isnar Annual Report 2001

Innovating knowledge institutions

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Message from the Board Chair and Director General

2001 was a year in which many administrators of development assistance in rich countries and national planning institutes in poor countries asked themselves whether food security, poverty alleviation, and sustainable use of natural resources would ever happen. As they prepared their figures for the first review of the 1996 World Food Summit and the 10th anniversary of the UN Conference on Environment and Development (also known as Rio+10), both to be held in 2002, the picture looked bleak. It became clear that the laudable targets they had subscribed to years ago would not be reached. Hunger and poverty persist at virtually the same levels, and wise use of land, water, and air is still a dream in many regions. Overseas development assistance declined in many rich countries, and never in modern history did so little go into the primary rural industries. In 2001, less than 7.5% was invested in agriculture and related projects.

In 2001, ISNAR poised itself to meet the challenges of an environment in which international investors in development are awakening to the failure of past strategies, and in which national governments are rethinking their tools for alleviating poverty. ISNAR's Board of Trustees, management, and staff spent part of 2001 in dialogue with developing-country strategists, donors, and renowned academics to find new ways to tackle the seemingly intractable problems in agricultural development. Together we developed a new "Road Map" for ISNAR, the key words of which are *institutional innovation*. Through experience with earlier projects, ISNAR knows that new organizational structures and new modes of operation are required if agricultural research is to make meaningful contributions in rapidly changing national and global environments. We also know that agriculture alone cannot solve all the pressing problems; it can only contribute as part of a cross-sectoral setting. And we know that ultimately, many of the solutions must come from the South—they can neither be generated nor imposed by the North. In 2001, we pulled all this knowledge together in a new organizational structure, focusing sharply on a limited number of issues that we felt to be critical to the creation of new hope and new incentives for investments in the impoverished primary rural industries.

In this Annual Report we highlight seven examples of the concentrated effort ISNAR is making to create institutional innovation through mobilizing talents in the South. We show how older institutions can reshape themselves under changing conditions, as in Cuba; how African agricultural research organizations have formed an umbrella organization to exchange knowledge among each other for more efficient contributions

to development; how new modes of participatory learning can forge ties and commitments among developing-country scientists; and how national scientists from the South extend ISNAR's capacity to assist in small but critical projects. We also report on major efforts with other CGIAR institutes to see how agriculture and human health are interrelated, rather than a set of issues to be dealt with separately by different government ministries—HIV / AIDS, for example, is posing one of the greatest threats to people, food security, and environmental sustainability. Finally, we report on two aspects of high science that are critical to the successful application of modern technology: biosafety, which must be observed to ensure that no dangerous organisms enter the agricultural production environment, and intellectual property rights regimes, which are needed to fairly balance incentives to innovate with access to innovation by all.

The continued support of our donors enabled us to balance our accounts in 2001—albeit at a level where we had to disappoint many who asked for our assistance. While we thank all our donors for their contributions, we record with particular gratitude major increases in contributions from Canada, Italy, and Norway and the strong, steady support from our host country, the Netherlands. We also note that the World Bank increasingly solicits our assistance when responding to requests from developing countries, possibly signaling a new mode of cooperation between the two institutions. In 2002, the declared new interest in rural development by this and other leading investors will require innovation of institutions that serve the rural poor in the developing world. ISNAR wants to assist in ensuring that this institutional innovation is generated primarily and owned fully by the developing countries.

Moïse Christophe Mensah
Chair, Board of Trustees

Stein W. Bie
Director General

Transformation triumph

Making a change to make a difference is difficult for any organization, but for one with continent-wide responsibilities, the challenge is especially great. When the members of SPAAR (the World Bank-based Special Program for African Agricultural Research) and FARA (the Forum for Agricultural Research in Africa) decided a few years ago that a new FARA should be forged to meet the challenges now being faced by national agricultural research systems, ISNAR was invited to perform the task of transition manager. ISNAR's long experience in managing institutional change for agricultural research, and its well-established reputation for neutrality and efficiency, would be invaluable. The year 2001 will be a special year in the annals of African agricultural research, being the year when the new FARA formally came into being as an Africa-based, African-led, and African-managed organization.

As the global community shows renewed interest in helping to solve Africa's problems, an authoritative voice speaking up for the needs of African agriculture, as seen by Africans themselves, is essential. That voice will only be heard and respected if it is truly representative of the people who matter in agricultural development. At the forefront are the national agricultural research systems and their representative subregional organizations. FARA's founding members are ASARECA (representing eastern and anglophone central Africa), CORAF (representing West and francophone central Africa), and SACCAR (representing southern Africa). Under the new FARA constitution, signed in April 2001, ordinary members will be added, including donor and development partners, scientific partners, industrial and banking institutions, foundations, NGOs, farmers' associations, producers, processors, consumers, and market agents, with special emphasis on women's groups. This wide representation is a recognition that agricultural research must take a broader view when setting priorities than in the past. It also reflects changing circumstances and the need to respond to the challenges of globalization, trade liberalization, deregulation, and rapid advances in biotechnology and information transfer.

2001 also saw the appointment of FARA's first Executive Secretary, Dr Monty Jones, a highly respected and well-known scientist who, until taking up his new appointment, worked at WARDA. ISNAR is pleased to have managed the recruitment process that resulted in such a fitting appointment. It should be emphasized that throughout the transition process, ISNAR has insisted that all key decisions be taken by the founding members and, through them, the national agricultural research organizations. It is essential to the future success of FARA that full ownership of the organization is taken by its members.

So what does the future hold for FARA? Providing that funding remains secure—and responsibility for this will increasingly devolve to African governments and institutions—FARA has a busy future ahead. As its name suggests, it will provide a forum for those involved with agricultural research to meet to exchange information and identify priority themes of a pan-African nature. FARA will also mobilize resources for

such research, facilitate Africa-wide research projects and networks, and help strengthen capacity within the sub-regional and national agricultural research organizations. Equally important will be its task of presenting an African perspective to the rest of the world. Africa needs a powerful advocate, and ISNAR is proud to have played a role in forging a new future for African agricultural research.

an authoritative voice speaking up for the needs of African agriculture is essential

Evaluating institutional change

People make things happen. This is why developing people's capacity to achieve better results is widely recognized as a sensible use of an institute's resources. Still, as with any initiative for change, it is also wise to find out how effective that initiative has been. Faced with exceptional challenges during the 1990s, Cuba recognized the urgent need for a major change in its agricultural research institutions, and, subsequently, the need to evaluate both the process by which that change had taken place and its results. Through its New Paradigm Project (supported by funding from the Swiss and Dutch governments), ISNAR has been involved in the preparations for this radical reform.

2001 saw the completion of an evaluation of the capacity development process within the Swine Research Institute (IIP), one of the 17 institutes that make up Cuba's national system for science and technological innovation in agriculture (SINCITA). The outcome of the evaluation clearly shows that the institute now possesses a greatly enhanced understanding of, and ability to adjust to, the needs of the country's pork industry. The evaluation also demonstrates ISNAR's contribution to achieving this.

Cuba experienced changes in its economic situation that were both profound and rapid. The disintegration of the former Soviet Union brought to an end the trading relationship upon which its economy had been based since the 1960s. This presented a major challenge to agricultural research and development. Previously, State-managed farms, with assured inputs from the Soviet Union and an assured market, had been able to deal directly with agricultural research institutions, laying out clear directions for research priorities. Those State farms have now disappeared, and agricultural research institutions must find a way to respond to the needs of small and medium-sized producers and, with them, plan research priorities and disseminate results. To do this, they needed to look beyond what was happening on-farm and understand the entire agrofood chain from beginning to end.

For IIP, the need to build institutional capacity in order to analyze the agrofood chain had been particularly important. This would lead to a better contribution to the formulation of national agricultural policies; allow the institution to share its capacity with partner organizations; and enhance its own credibility in order to secure political, financial, and institutional support. Capacity building in analyzing the agrofood chain took place largely through a process of learning by doing, using ISNAR training materials, and under ISNAR's technical guidance. Some 80 managers, scientists, and others were involved in a series of about 140 workshops and meetings. The evaluation during 2001 set out to discover how successful this process had been.

The first hurdle to overcome was a deep suspicion of the evaluation process itself. Participants were surprised to find that this was not to be an inquisition but a participatory, interactive process to which all would contribute and from which all would learn. There was collective agreement that the most important outcome was the notable change in the culture of the institution.

IIP's staff now feel a much greater sense of common purpose, commitment, and confidence. As a result, projects formulated since the study are driven less by narrow concerns and more by the problems to be solved. Now a national example of institutional innovation, IIP saw its budget grow by more than 11% in 2001 as new research projects based on the results of the agrofood chain study were awarded. The director of IIP received a national management award in recognition of IIP's contribution to Cuban agriculture.

And the evaluation process itself? That, too, has been considered so useful that self-assessment is set to become an accepted practice. Of particular importance to ISNAR has been the opportunity to help IIP respond so positively to a major challenge and to do so with the expertise available within the region and in Cuba in particular.

self-assessment is set to become an accepted practice

www.isnar.cgiar.org/ecd

Planning for learning for life

To learn, enjoy the experience, then promptly forget most of what has been learned is the fate, or missed fortune, of many adult learners. Learning may be further hampered by the common belief that any expert can teach his or her own subject. Adult learning requires trainers who have experience, skill, and a thorough understanding of educational science. And training must be very carefully planned and highly structured if the benefits of the course are to be of lasting value. During 2001, ISNAR continued to develop a range of training programs and supporting training materials that are now bringing benefits to agricultural research institutions throughout the world. Research managers who have been trained to be creative in their thinking bring innovation to their institutions and help them respond better to the needs of their clients, many of whom are poor farmers. Education can indeed help people escape from poverty.

Competent scientists often find themselves promoted away from the laboratory bench and into managerial positions for which they have little or no experience. The risk is that the institution gains a poor manager while losing a good scientist. Training in agricultural research management has been a key ISNAR activity for many years, with particular emphasis given to training of trainers to achieve a multiplier effect. The first step is always to identify needs, both individual and institutional. Potential trainers are then identified. They are very carefully selected on the basis of their qualities of leadership and enthusiastic desire to share knowledge with others. The content of the training course is then drafted. The next stage is to bring the new trainers together in a week-long workshop with both subject-area and training specialists from ISNAR. During the week's intensive activities, the course content is explained, and then discussed and refined by the participants. Their input is subsequently incorporated into the training course module. (A selection of ISNAR's training modules are available on the Internet and can be downloaded and used by anyone who wishes to do so.)

Immediately following the first workshop, a second is held during which the newly trained trainers reinforce their freshly acquired skills by delivering the training course to participants from agricultural research institutions. The specialists remain on hand to help if needed. The second workshop is held immediately after the first, not only for the practical purpose of reducing costs but, more important, because it gives the trainers an immediate opportunity to put into practice what they have learned. This means that they are more likely to have the confidence to continue the training process after they have returned to their places of work.

It has always been a challenge to bridge the gap between the enthusiastic embrace of learning in a workshop environment and the difficulties of putting what has been learned into practice when faced with the realities of the workplace. Participants of ISNAR training programs are encouraged to commit themselves to plans of action that they will attempt to implement after the training. A key element of this is that the organizers of the training project follow up on the participants' success with their plan 6 to 12 months later. Not only

does this add value to the participants' training, but their comments also provide valuable feedback to ISNAR's training unit.

Of special interest in 2001 was the project titled "How to Write a Winning Proposal for INCO-Dev," a joint initiative of ISNAR and ICRA. Funded by the European Union, the project was a response to the difficulties faced by many developing-country institutions as they attempt to source funds from the European Union's INCO-Dev program, which only funds consortia of developed- and developing-country partners. The initiative was supported between April and September 2001 by a permanently manned helpdesk at ISNAR. Twenty-eight consortia requested assistance in completing INCO-Dev's application forms. As a direct result of this project, INCO-Dev has already approved six applications for funds, worth several million dollars, and more may follow in 2002.

ISNAR hopes that the wider adoption of its training philosophy—learning for institutional innovation—will help establish a culture of education within agricultural research institutions that will bring long-lasting benefits to all.

www.isnar.cgiar.org/activities/training/selection.htm
www.isnar.cgiar.org/events.htm

trainers are carefully selected for their leadership qualities and desire to share knowledge

Supporting and enhancing biosafety systems

Modern agricultural biotechnology poses an enormous challenge to developed and developing countries alike. The decision to tackle this challenge, to what extent, and how, can only be taken based on a thorough understanding of all the implications of the various scenarios. The decision becomes all the more pressing as the opportunities to use genetically modified organisms (GMOs) increase. Indeed, hand in hand with the use of GMOs go concerns about environmental safety and health. Governments must be aware of the implications of biotechnology on the environment and biodiversity, as well as on agricultural development, trade, biodiversity protection, economic prosperity, and public attitude. Working with the Virginia Polytechnic Institute and State University (Virginia Tech) and supported by funds from the governments of Japan, the Netherlands, Switzerland, and the United Kingdom, ISNAR continued to strengthen its expertise in biosafety in 2001 and to make that expertise available to developing-country institutions as part of the ISNAR Biotechnology Service (IBS). The timing could not be more important.

International consensus on biosafety (the environmentally safe application of modern biotechnology) was reached under the Cartagena Protocol in 2000. During 2000 and 2001, the 130 signatory countries were asked to formally ratify the agreement. Ratifying the Protocol requires that countries have a functional biosafety system in place, a situation that many countries cannot yet claim. ISNAR, from its unique perspective of linking international and national agricultural research, has been assisting countries in taking a strategic and systematic approach to the design and implementation of efficient biosafety systems. The analysis of wider issues such as the impact on poor farmers, international trade, the environment, and consumer acceptance should guide the development and implementation of legal frameworks, biosafety committees, and regulatory systems. No country should be pressured into establishing piecemeal biosafety procedures simply because an application to import GMOs has been made by powerful groups and a response is urgently required. Even so, this often happens, which explains the importance of ISNAR's systematic focus.

2001 saw the completion of a report by ISNAR and its partners on Argentina's regulatory policies and procedures for biosafety. To be published jointly with Virginia Tech and the University of Buenos Aires, this study, together with a similar report on Egypt in 2000, highlights essential elements for any national biosafety system. One of these elements includes the path of regulatory review and approval leading to commercial release, and the necessary institutional structure necessary to conduct such a review.

An equally important element relates to people. Clearly, the quality of biosafety review and decision making, and the safe and appropriate handling of GMOs, is directly linked to the training and experience of the people involved. Each nation will undoubtedly wish to build its own national competence in time, but, for many countries, there will continue to be a need to call on regional or international expertise.

