ICT Expert Consultation on the Development of Second Phase of APARIS and Meeting of APARIS Steering Committee

24-25 October 2002
Bangkok, Thailand

PROCEEDINGS

Asia-Pacific Association of Agricultural Research Institutions
FAO Regional Office for Asia and the Pacific
Bangkok
An ICT Expert Consultation on the Development of Second Phase of APARIS and Meeting of APARIS Steering Committee were 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. Mrs. Prapaisri Pitakpaiwan, acting DG, DOA, Thailand inaugurated the Expert Consultation being the chief guest. The deliberations of the Expert Consultation were conducted in five technical sessions and a plenary session beside the inaugural session. The programme and the list of participants are annexed (I&II). The proceedings of the various sessions are given here under.

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. Mrs. Heather Briggs, who had to cancel her participation at the last moment, had sent the text of her introductory remarks. These were distributed to all the participants. Mrs. 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.
Mrs. 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. Mrs. 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 wherever required, so that sustainable information networks 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 agriculture 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 : Johannes Keizer
Co-Chairman : Dr. Anwar Alam

This was the first technical session of the Expert Consultation and included two important and well illustrated presentations on the APARIS. The first presentation was made by Dr. Raj 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 socio-economic parameters, and the mandate, mission, achievements and relevance, of APAARI since its inception. He further dwelt on the periodic developments in APAARIS. 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, sourcing external funds, strategic planning and also monitor and evaluate the program 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 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 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 Mrs. H. Briggs, ACIAR was also included in the session but as mentioned earlier she due to unavoidable reasons could not participate. 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 gave 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 evaluated Internet resources for agricultural research and development in the Asia Pacific region. This gateway will operate by allowing National Information Nodal Points (NINPs) in various APAARI member institutions to add to 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 websites generated by conventional search methodologies. Aside from 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 database and interface. **Phase II** will be concerned with the development of the advanced 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 in to APARIS databases, standard and quality of metadata to be stored in APARIS databases, and capacity requirements and building at various NINPs of APAARI. In his view, these issues should be further discussed as a first step in 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. GFAR's work programme supports the evolution of the development-aid concept towards that of full 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 actors 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 were 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 one of the most important roles 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.

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 a Thailand’s information technology agency NECTEC. The objective of the e-NACA program 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 centers. It will be based on Internet, email and multimedia publishing technologies and on establishing strong links to conventional knowledge distribution networks.

At the end of the session, the session chair, Prof. Gajendra Singh, informed the participants on AIT’s many 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 links with APARIS

Chairman: Dr. Jean F. Giovannetti
Co-Chair: Mrs. 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. At the end of the session there was 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, Mrs. Delia P.A. Delfino, asked how WAICENT can 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 replied that these workshops will 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. Dondi 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 the APAARI Executive Secretary, 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 supporting APARIS, further financial support from CABI has 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.

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

**Collaborative Programmes in ICT**

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

*Capacity strengthening*

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

*Financial supports*

- Catalytic funds
- Funds from projects involving other RAIS & E-GFAR
Standardization


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.

**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-Chair : 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 emerged from the discussions are summed up as follows:

- APAARI needs to catalyze Asia-Pacific NARS leaders in recognizing the importance of ICT in ARD. NINPs to promote APARIS activities in their respective NARS. It is expected that such an attitude 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 was expected to 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 web sites
- 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
- NINPs to help develop an updated list of NARS institutions
- NINPs to help in identifying suitable success stories including in ICT use in ARD
- NINPs to help identify topics for e-discussion
- 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 possibilities at AIT and other leading NARS such as PCARRD, ICAR etc.

**Plenary Session**

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

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 important outcome of the session was that the participants endorsed major decisions of the Expert Consultation and the first steering committee for APARIS was constituted.
The following endorsements were made in the session:

- 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.

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, as follows:

1. Mrs. 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.
- 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 needs with major initiative coming from ISNAR in collaboration with APAARI Secretariat
- Organize a Technical Workshop to be held at AIT with the technical and financial support extended by GFAR as well as logistic support by AIT, Bangkok
- Seek help of CABI to develop APARIS Gateway in order to move forward in this import area
- Collaborate with ASTI for its survey in Asia and extend needed support and technical inputs
NINPs to identify success stories where agricultural technologies have made substantial impact and contributions in their countries 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 this APARIS Consultation. He also hoped that this new 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.
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 things 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 where in 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. Mrs. 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

In the absence of Dr. Heather Briggs, the meeting was chaired by Dr. Anwar Ali Chaudhry, PARC. The following were present in the meeting:

