ICT Expert Consultation on the Development of Second Phase of APARIS

24–25 October 2002



PROCEEDINGS



ASIA-PACIFIC ASSOCIATION OF AGRICULTURAL RESEARCH INSTITUTIONS FAO Regional Office for Asia and the Pacific Bangkok

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CONTENTS

PREFACE	(i)
LIST OF ACRONYMS	(iii)
Session I : Inaugural Session	1
Session II : Way Forward for APARIS	2
Session III : Other ARI Systems	3
ACIAR	3
CABI	3
FAO	4
GFAR ISNAR	4
APAFRI	4 5
NACA	5
Session IV : Partnerships with International Organizations: Possible Linkages with APARL	S 5
FAO	6
GFAR	6
CABI	6
ISNAR	6
Collaborative Programmes in ICT	7
Terms of Reference for NINPs	7
Session V : Group Discussion on Development of Second Phase of APARIS	7
Plenary Session	9
PROCEEDING OF THE FIRST APARIS STEERING COMMITTE MEETING	11
ANNEXURE-1 : Programme	14
ANNEXURE-II : List of Participants	16

PREFACE

The foundation of Asia-Pacific Agricultural Research Information System (APARIS) was laid during an Expert Consultation on the Development of an Asia-Pacific Agricultural Research Information System organized by APAARI in November 2000 at Chiang Rai. In this meeting a project profile of the APARIS as a regional information system was developed. It was also decided that a Steering Committee of APARIS be constituted to provide directions for the strategic and technical development of APARIS, address critical issues of policy support and source external funds, as well. The Consultation provided an opportunity to review the status of information communication technology in national programmes/NARS, identify crucial ICM/ICT issues and challenges for further development elaborate the role of different participants and plan a framework for further activities keeping NARS needs in view. The ICT programme (APARIS), that was launched by APAARI in the year 2000, has successfully completed its pilot phase.

Encouraged by the progress and success of APARIS activities, the participating NARS and the members of the support group have agreed to initiate the second phase of APARIS. The development of APARIS is, therefore, entering a critical stage. The next steps are related to the strengthening of the various components that have been initiated in these last two years, and to the launching of those that are still in the design phase. In order to address some of these aspects of APARIS, an ICT Expert Consultation on the Development of Second Phase of APARIS was held during 24-25 October 2002 at bangkok, Thailand. As envisaged, the first APARIS Steering Committee was constituted, the role of NINPs in implementation of APARIS programme was defined and a set of activities finalized and short term plan of action were drawn. The APARIS Steering Committee also held its first meeting immediately after its constitution in Bangkok and made valuable suggestions.

It is with great pleasure that I present to you the proceedings of the Expert Consultation on APARIS. I wish to thank all the member NARS of APAARI and APARIS support group (ACIAR AIT CABI FAO. GFAR and ISNAR) for their continued and whole-hearted cooperation in ensuring the success of this new APARIS initiative. I am sure through APARIS we shall be able to serve better our NARS partners in the Asia-Pacific region.

(R.S. Paroda) Executive Secretary

LIST OF ACRONYMS

	Association of Agricultural Research Institutions in the Near-East and North Africa
ACIAR	Australian Centre for International Agricultural Research
AIT	Asian Institute of Technology
APAFRI	Asia-Pacific Association for Forestry Research Institutions
APARIS	Asia-Pacific Agricultural Research Information System
ARD	Agricultural Research for Development
ASTI	Agricultural Science and Technology Indicators
BARC	Bangladesh Agricultural Research Council
CABI	Centre for Agricultural Bioscience International
CARP	Sri Lankan Council for Agricultural Research Policy
CGIAR	Consultative Group on International Agricultural Research
CIDA	Canadian International Development Agency
COA	Council of Agriculture
DFID	Department for International Development
DOA	Department of Agriculture (Thailand)
FAO	Food and Agriculture Organization of the United Nations
FAO-RAP	FAO Regional Office for Asia and the Pacific
GFAR	Global Forum on Agricultural Research
HRD	Human Resource Development
IARC	International Agricultural Research Centre
ICAR	Indian Council of Agricultural Research
ICT	Information and Communication Technology
IFPRI	International Food Policy Research Institute
IPR	Intellectual Property Rights
ISNAR	International Service for National Agricultural Research
JIRCAS	Japan International Research Centre for Agricultural Sciences
KRS	Koronivia Research Station (Fiji)
MAFFM	Ministry of Agriculture Forests, Fisheries and Meteorology
MARD	Ministry of Agriculture and Rural Development
MARDI	Malaysian Agricultural Research and Development Institute
NACA	Network of Aquaculture Centres in Asia-Pacific

INTRODUCTION

An ICT Expert Consultation on the Development of Second Phase of APARIS and Meeting of APARIS Steering Committee was held during 24-25 October 2002 at Bangkok, Thailand. There were 32 participants representing member NARS, associate members, supporting organizations such as FAO and GFAR. Ms Prapaisri Pitakpaiwan, acting DG, DOA, Thailand and the chief guest inaugurated the Expert Consultation. The deliberations of the Expert Consultation were conducted in five technical sessions and a plenary session besides the inaugural session. The programme and the list of participants are respectively, annexed (I&II). A brief account of the proceedings of various sessions is given hereunder.