During 2001, ISNAR designed a framework for biosafety capacity building under the Cartagena Protocol and, in collaboration with the Global BioDiversity Institute, developed training courses on biosafety for countries in sub-Saharan Africa. Agricultural research institutes, universities, and policymakers from relevant ministries in East and West Africa, were able to take advantage of these courses during the year. There is still a tremendous shortage of biosafety expertise, and ISNAR believes that this should be addressed by more effective coordination of the various regional and international initiatives. Also, attention should be given to institutionalizing long-term solutions by developing biosafety training capacity within developing countries, such as providing special assistance to regulators and supporting the review of permits for field testing.

As a CGIAR Center with a long-term approach to biosafety and with a reputation for objective, balanced reporting, ISNAR is making a significant contribution to the development of biosafety systems worldwide, a role it expects to further expand in future. This expansion will occur by increasing collaboration with African and Asian NAROs, FAO, and other international organizations in IBS's work on decision support tools, training, capacity building, and research.

www.isnar.cgiar.org/ibs

hand in hand with the use of GMOs go concerns about environmental safety and health

Networking for action against AIDS

"We are all affected." "AIDS is more than a health problem." These are some of the mantras of the AIDS epidemics, repeated in speeches and sermons across Africa and now, increasingly, in Asia and Latin America too. But the capacity to act on these calls, particularly at the institutional level, lags behind. ISNAR believes that the agricultural sector plays a key role, and it is therefore working to show that fresh thinking in agricultural research and development policy can help prevent the spread of HIV infection and lessen the impact of AIDS. Supported by grants from Norway and Canada (CIDA and IDRC), and joined by IFPRI and FAO, ISNAR is building strong, enthusiastic networks of public and private organizations, NGOs, and farmers' organizations, beginning with two countries in Africa: Malawi and Uganda. These are now fully committed to taking actions that should ultimately result in reduced rates of HIV infection.

The link between agriculture and HIV / AIDS is not an obvious one for most researchers and development workers. Yet, historically, changes in the way people live and in how and where they make a living have had a decisive effect in diminishing the ravages caused by major diseases, including tuberculosis and malaria, long before medicines or vaccines became available. Such changes were mostly the by-product of wider development, and the health benefits a happy accident. The challenge ISNAR and its partners currently face is to enhance understanding of the links between rural livelihoods and food security on the one hand, and HIV infection and AIDS-linked illness, and death, on the other. This way, actions can be more conscious and better targeted, and their effects felt in years, not decades.

Some aspects of the link between AIDS and agricultural economies are well known. How can grandparents and orphans be expected to grow as much food as did the once able-bodied generation? Rural households often have to spend much of their savings to cater for the sick and to arrange traditional and often elaborate funerals. Children are withdrawn from school for lack of school fees, or to perform the role of carers and to provide farm labor. What will the impact be as this younger generation grows up? Other aspects are less well recognized. HIV / AIDS can break the chain of knowledge that links one generation to another. It can seriously erode institutions, from those at the village level that manage critical natural resources to those at the national level, such as research institutes, whose experienced staff are critical human resources.

Agricultural research has a key role to play in devising ways to mitigate the impact of the disease. Techniques that reduce the need for labor are but one aspect of this work. It is equally important to answer the question: what can agricultural research and development do to control the spread of infection? Indeed, could it be that agricultural policies contribute to that spread?

2001 saw the publication of reports on HIV / AIDS and agriculture in Malawi and Uganda. Prepared by in-country experts in collaboration with ISNAR, they

present an assessment of the present situation, the apparent trends, and the responses of institutions to the challenge. The reports formed the basis for a "think tank," a meeting of scientists and development workers from State-sector agricultural research and health institutions, national AIDS commissions, NGOs, and so on. By agreeing to leave their affiliations "at the door," they were able to concentrate on what should be done, to decide on priorities for action research, and to recommend how the network, as the initiative came to be known, should be organized. Think-tank participants then presented their recommendations to stakeholders—ministers, heads of AIDS commissions, deans of agricultural faculties, and other senior representatives of government and non-government organizations. Their work has put the networks on their feet in each country. Action-research funds are being established. ISNAR will continue to use its special relationship with national and other international institutions such as IFPRI, WARDA, and FAO, to forge effective partnerships that are committed to making a real difference to the lives of those affected by or at risk of HIV / AIDS.

www.isnar.cgiar.org/about_isnar/mtp_2004/project5.htm

AIDS can break the chain of knowledge that links one generation to another

Facilitating South-South collaboration

Over the years, as part of their effort to strengthen agricultural research in the developing countries, the Centers of the CGIAR have come to work with tens of thousands of developing-country scientists, who bring their skills to international agricultural research and return to their own national systems with those skills enhanced. This two-way skills-enhancing process is the cornerstone on which ISNAR founded its Global Associates program, initiated three years ago as a response to the increasing number of requests for ISNAR's services. The network of Global Associates, expanding to a total of 17 in 2001, continues to be a fine example of innovative thinking.

ISNAR's Global Associates are outstanding, experienced professionals who remain in the employ of their own national institutions but allocate a portion of their time to work with ISNAR on projects in other organizations and countries. They are able to provide cost-effective services to national agricultural research institutions that seek professional advice in a range of management skills. During 2001, ISNAR's Global Associates contributed many days of work. For example, Robert Obura, from Kenya, manned a help-desk between April and September to assist African research organizations in preparing proposals for the European Union's INCO-Dev initiative (see also our story on page 9). Obura, along with fellow Kenyans Lilian Kimani and Charity Kabutha, and Mick Mwala from Zambia, delivered several ISNAR training workshops in Africa. Philippine-born Gigi Manicad served as project coordinator for an initiative on organizing and managing ecoregional programs. Emy Ballelos-Duran, who is head of a nuclear research center in the Philippines, has been helping with ISNAR's Biotechnology Service, while Carlos Pomareda from Peru advised the government of Nicaragua on agricultural research policy. Silvia Galvez from Chile and Li Xiaoyun from China have helped ISNAR to support research organizations in their endeavors to forge better links with their clients. Silvia Galvez is reviewing and improving ISNAR materials on integrating agro-industrial demands into agricultural research, and Li Xiaoyun is proposing new projects for farmer-centered research in a shifting political context.

Especially well attuned to the challenges faced by developing countries and often closer in language and culture, the Global Associates are able to respond sympathetically to the needs of national agricultural research institutions. Through the program they gain wider experience, which, in turn, strengthens their own organizations. The program also enables ISNAR to meet a greater number of requests for its services.

The Global Associates network is an excellent example of South-South collaboration facilitated by an international organization, and it clearly demonstrates that recruiting scientists from the South makes sense. Such work is now part of a larger effort by ISNAR to strengthen its ability to pursue new and more entrepreneurial approaches to support agricultural research and innovation.

In recognition of a rapidly changing environment for agricultural research, ISNAR is seizing new opportuni-

ties. It is teaming up with other research and nonresearch organizations, accessing nontraditional modes of funding, and delivering novel products and services to strengthen the impact of its work on poor consumers and producers, in both rural and urban environments.

scientists return to their institutions with enhanced skills

www.isnar.cgiar.org/iga

Spotlight on intellectual property

The Centers of the CGIAR, whether they feel comfortable about it or not, are in the spotlight over issues of intellectual property. The Central Advisory Service on Intellectual Property (CAS), housed within ISNAR, continued to provide expert advice throughout 2001, helping to ensure effective and ethical management of a diverse range of intellectual property issues.

Many scientists are understandably anxious about intellectual property rights (IPR). Others prefer not to think about such things at all. Many display a certain degree of innocence about the extent to which their own work is subject to, or makes use of, other people's intellectual property. Scientists are naturally well informed about such issues as plant breeders' rights and material transfer agreements, but they may be less aware of the copyright rules surrounding the information they wish to use in the course of their work. In addition, it is not always easy to find out whether such information is free or merely accessible, a distinction even more difficult to make nowadays because of the Internet.

The principal tasks of CAS are to raise the awareness of intellectual property issues that must be addressed, and to assist CGIAR Centers in developing the capacity to set up appropriate management of intellectual property. During 2001, visits were made to CIP, CIAT, and CIMMYT (January), CIFOR, IWMI, ICRISAT, and ICLARM (February), IFPRI (March), IITA, WARDA, and IPGRI (April), and IRRI (July). At each Center, the CAS manager held seminars and individual and group meetings to help scientists and administrative staff understand the origination and use of intellectual property, to start the process of deciding on the new management procedures that may be necessary, and to engage scientists in an ethical debate on intellectual property rights.

These meetings not only raise awareness of the issues, but also provide an opportunity to alleviate some of the inevitable anxieties and suggest practical, easy to implement procedures that help protect both scientists and Centers from future criticism. Keeping proper laboratory records of incoming and outgoing chemical substances and laboratory materials is one example of such a procedure. Other areas include proper intellectual property provisions in employment contracts, funding agreements, and where appropriate, in visitors' documentation. A team of experts, from both within and outside the CGIAR, is now available to help with advice and training.

Beyond visiting individual Centers to provide assistance with their specific needs, CAS also organizes CGIAR-wide meetings and workshops on intellectual property. Other services include the preparation of briefing papers on topics of interest to the Centers and the dissemination of information and topical reports through the CAS Website. Searches of patent databases may be requested, and CAS is willing to review Center agreements and contracts that have an intellectual property component. Training can be provided, including internships at Centers—in 2001, both ISNAR and WARDA hosted a CAS intern. CAS also functions as a liaison mechanism on intellectual property issues

between CGIAR Centers and national and international authorities.

Keeping up to date with patent and other intellectual property legislation is a major undertaking, which is likely to intensify as WTO negotiators increasingly turn their attention to such issues. In this regard, CAS helps CGIAR Centers be well informed when exposed to public scrutiny. Traditionally, the Centers seek to provide the greatest possible access to their knowledge. CAS enables them to do so while protecting the intellectual property that is demanded by legislation and ethical considerations. CAS appreciates the support of the Centers—the Centers' continued funding of the CAS office underscores their vote of confidence.

www.isnar.cgiar.org/cas

CAS helps CGIAR centers set up appropriate management of intellectual property

Project activities in 2001

Region/countries	Activities and outputs	Donors/collaborators
1. Globalization: Analyzing forces, processes, and options for NARS		
Global	Finalized the manuscript "Globalization and the Developing Countries: Emerging Strategies for Rural Development and Poverty Alleviation," to be published by CABI Publishing in 2002.	DFID; CAB International
Global	Studied food-safety regulations and other trade barriers under the WTO agreements. Drafted a paper titled "The Impact of the WTO Agreements on Food Safety Standards on Agricultural Exports from Developing Countries."	DFID
Bangladesh, China, India, Philippines, Vietnam,	Further developed work to target poverty alleviation through agricultural research. Coauthored an article titled "Geographical Targeting of Poverty Alleviation Programs: Methodology and Applications in Rural India," to be published in *Journal of Policy Modeling (see also* DP 01-8).	DFID; IRRI; PCARRD; FAO; Chinese researchers Coauthor IGIDR
2. Informing agricultural research policymakers about trends in research: Agricultural science and technology indicators (ASTI)		
Global	Posted a wholly redesigned and expanded ASTI Website under the CGIAR home page. The Website (www.asti.cgiar.org) is an on-line version of ASTI's agricultural R&D-investment indicators database, with NARS profiles for more than 180 countries and a searchable bibliography.	CGIAR Finance Committee; IFPRI
Global	Continued developing the AROW database and linked it from the new ASTI Website. AROW, which is now completely searchable, currently holds more than 2500 links to agricultural research organizations and departments worldwide. In 2001, the AROW web pages received nearly 100,000 "hits."	CGIAR Finance Committee
Global	Published "Slow Magic: Agricultural R&D a Century after Mendel."	IFPRI
Global / Africa	Continued data-collection work: Carried out an African survey, updated expenditure data for OECD countries, updated and expanded NARS profiles.	CGIAR Finance Committee; Denmark; IFPRI; SPAAR; ASARECA; SACCAR; local African counterparts
Caribbean, Central America	Published ISNAR Research Report 19 "Agricultural R&D in the Caribbean: An Institutional and Statistical Profile." Drafted IFPRI reports on agricultural R&D in Mexico and Central America.	CARDI; CEDAF; DIA; FONTAGRO; INIFAP; IFPRI

Region/countries	Activities and outputs	Donors/collaborators
Colombia, Brazil	Submitted an article to the *International Journal for Technology Management* on structural transformation in agriculture (the role of input industries in agricultural innovation). Continued research on major companies in the various agricultural input industries.	Embrapa; ANPEI; MST; IICA Colombia; DNP; Colciencias; DANE
3. Public-private partnerships for agroindustrial research		
Latin America and the Caribbean	Developed the methodology and designed pilot projects and training activities to launch the project "Public-Private Partnerships for Agroindustrial Research," which aims to improve conditions for undertaking agricultural research in partnership with private agroindustries in Latin America and the Caribbean.	BMZ-GTZ; University of Hohenheim; Embrapa; PROCIANDINO; PROCISUR; CIAT; PROCITROPICOS; IICA
4. Enhancing the governance and accountability of NAROs and NARS		
Global	Conducted literature reviews, prepared a bibliographic database, and finalized ISNAR Discussion Papers 01-9 and 01-10 on governance and agricultural innovation. Produced a draft discussion paper titled "Governing and Managing Networks of Agricultural Research."	DFID
Indonesia, Pakistan, Sri Lanka, Vietnam	In collaboration with participating NAROs: • developed methods to assist decision makers in Indonesia with the decentralization of research (interim report); • initiated studies of governance systems and mechanisms in Indonesia, Pakistan, and Sri Lanka (contracted AIM to undertake these studies).	ADB; AIM; CDRI; CRI; RIR; AIAT Central Java; NIAH
Mozambique	Continued governance work establishing a broad-based council to steer research activities. Assisted with the establishment of a governance council to steer agricultural research activities.	DANIDA; INIA
Uganda	Assisted in preparing a new statute for Uganda's NARO that emphasizes stakeholder influence in decision making.	World Bank; NARO

