



Regional Meeting of CAC RAIS

**15-16 January 2007
Tashkent, Uzbekistan**

Proceedings



Foreword

I am pleased to welcome you all to this important Regional Agricultural Information System Workshop on behalf of the CGIAR Consortium for CAC and the International Center ICARDA being co-sponsor of this meeting. Also it is encouraging to see various NARS leaders and ICT experts participating in this meeting. It indicates your commitment to support and strengthen an agricultural information system in the region. I am also delighted that the CAC Regional Forum CACAARI has invited ARIS Coordinators from other Regional Fora such as APAARI and AARINENA to share their experiences relating to the role of information communication technology (ICT) for agricultural research and development. In particular, I am very pleased to welcome Dr. Ajit Maru, representing GFAR. This is the second major event organized by CACAARI in partnership with GFAR. First ICT Meeting was organized on January 2004. Unfortunately, not much progress could be made since then. While appreciating the support of GFAR, we through CGIAR Consortium for CAC and ICARDA Regional office in Tashkent are pleased to have facilitated this event. I also welcome specially Dr. A. Khanazarov, Deputy Minister of Agriculture and Head of Uzbek NARS, who is Executive Secretary of CACAARI and main force for this initiative. For CAC countries as economics in transition, there is an urgent need to have necessary organization and management reforms and to have them globally linked through effective ICT networking and partnership.

I need not emphasize the importance of sharing knowledge for agricultural R&D in CAC region, having already the limitation due to language barrier and lack of linkages in the past with the international scientific community. We need to address existing concern of “digital divide”. Fortunately, ICT offers immense opportunities to share information and join hands through networking so that different NARS in the region could gain through sharing of successful stories and experiences of each other and from other regional and global fora.

In strengthening regional agricultural information system, the Central Asia and Caucasus Agricultural Research Information System (CACARIS) can obviously play a critical role. Since information would require necessary communication skills and softwares, which differ among stakeholder groups, there is a need to have a unified approach as well as proper understanding. This requires the establishment and maintaining of effective research-farmer-exporter linkage as well as enhancing farmer’s ability to access advanced agricultural technologies and information relating to weather, prices, marketing opportunities, etc. Although traditional channels of communication still remain important, ICT is a viable and efficient means for disseminating knowledge at much faster pace and also at lower cost. In order to do so, we need to understand current status of ICT use by NARS, have a system of information flow and networking through

designated National Information Nodal Points (NINP) and a mechanism for continued cooperation in future.

The challenge of communication and information exchange still depends on a basic need for interaction among people, organizations and societies. The success in regional research networks and consortia will be achieved through ICT with strong support by research leadership, partnership, capacity building and policy dialogue, and a symbiotic information and knowledge networking with NARS, the private sector, and NGOs. GFAR aims to work with all these stakeholders by building strong RAIS in different regions. Therefore, this meeting is critical for taking decisions and concrete steps to move forward.

I am certain, therefore, that these initiatives of CAC Regional Forum are both timely and fully justified. We should express our appreciation to the movers of CAC Regional Forum and the builders of all the success stories in agricultural research and development, and provide much needed facilitation role. This is presently what PFU in partnership with CACAARI is doing.

Since the time of establishment of the Regional Forum for Agricultural Research in Central Asia and the Caucasus, both PFU and ICARDA has been actively involved in strengthening this important organization. Our Regional office in Tashkent has provided the secretarial support. Dr. Mahmoud Solh, Director General, ICARDA is fully committed to provide all needed support to the CACAARI, similar to that being provided to AARINENA. In particular, I appreciate the commitment of Dr. Zakir Khalikulov, my colleague from PFU, to accelerate this regional initiative. We have recently hired an ICT expert to work for CACARIS and build this Network. Currently, the CGIAR Program for CAC has its own web-site, reflecting, in both English and Russian, all the activities undertaken in region, including PGR web-page. Recently, we have registered a new domain name www.CACAARI.org to transfer the existing CACAARI website from www.CACAARI-Forum.Narod.ru. Mr. Umidjon Rahmonberdiev will act as web manager for CACAARI to strengthen the existing website and developing a new structure for sharing all relevant information with NARS of the Region.