Ms. Delia P.A. Delfino, PCARRD
Dr. Ajit Maru, ISNAR
Dr. Johannes Keizer, FAO
Dr. Tristan Barter, CABI
Mr. Felmer E.A.Cagampang, CABI
Dr. Sahdev Singh, APARIS Resource Person
Mr. P.K.Saha, FAO-RAP
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. The following TOR were agreed to by the members:

1. To provide policy support
2. To undertake strategic planning
3. To provide overall technical guidance
4. Sourcing external funds for the APARIS
5. Monitor the work plan and report the progress to APAARI Executive Committee

The Committee would plan to meet preferably annually in association with the APAARI Executive Committee/ General Assembly Meeting, and maintain contact in between meetings using regular email and APARIS based email 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:**

- Identify the areas of information where there are lacunas with regard to communication i.e. Need to have an updated directory of institutions.

- In the first stage APARIS can 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.

- 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, Thursday, 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
           APAARI Executive Secretary

9.20-10.00 Introductory Remarks
           - Prof. Gajendra Singh, AIT
           - Dr. Jean F. Giovannetti, GFAR
           - Johannes Keizer, FAO

10.00-10.10 Inaugural Address
             Mrs. Prapaisri Pitakpaivan
             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
             APAARI Liaison Officer

10.30-11.00 Group Photo and Coffee Break
Session II: Way Forward for APARIS

Chairman: 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

Session III: Other ARI Systems

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

14.00-15.30 “Useful Agricultural Research 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: Mrs. Delia P. A. Delfino

16.00-18.30 GFAR
   FAO
   CABI
   ISNAR
   General Discussion

19.00 Dinner hosted by APAARI
25 October, Friday, 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**

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

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

Formation of Steering Committee for APARIS

12.30-14.00 Lunch

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

ICT Expert Consultation on the Development of Second Phase of APARIS
24-25 October 2002
Rama Gardens Hotel, Bangkok, Thailand

List of Participants

1. Mr. Md. Qumrul Islam
   Principal Documentation Officer
   Bangladesh Agricultural Research Council (BARC)
   Farm Gate, New Airport Road, Dhaka-1215
   Bangladesh
   Tel.: 880-2-9132416, 8115353, and 9132416
   Fax: 880-2-8113032
   E-mail: Docbarc@grameen.com
   Web Site: http://saic-dhaka.org/saic/BARC.htm

2. Mr. Kamlesh S. Prakash
   Principal Agricultural Officer (Information Communication)
   Ministry of Agriculture, Sugar and Land Resettlement
   Private Mail Bag Raiwaqa
   Fiji
   Tel: 679-384233
   Fax: 679-387157
   E-mail: kprakash@is.com.fj

3. Dr. Anwar Alam
   Deputy Director General (Engg.)
   Indian Council of Agricultural Research,
   Krishi Anusandhan Bhawan –II
   Pusa, New Delhi - 110 012
   India
   Tel: 91-11-5823415
   Fax: 91-11-5823415
   E-mail: aalam@icar1.nic.in
   Web Site: http://www.icar.org

4. Mr. Hayashi Tadahiro
   Public Information Officer
   Japan International Research Center for Agricultural Sciences (JIRCAS)
   1-1 Ohwashi, Tsukuba, Ibaraki 305
   Japan
   Tel: 81-298-38-6708
Fax: 81-298-38-6334
E-mail: hayataro@jircas.affrc.go.jp
Web Site: http://www.jircas.affrc.go.jp

5. Dr. Sok-Dong Kim
Director, Research Coordination Division
Rural Development Administration (RDA)
Seodundong, Suwon,
Kyeonggido-441707
Korea
Tel: 82-31-2992610
Fax: 82-31-2992629
E-mail: kimsokdo@rda.go.kr
Web Site: http://www.rda.go.kr

6. Dr. Keun-Seop Shim
Senior Researcher, Information Division
Rural Development Administration (RDA)
Seodundong, Suwon,
Kyeonggido-441707
Korea
Tel: 82-31-2992376
Fax: 82-331-2992354
E-mail: shimks@rda.go.kr

7. Dr. Kamarudin Bin Saadan
Senior Research Officer (ICT), Director,
Information Resource Management Division
Malaysian Agricultural Research and Development Institute (MARDI)
P.O. Box 12301, G.P.O. 50774 Kuala Lumpur, Malaysia
Tel: 603-8 9437150
Fax: 603-8 9431543
E-mail: ks@mardi.my
Web Site: http://www.mardi.my