Region/countries	Activities and outputs	Donors/collaborators
Zambia	Launched the implementation of priority-setting methods. Collaborated with a working group to assist SCRB in preparing the research component for the successor IBRD Agricultural Services Investment Program (ASIP) in seeking stakeholder approval, and advised the World Bank on critical organizational issues regarding agricultural research in general and SCRB in particular. Produced a report for the World Bank titled "Increasing the Performance of Agricultural Research in Zambia: Further Issues for the Agricultural Sector Investment Program." In collaboration with MAFF, produced "Report of Stakeholder Consultation on the Soils and Crops Research Component: ASIP Successor Program."	World Bank; SCRB; MAFF; CDT; GART; University of Zambia
5. Strategic management of institutional change in NARS		
Colombia	Trained a national team of facilitators in a methodology to organize agricultural R&D projects.	SDC; PRONATTA; MOA
Costa Rica, Cuba, Ecuador, Panama, Venezuela	Finalized the five-volume series "Innovación para la Sostenibilidad Institucional" on innovation for institutional sustainability, and distributed it widely in participating countries.	SDC; DGIS; Embrapa; INIA; UCV; UCE; PUCE; SINCITA; IDIAP; UCR; UNA
Costa Rica, Ecuador	Supported a graduate course on science, technology, and society; an undergraduate course on community management; and an undergraduate course on social management, all in Ecuador, as well as a graduate course on social work for development in Costa Rica.	SDC; UCE; PUCE; UCR
Mexico	Trained the national central team of facilitators of institutional change.	SDC; INIFAP
6. Assessment of the impact of capacity building in agricultural research management		
Global	In the project "Evaluating Capacity Development (ECD) in R&D Organizations," carried out evaluation studies and drafted evaluation reports on six organizational capacity-development efforts in Bangladesh, Cuba, Ghana, Nicaragua, the Philippines, and Vietnam. **(See page 6 of this Annual Report for a story on ISNAR's work on evaluating institutional change in Cuba.)** Finalized two ISNAR Briefing Papers, to be published in 2002. Finalized a journal article titled "Issues in Planning, Implementing, and Evaluating Capacity Development: A 'Baker's Dozen'," to be published in 2002. Continued development of the ECD Website: www.isnar.cgiar.org/ecd	ACIAR; CTA; GTZ; IDRC; SDC; Concordia University (Canada); and collaborators in 13 national and international R&D organizations in Africa, Asia, and the Americas

Region/countries	Activities and outputs	Donors/collaborators
7. ISNAR's Biotechnology Service (IBS)		
Global, China	Held an international expert consultation on "Biotechnology and Rural Livelihood: Enhancing the Benefits" and began drafting its findings in a concept note. Planned a number of case studies to determine the economic impact of the new products of agricultural biotechnology. Drafted a report titled "Biotechnology Research—The Impact of Transgenic Cotton and Policy Implications for China," following a study with CCAP. Coorganized international workshop on "Plant Biotechnology in China: Initial Findings, Research Methods, and Research Priorities," hosted by CCAP.	SDC; DGIS; Japan; CCAP; IFPRI
Global, Argentina	Organized and conducted a consultation meeting titled "A Framework for Implementing Biosafety Under the Cartagena Protocol: A Tool for Building Capacity," in preparation for the drafting of a comprehensive conceptual framework for the safe implementation of biotechnology. Produced an ISNAR Discussion Paper titled "Commercializing Agricultural Biotechnology Products in Argentina: Analysis of Biosafety Procedures" (DP 01-2). Prepared a brief for CBD-ICCP titled "Consultative Group on International Agricultural Research: Biotechnology Research and Biosafety Capacity Building." Provided support to ICBAAR	SDC; DGIS; Japan; DFID; Virginia Tech; University of Buenos Aires; AGBIOS; ICCP; ICBAAR
Global, Southeast Asia	Contributed a chapter titled "Managing Intellectual Property and Proprietary Technology in Agricultural Research" to the book "Globalization and the Developing Countries: Emerging Strategies for Rural Development and Poverty Alleviation," to be published by CABI Publishing. Produced ISNAR Briefing Paper 44S "Uso de Insumos y Biotecnologías Apropriadas." Drafted the report titled "The Use of Proprietary Biotechnology Research Inputs at Selected Southeast Asian NAROs."	SDC; DGIS; DFID
Global, Benin, Tanzania	Contributed to two regional management courses organized by the Global BioDiversity Institute on the topic "Biodiversity, Biotechnology, and Law." Published an article titled "Harnessing Biotechnology for the Poor: Challenges Ahead for Capacity, Safety and Public Investment" in *Journal of Human Development*.	SDC; DGIS; GBDI

Region/countries	Activities and outputs	Donors/collaborators
China	Conducted a survey in China to determine how relevant physical, human, and financial resources are mobilized to implement agricultural biotechnology. Produced an ISNAR Discussion Paper on research indicators on agricultural biotechnology in China (DP 01-5).	SDC; DGIS; CCAP
	(See our story on page 10 for ISNAR's work in agricultural biotechnology.)	
CGIAR-Central Advisory Service on Intellectual Property (CAS)		
Global	Interacted with CG-CAS liaison persons at every CGIAR Center regarding intellectual property management. Responded to specific requests for assistance from all Centers.	CGIAR Finance Committee; CGIAR Centers; FAO; IP experts and expert organizations
Global	Organized and held a workshop "Helping Define Strategies for Managing Intellectual Property in the CGIAR."	GTZ
Cotê d'Ivoire, West Africa	Initiated internship program in intellectual property.	WARDA; RF
India	Participated in "Biotechnology on the Fast Track: The CII Regulatory Reform Conference."	CII
	Organized an internship program in intellectual property.	South Korea
	(See page 16 for more about CAS's work.)	
8. Information and communications for agricultural research organizations		
Global	Drafted "Evaluating Information: A Letter to a Project Manager," a hands-on, field-oriented manual for managers of information projects. To be published, jointly with CTA, as an ISNAR Research Management Guideline in 2002.	CTA
Asia	Organized and conducted the workshop "Internet and Intranets: New Opportunities for Change in Agricultural Research and Education," in Chennai, India, and in Hanoi, Vietnam.	Gov. of Japan (JIRCAS); FAO; WUR; TANUVAS; ICARD; HAU
Asia	Drafted plans for a module on the role of information in institutional development, to be included in a package of FAO/WAICENT training and resource materials.	FAO/WAICENT
Egypt	Participated in initial planning for a "Virtual Extension, Research, and Communication Network" (VERCON).	FAO; MALR
9. Agricultural research and the environment		
Global	Hosted the first consultative meeting of the CGIAR Systemwide Initiative on HIV/AIDS and Agriculture. Contributed a paper to the meeting on the organization and governance of the CGIAR-wide program.	Norway; WARDA; IFPRI; CIP; ICRAF; ICRISAT; CIAT; FAO; UNDP/UNAIDS

Region/countries	Activities and outputs	Donors/collaborators
Global	Guest-edited a special issue of the journal *Agricultural Systems* titled "Deepening the Basis of Rural Resource Management," to be published in 2002. Contributed an article to this issue.	IDRC; RIMISP/EU
Global	In the "Evaluation of Ecoregional Programs" project, coorganized an international workshop "Meeting the Challenge of Ecoregional Research" to draw lessons from the studies on seven ecoregional programs affiliated with the CGIAR centers and national organizations. The workshop was attended by about 25 participants from 16 countries. Presented the results of this meeting at the CGIAR Mid-Term Meeting. Three studies carried out in preparation for the workshop were finalized for publication in 2002.	DGIS; IAC; Alterra; ETC; CGIAR Centers: CIAT, CIMMYT, CIP, ICRAF, IITA, IRRI
Global	Developed a methodology for incorporating socioeconomic data for targeting antimalaria measures on vulnerable communities and identifying the main causes of their vulnerability to the spread of malaria.	
Eastern and southern Africa	Coordinating a regional network on HIV/AIDS, agriculture, and food security: • organized a think tank and stakeholder workshop in Malawi and facilitated the emergence of an agricultural sector network, including partners in public health; • began the process in Uganda; • produced the report "HIV/AIDS, Agriculture, and Food Security in Malawi: Background to Action" **(see page 12 of this Annual Report)**.	IFPRI; FAO; NARO; ministries of agriculture of Malawi and Uganda; SAT; ITM; UNDP/UNAIDS; Univ. of East Anglia (ODG) (UK); OXFAM; ECAPAPA; IDRC
10. Improving tools for research policy formulation, strategic planning, research linkages, and research system development		
Sub-Saharan Africa	Conducted a workshop jointly with WARDA in Côte d'Ivoire titled "A Collaborative Platform for Agricultural Research in Sub-Saharan Africa." Contributed two keynote papers.	CTA; WARDA
Sub-Saharan Africa	Finalized the two "University in NARS" manuscripts after peer review. To be published as an ISNAR Research Management Guideline in 2002.	
Uganda	Applied the analytic hierarchy process to determine priorities for investments in agricultural biotechnology.	NARO; Makerere University
Uganda, Philippines	Produced a training module on priority setting in biotechnology.	NARO; PCARRD; ETHZ
11. Towards integrated project-based agricultural research management systems		
Global	Finalized and published a 350-page book on management information systems titled "Knowing Where You're Going: Information Systems for Agricultural Research Management" **(see page 34)**.	CTA

Region/countries	Activities and outputs	Donors/collaborators
Mozambique, Tanzania, Uganda, Zambia	Carried out service missions to provide MIS follow up and technical backstopping. Started the compilation work for a compendium on the implementation of MIS in the NARS.	World Bank; ministries of agriculture
Mozambique, Uganda	Conducted two in-country workshops to train African MIS trainers.	World Bank; ministries of agriculture
	Held an international training workshop in the Netherlands, attended by research managers from Botswana, Ethiopia, Ghana, Mauritius, Nigeria, South Africa, Zambia, and Zimbabwe.	CTA
	Upgraded and improved INFORM-R and INFORM-R Light software. Produced an INFORM-R CD-ROM. Adapted INFORM-R Light for Tanzania. Developed a new, custom-made INFORM-R Light for Mozambique.	
12. Gender relations in agricultural research: Strengthening core competencies in policy, organization, and management		
Global	Drafted a final project report titled "Women in National Agricultural Research and Science."	
Global	Contributed to two ISS seminars and one institutional conference.	ISS; Queen's University, Belfast (N. Ireland)
Global	Reviewed participatory research and gender analysis in the PRGA Small Grants Program for natural resource management.	PRGA
Global	Contributed a chapter titled "Men in Women's Groups" to the book "Men and Masculinity in Development Theory and Practice," to be published by Zed Books in 2002.	University of Bradford (UK)
Kenya	Drafted a research report titled "Institutionalizing Gender: A Case Study on the Gender Task Force of the Kenyan Agricultural Research Institute."	
	Supervised an ISS Master student from Ethiopia carrying out studies related to gender and project management.	
	Contributed to a three-day training module titled "Gender Analysis for Monitoring and Evaluation: The Engendered Logframe Approach."	
13. Strengthening NARS through diagnostic reviews, planning, and facilitation of institutional development		
Indonesia, Pakistan, Sri Lanka, Vietnam	In collaboration with participating NAROs: • finalized OPAS reports at six institutes; • initiated strategic planning in Pakistan, Sri Lanka, and Vietnam (prepared interim reports on workshops); • analyzed staff performance assessment procedures and methods at each institute (interim reports prepared by AIM).	ADB; AIM; CRI; ASI; RIR; AIAT Central Java; NIAH

Region/countries	Activities and outputs	Donors/collaborators
Mozambique	Produced the following documents for Mozambican research managers: • a framework for monitoring and evaluation in Mozambique; • a report on the decentralization of research; • guidelines for staff evaluation in the national agricultural research system. Made presentations on priority setting for agricultural research and on program challenges and planning methods. Conducted a two-day workshop to train national scientific staff in using scoring-methods for priority setting.	DANIDA; INIA; IPA; CEF; INIVE
Vietnam	Organized and co-chaired a two-day national conference to endorse the national agricultural research masterplan. Completed and published the masterplan in English and Vietnamese.	UNDP; FAO; MARD
14. The double transition: Building NARS for the 21st century in Central Asia and the Caucasus		
Azerbaijan	Completed a draft country report on the basis of two discussion papers (DP 01-3 and DP 01-6).	CGIAR Finance Committee
Azerbaijan	Completed the study on the impact of malaria and the implications for institutional innovation, resulting in Discussion Paper DP 01-11, "Agricultural Development and its Impact on Malaria: Azerbaijan," coauthored with WHO.	WHO
Caucasus; Armenia, Azerbaijan, Georgia, Kazakhstan	Published the final regional analysis and individual country profiles.	IFAD; World Bank
Georgia	Finalized the work to set up a planning and reform process with the publication of the report "Reform of Agricultural Research, Education, and Extension in Georgia: 1998–99."	World Bank
15. Strengthening institutions to participate in the emerging global research system		
Africa	Acted as transition manager in the transformation of SPAAR and FARA into a single new apex organization, FARA **(see story on page 4 of this Annual Report)**.	SPAAR; FARA
16. Global information center on agricultural research policy, organization, and management		
	Recruited a project officer for the project. Initiated a project to analyze institutional changes in research and innovation systems in developing countries. The results will be disseminated mainly electronically through a project Website.	

Region/countries	Activities and outputs	Donors/collaborators
17. ISNAR Global Associates: Strengthening regional capacity to serve regional needs for institutional change in NARS		
Global	Maintained the network of ISNAR Global Associates, which welcomed four new Associates, all Africans. ISNAR Associates participated in a number of project and training activities throughout the world **(see story on page 14 of this Annual Report)**.	national governments and institutes
18. Building NARS capacity for training and facilitation of change processes		
Global	Together with CAS, supported the development of an e-learning program on genetics and intellectual property issues for the WIPO Academy.	WIPO
Global	Assisted FAO's Staff Development Group with the production of a five-part training module on project-cycle management; tested the module in a workshop. Produced a training module for FAO's Sustainable Development Women in Development Program, titled "Engendering Monitoring and Evaluation."	FAO
Global	Conducted the annual workshops titled "How to Write a Convincing Proposal" in French and in English at ISNAR headquarters. Drafted a Spanish version of the module, titled "Cómo Redactar una Propuesta Convincente."	
Global	Launched a new project to identify and develop human talents within a framework of strategic human resource management and development.	
Sub-Saharan Africa	Continued work supported by the INTG network under the project "Facilitating the Agricultural Innovation Process" (FAIP). Coauthored the documents "Creativity and Innovation," "Strengthening the Innovation Process," and "Engendering Participatory Research." Conducted a workshop to update the linkages concept and integrate issues of participatory research and gender analysis.	INTG/FAIP; SACCAR; FARM AFRICA FRP; EARO; KARI; BTA; IITA; CIAT - Tanzania; ICRAF
Sub-Saharan Africa	Developed a self-learning package for the "EU INCO-Dev Donor Relation Course," comprising a module, CD-ROM, and a Website titled "How to Write a Winning Proposal for the EU INCO-Development Program." Created and ran a helpdesk staffed by an ISNAR Global Associate. The project led to the formation of 28 consortia, which applied to the 2001 call for proposals from INCO-Dev **(see story on page 9).**	INCO-Dev (EU)
Bangladesh, Ghana, Sri Lanka, Uganda, Zambia	Implemented the third phase of the MIS project to help MIS practitioners apply newly learned skills.	