We realize the importance of inter-regional cooperation with APARIS, AARINENA-RAIS, FAO-Agroweb and other Regional Information Systems and I do hope that the representatives of CACARIS, APARIS, AARINENA-RAIS, FAO-Agroweb will establish good linkages and cooperation in future. It is necessary to strengthen CACARIS network through Agro-Portails, RAEL, Gateways, etc. In order to achieve all this, it is necessary to empower and train NINPs, and have a RAIS Steering Committee formed. During this meeting we have to establish the

CACARIS Steering Committee (SC) which should be responsible for the development of regional ICM strategy. We have to also identify our priority needs and develop a workplan for 2007-2008 which we could pursue rigorously, through much needed funding support of GFAR and PFU as well as ICARDA, and through active involvement of NARS.

Realizing the importance of English language for NARS of the region, the CGIAR Program for CAC also regularly organizes intensive English training course in all the eight countries. Presently, 20 young scientists from Azerbaijan, Uzbekistan, Kazakhstan, Tajikistan and Kyrgyzstan are attending a three month training course in Tashkent. So far, more than 393 young scientists have been trained in English language under our program. In future, we shall need training and capacity building of designated NINPs.

Finally, on behalf of all the CGIAR Centers involved in the CAC Regional Program, I would like to assure you of our best possible support to strengthen agricultural research and development through proposed CACARIS network in the region.

I wish you all to have very fruitful deliberations during the meeting. I also hope that you enjoy your stay in this beautiful city of Tashkent.

Thank you.

Dr. Raj Paroda
Regional Coordinator, **ICARDA-CAC**,
Head, **PFU-CGIAR**

Acronyms and Abbreviations

CACAARI	Central Asia and the Caucasus Association of Agricultural Research Institutions
AARINENA	Association of Agricultural Research Institutions in the Near East and North Africa
APAARI	Asia-Pacific Association of Agricultural Research Institutions
APARIS	Asia-Pacific Agricultural Research Information System
ARD	Agricultural Research for Development
CAC	Central Asia and the Caucasus
CGIAR	Consultative Group of International Agricultural Research
FAO	Food and Agriculture Organization
GFAR	Global Forum for Agriculture and Research
ICARDA	International Center for Agricultural Research in the Dry Areas
ICM	Information and Communication Management
ICT	Information Communication Technologies
JIRCAS	Japan International Research Center for Agricultural Sciences
NAIS	National Agricultural Information Services
NARS	National Agricultural Research Systems
NINP	National Information Nodal Points
PFU	Program Facilitation Unit
RAIS	Regional Agricultural Information Services

Inaugural Session

Chairperson: Dr. Abdushukur Khanazarov

Co-chairperson: Dr. Raj Paroda

Reporter: Dr. Zakir Khalikulov

1. Mr. Abdushukur Khanazarov, First Deputy Minister of Agriculture and Water Management of Uzbekistan, welcomed participants on behalf of the Uzbek Authorities. In his speech, Mr. A. Khanazarov indicated that ICT and ICM are key factors for Agriculture Research for Development (ARD).
2. Dr. R. Paroda, Head CGIAR-PFU Program and Regional Coordinator of ICARDA in CAC, what results had been achieved for last two years of working RAIS as long as with the key role of RAIS in CAC for development.
3. Dr. Ajit Maru gave his statement on GFAR's role in Regional Collaboration in ICM
4. Dr. Zakir Khalikulov introduced the participants to each other.

Session I: Experiences of GFAR and Regional Fora

Chairperson: Dr. Abdushukur Khanazarov

Co-chairperson: Dr. Guram Aleksidze

Rapporteur: Mrs. Taraneh Ibrahimi

Dr. Ajit Maru presented his presentation on "Developing National and Regional Agricultural Information Systems: Lessons Learned". He said that during this presentation we will discuss what is understood by a National Agricultural Information System; we also can get lessons learned in developing these information systems. He has mentioned that sometimes there is no clear definition of what is meant by a National Agricultural Information System (NAIS). Without a definition a NAIS means different to different people. Therefore first of all, we should reply to the following questions:

1. What a National Agricultural Information system is?
2. How we develop it

Related to the first question, he has clarified that a National Agricultural Information System comprises of a set of agriculture related information sources in a country that are publicly accessible and satisfy the needs of its users which include farmers, producers, scientists, teachers, students, research managers, policy makers, processors, market intermediaries, farm input providers and consumers of agricultural products. He has mentioned that each user requires different sources and NAIS should be able to define for them. Therefore a NAIS is made up of a set of information systems providing different information each from a variety of sources and catering to a multitude of users. He also has mentioned that prior to the use of ICT; we did not really have a concept of a NAIS. We only had national agricultural bibliographic systems for scientific and technical information.