SESSION I: INAUGURAL SESSION

Dr R.P. Sapkota chaired the session. After a brief introduction about the meeting he invited Dr R.S. Paroda, Executive Secretary, APAARI to deliver the welcome address and also apprise the participants about the objectives of the meeting. Dr Paroda extended a warm welcome to all the participants and guests. He highlighted the progress and achievements of APARIS in a short span of two years. He attributed the developments in APARIS to the close cooperation among the regional NARS and generous support, technical and financial, from supporting organizations such as ACIAR, FAO, CABI, AIT, ISNAR and GFAR. It was mentioned that the success of the APARIS in the initial phase provided the necessary encouragement to initiate phase-II of the programme. It was stated that constitution of a Steering Committee was essential to provide the requisite directions and guidance to APARIS programmes in future. In order to attain and sustain the progress, the need for committed involvement of NARS through NINPs was also stressed.

Prof. Gajendra Singh, AIT, Bangkok, Dr Jean F Giovannetti, Officer Incharge, GFAR and Mr Johannes Keizer, FAO gave introductory remarks about the importance of ICT in the development of regional agriculture and how their respective organizations were working towards promotion of ICT applications to improve agriculture and sustainable food security at the regional and global level. Important issues surrounding the development of regional agricultural information systems, such as ownership of information, decentralized ICT promotion, capacity building at NINPs, and metadata development, were highlighted. Ms Heather Briggs, who had to cancel her participation at the last moment, had sent the text of her introductory remarks. Ms Briggs mentioned that ACIAR values "APAARI's role in promoting knowledge exchange and priority setting across the region, and is committed to a long-term membership." She reminded the participants that information and communication technologies are just tools to help us to do our jobs. The most important elements in all this are the networks of people involved, and information exchange at the personal level. She wished that the consultation will foster development and strengthening of those critical networks, and that the networking and information exchange started here will continue beyond the consultation, as people learn from their individual and collective experiences.

Ms Prapaisri Pitakpaiwan, acting DG, DOA, Thailand in her inaugural address appreciated the role of APAARI towards building research partnerships, sharing information on technological developments in agriculture through expert consultations and publications in the region. She informed the audience about the initiative of Prime Minster, Royal Government of Thailand on encouraging

use of ICTs in all the government departments and collaborations at national and international levels to promote the use of ICT in national development. Ms Pitakpaiwan desired that the participants should avail this opportunity to assess the performance of APARIS so far, prepare a comprehensive plan of action keeping in view the fast changing global scenario so that the needs and priorities of the members are adequately addressed. She felt that the access to advanced knowledge at national and international levels was essential for rapid development wherein the use of ICT was an imperative. Before the formal inauguration of the Expert Consultation, she emphasized that the NINPs be given a suitable mandate and infrastructure whereever required, so that sustainable information networks in the region can be established.

Dr R.P. Sapkota, Chairman APAARI in his opening remarks emphasized on the technological empowerment of poor farmers through the use of ICTs. He expressed that in the present context, having timely, useful, adequate and accurate information is critical for the poor farmers who are to make correct decisions needed to support their occupation and pull them out of poverty. Lack of proper information was cited as an impediment for small scale agriculturalists who often fail to reach their potential in the absence of adequate information. In this context, he urged that the national governments should step up their investments in ICT for the development of agricultural sector as well.

Mr P.K. Saha, Technical Officer, FAO-RAP and Liaison Officer, APAARI proposed the vote of thanks and appreciated the overwhelming response by the participants to attend the meeting and strengthen further the APARIS initiative.

SESSION II: WAY FORWARD FOR APARIS

Chairman : Dr Johannes Keizer Co-Chairman : Dr Anwar Alam

This technical session of the Expert Consultation included two important and well illustrated presentations on the APARIS. The first presentation was made by Dr R.S. Paroda, Executive Secretary, APAARI on the establishment and progress of APARIS. The next presentation in the session entitled "Initial Phase of APARIS and Issues for Further Development" was made by Dr Sahdev Singh, APAARI resource person.