Region/countries	Activities and outputs	Donors/collaborators
Cameroon, Ghana, Mali, Uganda	Further developed work on establishing the Rural Radio Network project, which promotes capacity building to link agricultural researchers and rural radio broadcasters in order to improve two-way communication with farmers in four African countries. Coauthored and coproduced the publication "Training Needs and Organizational Constraints Assessment for Linking Agricultural Research and Rural Radio." A video is included.	CIDA; University of Guelph; FAO; DCFRN; NARS of Cameroon, Ghana, Mali, Uganda
Caribbean	Supported the development and testing of a training module with new sessions on the management of research networks for PROCICARIBE. Joint publication of the revised version of "Network Management."	PROCICARIBE
Ghana, South Africa	Conducted two workshops in Africa at the request of CTA: "How to Write a Convincing Proposal" in Ghana, and "Scientific Writing and Presentation" for ARC staff in South Africa.	CTA; CSIR; ARC
India	Planned, prepared, and implemented a "distance training" course entitled "Focusing Agricultural Research on the Needs of the Poor." Participants included 69 scientists from five agricultural universities throughout South India. Lasting five months, the course was directed by a four-person team from NAARM.	DFID; NAARM; COL; Wye College External Programme

"ISNAR's ability to respond to requests with targeted funding depends on the base created by the generous support of donors providing unrestricted funding."
Stein W. Bie, Director General.

In 2001, unrestricted funds were provided by Australia, Belgium, Canada, Denmark, Germany, India, Iran, Italy, Japan, the Netherlands, Norway, the Philippines, Sweden, Switzerland, USA, and the World Bank.

No peace without food security

by Stein W. Bie

ISNAR's reception area was completely refurbished in 2001 and now offers visitors a more appropriate welcome to the headquarters building. A striking feature of the new entrance is a collage of photos depicting the world in which ISNAR works: research institutions, small farmers around the world collecting their harvests, and agricultural researchers in the field and in the laboratory.

And then there is the child soldier.

When we first introduced our new public awareness materials at the CGIAR Mid-Term Meeting in May 2001, this particular image raised many questions, especially about the relationship between agricultural research and a child with a kalashnikov.

Three years ago, a Sri Lankan and a Norwegian political scientist spent a week at ISNAR collecting material for what later became a Future Harvest publication, titled "To Cultivate Peace—Agriculture in a World of Conflict."* The authors, Indra de Soysa and Nils Petter Gleditsch, observed that since World War II, the vast majority of armed conflicts with significant loss of life were in developing countries, and they linked food insecurity and the struggle for natural resources directly to these conflicts.

The current uncertainties in the world are a tragic illustration of their basic thesis: peace cannot exist without food security. Until the rural poor have faith in their own future, have justified hopes of finding enough nutritious food, have a family, and give their own children a fair chance, until then, children and youths will be easily captured by fanatics and local warlords who turn ploughs into guns. ISNAR's new entrance is dominated by peaceful and promising images, but it has one vivid reminder of what is at stake.

The collage is an appropriate entry point to an institution that does its utmost to prevent that every day of every year as many as 50,000 of the world's poor—half of them children—die from hunger, malnutrition, and diseases. The display is a reminder to all, staff and visitors alike, of why we work at ISNAR.

* *www.futureharvest.org/peace/prioreport.shtml*

Postcard from home

Library goes on-line

Information and communication technology, particularly with the success of the Internet, has had an enormous impact on the way people gather and manage information, and libraries have had to adapt. Playing a central role at ISNAR in selecting, organizing, and facilitating access to scientific information, ISNAR's Library and Information Services began to develop and participate in several new on-line services in 2001, while still maintaining the traditional library.

The Library and Information Services staff launched what is now known as the Library Knowledge Base, an on-line information source for scientific staff working in selected ISNAR projects. In close collaboration with scientists, Web pages are being designed for ISNAR's main thematic areas of work. These Web pages will contain the most useful and relevant bibliographic materials, links to key documents, sites, and databases on the Internet, and information about key individuals and organizations in each subject area. The Library Knowledge Base will also be accessible to ISNAR's partners.

As funds for library and information services continued to decline at most CGIAR Centers in 2001, the information services staff of nearly all 16 Centers came together in early 2001 to discuss how they could use existing budgets more efficiently and effectively. The meeting resulted in the establishment of a CGIAR-wide Consortium, which has already negotiated with publishers several shared subscriptions to journals (both on-line and paper). This resulted not only in considerable savings for the Centers, but also in continued subscriptions to key journals and publications that Centers could not have afforded otherwise. A key purpose of the Consortium is to improve global access to the knowledge residing in the CGIAR. To this end, the Consortium launched the joint FAO-CGIAR "Info-Finder" project. The Info-Finder is intended to become a "one-stop shop" that allows users to search for on-line information and publications on a wide range of topics across the CGIAR and FAO Websites.

Computer facilities upgraded

In 2001, ISNAR's Computer Services completed a project to update ISNAR's computer hardware and software. Started in 1999, the "Technology Refresh Project" involved the installation of new infrastructure for ISNAR's local network, new servers, new printer/copiers, and new PCs for all staff. Hardware, operating systems, and applications have now been standardized, reducing considerably the costs and time of operational management and administration.

ISNAR also has a new, local Internet service provider, and it has upgraded its connection to the Internet to a fiber connection, increasing its operating bandwidth from 128 Kb per second to 2 Mb per second. Outposted, traveling, and teleworking staff can now access e-mail, databases, and other electronic files and documents on ISNAR's computer network much more quickly and easily.

New on-line information resources for institutional innovation

In 2001, ISNAR improved its Website's search facilities substantially. Publications, reports, statistics, learning materials, and other information about institutional innovation in agricultural research can now be found in a range of userfriendly ways.

www.isnar.cgiar.org/search/query.htm

The Agricultural Science and Technology Indicators (ASTI) Website was created in 2001 to search for and download internationally comparable data on institutional developments and investments in agricultural R&D worldwide. The ASTI initiative is led jointly by ISNAR and IFPRI.

www.asti.cgiar.org

Earthprint, UNEP's official Web bookstore, has set up a shop dedicated to ISNAR publications. Visitors to the Earthprint site can purchase publications on-line by credit card.

www.earthprint.com/isnar

All publications can also be viewed and downloaded in text-only or PDF format from ISNAR's on-line publications catalogue.

www.isnar.cgiar.org/publications

Publications in 2001

Most ISNAR publications are published both on paper and in electronic format. The electronic versions are accessible via ISNAR's Website (www.isnar.cgiar.org) and can be downloaded at no charge. ISNAR publications can be purchased at www.earthprint.com.

Corporate and General Publications

ISNAR Annual Report 2000

Road Map 2002–2006. Institutions Matter: Let Knowledge Make the Difference

ISNAR Medium Term Plan 2002–2004

Catalog of Publications 2001

Books

Knowing Where You're Going: Information Systems for Agricultural Research Management by **R. Vernon**.
Contributors:
M. Allmand, D. Baguma, P. Ballantyne, H. Besemer, T. Brush, A. Devaux, **B. Fraser**, **G. Gijsbers**, A.M. Gomes de Castro, A.D. Hartkamp, **H. Hobbs**, D.P. Hodson, D. Kisauzi, S.M.V. Lima, **B.T. Mook**, M. Ngwira, T. Niang, D. Parker, M. Pedroso, P. Philpot, A. Rodriguez-Aguila, K.M. Setsoafia, **H. Webber**, J.W. White

Briefing Papers

No. 44S. Uso de Insumos y Biotecnologías Apropiadas en Algunos Sistemas Nacionales de Investigación Agrícola. By S. Salazar, C.A. Falconi, J. Komen, and J.I. Cohen

No. 45. Methods for Planning Effective Linkages. By W. Peterson, V. Galleno, T. Eponou, A. Wuyts-Fivawo, and M. Wilks

Research Reports

No. 18. Evaluación del Desarrollo de Capacidades en la Gestión de la Investigación Agrícola: El Proyecto del ISNAR de Planificación, Seguimiento y Evaluación en América Latina y el Caribe.
By D. Horton, L. Dupleich, A. Andersen, and R. MacKay

No. 19. Agricultural R&D in the Caribbean: An institutional and statistical profile. By J. Roseboom, M. Cremers, and B. Lauckner

No. 20. The Legacy of the Soviet Agricultural Research System for the Republics of Central Asia and the Caucasus.
By A. Morgounov and L. Zuidema

Country Reports

Agricultural Research in the Caucasus Region: A Regional Analysis

Agricultural Research in the Caucasus Region: Georgia Country Profile

Agricultural Research in the Caucasus Region: Armenia Country Profile

Agricultural Research in the Caucasus Region: Azerbaijan Country Profile

Agricultural Research in the Republic of Kazakhstan: A Country Profile. By A.A. Satybaldin, G.A. Kaliev, M.I. Sigarev, G.A. Nikitina

Reform of Agricultural Research, Education, and Extension in Georgia: 1998–1999

Reports of meetings

Meeting the Challenge of Ecoregional Research: An International Workshop on Organizing and Managing Ecoregional Programs, Wageningen, the Netherlands, 26–28 March 2001

Learning about Capacity Development through Evaluation: Perspectives and Observations from a Collaborative Network of National and International Organizations and Donor Agencies. Edited by **D. Horton**

Workshop on a Collaborative Platform for Agricultural Research in Sub-Saharan Africa. (Held at WARDA, Bouaké, Côte d'Ivoire, March 14–16, 2001). Joint publication: The Hague: ISNAR, and Bouaké: WARDA

Project and Joint Publications

Increasing the Performance of Agricultural Research in Zambia: Further Issues for the Agricultural Sector Investment Program. By **H. Elliott** and **P.T. Perrault**

Communication Directory of National Agricultural Research System: ISNAR-ICAR / NAARM Research Project: Distance Training for Agricultural Research Management. Hyderabad, India: National Academy of Agricultural Research Management

Organization Performance Assessment: Animal Sciences Institute. National Agricultural Research Centre (NARC). Report under the Project Performance-based Management System for Asian NARS. Islamabad: Pakistan Agricultural Research Council (PARC) / ISNAR

Organization Performance Assessment: Crop Diseases Research Institute. National Agricultural Research Centre. Report under the Project Performance-based Management System for Asian NARS. Islamabad: Pakistan Agricultural Research Council (PARC) / ISNAR

The Internet and Intranets: New Opportunities for Change in Agricultural Research and Education. Proceedings of the workshop held at the Tamil Nadu Veterinary and Animal Sciences University (TANUVAS), in Chennai, India, June 11–20. CD-ROM

New Paradigm Project Series: *Innovación para la Sostenibilidad Institucional:*

- La Cuestión Institucional: de la Vulnerabilidad a la Sostenibilidad Institucional en el Contexto del Cambio de Época. By J. de Souza Silva, J. Cheaz Peláez, and J. Calderón Romero. San José, Costa Rica: ISNAR
- La Dimensión de Entorno en la Construcción de la Sostenibilidad Institucional. By S.M.V. Lima, A.M. Gomes de Castro, O. Mengo, M. Medina, A. Maestrey, V. Trujillo, and O. Alfaro. San José, Costa Rica: ISNAR
- La Dimensión de Estrategia en la Construcción de la Sostenibilidad Institucional. By J. de Souza Silva, J. Cheaz, J. Santamaría, M.A.Mato, and A. León. San José, Costa Rica: ISNAR
- La Dimensión de Futuro en la Construcción de la Sostenibilidad Institucional. By A.M.G. de Castro, S.M.V. Lima, A. Maestrey, V. Trujillo, O. Alfaro, O. Mengo, and M. Medina. San José, Costa Rica: ISNAR
- La Dimensión de Gestión en la Construcción de la Sostenibilidad Institucional. By M.A. Mato, J. Santamaría, J. de Souza Silva, and J. Cheaz. San José, Costa Rica: ISNAR
- La Dimensión de Participación en la Construcción de la Sostenibilidad Institucional. By L. Salazar, J. de Souza Silva, J. Cheaz, and S. Torres. San José, Costa Rica: ISNAR

Training Materials

Linking Agricultural Research and Rural Radio: Training Needs and Organizational Constraints Assessment Workshop: module, final report, and video. (Collaborators: University of Guelph, Developing Countries Farm Radio Network; FAO)

Learning for Institutional Innovation (six modules)

- The Organization as a Learning Laboratory
- Organizational Learning and Learning Organization
- Leaders in the Learning Organizations
- Innovation
- Evolution in the Main Approaches Used in the Agricultural Innovation Process
- Creativity

FAO / ISNAR Project Cycle Overview: Developing a Common Discipline (eight modules)

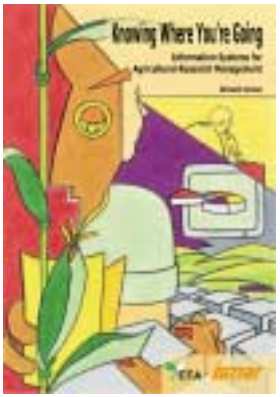
- Distance Learning Module—Learning Package
- Participant's Module
- Facilitator's Module
- Participant Action Plan Approach (PAPA): Tools for a Follow-up Program
- Trust Fund Projects
- Special Programme for Food Security
- Technical Cooperation Programme
- FAO-Gender Analysis for Monitoring and Evaluation: The Engendered Log Frame Approach

INTG / NARS / Facilitating the Agricultural Innovation Process (FAIP) (three modules)

- Facilitating Linkages among Stakeholders in Agricultural Innovation Systems
- Engendering Participatory Research
- Strengthening Creativity Skills to Promote Innovation

New publication

Comprehensive guide for research managers and information managers



Knowing Where You're Going: Information Systems for Agricultural Research Management

Edited by Richard Vernon

360 pages / ISBN 92-9118-054-8 / USD 35.00 / Order code ISNAR303

Published jointly by ISNAR and CTA

Agricultural researchers, especially in the developing countries, are facing serious problems in accessing information. Scientific journals, once the lifeblood of research, are becoming less and less affordable to most research institutions. Research is often inefficient: many scientists pursue lines of research unaware that the topic has already been covered in the past because they have no access to records of former research, even in their own country. Research managers often supervise programs and make decisions with insufficient information from within their own research programs, and little or no information on external factors that should have a crucial bearing on research priorities.

But there is also good news. Never before has there been such rapid development of information and communication technologies. Capacities and speeds are increasing, while prices are falling. The Internet has opened a vast range of information to millions of users. CD-ROMs provide enormous capacity for cheap storage and distribution of information, even to those without Internet access. Most of the benefit of the information management revolution, however, accrues to the developed countries, and the North-South gap in information access is increasing. It is a target of this book to help reverse that trend. The book provides agricultural research managers at all levels, and information specialists within agricultural research organizations in particular, with a source of ideas, concepts, methodologies, explanations, and guidance in information management within their respective roles.