He talked about a generic framework to enable ICT use for ARD. He said that this framework include five components. The first one which is "ARD information organization" produces web sites, CDs, publications, radio programs, etc... and all of these together give us an "Information platform"; then someone who produce it should send it to someone who uses it and this process

will happen through the "information Bus" component. New knowledge and information should be released and reach to the clients through the "information and knowledge Intermediaries."

He has mentioned that Key Issues to be addressed in developing AIS are related to 7C's as **C**onnectivity, **C**ontent, **C**ommunication, **C**apacity and **C**ompetence, **C**ommunity Participation, **C**apital Investment, **C**ollaboration, and **C**ulture of Organizations.

Finally, Dr. Maru has mentioned his suggestions for an effective RAIS. He said that Regional Forums must have an explicit communications strategy for their RAIS; also In addition to a focal unit, regional forums must identify a national lead Institute that will guide and support national collaboration in developing and strengthening agricultural information systems; the lead Institute may be responsible to provide access to standards, norms, guidelines, tools, applications, translation etc. at the national level

The next presentation was belonged to Dr. Sahdev Singh which was related to the activities of Asia-Pacific Agricultural Research Information System (APARIS).He thanked CACAARI, ICARDA and GFAR for inviting him to share his experience with another Regional Forum. During his presentation he has talked about the information needs and problems which exist in information dissemination in Agricultural Research for Development. He has insisted on the role of ARD Institutions to solve the problems by providing Knowledge production and dissemination and by developing the capacity building. He also has talked about the role of Regional Forums and Regional Agricultural Information Systems; some of the main issues were about knowledge sharing between NARS and others, strengthening collaboration among ARD institutions and Capacity building in NARS. He has mentioned the APARIS Governance is comprised of APARIS Steering Committee; National Information Nodal Points (NINPs), APAARI Secretariat and APARIS Coordinator. He has mentioned that NINPs are the main drivers of APARIS; they help APARIS to find which information is needed to develop by APARIS; they provide link between APARIS and NARS; they also provide success story and Country reports. He has mentioned that APARIS themes are basically on the following issues: Capacity building, Advocacy for ICT/ICM in ARD, Integration of Information Resources and Inter-regional Cooperation through GFAR. He has insisted that many institutes produce information and APARIS mission is to act an important role to share and exchange the information. He has introduced some of the APARIS activities related to the capacity building and advocacy which have been done during last years .He has talked about the activities which have been done by APARIS related to the Integration of Information Resources such as Continuous update of APAARI web site, Regional Agricultural Expert Locator and ARD Information Gateway.

He has mentioned that APARIS has a close collaboration with other Regional forums, stronger NARS like JIRCAS, ACIAR and RDA, sub-regional groups (SEARCA, SAIC, SPC), private sector and foundations and NGOs.

Dr. Taraneh Ibrahimi presented the AARINENA-RAIS (Association of Agricultural Research Institutes of Near East and North Africa – Regional Agricultural Information Systems). She has presented a brief history about AARINENA and its mission. Then she talked about the establishment of RAIS Secretariat which takes place in Iran. Then she talked about the AARINENA-RAIS main goals and establishment of AARINENA-RAIS Steering Committee .She said that the Steering Committee is composed of information technology and information management specialists from the five sub-regions and representatives of AOAD, FAO, GFAR and ICARDA. She talked about the plans which the first AARINENA Steering Committee has intended to implement. She said that one of the main plans was related to design of a National Agriculture Information System. She also has introduced the AARINENA-RAIS Business plan for 2007-2009. Some of the main issues in this plan were related to the identifying focal points in the member countries, human capacity building programs and supporting the previous projects which have been implemented by the first Steering Committee .Then she talked about the AARINENA website. She said that all activities related to the AARINENA web site (<http://www.aarinena.org>), are managed and developed by the AARINENA-RAIS secretariat. She has introduced the 3 versions of the web site since 2002. She said that they have

developed the Arabic version of web site by the collaboration of Regional FAO office in Cairo, Egypt. She has introduced the main activities which have been done by AARINENA-RAIS from 2004 to 2006; developing the Western Asia Agricultural Researchers Information System and implementing of the Medicinal and Aromatic Plants Webpage on the AARINENA Web site were some of these activities. She has mentioned that they have 4 Regional Networks (Cotton, Date-palm, Olive, Medicinal plants) which have a close collaboration with AARINENA-RAIS. Some of them which don't have their own website can publish their information on the AARINENA website. She has introduced the Western Asia Agricultural Researchers Information System which has been developed by the collaboration of Iran, Turkey, and Pakistan and includes more than 400 data from the Regional Agricultural Researchers. She has introduced the NARIMS(National Agricultural Research Information Management System).She said that NARIMS is an important project in the Region, which has been implemented by the central laboratory for Agricultural Expert Systems(CLAES) in Egypt with support of FAO; NARIMS enables researchers and Scientists to carry out research more effectively by creating access to research and Institutional information, as well as by providing modern tools for managing researchers information, projects, plans, and other activities.