Dr Paroda presented the background information on agriculture in the region, select socioeconomic parameters, and the mandate, mission, achievements and relevance, of APAARI since its inception. He further dwelt on the periodic developments in APARIS. It was mentioned that APAARI having realized the potential use of ICT in agriculture had included these among the future initiatives in its Perspective Plan formulated in 1995 and had further discussed about it in the subsequent General Assemblies held in 1996, and 1998. The potential collaborators identified were the NARS focal points, ACIAR, ISNAR, CABI, FAO-WAICENT and GFAR. A concept note on APARIS was prepared in collaboration with ISNAR, FAO and CABI. The main functions identified for APARIS included review of existing status of ICT at national level, information requirements, issues and challenges in ICM and encouragement of partnerships among diverse stakeholders. A SWOT analysis of the APARIS was also presented. The participants were informed about the proposed constitution of a steering committee for APARIS that will provide directives, policy support, source external funds, strategic planning and also monitor and evaluate the programme activities of APARIS.

The presentation on 'Initial Phase of APARIS and Issues for Further Development' was made by Dr Sahdev Singh. The various components developed in the initial phase of APARIS, including MIS tools for monitoring ARD activities, information on regional events, access to scientific publications, electronic forum, gateway portal functions, knowledge networks and APAARI publications, were presented. Dr Singh elaborated on each of these components and highlighted on some important issues such as involvement of NARS, role of NINPs, capacity building, portal to NARS institutions, access to publications, thematic forums by APAARI, intelligent Gateway/portal facility – CABI, support from GFAR, ACIAR and other sources of funding. Finally a feedback on APARIS Phase–I was invited and the presentation concluded with a tour of APAARI website.

Both the presentations stimulated lively discussions. The need to address IPR obligations relating to application of ICTs and sharing of information was strongly emphasized by several participants. It was proposed that, should the need arise, patenting of information could be considered as an alternative. Exchange of information on technological developments, digital or documented to facilitate technology dissemination was emphasized. Mutual sharing of information, even on bilateral basis, was also felt desirable in order to avoid duplication of efforts and to support those NARS that lack adequate infrastructure. Creation of extension networks was found wanting and it was suggested that APAARI should establish links with sub-regional organizations such as SAARC Agricultural Information Centre (SAIC). The issues of data ownership and intellectual property rights in knowledge transfer and information dissemination were raised by some participants. Other useful points that emerged from the discussion included drafting suitable Terms of Reference for the NINPs, an audit of ICT status in member countries, need to overcome reluctance to share information, translation of information/documents such as the APAARI Success Stories, and make collective efforts to bridge the digital divide.

SESSION III: OTHER ARI SYSTEMS

Chairman : Prof. Gajendra Singh Co-Chairman : Mr Hayashi Tadahiro

In this session, presentations were made by participants from CABI, FAO, GFAR, ISNAR, APAFRI and NACA.

ACIAR: A presentation by Ms H. Briggs, ACIAR was also included in the session but as mentioned earlier she could not participate due to unavoidable reasons. The write-up of her presentation entitled 'A New Australian Initiative: the Australian Development Gateway' was distributed among the participants. The gateway (www.developmentgateway.co.au) was launched in September 2002 and is linked to World Bank sponsored gateway. The site is named as 'Sustainable Development through Sharing Australian Knowledge.' The gateway provides developing countries with information from government, private sector, civil society and academic sources. A section of the site lists Australia's agricultural research knowledge sources that are mainly Commonwealth Scientific and Industrial Research Organization (CSIRO), Research and Development Corporations (RDCs), Cooperative Research Centres (CRCs) and agricultural and environment faculties at Australian universities. A point of consideration for APAARI in the Phase-II of APARIS was that the needs of intended audience and its purpose based on the feedback from the potential users should be clearly understood.

CABI: Mr Felmer E.A. Cagampang of CABI made a presentation on feasibility study of an APARIS Gateway. The study was carried out by CABI with funding from CAB International's Partnership Facility Programme, with financial contributions from the Australian Centre for International Agricultural Research (ACIAR), the United Kingdom's Department for International Development (DFID) and the Canadian International Development Agency (CIDA). The APARIS gateway component is envisioned to provide access to high quality, intellectually elevated internet resources for agricultural research and development in the Asia-Pacific region. This gateway will operate by allowing NINPs in various

APAARI member institutions to add the system links to self developed Internet resources or useful resources discovered from the Internet. As most of the users of this system from APAARI member institutions do not have time and resources to trawl the Internet for information, this method will add value by releasing APARIS users of the burden of having to go through long lists of websites generated by conventional search methodologies. Besides having long lists, most search results also list Internet sites which are having content of unverified quality. The development of the gateway will correspond with the two phases of the information system. Phase–I will involve the development of the simplified gateway function, where only existing content and resources within APAARI and its members will be prioritized for inclusion in a simplified gateway function, where other relevant resources in the Internet will then be included in the gateway. Phase II will also include advanced features, such as sophisticated metadata design, metadata harvesting from other gateways, and superior user interfaces. He also highlighted the investment needs, skills and expertise required to manage this system.