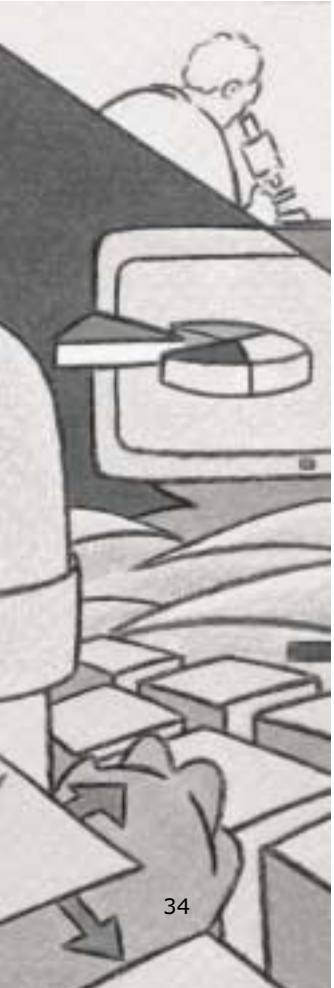
The author, with formal qualifications and many years experience in both agriculture and information systems, has spent many years working with researchers and research managers in developing countries in Africa, Asia, the Middle East, and Latin America, to bring about better information management. The fruits of this work, drawn from the experiences of many, are collected in this book.

Part 1. For the Research Manager

1. Information Management and Information Strategy
2. The Agricultural Research Management Information System
3. Developing a Management Information System: Five Case Studies

Part 2. For the Information Manager

4. Building a Management Information System
5. Information Systems for Administration
6. Scientific Information
7. Aspects of Information Science and Technology



External Publications

Preston, H. and **M. Allmand**. Discovering the Information Professional: Organizational Culture in a Digital World. *Online Information Review* 25(6): 388–395

Baur, H. and Ch. Kradi. Integrating Participatory Research Methods in a Public Agricultural Research Organisation: A Partially Successful Experience in Morocco. Agricultural Research and Extension Network (AgREN) Paper No. 109. London: Overseas Development Institute. www.odi.org.uk/agren/papers/agrenpaper_109.pdf

Baur, H. and **D. Horton**. Capacity development for national plant genetic resources programmes: principles and lesssons. In *Towards Sustainable National Plant Genetic Resources Programmes: Policy, Planning and Coordination Issues.* Ed. by Engels, J.M.M., R. Vodouhe, J. Thompson, A. Zannou, E. Hehne and M. Grum. Nairobi: International Plant Genetic Resources Institute

Beintema, N.M., A.F.D. Avila, and P.G. Pardey. Agricultural R&D in Brazil: Policy, Investments, and Institutional Profile. Washington, DC: IFPRI, Embrapa, and FONTAGRO

Pardey, P.G. and **N.M. Beintema**. Slow Magic: Agricultural R&D a Century after Mendel. IFPRI Food Policy Report. Washington, DC: International Food Policy Research Institute. www.ifpri.cgiar.org/checknames.cfm/fpr31.pdf?name=fpr31.pdf &direc=d:\webs\ifpri\pubs\fpr

Bie, S.W. Agricultural Research: In Ivory Towers or in Farmers' Fields? In *Utilization of Research for Development Cooperation: Linking Knowledge Production to Development Policy and Practice*. Publication 21. The Hague: Netherlands Development Assistance Research Council (RAWOO)

Bie, S.W. Contribution to the Preface of *The Skeptical Environmentalist*, book by Bjørn Lomborg. 540 p. Cambridge: Cambridge University Press

Bie, S.W. Hvorledes virkeliggjør vi begrepet om bærekraftig utvikling for verdens fattige? In *Har fjellet ansikt? Naturfilosofiske essays*, edited by Hans Kolstad: 249–260

Braunschweig, T., J. Enyaru, D. Kyetere, P. Rubaihayo, M. Saimo, and T. Sengooba. Capacity Building in Agricultural Biotechnology Research. Choosing the Best Investment Option for Uganda. Kampala: Uganda National Agricultural Research Organization

Braunschweig, T., W. Janssen, and P. Rieder. Identifying Criteria for Public Agricultural Research Decisions. *Research Policy* 30(2001): 725–734. Amsterdam: Elsevier

Braunschweig T. and J.C. Reyes. Applying the AHP to Research Priority Setting in Agricultural Biotechnology: The Philippine Case. In *Proceedings of the Sixth International Symposium on the Analytic Hierarchy Process (ISAHP)*, edited by K. Dellmann. pp. 47–58. Berne, Switzerland: Institute of Agricultural Economics

Braunschweig, T. and T. Sengooba. Inventory of Agricultural Biotechnology Research Capacity in Uganda. *Journal of Agricultural Sciences* 6(1): 37–41

Cohen, J.I. Harnessing Biotechnology for the Poor: Challenges ahead for Capacity, Safety and Public Investment. *Journal of Human Development* 2(2): 239–263

De Souza Silva, J. La Dimensión Institucional del Desarrollo Sostenible: De las "Reglas de la Vulnerabilidad" a las "Reglas de la Sostenibilidad" en el Contexto del Cambio de Época. Quito: Editorial QUIPUS / PUCE-I

De Souza Silva, J. A New Coherence and Correspondence for Development Efforts in a Change of Epoch: The ISNAR Network "New Paradigm" Project. *Development Issues* Vol. 3(3): 1–10. The Hague: Institute for Social Studies. www.iss.nl/pdfs/devissues3_3.pdf

Echeverria, R.G. and **H. Elliott**. Competitive funds for agricultural research: Are they achieving what we want? In *Tomorrow's agriculture: Incentives, institutions, infrastructure and innovations. Proceedings of the Twenty-fourth International Conference of Agricultural Economists, Berlin, Germany, 13-18 August 2000.* Edited by G.H. Peters and P. Pingali. p.442–466

Falconi, C.A., S.W. Omamo, G. d'Ieteren, and F. Iraqi. An Ex Ante Economic and Policy Analysis of Research on Genetic Resistance to Livestock Disease: Trypanosomosis in Africa. *Agricultural Economics* 25:153–163

Qaim, M. and **C.A. Falconi.** Agricultural biotechnology policies and research investments in Mexico. *International Journal of Biotechnology* 3(3/4):323–337

Hambly Odame, H. The Rise and Fall of Women's Groups: Agricultural Development and Local Institutions. Seminar Series Paper ISS. The Hague: Institute of Social Studies

Hambly Odame, H. The Collapse of Rural Women Groups. Development Issues. 3(20). The Hague: Institute of Social Studies. www.iss.nl/pdfs/devissues3_2.pdf (p.7)

Hambly Odame, H. Making Waves in the CGIAR: Rural Radio and Agricultural Science. First International Workshop on Farm Broadcasting, February 3–6, 2001, Rome: FAO. www.fao.org/docrep/003/x6721e/x6721e32.htm#P5_1

Hambly Odame, H. and F. Cleaver. Men in Women's Groups: A Gender and Agency Analysis of Local Institutions: Men and Masculinity in Development. London: Zed Books

Hobbs, H. Innovaciones Institucionales en Otros Continentes, Puntos de Referencia. Anexo of *"Agricultura con Conocimiento."* Memorias de la II Reunión del Foragro México 2000. San José, Costa Rica: IICA and INIFAP: p. 204–208

Horton, D. Issues in Planning, Implementing and Evaluating Capacity Development: A "Baker's Dozen." In *Capacity Development for Participatory Research.* CIP-UPWARD: Los Baños, Laguna, Philippines: p. 3–9

Janssen, W. Innovaciones Institucionales en la Investigación Agrícola en la Pública en los Países Desarrollados. In *Agricultura con Conocimiento. Memorias de la II Reunión del Foragro México 2000*. San José, Costa Rica: IICA and INIFAP: 184–203

Michelsen, H. Book review of *Paying for Agricultural Productivity*. Edited by J. Alston, P. Pardey, and V. Smith (1999). Quarterly Journal of International Agriculture 40(2):192–194

Mook, B.T. Information Planning: Seven Years of Lessons Learned. In *Development of Agricultural Information Management & Information Technology, Proceedings of the International Conference on the Development of Agricultural Information Management, Technology and Markets in the 21st Century*. Edited by Mei Fangquan. Beijing: China Agricultural Scitech Press

Mook, B.T. Information Strategies for National Agricultural Research. In *Promoting Global Innovation of Agricultural Science & Technology and Sustainable Agricultural Development, Proceedings of the International Conference on Agricultural Science and Technology (ICAST). Session 6: Information Technology of Agriculture.* Beijing: Organizing Committee ICASR, Ministry of Science and Technology

Omamo, S.W. and L. Mose. Fertilizer Trade Under Market Liberalization: Preliminary Evidence from Kenya. *Food Policy* 26: 1–10

Randolph, Th., P. Kristjanson, **S.W. Omamo**, A. Odero, Ph. Thornton, R. Reid, T. Robinson, and J. Ryan. A Framework for Priority Setting in International Livestock Research. *Research Evaluation* 10:142-160

Discussion Papers

Discussion papers are preliminary reports of work in progress at ISNAR. They are neither edited nor formally reviewed, and their circulation is limited

DP 01-1. Targeting Agricultural R&D for Poverty Reduction: HIV/AIDS in Sub-Saharan Africa. By M.E. Loevinsohn and D. Bigman

DP 01-2. Commercializing Agricultural Biotechnology Products in Argentina: Analysis of Biosafety Procedures. By M. Burachik and P.L.Traynor

DP 01-3. Agricultural Innovation System of Azerbaijan: An Assessment of Institutional Interactions. By T. Temel, W. Janssen, and F. Karimov

DP 01-4. Implementation of Actions to Improve the Contribution of Universities to National Agricultural Research in Six African Countries. By H. Michelsen and L. Petry

DP 01-5. Agricultural Biotechnology Research Indicators: China. By J. Huang, Q. Wang, Y. Zhang, and J-B Falck-Zepeda

DP 01-6. Systems Analysis by Graph Theoretical Techniques: Assessment of the Agricultural Innovation System of Azerbaijan. By T. Temel, W. Janssen, and F. Karimov

DP 01-7. The Pros and Cons of Globalization for Developing Countries: A Review of the Theoretical Issues and the Empirical Debates. By D. Bigman

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DP 01-9. Governance and Institutional Innovation. By G. Gijsbers

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DP 01-11. Agricultural development and its impact on malaria: Azerbaijan. By T. Temel and M. Ejov

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Financial report for 2001

ISNAR's audited financial result for the year is a surplus of income in comparison to expenses, amounting to USD 21,000. It is very satisfying to record this positive result, but it needs noting that overall donor funding was lower in 2001 than in 2000, and the result was only achieved by reducing activities and expenditure.

We highly appreciate our many longstanding donors who continue to maintain the level of their unrestricted contributions. Special mention should be made of Norway, which made a supplementary grant in 2001, and Italy, which increased its contribution. But in line with other CGIAR centers, there is a clear trend by ISNAR's donors to move from unrestricted contributions to "restricted" grants.

While ISNAR's financial situation is relatively healthy, there remains the perpetual uncertainty for all CGIAR centers regarding the amount and nature of donor funding. ISNAR continues to be in discussion with its auditors over the difficulty of long-term commitments, staffing, forward planning, and budgeting, as most of its donors promise support only on an annual basis. ISNAR has recognized the need to be more entrepreneurial and to have the flexibility to be more responsive to the many ongoing changes in the external environment.

The financial statements on the following pages have been audited by the independent accounting firm Deloitte and Touche.

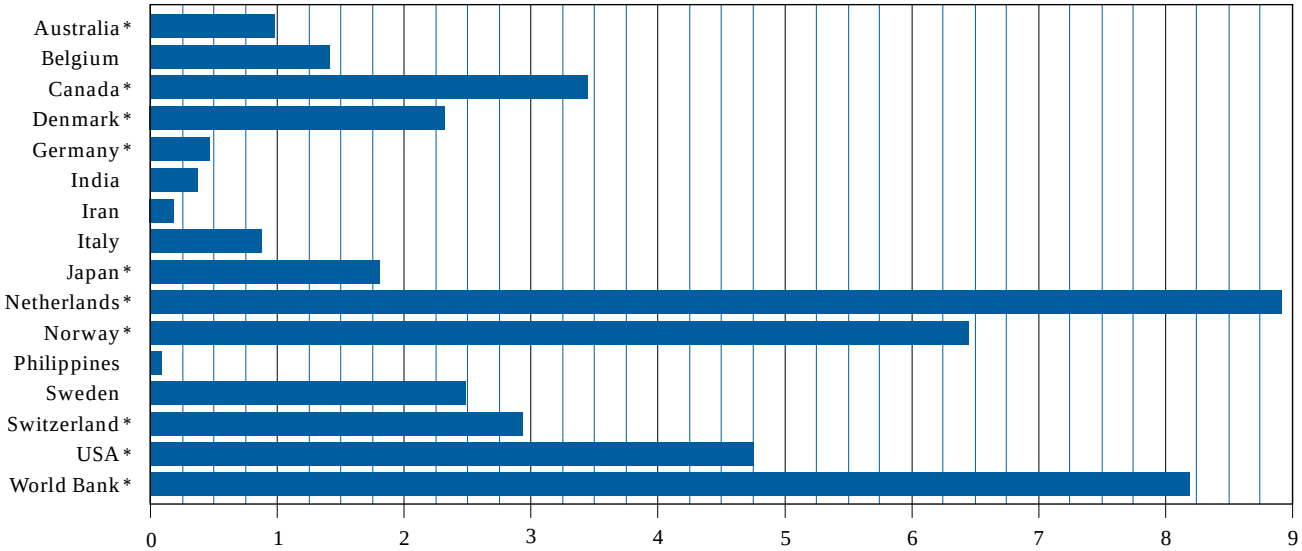
Statement of activity

Revenue	Unrestricted	Restricted	Total 2001	Prior year
Grants	4,551	3,525	8,076	8,763
Other revenues	247	-	247	134
Total revenue	**4,798**	**3,525**	**8,323**	**8,897**
Expenses				
Program expenses	2,801	3,054	5,855	5,957
Management and general expenses	2,447		2,447	2,169
Subtotal	**5,248**	**3,054**	**8,302**	**8,126**
Recovery of indirect costs	(471)	471		
Total expenses	**4,777**	**3,525**	**8,302**	**8,126**
Excess of revenue over expenditure	21	-	21	771
Net assets				
Net assets at beginning of year	1,673	-	1,673	902
Change in year	21	-	21	771
Net assets at end of year	**1,694**	-	**1,694**	**1,673**
Memo item				
Management and general expenses by natural classification:				
Personnel costs	944	-	944	782
Supplies and services	1,170	-	1,170	1,013
Operational travel	88	-	88	72
Depreciation of fixed assets	158	-	158	164
Exceptional items (exchange losses, provisions)	87	-	87	138
Total expenses	**2,447**	-	**2,447**	**2,169**

Notes: All figures are stated in USD 000's.
The above information is taken from ISNAR's audited Financial Statements for 2001.
The complete Financial Statements are available on request.