Finally she has introduced the future plans of RAIS which one of the main issues was about identifying focal points in the member countries.

The next presentation was belonged to Dr. Zakir Khalikulov; his presentation was about the main highlights of the first CAC-RAIS meeting. He has mentioned that Regional Agricultural Information System (RAIS) Workshop for Central Asia and the Caucasus was held in Tashkent, Uzbekistan from 27-28 January 2004 and it was the first formal event organized by the established CAC Association of Agricultural Research Institutions (CACAARI). During the meeting they have recognized what exactly they need in the region. They have found that their activities of agricultural information and communication management (ICM) should be supported through an active political commitment and an ICT policy effectively implemented at the national level. They also have found that exchanging and sharing information is the main issue which should be done at national, regional and inter-regional level. Then based on the recognized needs, they have decided to establish a Regional Agricultural Information System in the CAC Region, but they have mentioned the need of a multi-stakeholder involvement to achieve effectively the national and regional information system in the area of ARD. They have also insisted on the identifying of focal points in the region as the information resources to exchange data and knowledge. During that meeting they also has introduced the Agroweb which is a relevant initiative enabling the management of national information resources in agricultural research for development; they have mentioned that Agroweb acts as a gateway function from the regional level facilitating the access to national resources and hence be strengthened further by contributions from each NARS. Some of the main recommendations of the first CAC-RAIS meeting, were as following: to prepare a document on the CAC-RAIS strategy to be facilitated by the GFAR Secretariat, To define a specific plan of work to strengthen the ICT activities and skills at a regional level and to launch a RAIS Steering Committee; they have decided that the launching of this Steering Committee will be facilitated by a temporary working group.

The last presentation was belonged to Mr. Umidjon Rahmonberdiev, the CACAARI-RAIS web manager. His presentation was about strengthening the existing CACAARI web site. First he has analyzed the current status of web site. He has mentioned that the web site (<http://cacaari-forum.narod.ru>) has minimum information and it is not updated; the support and maintaining is very low and the design is very poor. The he has mentioned that during last months they made some changes in this regard to improve the situation. He has mentioned that they have registered a new web address as <http://www.cacaari.org> for the CACAARI and ICARDA holds its ownership. He has mentioned that the new design of web site supports all the standard items which are needed for a dynamic web site and it is well secured. He has mentioned the items which currently exist in the web site such as constitution, events , news,... and has mentioned other items which could be useful to add in the future(information related to the Research

Institutes, projects, experts, links to other Regional Networks,...).He talked about the technical aspects of a dynamic web site and its privileges. He has clarified that developing the databases are essential to store the huge amount of data centralized and to facilitate information exchange in the Region and with other RAIS. He said that they are intended to offer online services to the users through the web site such as e-libraries, encyclopedias, e-manuals and discussion boards. He has clarified that they intend to develop a website which allows to users to comment news, submit their electronic publications to the E-library, participate in online discussions and forum, and write feedbacks and testimonials. Then he has mentioned that as the daily support and maintenance of the web site, they should troubleshoot and maintain online web services, keeping up-to-date information about projects, contacts, experts and develop new web services in order to satisfy future needs and goals.

The general discussion of presented presentations was taken place: the participants were asking questions of presenters on different areas like “how the linkage between AARINENA and APARIS established?”, “How the process of gathering, analyzing and publishing the information on AARINENA web site is organized?” and the presenters did respond to all questions. All participants were agreed that exchanging and sharing information are the main issue which should be taken in consideration. They talked about the publications and how they can share them with other countries. Collecting information and deciding about the right data to publish on the web were other issues which were discussed. Also they have discussed about standardization of the databases. Participants ask the other Regional Forums and International Organizations to introduce few products which is very successful and can use as a model for them. Dr. Maru said that we try to standardize the databases, but it is better that each country has its own policy to recognize which kind of database is really needed for their country.

Session II: Country Status Reports

Chairperson: Dr. Zakir Khalikulov
Co-chairperson: Dr. Taraneh Ibrahim
Reporter: Dr. G. Karimova

Armenia.