FAO: Dr Johannes Keizer from FAO Library and Documentation Systems Division briefly presented useful experiences gained from AGRIS development (a bibliographical database) and drew attention to some key issues that need thorough consideration for further development of APARIS and its various databases. His presentation focused on distributed ownership of data, distributed data entry into APARIS databases, standard and quality of metadata to be stored in APARIS databases, and capacity building requirements at various NINPs of APAARI. In his view, these issues should be further discussed as a first step towards the future development of APARIS.

GFAR: Ms Fulvia Bonaiuti presented the ICT initiative of the GFAR. It was mentioned that GFAR operates through its stakeholders and mobilizes all stakeholders in planning and executing its programmes and activities. The NARS of the developing countries, together with their regional and sub-regional fora, are the major partners in the global agricultural research information system that GFAR aims to create and its work programme supports the evolution of the development-aid concept towards partners with common interests collaborating for mutual benefits.

It was informed that facilitating access to information and knowledge exchange among all the ARD stakeholders is one of the main goals of GFAR. The main partners in Agricultural Research for Development Information are working together to facilitate information flows among stakeholders and access to knowledge by end-users. To contribute to the achievement of this goal, information resources relevant to ARD are regularly identified to fulfill the needs of the various stakeholders who are considered as important partners of the GFAR initiative. Salient features including e-discussion fora, information search engine, and back office system for content management, and links of the reconstructed EGFAR site were demonstrated.

ISNAR: Dr Ajit Maru of ISNAR in his presentation on useful agricultural research information systems described ISNAR's Agricultural Research on the Web (AROW), which provides information on agricultural research institutes, Inform and its variants, which are used in more than 26 countries to manage agricultural research management information, the large amounts of information particularly aimed for the APARIS clientele on the ISNAR website and some of the CD-ROMS that ISNAR has developed. He also drew attention to ISNAR's work on developing a framework for ICT use in Agricultural Research and Development to benefit the stakeholders, especially the farmers and indicated certain major gaps in information systems for research such as in publication of e-journals from within the region on agriculture and agricultural research, the need for exchangeable and shared data on experts, institutions, projects for which ISNAR's Shared-Collexis initiative could play a role, open learning, natural resources management and biotechnology information. He laid stress on the need for relevant and useful content to be generated for various groups of clients

by NARS from the region and the need to create communities that collaborate in generating this information. He stated that the content can be very expensive quoting as an example how CABI had indicated that they had spent about USD 7.9 million on their compendia. He was of the opinion that an important role APARIS could play was in enabling NARS to manage its information content base and reduce costs in content generation through well managed information repositories. He also stressed that the issues of intellectual property rights would be at the core of all decisions in exchanging and sharing information within the region and this aspect of information management needs more attention. During discussions on partnerships with APARIS, he indicated ISNAR's expertise in the various aspects of developing, implementing and managing information and information systems and also issues of ICT and Institutional governance which play a critical role in the long-term sustainability and growth of information systems. Linking of APARIS with ISNAR's databases was also mentioned as a future possibility. ISNAR also has significant experience in capacity building especially in the area of management of systems and intellectual property rights issues that could be gainfully utilized by regional NARS.

APAFRI: Dr Sim Hoek Choh, Executive Director made a presentation on APAFRI-Tree Link Information System (ATIS), an APAFRI gateway to Asia-Pacific. ATIS was described as a unique web based information exchange system having links with libraries, databases, networks and other information sources on forestry research throughout Asia-Pacific. The major aim identified for ATIS is to create and facilitate networks and increase knowledge and information sharing. An important facility under ATIS will be on-line regional language translation. The goal is to remove the language barrier in sharing the research findings. The useful features of machine language translation (MLT) include instant translation of any two languages and with the customized vocabulary the accuracy could be as high as 80 percent.

NACA: Mr Simon Wilkinson in his brief presentation underpinned the importance of sharing publications through Internet. He mentioned that e-publications in PDF format prove to be very cost effective. He also mentioned that enhanced use of ICT applications in agricultural extension are becoming increasingly popular and NACA is now trying to improve computer literacy among rural communities. He described the e-NACA programme and NACA's collaboration with Thailand's information technology agency NECTEC. The objective of the e-NACA programme is to develop a participatory knowledge-sharing network that will support sustainable aquaculture development and aquatic resource management in the Asian region. The network will build on the existing network of NACA centres. It will be based on Internet, e-mail and multimedia publishing technologies and on establishing strong links to conventional knowledge distribution networks.

