmes. This is easier to do at the sub-regional level, because of the similarities in terms of ecosystems and production systems. PROCISUR in the Latin American and Caribbean region is developing an interesting experience in this direction.

Another interesting concept that is emerging from these exploratory efforts is that of “virtual global research communities” in a given area of research. Three interesting cases that could be mentioned are those of OneFish (in the case of the fisheries R&D community), the Global Consortium of Agricultural Universities (GCAU), and the Global Collaborative Post-Production Research Network that is evolving into a “Global Post-Harvest Forum”. We are here witnessing the emergence of different forms of virtual global research communities, that may play an increasingly important role in collaborative research and training efforts. Depending on the dynamics they are able to develop in the near future, these are interesting cases for presentation in GFAR-2000. And they are part of the networking and research partnerships that the Global Forum is seeking to promote.

8. Scaling-up Successful Research Partnerships in Agroecology

One of the most important challenges that are faced in development-related research efforts is that of how to "scale-up" projects that have proven to be successful, in order to generate a meaningful impact on the income, food security and welfare of the rural population in a given country or region. The importance of the issue of scaling-up reflects the fact that without this step, there can be no real development impact of the research and development efforts. In order to address this issue, the NGO Committee and the Global Forum (NARS Secretariat) are co-sponsoring a workshop aimed at analyzing specific cases of successful agro-ecological projects that are ready for a "scaling-up" effort, and at initiating a pilot "scaling-up process". This workshop, that will take place in Washington, D.C., on October 22-23, 1999, forms part of a longer-term programme that is aimed at developing a capacity for scaling-up in the different regions of the developing world.

The scaling-up of successful but individual projects requires the development of an adequate approach and methodology for such a process, that can assure a joint effort or research-and-development partnership among key actors or stakeholders that play an important role in this process. As such, scaling-up requires the development of innovative partnerships, becoming a specific case of the latter. It also plays an important role in the integration of NARS, specially along the "research-extension-adoption-innovation" continuum. Section 3.3 of the attached document describes the workshop that is been organized, the expected results, and the broader programme of which it forms part.
9. Exploratory Meetings with ARIs

It is important to highlight the fact that NARS form part of a broader framework defined by the Global Forum on Agricultural Research (GFAR), along with the other stakeholders that constitute the emerging Global System of Agricultural Research for Development: Advanced Research Institutes (ARIs) (including universities), International Research Centres (IARCs), Non-Governmental Organizations (NGOs), Farmers' Associations and the Private Sector. This underscores an important function of the NARS Secretariat: that of facilitating and promoting the interaction between NARS and the other stakeholders of the GFAR. From this perspective, the process of formulating a joint Programme of Work 1999-2000 shared by all stakeholders has played an important role in identifying areas of common interest.

Interaction with ARIs is being pursued through a series of exploratory meetings and joint efforts which the NARS Secretariat has initiated with research institutions in France, Germany, Italy, Spain, the Netherlands, the UK, the US and Canada.1 In the case of the European countries, the European Forum on Agricultural Research for Development, held in Wageningen (7-8 April, 1999), and the follow-up to this forum, is playing a very important role. The role of Advanced Research Platforms is appearing in this context.

Two meetings are scheduled for this year: one in Italy and one in Germany.

10. Activities related to the Development of a Global Knowledge System in ARD

Section 4 of the attached document covers various activities underway related to the follow-up to the Rome consultation meeting on strengthening international cooperation among ARD information initiatives (29 – 31 March 1999). The main decision that was taken at this meeting was based on the consensus that was obtained 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”.

From the discussions that took place at the Rome consultation meeting, it became quite clear that the development of such a Global Knowledge System entails efforts at three levels: (a) National Agricultural Information Systems (which include local and corporate information services); (b) Regional/Sub-Regional Agricultural Information Systems, established through the collective efforts of a group of countries; and (c) Global Information Systems and Information Facilities. One of the challenges that we confront in

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1 This is the list of countries with which contacts have so far been established. Of this list, the meeting with French research organizations already took place in January of this year. The results of this meeting are presented in: Compte Rendu de la Consultation avec les Organismes Français Chargés de la Recherche Agricole pour le Développement (Rome, NARS Secretariat, January 18, 1999). In the case of the other countries these meetings are in the process of being organized.
facilitating the emergence of a Global Knowledge System is that of how to promote/facilitate complementarities and linkages between these three levels. In the approach that was adopted for the establishment of an Enabling Framework, the Regional/Sub-Regional Information Systems were considered to play a key function, because of the role they play in facilitating the flow of information among the countries of a given region, and in linking Global Information Facilities with end-users at the regional, national and local levels. Emphasis was clearly placed on the local, national and regional levels, since this is where end-users actually use information. The NARS Secretariat was asked to support the RF/SRF in the establishment or strengthening of such regional systems.

A more detailed description of how this area is being implemented following-up on the conclusions and recommendations of the Rome consultation meeting of March of this year, is found in: “Information Initiatives in Agricultural Research: Follow-up to the Rome Consultation Meeting” (Rome, NARS Secretariat, June 25, 1999).