8. Dr. Raghu Nath Sapkota
Executive Director
Nepal Agricultural Research Council (NARC)
Singha Durbar Plaza, Ramshah Path
P.O.Box 1440, Kathmandu
Nepal
Tel: 977-1 256837
Fax: 977-1 262500
E-mail: ednarc@ntc.net.np

9. Mr. Bhola Man Singh Basnet
Chief, Communication, Publication & Documentation Division (CPDD)
Nepal Agricultural Research Council (NARC)
Khumaltar, Lalitpur
10. Dr. Anwar Ali Chaudhry  
Deputy Director General  
Technology Transfer, PARC,  
Pakistan Agricultural Research Council,  
P O Box 1031, Islamabad, Pakistan  
Tel: 92-51 9201302  
Fax: 92-51 9255034  
E-mail: ach@comsats.net.pk  
Web Site: http://www.parc.gov.pk

11. Ms. Delia P. A. Delfino  
Director  
Management Information Services Division  
Philippine Council for Agriculture, Forestry, and Natural Resources Research and Development (PCARRD),  
Los Banos, Laguna 4030 Philippines  
Tel: 63-49-5360014 to 20; 536-5895 to 99  
Fax: 63-49-5360016; 536-0132  
E-mail: dell@pcarrd.dost.gov.ph  
Web Site: http://www.pcarrd.dost.gov.ph

12. Ms. Ipul Powaseu  
Senior Information Officer  
National Agricultural Research Institute (NARI)  
2nd Floor, Vele Rumana  
P.O. Box 4415  
Lae 411 Morobe Province  
Papua New Guinea  
Tel: 675-4751228  
Fax: 675-4722242  
E-mail: ipul.powaseu@global.net.pg

13. Mr. Simon Meru Pathirana Chandra Padmini  
Research Officer  
Sri Lanka Council for Agricultural Research Policy (CARP)  
114/9 Wijerama Mawatha,  
Colombo 07,  
Sri Lanka  
Tel: 94-1-697103  
Fax: 94-1-682951  
E-mail: carp@sri.lanka.net  
Web Site: http://www.slcarp.lk
14. Dr. Ting-Chin Deng  
   Associate Researcher in TARI  
   Council of Agriculture, Executive Yuan,  
   37 Nan Hai Road, Taipei, Taiwan 100  
   Tel: 886-4-23302301 ext 514  
   Fax: 886-4-23338162  
   E-mail: tcde@wufeng.tari.gov.tw  
   Web Site: http://www.coa.gov.tw

15. Dr. Margaret C. Yoovatana  
   Plan and Policy Analyst  
   Department of Agriculture  
   Ministry of Agriculture and Cooperatives  
   Chatuchak, Bangkok 10900  
   Thailand  
   Tel: 662-5614669  
   Fax: 662-5615024  
   E-mail: margaret@doa.go.th  
   Web Site: http://www.disc.doa.go.th

16. Mr. Panarat Sareewattana  
   System Analyst, Information Service Center  
   Department of Agriculture  
   Ministry of Agriculture and Cooperatives  
   Chatuchak, Bangkok 10900  
   Thailand  
   Tel: 66-2-5790890  
   Fax: 66-2-9405415  
   pana@doa.go.th  

17. Dr. Tjeppy Soedjana  
   Director of ICALTD / AARD  
   Indonesian Center for Agricultural Library and Technology Dissemination  
   Agency for Agric. Res. & Dev.  
   Jl. Ir. H. Juanda 20, Bogor 16122, West Java  
   Indonesia  
   Tel: 62-251-324394  
   Fax: 62-251-326561  
   E-mail: tjephyds@indo.net.id  
   Web site: http://pustaka.bogor.net

18. Dr. Le Van Bam  
   Vice Director  
   Department of Science, Technology and Product Quality-MARD  
   No.2, Ngoc Ha Street, Ba Dinh, Hanoi, Vietnam  
   Tel: 84-4-7332087  
   Fax: 84-4-8433637  
   E-mail: ph-bam@fpt.vn
19. Mr Simon Wilkinson  
Communications Manager  
Network of Aquaculture Centre in Asia-Pacific (NACA)  
P.O. Box 1040  
Kasetsart Post Office  
Bangkok 10903  
Thailand  
Tel: 662-561-1728 ext 113  
Fax: 662-561-1727  
E-mail: simon.Wilkinson@enaca.org  
Web Site: http://www.enaca.org