At the end of the session, Prof. Gajendra Singh, informed the participants about AIT's training programmes in the area of ICT and offered to help further reinforcement of APAARI-AIT relationship, particularly in the area of human resource development and training.

SESSION-IV: PARTNERSHIPS WITH INTERNATIONAL ORGANIZATIONS: POSSIBLE LINKAGES WITH APARIS

Chairman : Dr Jean F. Giovannetti Co-Chairman : Ms Delia P.A. Delfino

This session involved brief presentations from representatives of FAO, GFAR, CABI, and ISNAR on partnerships and possible links that APAARI can develop with these international organizations to add value to APARIS. Each presentation was followed by a short question-answer session and a general discussion.

FAO: Dr Johannes Keizer talked about FAO's role as a clearing house for standards of information exchange among various stakeholders, content production and organization, and electronic material available from FAO. He used the example of FAO's bibliographical database and pointed out that the popular search engines do not yield information in a standard format. He cautioned that in APARIS the standards should be developed for information exchange only, and not for database development at NARS level. This can be best served by having distributed databases at NARS with FAO acting as a clearing house for standards on information exchange facilitated through APARIS. Regarding content management, his view was that locally produced content should have proper descriptors for knowledge objects. He mentioned that some CD-ROMs on agricultural research publications are available free for some member countries or minimally priced for others. Such material could help develop further the content for APARIS.

Dr R.S. Paroda, APAARI Executive Secretary, wished to know as to how FAO-WAICENT could help APARIS development. In response Dr Keizer stated that WAICENT is a large framework including AGRIS and it offers several tools that APARIS can make use of. The session co-chair, Ms Delia P.A. Delfino, asked how WAICENT could help in capacity building at farm level and narrowing digital divide that exists among various NARS. The localization of content in APARIS was provided as an answer by Dr Keizer.

GFAR: Dr Giovannetti of GFAR informed the participants about GFAR's plan to hold five regional workshops including one for Asia-Pacific region and one inter-regional workshop for global partnership in the area of ICT for ARD through an EU-funded project. He anticipated that APAARI would play a significant role in the Asia-Pacific workshop as a contact point to NARS of the region and can also benefit from using the tools developed by e-GFAR initiative.

The APAARI Executive Secretary, Dr R.S. Paroda, asked if any consideration has been given to capacity building at NARS level. Dr Giovannetti informed that these workshops would also serve as training forums and some financial resources have also been allocated for this purpose. He added that these workshops will help develop human capacities in the ICT area.

CABI: CABI representative Mr Cagampang briefly described the APARIS Gateway study that CABI has conducted for APAARI. A full report of this study was submitted to APAARI. The study explores several management, content, and technical options for APARIS development and operation. It also details manpower and financial requirements of setting up and operating APARIS Gateway. In the presentation, it was mentioned that CABI, being an international publishing house, can offer its expertise to APAARI with regard to content/knowledge management, commercial publishing, and trainings.

To a question by Dr R.S. Paroda, on possible future progress of APARIS Gateway in cooperation with CABI, the CABI representatives responded that while CABI is willing to continue support to APARIS, but further financial support would have to come through its partnership programme, which is evaluated by CABI on a case-by-case basis. A new proposal may have to be developed for consideration in this partnership programme.

ISNAR: Dr Ajit Maru of ISNAR shared ISNAR's experiences with ARD information systems development and management in the 1990s. ISNAR had to stop working on these systems because of difficulties in maintaining them. However, he indicated that ISNAR can help APARIS in many ways such as by providing training materials on CD and ISNAR's ARD databases. The support could also include making APAARI a part of the ISNAR's proposal on "developing search engine" and partial financial support for a potential ISNAR personnel to be located at APAARI office in Bangkok could also be considered.

ICT Expert Consultation on the Development of Second Phase of APARIS

After the presentations, the session chair, Dr Giovannetti, summarized the proceedings of the session under the following self-explanatory headings: Collaborative Programmes in ICT, Capacity Strengthening, Financial Support, and Standardization. The specific points mentioned under these were:

Collaborative Programmes in ICT

- Sharing data
- Co-building of databases and services (gateway, web-ring)
- Sharing tools in ICT

Capacity Strengthening

- Training programmes
- Study visits
- Backstopping activities, and
- Sharing Expertise

Financial Support

- Catalytic funds
- Funds from projects involving other RAIS and E-GFAR

Standardization

• Specific role of U.N. Agencies, like FAO and UNESCO in standardization of information exchange.