Donors supporting ISNAR's work in 2001

Contributors of unrestricted funding (USD 100,000's)



* Indicates that donor has also provided targeted support

Contributors of targeted funding

African Development Bank Group (AfDB)
Australia: Australian Centre for International Agricultural Research (ACIAR)
CAB International (CABI)
Caribbean Agricultural Research and Development Institute (CARDI)
Canada: Canadian International Development Agency (CIDA)
Canada: International Development Research Centre (IDRC)
Denmark: Danish International Development Agency (Danida)
Dominican Republic: Centro para el Desarrollo Agropecuario y Forestal (CEDAF)
European Union
Food and Agriculture Organization of the United Nations (FAO)
Germany: Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)
Inter-American Development Bank (IDB)
International Bank for Reconstruction and Development / The World Bank Group (IBRD)
Japan: Japan International Cooperation Agency
Netherlands: Directoraat-Generaal voor Internationale Samenwerking (DGIS)
Norway
Rockefeller Foundation
Switzerland: Swiss Federal Institute of Technology Zurich (ETHZ)
Switzerland: Swiss Agency for Development and Cooperation (SDC)
Tanzania
Technical Centre for Agricultural and Rural Cooperation (ACP-EU) (CTA)
Uganda: National Agricultural Research Organization (NARO)
United Kingdom: Department for International Development (DFID)
United Nations Development Programme (UNDP)
United Nations Office for Project Services (UNOPS)
USA: United States Agency for International Development (USAID)
World Health Organization (WHO)
World Intellectual Property Organization (WIPO)
Zambia

Acronyms/abbreviations

ACIAR	Australian Centre for International Agricultural Research
ADB	Asian Development Bank
AfDB	African Development Bank
AGBIOS	Agriculture & Biotechnology Strategies Inc (Canada)
AIAT	Assessment Institute for Agricultural Technology – Central Java (Indonesia)
AIM	Asian Institute for Management
ANPEI	Associação Nacional de Pesquisa e Desenvolvimento das Empresas Industriais (Brazil)
ARC	Agricultural Research Council (South Africa)
AROW	Agricultural Research Organizations on the Web (ISNAR)
ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
ASI	Animal Science Institute (Pakistan)
ASTI	agricultural science and technology indicators
BMZ	Bundesministerium für Wirtschaftliche Zusammenarbeit (Germany)
BTA	Biotechnology Trust Africa (Kenya)
CABI	CAB International
CARDI	Caribbean Agricultural Research and Development Institute (Jamaica)
CAS	Central Advisory Service on Proprietary Technology (CGIAR)
CBD	Convention on Biological Diversity
CCAP	Center for Chinese Agricultural Policy (Chinese Academy of Agricultural Sciences)
CDRI	Crops Diseases Research Institute (Pakistan)
CDT	Cotton Development Trust (Zambia)
CEDAF	Centro para el Desarrollo Agropecuario y Forestal (Dominican Republic)
CEF	Centro de Experimentação Florestal (Mozambique)
CGIAR	Consultative Group on International Agricultural Research
CIAT	Centro Internacional de Agricultura Tropical
CIDA	Canadian International Development Agency
CIFOR	Center for International Forestry Research
CII	Confederation of India Industry
CIMMYT	Centro Internacional de Mejoramiento de Maíz y Trigo
CIP	Centro Internacional de la Papa
COL	Commonwealth of Learning
Colciencias	El Instituto Francisco José de Caldas para el Desarrollo de la Ciencia y la Tecnología
CORAF/WECARD	West and Central African Council for Agricultural Research and Development
CRI	Coconut Research Institute (Sri Lanka)
CSIR	Council for Scientific and Industrial Research (Ghana)
CTA	Technical Centre for Agricultural and Rural Cooperation (ACP-EU)
DANE	Departamento Administrativo Nacional de Estadística (Colombia)
Danida	Danish International Development Agency
DCFRN	Developing Countries Farm Radio Network
DFID	Department for International Development (UK)
DGIS	Directoraat-Generaal voor Internationale Samenwerking (Netherlands)
DIA	Departamento de Investigaciones Agropecuarias (Dominican Republic)
DNP	Departamento Nacional de Planeación (Colombia)
EARO	Ethiopian Agricultural Research Organization
ECAPAPA	Eastern and Central African Programme for Agricultural Policy Analysis
Embrapa	Empresa Brasileira de Pesquisa Agropecuária (Brazil)
ETHZ	Federal Institute of Technology Zurich (Switzerland)
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FARA	Forum for Agricultural Research in Africa (sub-Saharan)
FONTAGRO	Fondo Regional de Tecnología Agropecuaria
GART	Golden Valley Agricultural Research Trust (Zambia)
GBDI	Global BioDiversity Institute
GMO	genetically modified organism
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit (Germany)
HAU	Hanoi Agricultural University (Vietnam)
IAC	International Agricultural Center (WUR, Netherlands)
IBRD	International Bank for Reconstruction and Development (World Bank)
IBS	ISNAR Biotechnology Service
ICARD	Information Center for Agricultural and Rural Development (part of MARD) (Vietnam)
ICBAAR	International Conference on Biotechnology Applications for the Arid Regions
ICCP	Intergovernmental Committee for the Cartegena Protocol on Biosafety
ICLARM	International Center for Living Aquatic Resources Management
ICRA	International Center for development oriented Research in Agriculture (France)
ICRAF	International Centre for Research in Agroforestry
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IDIAP	Instituto de Investigaciones Agropecuarias de Panamá
IDRC	International Development Research Centre (Canada)
IFAD	International Fund for Agricultural Development

IFPRI	International Food Policy Research Institute
IGIDR	Indira Gandhi Institute of Development Research (India)
IICA	Instituto Interamericano de Cooperación para la Agricultura (Costa Rica)
IIP	Instituto de Investigaciones Porcinas (Cuba)
IITA	International Institute of Tropical Agriculture
INCO-Dev	International Cooperation with Developing Countries (EU program)
INFORM	Information for Research Managers
INIA	Instituto Nacional de Investigaçao Agronómica (Mozambique)
INIA	Instituto Nacional de Investigaciones Agrícolas (Venezuela)
INIFAP	Instituto Nacional de Investigaciones Forestales y Agropecuarias (Mexico)
INIVE	Instituto Nacional de Investigaçao Veterinária (Mozambique)
INTG	IARC / NARS Training Group
IP	intellectual property
IPA	Instituto de Produçao Animal (Mozambique)
IPGRI	International Plant Genetic Resources Institute
IRRI	International Rice Research Institute
ISS	Institute of Social Studies (Netherlands)
ITM	Prince Leopold Institute of Tropical Medicine (Belgium)
IWMI	International Water Management Institute
JIRCAS	Japan International Research Center for Agricultural Sciences
KARI	Kenya Agricultural Research Institute
MALR	Ministry of Agriculture and Land Reclamation (Egypt)
MAFF	Ministry of Agriculture, Food and Fisheries (Zambia)
MARD	Ministry of Agriculture and Rural Development (Vietnam)
MIS	management information system(s)
MOA	Ministry of Agriculture (Colombia)
MST	Ministry of Science and Technology (Colombia)
NAARM	National Academy of Agricultural Research Management (India)
NARO	national agricultural research organization
NARO	National Agricultural Research Organization (Uganda)
NARS	national agricultural research system(s)
NGO	nongovernmental organization
NIAH	National Institute of Animal Husbandry (Vietnam)
ODG	Overseas Development Group (University of East Anglia) (UK)
OECD	Organisation for Economic Co-operation and Development (France)
OPAS	Organizational Performance and Assessment System (ISNAR)
OXFAM	Oxford Committee for Famine Relief
PCARRD	Philippine Council for Agriculture, Forestry and Natural Resources Research and Development
PRGA	Participatory Research and Gender Analysis (CGIAR program)
PROCIANDINO	Programa Cooperativo de Investigación y Transferencia de Tecnología Agropecuaria para la Subregión Andina
PROCICARIBE	Program for Cooperation in Agricultural Science and Technology in the Caribbean
PROCISUR	Programa Cooperativo para el Desarrollo Tecnológico Agropecuario del Cono Sur
PROCITROPICOS	Programa Cooperativo para el Desarrollo Tecnológico Agroalimentario y Agroindustrial del Cono Sur
PRONATTA	Programa Nacional de Tranferencia de Tecnología Agropecuaria (Colombia)
PUCE	Pontificia Universidad Catolica del Ecuador
R&D	research and development
RF	Rockefeller Foundation
RIMISP	Red Internacional de Metodología de Investigación de Sistemas de Producción
RIR	Research Institute for Rice (Indonesia)
SACCAR	Southern African Centre for Co-operation in Agricultural & Natural Resources Research and Training
SAT	Southern Africa AIDS Training Programme
SCRB	Soil and Crops Research Branch (Zambia)
SDC	Swiss Agency for Development and Cooperation
SINCITA	Sistema Nacional de Ciencia e Innovación Tecnológica Agraria (Cuba)
SPAAR	Special Program for African Agricultural Research (World Bank)
TANUVAS	Tamilnadu Veterinary and Animal Sciences University (India)
UCE	Universidad Central del Ecuador
UCR	Universidad de Costa Rica
UCV	Universidad Central de Venezuela
UN	United Nations
UNA	Universidad Nacional (Costa Rica)
UNAIDS	Joint United Nations Programme on HIV / AIDS
UNDP	United Nations Development Programme
USAID	US Agency for International Development
WAICENT	World Agricultural Information Centre (FAO)
WARDA	West Africa Rice Development Association
WHO	World Health Organization
WIPO	World Intellectual Property Organization
WTO	World Trade Organization
WUR	Wageningen Universiteit en Researchcenter (Netherlands)

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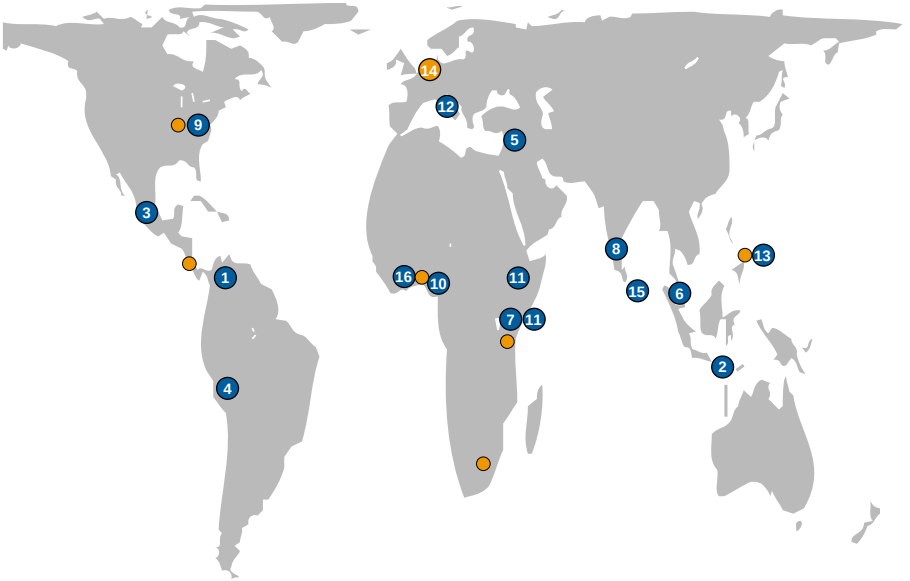


1. **CIAT** Centro Internacional de Agricultura Tropical, Cali, Colombia
2. **CIFOR** Center for International Forestry Research, Bogor, Indonesia
3. **CIMMYT** Centro Internacional de Mejoramiento de Maíz y Trigo, El Batan, Mexico
4. **CIP** Centro Internacional de la Papa, Lima, Peru
5. **ICARDA** International Center for Agricultural Research in the Dry Areas, Aleppo, Syria
6. **ICLARM** International Center for Living Aquatic Resources Management, Penang, Malaysia
7. **ICRAF** International Centre for Research in Agroforestry, Nairobi, Kenya
8. **ICRISAT** International Crops Research Institute for the Semi-Arid Tropics, Patancheru, India
9. **IFPRI** International Food Policy Research Institute, Washington, DC, USA
10. **IITA** International Institute of Tropical Agriculture, Ibadan, Nigeria
11. **ILRI** International Livestock Research Institute, Addis Ababa, Ethiopia / Nairobi, Kenya
12. **IPGRI** International Plant Genetic Resources Institute, Rome, Italy
13. **IRRI** International Rice Research Institute, Los Baños, The Philippines
14. **ISNAR** International Service for National Agricultural Research, The Hague, The Netherlands
15. **IWMI** International Water Management Institute, Colombo, Sri Lanka
16. **WARDA** West Africa Rice Development Association, Bouaké, Côte d'Ivoire

● Outposted staff are located in San José, Costa Rica; Ibadan, Nigeria; Los Baños, The Philippines; Pretoria, South Africa; Entebbe, Uganda; and Washington, DC, USA.

Résumé

Un triomphe de la transformation

Introduire un changement en vue de réaliser une amélioration significative — voilà ce qui constitue une tâche difficile pour toute organisation de recherche, mais pour une institution dont les responsabilités s'étendent à tout un continent, le défi est particulièrement grand. Lorsque les membres du Programme spécial de la Banque mondiale sur la recherche agricole africaine (SPAAR) et du Forum pour la recherche agricole en Afrique (FARA) décidèrent qu'il fallait établir un nouveau FARA pour aider les systèmes nationaux de recherche agricole à relever les défis auxquels ils sont confrontés actuellement, c'est à l'ISNAR qu'ils ont confié la tâche de gérer la phase de transition.

Ils reconnaissaient en effet que l'ISNAR apporterait au processus les avantages inappréciables d'une longue expérience en gestion du changement au sein des institutions de recherche agricole, ainsi que de sa solide réputation en tant qu'acteur impartial et efficace. L'an 2001 se distinguera dans les annales de la recherche agricole africaine comme étant l'année de la création formelle du nouveau FARA — organisation authentiquement africaine, siégeant en Afrique et dirigée par des responsables africains.