10.1. Support by NARS Secretariat to Regional Agricultural Information Systems (RAIS)

The main responsibility of the NARS Secretariat in the follow-up to the Rome meeting is in working together with the RF/SRF in establishing or strengthening Regional/Sub-regional Agricultural Information Systems (RAIS), on the basis of the recent experiences and the present efforts that these organizations are carrying out in this field. For this purpose, the NARS Secretariat is developing a joint programme with FAO/SDRR and FAO/WAICENT aimed at the support of Regional/Sub-regional Agricultural Information Systems (RAIS), through the following:

a) On the basis of the definition of Regional Agricultural Information Systems (RAIS) that is presented in the main attached document, a global consultant has been hired to further elaborate in operational terms the concept of a RAIS, the various functions they have, the different forms they can take, and the main issues that have to be addressed in developing and strengthening a Regional Agricultural Information System. The report will be available before the end of 1999.

b) Secondly, the NARS Secretariat has some seed money to support a regional consultant to work with each RF/SRF in identifying the main elements that should be taken into consideration in formulating a Regional Information Strategy. The consultant will be asked to look at three main questions: (a) the question of telecommunications infrastructure, of connectivity and of access to internet in the region, and expected trends in the near future; (b) identification of the main databases and information services in ARD that already exist in the region, and that could be considered as the “building blocks” for that particular RAIS (this is a first approximation to the “information supply” capacity in the region); and (c) a

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For a more detailed description of the activities that are being supported in RF/SRF, in cooperation with FAO/SDRR, see “Joint FAO/SDRR – NARS Secretariat Programme to Support Regional and Sub-regional Agricultural Research Organizations in the Field of Information and Communication” (Rome, NARS Secretariat, June 24, 1999).
characterization of the main categories of end-users in the region, their characteristics, their information behaviour, and thus a first approximation to the analysis of the information requirements the region faces. In analyzing these three points, the consultant will be asked to identify bottlenecks or limitations that constraint or limit the flow of information among stakeholders, or the access to it by end-users in the region.

c) Thirdly, one of the important components of a RAIS is constituted by the Management Information System (MIS) of each RF/SRF. This refers to regional databases that contain relevant information to monitor and analyze the evolution of ARD in the region, or of one of its key components. The most important regional databases of this nature cover three main topics: human resources (quantitative and qualitative: who works in what); ongoing research projects; and existing regional and sub-regional research networks (and the databases or information services those networks have). The NARS Secretariat can support a regional consultant to assist in the development of the third database that has been mentioned among the MIS tools: a regional database on regional/sub-regional research networks.

d) The fourth type of support is aimed at facilitating the establishment of a Web Page of the RF/SRF that, if well designed, can play an important Gateway function to facilitate access to the various regional databases and/or information systems that are accessible through the internet.

e) The fifth type of support that can be provided by the NARS Secretariat is for the organization of a regional workshop to bring together the key players in agricultural information in the region, in order to analyze the above mentioned inputs, and to discuss a concrete proposal for a Regional Information Strategy aimed at the articulation of a Regional Agricultural Information System.

The five components previously mentioned represent approximately US $ 22,500 per region (besides the conceptual contribution of the global consultant). These five components are being developed as a "regional package or programme", and not as independent and isolated studies. But this means that the various consultancies will have to be coordinated among them, and designed in such a way that they can lead up to the regional workshop. In this way, their impact on generating a proposal for the strengthening of a Regional Agricultural Information System can be much greater. In the case of Sub-Sahara Africa a preliminary project-formulation meeting took place in Dakar on July 26-27, 1999, organized by FARA and co-sponsored by CTA and the NARS Secretariat. The conclusions of this workshop and the follow-up that is being made is found in the final report of this meeting: “Development of a Sub-Saharan African Agricultural Information Strategy: Conclusions and Recommendations of the Dakar Workshop (July 26-27, 1999)” (FARA/NARS Secretariat, July 30, 1999). The further development of these ideas are being coordinated with the ILRI/WAICENT initiative aimed at strengthening access to information in Sub-Sahara Africa.
10.2. Support to Other Activities related to the Follow-up to the Rome Consultation Meeting

The support to Regional/Sub-regional Agricultural Information Systems (RAIS) that was described in the previous section should not be seen as an isolated process. It is part of the broader effort that was initiated at the Rome consultation meeting of establishing a facilitating framework with the purpose of promoting the gradual emergence of a Global Knowledge System in Agricultural Research for Development (ARD).

In addition to the support to the RAIS mentioned above, the other activities identified and currently being implemented are:

a) The implementation of EGFAR and the operationalization of its three functions: the Gateway function, the Observatory function, and the Forum function;

b) The activities and services that WAICENT carries out in the further strengthening of a normative framework to facilitate information flows among ARD Stakeholders;

c) The role of the CGIAR in the emergence of a "Global Knowledge System in ARD", given the strategic importance of the CG databases related to ARD, and the information-management know-how that the IARCs have developed. One of the main questions to consider in this context is how to facilitate and strengthen the interaction between CGIAR information activities and services, and the other stakeholders that constitute the Global Knowledge System, mainly the Regional and National Agricultural Information Systems and the end-users located in them. Access to CGIAR databases, and the integration of the latter into the RAIS of the region in which they are located, is of great importance.

d) The monitoring of ICT applications to agricultural and rural development. The September conference on this topic organized by the European Federation of Information Technology to Agriculture (EFITA) has provided an interesting overview of the range of applications that are emerging in this area, and one of the Symposia within the conference will be specifically looking at the applications of ICT to agricultural and rural development issues. This information will be useful to RF/SRF in their formulation of Regional Information Strategies, presently underway. This is analyzed in section 4.4 of the attached document.