At the end of the session a small group from the participants representing Pacific, Southeast Asia and South Asia regions was constituted to draft Terms of Reference for the NINPs. The group discussed the issue and proposed the following:

Terms of Reference for NINPs

- Assess the status and needs of respective NARS, monitor and update to improve relevance and effectiveness of APARIS contributions to APAARI vision and mission
- * Identify, collect, organize and make accessible information systems within the subject scope of APARIS
- Establish and operate information services for national and regional clientele based on APARIS processed information
- Share skills, knowledge and experiences in the handling and management of information among national NINPs.

SESSION-V: GROUP DISCUSSION ON DEVELOPMENT OF SECOND PHASE OF APARIS

Chairman : Dr Anwar Ali Chaudhry Co-Chairman : Ms Ipul Powaseu

As mentioned earlier, encouraged with the success of APARIS in the pilot phase, the members and support group agreed to take the APARIS initiative to its second phase. A general discussion on the subject was planned. Initial discussions were centred on issues of access vs. ownership, centrality vs. decentrality, changing role of regional and international systems and standardization of procedures for database structures and information exchange. There was an in-depth discussion with some useful contribution from all the participants. The major action points/issues that emerged from the discussions are summed up as follows:

- * APAARI needs to catalyze Asia-Pacific NARS in recognizing the importance of ICT in ARD. The NINPs will extend cooperation to promote APARIS activities in their respective NARS. It is expected that such an approach will generate support and popularize the APARIS.
- Need-assessment exercise is considered as an important primary requisite. Simultaneously, it was felt necessary to define the responsibilities of the NINPs. APAARI secretariat and ISNAR could possibly undertake this need assessment. ISNAR will provide the technical backstopping to APAARI secretariat. In this context a reference was to a similar study already completed by ASEARCA that could be useful to plan APAARI exercise.
- * APAARI gateway function to be made operational with the help of CABI.
- GFAR has extended support under RAIS and in view of the progress being made by APAARI more support could be forthcoming.

Keeping in view the limited financial and human resources available with APAARI, some activities were identified for APARIS. These included:

- Establish link with CG websites
- * Establish ICT links with sub-regional fora such as SAARC, ASEAN etc.
- * Building of Webpages
- Access and disseminate information to the end users
- NINPs to help in building mailing list including e-mail; develop an updated list of NARS institutions; and help in identifying suitable success stories including ICT use in ARD; identify topics for ediscussion
- Initiate e-discussion on IPM technologies for cotton since more than half the insecticide consumption is for protection of this crop, especially in South Asia
- * APARIS should develop standards for information exchange among NARS
- * APAARI should explore training opportunities at AIT and other leading NARS such as PCARRD, ICAR etc.

PLENARY SESSION

Chairman : Dr R.S. Paroda Co-Chairman : Dr Margaret C. Yoovatana

The Chairman of the session Dr Paroda appreciated the valuable inputs of the NARS members and the contributions from the support group. He flagged constitution of the APARIS Steering Committee as an important outcome from the session.

The following endorsements, based on the previous deliberations, were made in the session:

APARIS

* APARIS initiative should be taken to the second phase.

* A Steering Committee be constituted to provide directions, guidance and to oversee the activities of APARIS.

Steering Committee

The composition of the proposed Steering Committee be such that the Chair, Co-Chair and a member be from the NINPs (one each from the three sub-regions such as South Asia, SE Asia and the Pacific) with representation from the support group. The consent of the Support Group members was sought to this effect.

The composition of the first Steering Committee of APARIS consisting of ten members was unanimously agreed to by all the participants and is as follows:

1.	Ms Heather Briggs, ACIAR	Chair
2.	Dr Anwar Ali Chaudhry, PARC	Co-Chair
3.	Ms Delia P.A. Delfino, PCARRD	Member
4.	One representative each from APARIS support group-	

- ACIAR, AIT, CABI, FAO, GFAR, ISNAR
- 5. Assistant Executive Secretary, APAARI

Member Secretary

 The Steering Committee will have a term of two years and will be reconstituted from the NINPs with a permanent representation of the Support Group.

NINPs

- The TORs of the NINPs be discussed and revised by the APARIS Steering Committee, if required
- APARIS will work in close cooperation with the other regional fora to establish information links/ networks
- The NINPS and members will provide support and feedback to APARIS
- Undertake an exercise on assessment of ICT needs at national level with major initiative coming from ISNAR in collaboration with APAARI Secretariat

Next Steps

- Organize a Technical Workshop preferably at AIT with the technical and financial support extended by GFAR and logistic support by AIT, Bangkok
- * Seek help of CABI to develop APARIS Gateway in order to move forward in this important area
- * Collaborate with ASTI for its survey in Asia and extend needed support and technical inputs
- NINPs to identify success stories on agricultural technologies that have made substantial positive impact not only in their country but in other countries as well, for publication by APAARI
- NINPs will make available the list of the ARD institutions under their respective NARS for updating the APAARI mailing list, so that all key ARD related organizations could be benefited.