C'est également en 2001 que l'on nomma au poste de premier secrétaire exécutif du FARA, Monsieur Monty Jones, scientifique bien connu et tenu en haute estime, qui fut directeur adjoint de la recherche à l'ADRAO jusqu'à son entrée en fonction au FARA. L'ISNAR se félicite d'avoir géré le processus de recrutement qui a abouti à la sélection d'une personne aussi apte à exécuter la tâche. Une des responsabilités les plus importantes du nouveau FARA consistera à faire connaître les points de vue de l'Afrique au reste du monde. L'Afrique a en effet besoin d'un avocat influent. L'ISNAR est fier d'avoir ainsi contribué à la création d'un avenir nouveau pour la recherche agricole en Afrique.

L'évaluation d'un changement institutionnel introduit au Cuba

Puisque « rien ne se fait sans les hommes », il est rare qu'on mette en doute la sagesse d'une institution qui applique ses ressources au développement des capacités de son personnel. Or, il est également judicieux que l'institution cherche à savoir dans quelle mesure l'investissement a produit l'effet désiré, comme c'est le cas pour toute initiative de changement. Face aux défis exceptionnels des années 90, les autorités cubaines ont compris qu'il fallait, d'urgence, introduire des réformes au sein des institutions de recherche agricole et, par la suite, soumettre à l'évaluation à la fois le processus de transformation et les résultats obtenus. Par le biais du projet intitulé « Nouveau Paradigme » (auquel les gouvernements suisse et néerlandais accordent un soutien financier), l'ISNAR a été associé à la préparation de cette réforme radicale qui s'imposait au Cuba.

C'est en 2001 que s'acheva l'évaluation du processus de développement des capacités au sein de l'Institut de la recherche sur les porcins (IIP). L'un des 17 instituts du système national cubain de la science et de l'innovation

technologique au service de l'agriculture, l'IIP avait jugé de prime importance la tâche de renforcer ses capacités institutionnelles en vue d'effectuer une analyse de la chaîne agroalimentaire.

Pour ce faire, l'institut avait mis en application une méthode participative d'apprentissage par la pratique, à laquelle l'ISNAR avait accordé son soutien technique sous la forme des matériels de formation qu'il avait produit et des formateurs qui ont participé au processus.

Le résultat final de l'évaluation révèle clairement que l'institut a aujourd'hui une meilleure compréhension de ce que sont les exigences de l'industrie porcine du pays et qu'il est mieux capable de s'y adapter. Les enseignements de l'expérience sont actuellement mis en pratique dans toute la région d'Amérique centrale et des Caraïbes.

La planification de la formation continue

Étudier, prendre plaisir à le faire, puis aussitôt oublier la quasi totalité de ce qu'on a appris — voilà le sort, la fortune manquée, de bon nombre d'apprenants adultes. Autre handicap à l'apprentissage : la croyance universelle que tout spécialiste est capable d'enseigner sa discipline. En vérité, si l'on souhaite obtenir des bénéfices de valeur durable, il faut confier la formation des adultes à des formateurs chevronnés, compétents et spécialistes en sciences pédagogiques, et il faut planifier les cours avec la plus grande minutie et veiller à ce qu'ils soient hautement structurés.

Au cours de l'année 2001, l'ISNAR a continué d'élaborer des programmes de formation sur des sujets divers et de réaliser des matériels d'appui didactiques — produits dont profitent aujourd'hui des institutions de recherche agricole situées aux quatre coins du monde. Et il va sans dire qu'un responsable de recherche, qui au cours d'un stage apprend à développer sa créativité, retournera dans son institut avec des idées innovatrices qu'il partagera avec toute son équipe. Celle-ci apprendra également à mieux répondre aux besoins des clients, dont bon nombre risquent d'être des paysans démunis. C'est ainsi que l'éducation peut jouer un rôle en aidant certains pauvres à s'échapper de leur état d'indigence.

En 2001, un cours intitulé « Comment rédiger une proposition de recherche qui sera gagnante aux yeux des bailleurs de fonds INCO-Dev ? » a suscité un intérêt tout particulier. Élaboré conjointement par l'ICRA et l'ISNAR et financé par l'Union européenne, ce projet fut conçu en réaction aux difficultés qu'éprouvaient les institutions du monde en développement à obtenir des fonds en répondant aux appels à propositions du programme INCO-Dev. En effet, ce programme de l'Union européenne exige la constitution de partenariats associant pays industrialisés et pays en développement. Le cours de l'ISNAR et le service d'assistance qui en faisait partie ont eu pour résultat direct l'approbation, par INCO-Dev, de deux propositions de recherche, d'une valeur totale de plusieurs millions de dollars américains.

L'ISNAR espère qu'un nombre croissant de pays adopteront son approche philosophique en matière de formation, à savoir que la formation peut conduire à l'innovation institutionnelle, et que cela contribuera à l'instauration d'une culture institutionnelle axée sur l'éducation dont les bénéfices enrichiront les générations actuelles et à venir.

L'ISNAR appuie l'élaboration et la mise en valeur des systèmes de biosécurité

Les progrès de la biotechnologie moderne lancent un défi énorme tant aux pays industrialisés qu'au monde en développement. Il leur faut choisir entre relever ou refuser ce défi, et ceux qui décident de l'accepter doivent, de plus, définir des limites et des modalités d'application. Or, si choisir parmi les diverses options ne peut se faire qu'en pleine connaissance de cause, certaines décisions s'imposent et avec d'autant plus d'urgence que les possibilités et occasions d'utiliser des organismes génétiquement modifiés (OGM) se multiplient. En effet, tout maniement d'OGM est indissociablement lié aux risques que ceux-ci posent pour l'environnement et la santé humaine.

Il faut donc aider les gouvernements à s'instruire sur les effets de l'application des biotechnologies modernes sur l'environnement, notamment la diversité biologique ; ils doivent également anticiper quelles seront les conséquences pour le développement agricole, le commerce, la prospérité économique, et les attitudes publiques. En 2001, l'ISNAR a continué de parfaire son savoir et ses compétences dans le domaine de la sécurité biologique et de mettre son expertise au service des institutions des pays en développement, par le biais de son programme IBS (ISNAR Biotechnology Service) ; il effectue ce travail en collaboration avec l'Institut polytechnique et l'Université de l'État de Virginie aux États-Unis et bénéficie de l'appui financier que lui accordent les gouvernements du Japon, des Pays-Bas, de la Suisse et du Royaume-Uni.

Par « biosécurité » on entend les applications biotechnologiques modernes qui ne mettent pas à risque l'environnement. Il existe un lien direct entre d'une part, le niveau de formation et d'expérience des personnes travaillant dans le domaine de la biosécurité et d'autre part, la qualité de leurs évaluations et décisions, et le degré d'opportunité et de maîtrise des risques observé au niveau du maniement des OGM. En 2001, l'ISNAR a élaboré un cadre conceptuel pour le renforcement de la capacité à promouvoir la biosécurité, tel que prévu dans le protocole de Cartagena sur la prévention des risques biotechnologiques. Il a de plus collaboré avec le « Global BioDiversity Institute » (GBDI) pour mettre au point et exécuter des cours de formation adaptés aux pays d'Afrique subsaharienne.

Centre du GCRAI ayant une vision à long terme de la biosécurité et réputé pour son objectivité et le ton pondéré de ses rapports, l'ISNAR contribue d'une manière significative à l'élaboration de systèmes de prévention des risques biologiques dans un grand nombre de pays et il s'attend à ce que son rôle devienne encore plus important dans les années à venir.

Le Sida et la R-D agricole : il faut s'associer en réseaux pour pouvoir agir

« Le Sida nous affecte tous ! » « Le problème du Sida dépasse le cadre de la santé. » Ce sont là quelques uns des mantras associés aux épidémies du Sida, abondamment répétés dans les discours et sermons prononcés partout en Afrique, et maintenant, avec une fréquence croissante, en Asie et en Amérique latine également.

Cependant, la capacité d'agir en conséquence laisse à désirer, surtout au niveau institutionnel. Persuadé que le secteur agricole joue un rôle clé, l'ISNAR s'efforce actuellement de démontrer qu'une conception nouvelle des sciences agricoles et politiques du développement peut favoriser le ralentissement de la propagation de l'infection VIH ainsi que l'affaiblissement de l'impact du Sida.

Moyennant des contributions financières de la Norvège et du Canada (de l'ACDI et du CRDI) et travaillant de concert avec l'IFPRI et la FAO, l'ISNAR établit des réseaux solides et animés d'enthousiasme, qui mettent en rapport des organisations publiques et privées, des ONG et des organisations paysannes — à commencer dans deux pays africains, le Malawi et l'Ouganda. Dans ces deux pays les réseaux se sont pleinement engagés à mener des actions qui devront aboutir à une réduction des nombres de personnes séropositives.

Il est vrai que le lien entre agriculture et Sida/VIH ne paraît pas évident à la plupart des chercheurs et agents du développement. Le défi que doivent relever l'ISNAR et ses partenaires est de créer une meilleure intelligence des liens qui existent entre d'une part, les conditions de vie et de sécurité alimentaire en milieu rural et d'autre part, l'infection VIH et les maladies et décès causés par le Sida, de manière à pouvoir mener des actions plus réfléchies et mieux ciblées, dont les effets se feront sentir en l'espace d'années, plutôt que de décennies.

L'ISNAR continuera à employer ses relations spéciales avec certaines institutions nationales et avec d'autres organisations internationales telles que l'IFPRI, l'ADRAO et la FAO, pour créer des partenariats effectifs qui s'engagent à améliorer de manière significative les conditions de vie de ceux qui sont atteints du Sida/VIH, ou qui courent le risque de l'être.

Sage prévoyance : le recrutement de scientifiques originaires du Sud

Au fil des années, les centres du GCRAI ont collaboré avec des dizaines de milliers de scientifiques du monde en développement, qui ont enrichi la recherche agricole internationale en exerçant leurs talents, pour ensuite rejoindre leurs systèmes nationaux, à leur tour forts de l'expérience et du savoir acquis.

Ce processus de perfectionnement des capacités à double sens constitue la pierre angulaire du programme dénommé « Global Associates » que l'ISNAR a démarré, il y a trois ans, en réaction au nombre croissant de demandes

d'assistance qu'il recevait. Le réseau des Associés de l'ISNAR, dont le nombre total fut porté à 17 en 2001, continue à être un excellent exemple de la pensée novatrice.

Connaissant particulièrement bien les obstacles auxquels font face les chercheurs des pays en développement, dont ils se rapprochent aussi fréquemment du point de vue de la langue et de la culture, les Associés de l'ISNAR peuvent prêter une oreille attentive aux besoins exprimés au sein des institutions nationales de recherche agricole. Le travail en tant que membre du programme leur fait gagner de l'expérience, dont profitent à leur tour les organisations de recherche dans leurs pays d'origine. Le recours aux Associés permet à l'ISNAR de donner une suite favorable à un plus grand nombre de requêtes d'assistance. Le réseau des Associés constitue enfin l'exemple par excellence d'une collaboration Sud-Sud favorisée par une organisation internationale. Cette formule de travail s'intègre à présent dans une activité de plus grande envergure, qui doit permettre à l'ISNAR de développer sa capacité à promouvoir la recherche et l'innovation agricoles en adoptant des approches innovatrices et plus entrepreneuriales.

La propriété intellectuelle mise en vedette

Que l'idée leur plaise ou non, les Centres du GCRAI sont sous les feux de l'actualité, à cause de l'attention suscitée par les enjeux de la propriété intellectuelle. Situé dans l'enceinte de l'ISNAR, le Service consultatif central (CAS) en matière de propriété intellectuelle a continué de fournir son conseil judicieux au GCRAI durant 2001, pour ainsi assurer qu'un ensemble varié de cas de propriété intellectuelle soit soumis à une gestion en tous temps efficace et éthique.

Les droits de propriété intellectuelle (DPI) préoccupent à juste titre de nombreux scientifiques. À noter que beaucoup d'entre eux révèlent une certaine ingénuité en estimant la part de leur travail qui dépend et fait usage de ce qui constitue la propriété intellectuelle d'autres chercheurs. En effet, quoique généralement bien informés en matière de droits d'obtenteurs et d'accords de transfert de matériel biologique et génétique, les scientifiques sont souvent bien moins au courant des règles en matière de droits d'auteur régissant l'information qu'ils souhaitent utiliser en effectuant leurs travaux. Par exemple, il leur est parfois difficile de distinguer une information réellement libre et gratuite d'une information qui est disponible, mais sans rien de plus — et, avec l'avènement de l'Internet, ces nuances sont devenues encore plus difficiles à saisir.

Le CAS a pour tâches principales de renseigner les chercheurs sur les problèmes qui se posent en relation avec la propriété intellectuelle et d'aider les Centres à se munir des capacités nécessaires pour établir de bonnes pratiques de gestion dans ce domaine. Les Centres du GCRAI souhaitent donner accès à leur savoir à un public aussi vaste que possible. Le CAS leur permet de réaliser ce but tout en protégeant la propriété intellectuelle là où soit la législation, soit des préoccupations éthiques l'exigent.

Resumen

Transformación exitosa

Efectuar un cambio con el fin de hacer una diferencia es difícil en cualquier nivel; en el caso de una institución con responsabilidades hemisféricas, el reto es aún mayor. Cuando los miembros del SPAAR (Programa Especial para la Investigación Agropecuaria en África, del Banco Mundial) y del FARA (Foro para la Investigación Agropecuaria en África) tomaron la decisión de crear un nuevo FARA para ayudar a los sistemas nacionales de investigación agropecuaria a enfrentar los retos actuales, invitaron al ISNAR a dirigir la transición. De hecho, la larga trayectoria del ISNAR en la gestión del cambio institucional en la investigación agropecuaria, y su reputación sólida como organismo neutral y eficiente, resultarían ser de gran valor. El 2001 será recordado como un año especial en la historia de la investigación agropecuaria en África, por ser el año en que el nuevo FARA, una organización basada en África y dirigida y administrada por africanos, se fundó formalmente.

También en el 2001, se nombró como primer Secretario Ejecutivo del FARA al Dr. Monty Jones, un científico de gran renombre, quien anteriormente trabajó en la WARDA (Asociación para el Desarrollo del Arroz en África del Oeste). Al ISNAR le honra haber dirigido el proceso de reclutamiento, el cual dio como resultado tan acertado nombramiento. Una de las tareas más importantes del nuevo FARA será la de presentar una perspectiva africana al resto del mundo. África necesita un aliado poderoso que abogue por sus intereses. El ISNAR se enorgullece de haber contribuido a forjar un nuevo futuro para la investigación agropecuaria en África.