Dr. Ashot Hovhannisyan presented the country report for Armenia, where he gave the current picture of Agriculture in Armenia in general and particularly described the current activities on ICT and ICM for ARD. He stressed, that in Armenia there is an organization called “Republican Center for Assisting Agriculture”, which analyzing and organizing data of all research works, done by agricultural. He mentioned, that in Armenia functioning an organization called “Republican Center for Assisting Agriculture”, which analyzing and summarizing the data of research works, which done by agricultural research centers and other agricultural research organizations, and based on this information they are creating database of Scientific Technical Researches.

Azerbaijan.

Dr. Yagub Guliev presented the country report for Azerbaijan. He gave the picture of The State of National Agricultural Information System in Azerbaijan and the brief description of Agriculture in Azerbaijan. Dr. Yagub Gulliev stressed that the continuing development of rural enterprises is limited by market imperfections resulting in ineffective marketing linkages due to a number of problems such as1: (i) an insufficient range of financial services; (ii) disorganized supply chains with poor vertical coordination; (iii) a poor business environment

characterized (weak investment climate, inadequate contract law, corruption, and others); (iv) high transaction costs for marketing and trade resulting from a limited number of producer organizations and professional associations; (v) poor public services and institutional capacity; and (vi) inadequate public investment in electricity and gas supply, transportation and communication infrastructure, and public marketing infrastructure such as wholesale markets.

Georgia.

Dr. Givi Mosashvili presented the country report for Georgia. He stressed the well-organized ICM system inside the country and the activities of TECHINFORMI in this field, the new project 'AgVANTAGE', which provides monthly printed journal, weekly informational bulletin and the web site www.agroinfo.ge. As he indicated, there are still exists various problems: In agricultural sector, Internet is mainly accessible only for organizations, institutions and representatives of middle and big-scale businesses. From 60% of nation, leaving in Georgia, only small part of it uses internet. 80% of web sites are in English, which is a big barrier on using this information for those, who does not know English.

Session II: Country Status Reports (Cont.)

15 January, 2007 (Monday)

Chairperson: Dr. Sahdev Singh
Co-chairperson: Dr. Zakir Khalikulov
Reporter: Mr. Yagub Guliyev

Kazakhstan.

Dr. (Mrs.) Sakish Erjanova presented the country report for Kazakhstan. She described in brief the current status of Telecommunications, Agriculture and the government policy on strengthening the agriculture in Kazakhstan. Dr. Sakish Erjanova indicated that in Kazakhstan National Center for Scientific Technical Information already developed many databases, like: "Defended Thesis's of Republic of Kazakhstan" (12 374 records), "Registered Research and Experimental Development works of Republic of Kazakhstan" (8 686 records), "Research and Experimental Development Reports" (10 519 records), "Scientific Potential of Kazakhstan" (230 records), "New Technologies of Kazakhstan" (1 893 records) and so on.

Kyrgyzstan.

Dr. Azilbek Usubaliev presented the country report for Kyrgyzstan. He gave the current picture of agriculture in Kyrgyzstan, and stressed the status of ICT, the difficulty of telecommunications in the rural areas due to lack of finances and unstable political situation in Kyrgyzstan. He mentioned, that Government of Kyrgyzstan is planned to achieve following results in near future:

- a. Provide reliable telecommunications and postal services to the rural areas
- b. Provide access to national and international information services via Internet and E-mail for rural areas
- c. Ensure, that the Radio and TV is available in all areas of Kyrgyzstan

Tajikistan.

Dr. G. Karimova presented the country report for Tajikistan. She stressed the very poor agriculture and ICT in Tajikistan. She stressed that the current technical base of telecommunications is not capable to provide communications and informational services to all residents of Tajikistan, especially those who live in rural areas. In her presentation, she also stressed that the nation is very poor: she presented the table of available provisions to the population: this table make participants very upset about Tajikistan: especially availability of meat: 0.6 kg per month per person in 2004 was very shocking.

Turkmenistan.

Participants from Turkmenistan could not participate in this workshop, but they kindly provided country status presentation, which was presented by Dr. Zakir Khalikulov. In this presentation was stated the current status of Agriculture in Turkmenistan, the current ICT Policy and Government's strategy on development ICT and ICM. For the last three years, government of Turkmenistan achieved significant progress on improving ICT for Development. Currently government is preparing new projects of law on ICT, Electronic signatures, electronic document exchanging and e-commerce. Although, with the good results, there are still exists problems in this area: currently truly governmental online services for nation and organizations does not exists, the level of equipping regional governmental organization, schools with new IT technologies still remains low. The cost for Internet is very high, and it is not accessible at all in rural areas.