It was again emphasized that the partnerships in agricultural research and development activities are essential in the regional context and therefore all APAARI members must strive to foster such partnerships that are of mutual benefit. Finally, Dr Paroda expressed his gratitude to all the participants for their continued interest and efforts that led to the success of Consultation. He also hoped that APARIS initiative will be sustainable because of commitment of all NARS through their NINPs and the support of all important international organizations.

The Expert Consultation came to a close with a vote of thanks from the participants to the Chair.

PROCEEDINGS OF THE FIRST APARIS STEERING COMMITTEE MEETING

25 October 2002 Bangkok, Thailand

The Expert Consultation on Development of an Asia Pacific Agricultural Research Information System (APARIS) organized by APAARI from 6-7 November 2000 at Chiang Rai, Thailand, among other matters decided that in order to provide direction and guidance to the APARIS programmes/ activity a Steering Committee needs to be constituted.

An ICT Expert Consultation on the Development of Second Phase of APARIS was held from 24-25 October 2002 at Bangkok wherein this issue was discussed. At the end of the Expert Consultation the first Steering Committee for APARIS was constituted by consensus. The Committee comprises of following ten members:

1. Ms Heather Briggs, ACIAR		Chair	
2. Dr Anwar Ali Chaudhry, PARC		Co-Chair	
3. Ms Delia P.A. Delfino, PCARRD		Member	
4. One representative each from APARIS Support ACIAR, AIT, CABI, FAO, GFAR, ISNAR	Group		
5. Assistant Executive Secretary, APAARI		Member Secretary	
In the absence of Ms Heather Briggs, the meeting was chaired by Dr Anwar Ali Chaudhry, PARC. The following were present in the meeting:			
M. Dalla DA Dalfing DCAPPD	Mr Felmer E.A. Cag	ampang, CABI	

Ms Delia P.A. Delfino, PCARRD	Mr Felmer E.A. Cagampang, CABI
Dr Ajit Maru, ISNAR	Dr Sahdev Singh, APARIS Resource Person
Dr Johannes Keizer, FAO	Mr P.K. Saha, FAO-RAP
Dr Tristan Barter, CABI	Dr A.K. Bawa, APAARI Secretariat

Dr Jean F. Giovannetti of GFAR could not attend as he had to leave early for Manila to attend GFAR meetings

The Chairman welcomed the members to the first meeting of the Steering Committee and expressed confidence of success in APARIS programmes given the cooperation and commitment of the partner institutions. Being the first meeting of the Committee, the agenda for discussion centred on developing suitable mandate for the Steering Committee itself, finalizing the TORs for the NINPs and to chart a short term plan of action for APARIS.

TERMS OF REFERENCE FOR THE STEERING COMMITTEE

The first issue for consideration was the Terms of Reference for the Steering Committee. As per the following TORs agreed to by the members the committee will:

1. Provide policy support

- 2. Undertake strategic planning
- 3. Provide overall technical guidance
- 4. Source external funds for the APARIS
- 5. Monitor the work plan and report the progress to APAARI Executive Committee

The Committee would plan to meet every year preferably in association with the APAARI Executive Committee/General Assembly Meeting, and maintain contact in between meetings using regular e-mail and APARIS based e-mail discussion forums. The Steering Committee would: (a) share documents for comments, (b) discuss key decisions, and (c) inform others about APARIS activities and important strategic or technical developments.

TERMS OF REFERENCE FOR THE NINPS

The committee accepted the TORs for NINPs as developed and agreed during the Expert Consultation. These are:

- * Assess the status and needs of respective NARS, monitor and update to improve relevance and effectiveness of APARIS contributions to APAARI vision and mission
- * Identify, collect, organize and make accessible information systems within the subject scope of APARIS
- * Establish and operate information services for national and regional clientele based on APARIS processed information
- Share skills, knowledge and experiences in the handling and management of information among national NINPs.

Action Points

- Identify other regional and sub-regional bodies involved in similar activities/programmes to share their experience and also avoid duplication of efforts
- Design and develop promotional materials for APARIS. These could be in the form of brochures, CDs, etc. Keeping the diverse clientele in view viz: researchers, institutions, policy makers, funding agencies and donors and could be undertaken as a joint responsibility of the NINPs and APARIS. Multiplication of the material will be undertaken by APAARI.
- * List of e-mail addresses of Steering Committee to be provided to all concerned on urgent basis.
- * Steering Committee will develop monitoring procedures.
- Steering Committee members will also represent APAARI in meetings/conferences in their region while representing their respective NARS/institution. In case the representation is specific then APAARI could be approached. The participating member will report back any relevant information for APARIS.