20. Dr. Sim Heok Choh  
Executive Director,  
APAFRI Secretariat,  
c/o Forest Research Institute Malaysia,  
Kepong, 52109, Kuala Lumpur,  
Malaysia  
Tel: 603-6279 7536  
Fax: 603-62773249  
Email: secretariat@apafri.org, simhc@frim.gov.my  
Web Site: http://www.apafri.upm.edu.my

21. Prof. Gajendra Singh  
Professor & Dean  
AIT Extension  
AIT - Asian Institute of Technology  
P.O. Box 4,  
Klong Luang, Pathumthani 12120,  
Thailand  
Tel: (66-2)-5246331  
Fax: (66-2)- 5246332  
E-mail: singhg@ait.ac.th

22. Dr. Jean F. Giovannetti  
Officer in Charge  
GFAR Secretariat  
c/o FAO, SDR,  
Viale delle Terme di Caracalla,  
00100 Rome,  
Italy  
Tel: +39 (06) 5705-3352 / 5705-4313  
Fax: +39 (06) 5705-3898  
E-mail: JeanFrancois.Giovannetti@fao.org  
GFAR-secretariat@fao.org  
Web Site: http://www.egfar.org

23. Ms. Fulvia Bonaiuti  
APo Information & Communication Technology
GFAR Secretariat
c/o FAO, SDR,
Viale delle Terme di Caracalla,
00100 Rome,
Italy
Tel: 39-06-57053584
Fax: 39-06-57053898
E-mail: fulvia.bonaiuit@fao.org

24. Dr. Johannes Keizer
FAO Library and Documentation Systems Division
Information Systems Officer
Viale Delle Terme Di Caracalla
FAO, Rome
Italy
Tel: 39-06-57052729
Fax:
E-mail: johannes.keizer@fao.org
Web Site: http://www.fao.org

25. Dr. Tristan Barter
Regional Sales Manager – Asia-Pacific
CAB International
Wallingford, Oxon
OX 7 6 RD
United Kingdom
Tel: 44-0-1491 832111 / 491 829473
Fax: 44-01491 833508
E-mail: t.barter@cabi.org
Web Site: http://www.cabi.org

26. Mr. Felmer Emmanuel A. Cagampang “Dondi”
Information Officer
CAB International South-east Asia Region Centre
Glasshouse No. 2 (block G) MARDI
Serdang, Selangor
Malaysia
Tel: 603-8943 2921
Fax: 603-8943 6400
E-mail: dondi@cabi.org

27. Dr. Ajit Maru
ISNAR
P.O. Box 93375,
NL-2509 AJ, The Hague,
The Netherlands
Tel: +31 (70) 349 6154 / 349 6206 (direct line)
Fax: +31 (70) 381 9677
E-mail: a.maru@cgiar.org
Web Site: http://www.cgiar.org/isnar
APAARI SECRETARIAT

28. Dr. R.S. Paroda  
Executive Secretary (APAARI),  
ICARDA-CAC, P.O. Box 4564,  
Tashkent 700 000, Uzbekistan  
Tel: +998-71-1372169/1372130  
Fax: +998-71-1207125  
E-mail: cac-tashkent@icarda.org.uz

29. Mr. P.K. Saha  
Technical Officer (Plant Protection, FAO) and Liaison Officer (APAARI)  
FAO Regional Office for Asia and the Pacific  
39, Phra Atit Road, Bangkok 10200, Thailand  
Tel: ++662-6974253  
Fax: ++662-6974445  
E-mail: PijushKanti.Saha@fao.org  
Web Site: http://www.apaari.org

30. Dr. A.K. Bawa  
Scientific Officer (APAARI),  
c/o FAO, 55 Lodi Estate  
New Delhi 110 003, India  
Tel: 91-4628877/4693060 ext. 377  
Fax: 91-4620115  
E-mail: APAARIIND@field.fao.org  
Web Site: http://www.apaari.org

31. Dr. Sahdev Singh  
APARIS Resource Person  
APAARI - Asia Pacific Association of Agricultural Research Institutions  
c/o FAORAP, Bangkok 10200, Thailand  
Tel: ++662-6974371  
Fax: ++662-6974408  
E-mail: ssingh@air.ac.th

32. Ms. Urairat Rujirek  
APAARI Secretary  
APAARI - Asia Pacific Association of Agricultural Research Institutions  
c/o FAORAP, Bangkok 10200, Thailand  
Tel: ++662-6974371  
Fax: ++662-6974408  
E-mail: urairat@apaari.org  
Web Site: http://www.apaari.org