Uzbekistan.

Mr. Umidjon Rahmonberdiev presented the country status report for Uzbekistan. He gave the brief picture of Agriculture and the current status of ICT in Uzbekistan. He mentioned that in Uzbekistan ICT is rapidly growing; the government recognized the need of developing strong ICT is paying very big attention to the telecommunications. During the last three years, the Government has achieved significant progress in promotion of "ICT for development". Laws have been drafted in the areas of information, digital signature, electronic document circulation and electronic commerce, and adopted by the Parliament, which provided the basis for a wider application of ICT. This has supported the Government in its adherence to ICT development. In confirmation of its adherence to ICT, the Cabinet of Ministers has instructed all government agencies to launch active a web-sites by the end of 2002, and now practically at all major ministries, committees, agencies and regional administrations have web-sites.

General Discussion

In general discussion, participants asked questions each other on different areas, discussed the some facts and indicators. Oleg Shatberashvili indicated, that in general, ICT is one of the key fields, that is rapidly growing in these countries and now these countries has the capacity to develop NAIS.

Session III: Regional Presentations

Chairperson: Dr. Jamin Akimaliev

Co-chairperson: Zakir Khalikulov

Reporter: Dr. Sahdev Singh

The Chair welcomed the participants and opened the session with the comment that the 21st Century will be highly knowledge-based and therefore new approaches of knowledge management are needed to improve the agriculture sector and farming communities in the Central Asia and Caucasus (CAC) region. The session had two presentations on current status of information and communication technologies (ICT) and information and communication management (ICM) in agricultural research for development in the CAC region.

Dr. O. Shatberashvili presented a Synthesized Regional Report based on the country reports submitted by the national information nodal points (NINPs), FAO findings during a workshop in 2005, and his own research in the area. He started his presentation with a broad overview of the CAC region and issues related to a rapid decline in public funding support for the management of Scientific and Technical Information (STI) in various organizations such as libraries, universities and research institutions. However, he also pointed out that part of this decline is being compensated by gradual increase in the use of internet for STI management and dissemination as telecommunication services were growing at a healthy pace in most CAC countries. There still exists It was recognized that regional and international ARD organizations have a greater role to play by making timely policy recommendations to the national systems and assisting them in developing new extension mechanisms in the rural areas where most of the agriculture is practiced considering the digital divide between the rural and urban populations. According to him, regular updates of existing agriculture related databases in the national systems and establishment or strengthening of national agricultural information systems through support from all national, regional and international stakeholders are critical. Another concern raised was that national systems should have regular NINPs, who can form a regional collaborative group to tackle the above issues.

The second presentation was on Development of AgroWeb Network and its Collaboration with GFAR in CAC Region by Dr. Michal Demes, FAO. Dr. Demes informed that agricultural research professional in all eight countries of the CAC Region have free access to AGORA for STI and gave a brief overview of Agroweb development since its inception in 1998, its geographical coverage, local language features, thematic areas and past collaboration with GFAR. He pointed out that human capacity issues including frequent rotation of people in key positions and lack of professional decision making at higher level needed an urgent attention to establish well-defined and structured national agricultural information systems having a certain level of authority and recognition within the national agricultural research systems. According to him, the other priorities for the CAC region included guaranteed allocation of support and resources (human and financial) for capacity building from FAO, CGIAR, and ICARDA at national level, possibilities for partnership and collaborative activities with Agroweb experts and thematic networks, and improvement in the quality of services provided by Agroweb national portals. He cited the example of Georgia as best practice in terms of national Agroweb network development.

A general discussion followed the above two presentations during which the following important points were raised by the participants:

- (1) Several participants identified lack of human capacity in the national systems coupled with inadequate policy advocacy and sensitization of national system leaders as the critical bottleneck for development of NAIS.
- (2) It was generally recognized that better use of ICT and ICM in ARD is definitely needed and the focus should be on how to accomplish this. While significant capacities also exist in the region, using a synergistic approach a regional framework was necessary for improved collaboration for and sustainability of NAIS and RAIS. As Agroweb focuses on

STI services for agricultural professionals, the CAC-RAIS will also cover farming communities and their information needs such as extension information, weather reports and market updates.

- (3) It was suggested that there should be better communication between Agroweb and CACAARI, and the Agroweb portal could be an important part of the regional network or the regional system (RAIS) which should be located and managed within the region.