Action Plan

The action plan has the following activities identified as short-term plan:

- Identify the areas of information where there are lacunae with regard to communication i.e. Need to have an updated directory of institutions.
- In the first stage APARIS will undertake assessment of ICT needs and present status in member NARS. In this endeavour, ISNAR will develop the questionnaire so that the responses can be obtained by March 2003 and final report be completed by May/June 2003. CABI would make available the knowledge audit proforma.

• The committee agreed to the following action points as part of APARIS activities in the initial stages of Phase-II.

Organize specialized group discussion forum. An issue identified for the purpose was IPM Technologies in Cotton Cultivation. On identification of other issues for e-discussion, reference was made to the ARD priorities in Asia-Pacific vis-à-vis the CGIAR Challenge Programmes. NRM issues were also agreed to for the discussion.

The meeting ended with a vote of thanks to the Chair.

ANNEXURE-I

ASIA-PACIFIC ASSOCIATION OF AGRICULTURAL RESEARCH INSTITUTIONS ICT EXPERT CONSULTATION ON THE DEVELOPMENT OF SECOND PHASE OF APARIS 24-25 October 2002 Rama Gardens Hotel, Bangkok, Thailand

AGENDA

24 October, 2002

SESSION I:	INAUGURAL SESSION			
8.00-9.00	Registration			
9.00-9.20	Welcome Address and Purpose of Expert Consultation	Dr R.S. Paroda Executive Secretary, APAARI		
9.20-10.00	Introductory Remarks	- Prof. Gajendra Singh, AIT		
		- Dr Jean F. Giovannetti, GFAR		
		- Johannes Keizer, FAO		
10.00-10.10	Inaugural Address	Ms Prapaisri Pitakpaiwan Acting Director General, DOA		
10.10-10.20	Chairman Remarks	Dr R.P. Sapkota Chairman, APAARI		
10.20-10.30	Vote of Thanks	Mr P.K. Saha Liaison Officer, APAARI		
10.30-11.0	Group Photo and Coffee Break			
SESSION II:	WAY FORWARD FOR APARIS			
Chairman : Dr Johannes Keizer Co-Chairman : Dr Anwar Alam				
11.00-11.30	Report on Initial Phase of APARIS	Dr R.S. Paroda		
11.30- 12.00	Issues for Consideration	Dr S. Singh APAARI Resource Person		
12.00-12.30	Suggestions from National Information Nodal Points			
12.30-13.00	General Discussion			
13.00 - 14.00	Lunch			

ICT Expert Consultation on the Development of Second Phase of APARIS

SESSION III: OTHER ARI SYSTEMS

Chairman : Prof. Gajendra Singh Co-Chairman : Mr Hayashi Tadahiro

14.00-15.30	"Useful	Agricul	tural Re	esearch	Information	Systems"
	– CABI,	FAO,	GFAR,	ISNAR	, APAFRI,	NACA

15.30-16.00 Coffee Break

SESSION IV: PARTNERSHIP WITH INTERNATIONAL ORGANIZATIONS: POSSIBLE LINKAGES WITH APARIS

Chairman : Dr Jean F. Giovannetti Co-Chairman : Ms Delia P.A. Delfino

 16.00-18.30 GFAR FAO CABI ISNAR General Discussion
 19.00 Dinner hosted by APAARI

25 October, 2002

SESSION V: GROUP DISCUSSION ON DEVELOPMENT OF SECOND PHASE OF APARIS

Chairman : Dr Anwar Ali Chaudhry Co-Chairman : Ms Ipul Powaseu

8.30-10.30 General Discussion and Action Plan

10.30-10.50 Coffee Break

SESSION VI: PLENARY SESSION

Chairman : Dr R.S. Paroda

Co-Chairman: Dr Margaret C. Yoovatana

10.50-12.30Endorsement of Recommendations and Action Plan
(For further submission to Steering Committee)

Formation of Steering Committee for APARIS

12.30-14.00 Lunch

14.30-16.30Steering Committee Meeting (only members)
(To endorse the action plan for the Second Phase of APARIS and
suggest on tasks assigned to concerned organizations/persons)

ICT EXPERT CONSULTATION ON THE DEVELOPMENT OF SECOND PHASE OF APARIS 24-25 October 2002

Rama Gardens Hotel, Bangkok, Thailand

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Printed at: Angkor Publishers (P) Ltd. NOIDA Phone: 95120-2422446

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