The session ended with the final remarks from the Chair who concluded that we all need to move forward for effective development of agriculture sector in the CAC region which is agrarian in nature. The region requires improved information and knowledge sharing at various levels and among various organizations, adequate funding and policy support to develop NAIS and RAIS with a focus on the information needs of farmers and agricultural researchers.

Session IV: Plenary Session

Chairperson: Dr. Raj Paroda
Co-chairperson: Dr. Ajit Maru
Reporter: Mr. Umidjon Rahmonberdiev

The first part of the session (before lunch) was lead by the Dr. Ajit Maru, and he informed participants about forthcoming tasks for this session: discussion on how CAC-RAIS work plan can be strengthened and at the last discussion on strengthening National Agro Web Portals and linking with CAC-RAIS.

Dr. Zakir Khalikulov (co-chairperson) stressed that these two issues are very important and future of CAC-RAIS primarily depends on conclusions made today. He asked to give their suggestions on how CAC-RAIS can be strengthened by one of the representatives from each country. The different suggestions were given by each county, and some main suggestions were:

1. The institutional support has to be established for CAS-RAIS in regions
2. More financing needs to be attracted to the regions from donors to establish National Agricultural Information Centers in each regions
3. A strong linkage has to be established between National Agro Web portals and CAC-RAIS.
4. Development of different online web services, databases for farmers, researchers, marketers
5. Human capacity building in CAC Countries
6. Development of special project by GFAR, CACAARI, ICARDA and FAO on establishment of RAIS and apply to donors for financing
7. Advocacy and sensitization for NARS leaders to promote the use of ICT for better ICM in ARD

After the discussion end, Dr. Ajit Maru distributed the two blank papers among participants and asked them to write down their two main ideas how the work of CAC-RAIS can be strengthened on each blank paper. After all participants wrote their ideas, Dr. Ajit Maru collected all of them and asked participants to come over to a big table and started discussion on categorizing these ideas by their relevance. The following main categories were raised as a result of this discussion:

1. Establishment or Identification of Institution responsible for agricultural information system

2. Develop small informational products and services for scientists and farmers
3. Work out strategy on development of ITC for CAC countries
4. Development of Information Sources (National AgroWeb portals)
5. Collaboration with International Organizations
6. Advocacy and sensitization for NARS leaders

After this, all participants left for lunch.

After the lunch, the meeting was lead by Dr. Abdushukur Khanazarov, First Deputy Ministry of Agriculture of Uzbekistan and asked to distribute the draft of suggestions for strengthening the work plan for 2007-2009, which was currently developed by the participants. Dr. Raj Paroda, the co-chairperson indicated that although the list of suggestions are very good and covers many problems, there are still some big issues that this document did not cover and this document has to be revised, discussed not only with participants of this workshop, but with NARS leaders needs to be included in revising this document. The participants were agreed with Dr. Paroda, and Dr. Ajit Maru promised to establish a working group and asked for four volunteers to join him on revising this document for the next day.

Dr. Abdushukur Khanazarov concluded that participant did very good job on developing work plan for 2007-2009, and expressed his gratitude to participants and especially to Dr. Ajit Maru for his great assistance and contribution on this process.

Chairperson, Abdushukur Khanazarov then informed participants about forthcoming task, which was planned for this workshop: The Establishment of Steering Committee of CACAARI. At first, he asked participants to vote on the number of members of SC – should it consists of the five persons, or seven. The participants concluded that five people for SC would be the best: two from Caucasus, two from Central Asia and the executive secretary of CACAARI.

(What about the final composition of the Steering Committee)

After discussing the candidates for a while, participants agreed on following candidates:

1. Dr. Abdushukur Khanazarov (Uzbekistan) – Chairman
2. Dr. Oleg Shatberashvili (Georgia)
3. Acad. Tolib Nabiev (Tajikistan)
4. Dr. Asad Musayev (Azerbaijan)
5. Dr. Bayan Alimgazanova (Kazakhstan)

From International organizations following candidates were selected as Steering Committee members:

1. Dr. Ajit Maru, GFAR
2. Dr. Zakir Khalikulov, ICARDA
3. Dr. Michal Demes, FAO SEUR/KCEF

Regional Meeting of CAC RAIS

15-16 January 2007
Tashkent, Uzbekistan

Agenda

15 January, 2007 (Monday)

- 08:30 - 09:00** Registration
- Inaugural session***
Chairperson: Dr. Abdushukur Khanazarov
Co-chairperson: Dr. Raj Paroda
Rapporteur: Dr. Zakir Khalikulov
- 09:00 - 10:00** Welcome Addresses
- Opening Statement by Dr. Raj Paroda, Head, CGIAR-PFU Program and Regional Coordinator, ICARDA - CAC
 - Inaugural Address and the Objectives of the RAIS Meeting by Dr. Abdushukur Khanazarov, Deputy Minister, Ministry of Agriculture and Water Resources of Uzbekistan and Executive Secretary, CAC Regional Forum,
 - Statement on GFAR's role in Regional Collaboration in ICM by Dr. Ajit Maru, Agricultural Research Officer, GFAR
 - Introduction of Participants and Vote of Thanks - Dr. Zakir Khalikulov, PFU-CGIAR
- 10:00 - 10.30** Coffee Break and Group Photograph
- Session I: Experiences of GFAR and Regional Fora***
Chairperson: Dr. Samvel Avetisyan
Co-chairperson: Dr. Guram Aleksidze
Rapporteur: Mrs. Taraneh Ebrahimi
- 10:30 - 10:40** Approval of Agenda - Dr. Zakir Khalikulov
- 10:40 – 12:30** Experiences of Global and Regional Fora Information System
- 10:40 – 11:10** Presentation on "Developing National and Regional Agricultural Information Systems: Lessons Learned" - Dr. Ajit Maru
- 11:10 – 11:30** Presentation on APARIS -Dr. Sahdev Singh
- 11:30 – 11:50** Presentation on AARINENA-RAIS – Mrs. Taraneh Ebrahimi
- 11:50 – 12:10** Main Highlights of the First RAIS Meeting, 27-28 January, 2004, Tashkent, - Dr. Zakir Khalikulov
- 12:10 – 12:30** Strengthening the existing CACAARI web site – Mr. Umidjon Rahmonberdiev,
CACAARI-RAIS Web Manager

- 12:30 – 13:00** Discussion
- 13:00 - 14:00** Lunch
- 14:00 – 18:45** **Session II: Country Status Reports**
Chairperson: Dr. Asad Musaev
Co-chairperson: Dr. Ashir Saparmuradov
Rapporteur: Dr. G. Karimova
- Country Reports: (20 min. of presentation and 15 min. of discussion)*
- Armenia -Dr. Ashot Hovhannisyan
 - Azerbaijan -Mr. Yagub Guliyev
 - Georgia -Mr. Mosashvili
- 16:00 - 16:20** Coffee Break
- Session II: Country Status Reports (cont.)**
- Chairperson: Dr. Bayan Alimgazanova*
Co-chairperson: Dr. Zakir Khalikulov
Rapporteur: Mr. Yagub Guliyev
- Kazakhstan - Dr. (Mrs.) Sakish Erjanova
 - Kyrgyzstan -Dr. Azilbek Usubaliev
 - Tajikistan -Dr. G. Karimova
 - Turkmenistan -Mr. Gayipov
 - Uzbekistan - Mr. Umidjon Rahmonberdiev
- 19:30** Reception dinner (Sorbon Restaurant)

16 January, 2007 (Tuesday)

- Session III: Regional Presentation**
Chairperson: Dr. Jamin Akimaliev
Co-chairperson: Acad. Tolib Nabiev
Rapporteur: Dr. Sahdev Singh
- 09:00 – 09:40** Presentation of the Regional Synthesis Report - Dr. O. Shatberashvili
- 09:40- 10:00** Development of AgroWeb Network and the collaboration with GFAR in CAC region –
 Dr. Michal Demes, FAO
- 10:00 – 10:45** General discussion on Strengths and Weaknesses of the National Agricultural Information System (NAIS)
- 10:45 - 11:05** Coffee Break
- Plenary Session:**
Chairperson: Dr. Raj Paroda
Co-chairperson: Dr. Ajit Maru
Rapporteur: Mr. Umidjon Rahmonberdiev

- 11:05 - 11:50** Establishment of the CAC-RAIS Steering Committee (SC)
- 11:50 – 12:10** Suggestions for Strengthening CAC-RAIS and Work Plan for 2007-2009
- 12:10 – 13:00** Discussion on Strengthening Agro Web Portals and linking with CAC-RAIS
- 13:00 - 14:00** Lunch
- 14:00 – 15:00** Adoption of RAIS Work Plan of CACAARI for 2007-2009
- 15:30 – 16:00** Final Recommendations
- 16:00 - 16:30** Chairman's Closing Remarks

**Regional Meeting of CAC RAIS,
Tashkent, 15-16 January 2007**

List of Participants

No	Country / organization	Contact details
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