Respondiendo a la reforma: Evaluando el cambio institucional en Cuba

Son las personas las que hacen que las cosas ocurran. Es por ello que el desarrollar las capacidades de la gente para lograr mejores resultados es ampliamente considerado como un uso sensato de los recursos de una institución. Pero, al igual que con cualquier iniciativa que busque el cambio, también es conveniente averiguar cuán efectiva ha sido la iniciativa. Ante los tremendos retos que surgieron durante la década de los noventa, Cuba reconoció la urgente necesidad de cambio en sus instituciones de investigación agropecuaria, y de evaluar posteriormente tanto el proceso mediante el cual se había dado el cambio, como los resultados del mismo. A través de su proyecto “Nuevo Paradigma” (con apoyo financiero de los gobiernos de Suiza y Holanda), el ISNAR ha participado en la preparación de esta reforma radical.

En el 2001, se concluyó la evaluación del proceso de desarrollo de capacidades en el Instituto de Investigaciones Porcinas (IIP), uno de los 17 institutos que integran el sistema nacional cubano para la ciencia y la innovación

tecnológica en la agricultura. La necesidad de desarrollar la capacidad institucional para realizar un análisis de la cadena agroalimentaria había sido un tema de gran importancia para el IIP. Ello se logró en gran parte por medio de un proceso de "aprender haciendo," en el cual el ISNAR proporcionó materiales de capacitación y asesoría técnica. Los resultados de la evaluación indican claramente que hoy en día el Instituto es mucho más capaz de entender las necesidades de la industria porcina nacional, y de adaptarse a ellas. Las lecciones aprendidas se están aplicando en toda la región.

Preparándose para aprender durante toda la vida

Aprender, disfrutar de la experiencia, y luego olvidar rápidamente casi todo lo aprendido, es el destino, o la oportunidad desaprovechada, de muchos educandos adultos. Además, la creencia común de que cualquier experto está en condiciones de impartir sus conocimientos a otros podría entorpecer el proceso de aprendizaje. La educación de adultos requiere instructores con experiencia, competencia y una comprensión integral de la ciencia de la educación. Además, la capacitación debe ser cuidadosamente planeada y muy estructurada si los beneficios del curso han de ser duraderos. Durante el 2001, el ISNAR continuó con el desarrollo de una gama de programas de capacitación y materiales de apoyo, los cuales están generando beneficios para distintas instituciones de investigación agropecuaria alrededor del mundo. Los gerentes de investigación que han sido capacitados para ser creativos aportan ideas innovadoras a sus instituciones, y las ayudan a responder mejor a las necesidades de sus clientes, muchos de los cuales son agricultores pobres. La educación sí puede ayudar a la gente a escapar de la pobreza.

De especial interés en el 2001 fue el proyecto conjunto del ICRA y el ISNAR intitulado "Cómo Elaborar una Propuesta Convincente para el INCO-Dev". Financiado por la Unión Europea (UE), dicho proyecto constituye una respuesta a las dificultades enfrentadas por las instituciones de muchos países en desarrollo al intentar obtener fondos del programa INCO-Dev de la UE, que sólo financia consorcios integrados por países desarrollados y en desarrollo. Como resultado directo de este proyecto, y del servicio de consultas que se brindó, el INCO-Dev ya ha aprobado dos solicitudes de fondos valoradas en varios millones de dólares.

El ISNAR espera que una adopción más amplia de su filosofía de capacitación – aprendizaje para la innovación institucional – ayude a establecer una cultura de educación dentro de las instituciones de investigación agropecuaria que genere beneficios duraderos para todos.

Apoyando y mejorando los sistemas de bioseguridad

Los países pueden escoger de una gama de opciones en el campo de la biotecnología agropecuaria moderna. Aunque entre lo dicho y lo hecho hay gran trecho, este imperativo se hace cada vez más urgente conforme incrementan las oportunidades para usar organismos genéticamente modificados (OGM). Inevitablemente, al considerar el uso de OGM, también hay que considerar los temas de seguridad, beneficios y costos. Por lo tanto, resulta esencial entender todas las posibles implicaciones de la biotecnología agropecuaria moderna, no sólo para el medio ambiente y la biodiversidad, sino también para el desarrollo agropecuario, el comercio, la protección de la biodiversidad, la prosperidad económica y la opinión pública. Trabajando en colaboración con el Virginia Polytechnic Institute y con fondos aportados por los gobiernos de Japón, Holanda, Suiza y el Reino Unido, el ISNAR sigue ampliando sus conocimientos en el campo de la bioseguridad, y poniendo dichos conocimientos a la disposición de instituciones en los países en desarrollo, como parte del Servicio Biotecnológico del ISNAR.

La bioseguridad es la aplicación ambientalmente segura de la biotecnología moderna. La calidad de los análisis de bioseguridad y de la toma de decisiones, y el manejo seguro y apropiado de los OGM en el medio ambiente, están vinculados directamente con la capacitación y experiencia de la gente involucrada. Durante el 2001, bajo el Protocolo de Cartagena, el ISNAR desarrolló un marco para el desarrollo de capacidades en el campo de la bioseguridad. Asimismo, diseñó y realizó cursos de capacitación sobre la bioseguridad para distintos países en África Sub-Sahariana, en colaboración con el Instituto Global de Biodiversidad.

Como un Centro del CG, con un enfoque de largo plazo en el campo de la bioseguridad y reconocido por siempre rendir informes objetivos y balanceados, el ISNAR está haciendo un aporte importante al desarrollo de sistemas de bioseguridad a nivel mundial, un papel que espera poder expandir en el futuro.

El SIDA y la investigación agropecuaria: Formando redes para la acción

“Todos resultamos afectados”. “El SIDA es más que un problema de salud”. Estas son algunas de las frases relacionadas con las epidemias de SIDA que son repetidas en discursos y sermones en toda África, y cada vez con mayor frecuencia en Asia y América Latina también. Sin embargo, la capacidad de responder, especialmente a nivel institucional, es insuficiente. Para el ISNAR, el sector agropecuario juega un papel clave; por eso trabaja para demostrar que la adopción de nuevas maneras de pensar en la investigación agropecuaria y las políticas de desarrollo puede ayudar a prevenir la infección con el VIH y reducir el impacto del SIDA. Apoyado por donativos de Noruega y Canadá (la ACDI y el CIID), y en colaboración con el IFPRI y la FAO, el

ISNAR está construyendo redes fuertes y entusiastas con el fin de vincular a organizaciones públicas y privadas, ONGs y organizaciones de agricultores – para empezar, en dos países africanos, Malawi y Uganda. Estos están decididos a tomar acciones que con el tiempo deberían resultar en tasas más bajas de infección con el VIH.

El vínculo entre la agricultura y el VIH / SIDA no es muy obvio para la mayoría de los investigadores y los que trabajan en el campo del desarrollo. El reto para el ISNAR y sus socios es el de mejorar la comprensión de los vínculos entre, por un lado, los medios de ganarse la vida en las áreas rurales y la seguridad alimentaria, y, por el otro, las enfermedades relacionadas con el VIH y el SIDA, y la muerte, de manera que las acciones sean más conscientes y mejor enfocadas, y que sus efectos se manifiesten dentro de unos años en vez de décadas.

Una iniciativa visionaria: Reclutar a científicos del Sur tiene sentido

A través de los años, decenas de miles de científicos de países en desarrollo han aportado sus capacidades a instituciones internacionales de investigación agropecuaria, regresando posteriormente a sus sistemas nacionales con mayores capacidades. Este proceso de doble vía de mejoramiento de capacidades es la piedra angular del programa de Asociados Globales del ISNAR, iniciado hace tres años para dar respuesta a la creciente demanda por los servicios del ISNAR. La red de Asociados Globales, que se expandió en el 2001 para llegar a un total de 17, continúa siendo un magnífico ejemplo de pensamiento innovador.

Conocedores de los retos a que se enfrentan los países en desarrollo, y compartiendo con frecuencia cultura e idioma, los Asociados están capacitados para satisfacer las necesidades de las instituciones nacionales de investigación agropecuaria. A través del programa adquieren una experiencia más amplia que, a su vez, fortalece sus propias organizaciones. Asimismo, el programa le permite al ISNAR responder a un número mayor de solicitudes de servicios. La red de Asociados Globales es un excelente ejemplo de colaboración Sur-Sur facilitada por una organización internacional. Dicha iniciativa ahora forma parte de un esfuerzo más amplio por parte del ISNAR para fortalecer su capacidad de buscar enfoques nuevos y más empresariales para apoyar la investigación agropecuaria y la innovación.

Un enfoque sobre la propiedad intelectual

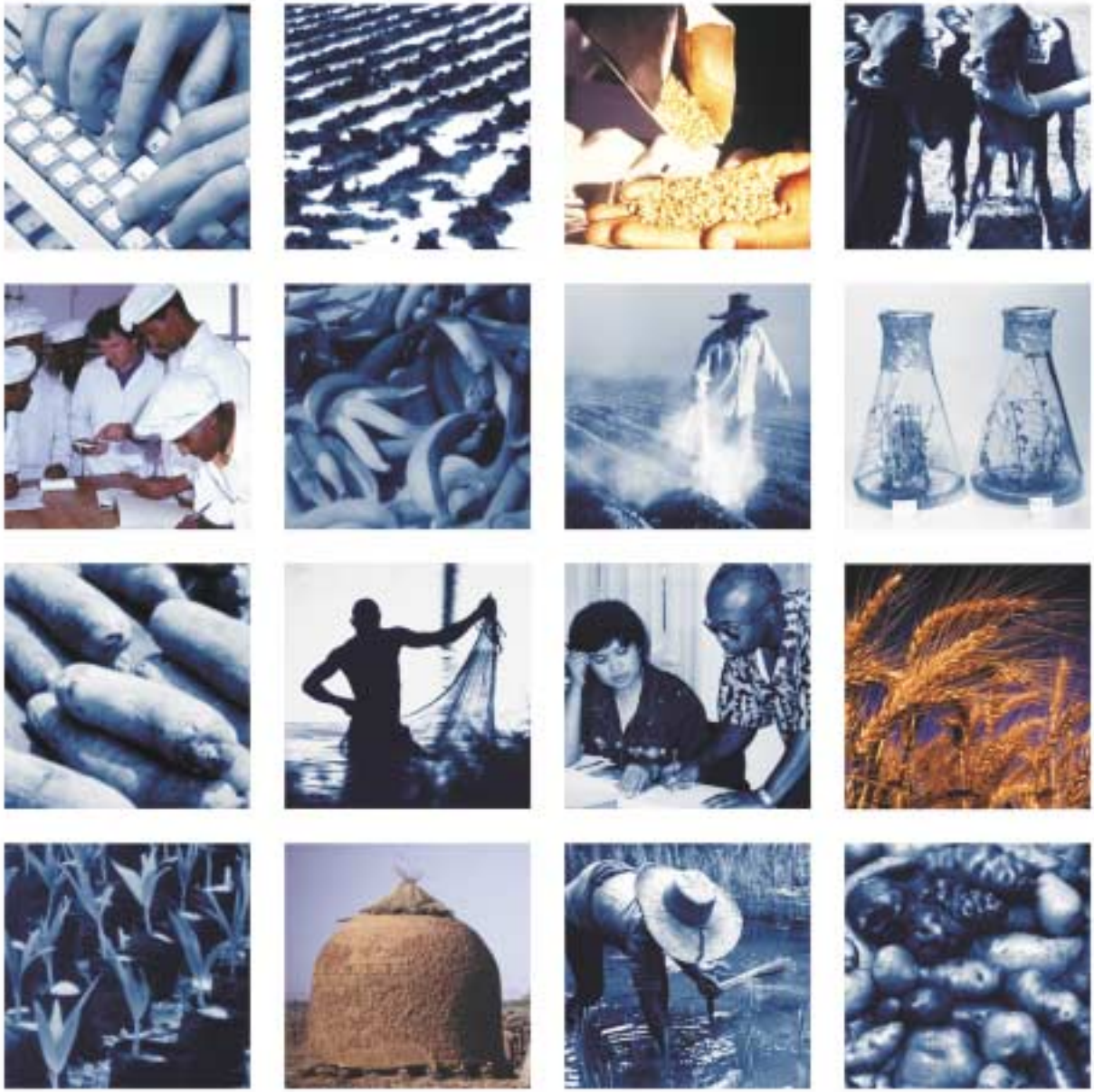
Los incomode o no, los Centros del CGIAI están en la mira debido al tema de propiedad intelectual. Durante el 2001, el Servicio Central de Asesoría en Propiedad Intelectual (CAS), que atinadamente está ubicado en las

instalaciones del ISNAR, continuó brindando asesoría al CGIAR, ayudando a asegurar que se enfoque en el manejo efectivo y ético de una amplia gama de aspectos del tema de la propiedad intelectual.

Es comprensible que muchos científicos estén preocupados por los derechos de propiedad intelectual (DPI). Muchos muestran cierta inocencia con respecto al grado en que su trabajo está sujeto a propiedad intelectual que pertenece a otras personas, o hace uso de la misma. Es posible que los científicos estén bien informados acerca de temas como los derechos de obtentores de nuevas variedades vegetales y acuerdos sobre la transferencia de material, pero puede ser que estén menos conscientes de las reglas sobre derechos reservados que se aplican a información que deseen usar en su trabajo. Por ejemplo, resulta difícil determinar si la información es realmente gratis, o simplemente accesible; y gracias al Internet es aún más difícil hacer esta distinción.

Entre las tareas principales del CAS siguen figurando la concientización de los investigadores en relación con temas de la propiedad intelectual que deben ser abordados, y la asistencia a centros que deseen desarrollar la capacidad para establecer una gestión adecuada. Los Centros del CG buscan brindar el mayor acceso posible a sus conocimientos. El CAS les permite hacerlo mientras que se protege la propiedad intelectual que es requerida por la legislación y las consideraciones éticas.

总结



成功的转变

通过变革来发挥影响，无论在哪一层次上，都是一个难以实现的目标，而对于一个肩负整个大洲重任的机构来说，挑战尤其艰巨。当非洲农业研究特别项目（SPAAR，该项目以世界银行为基础）和非洲农业研究论坛（FARA）的成员决定建立新的非洲农业研究论坛以协助各国家农业研究系统应付它们面临的挑战时，国家农业研究国际服务中心（ISNAR）被邀请在这一转变中担当经理人。的确，国家农业研究国际服务中心在管理农业研究机构变革方面的长期经验，以及它众所周知的中立性和效率，都将是极其宝贵的。2001 年将作为一个特殊的年份载入非洲农业研究史册。这一年，新的非洲农业研究论坛正式诞生，成为一个以非洲为基地，由非洲人领导，由非洲人管理的组织。

2001 年，非洲农业研究论坛还任命了它的第一任执行秘书，蒙蒂·琼斯博士（Dr. Monty Jones）。作为一名受人尊敬的著名科学家，琼斯博士在就任新职务以前，曾任职于西非水稻发展协会（WARDA）。国家农业研究国际服务中心非常高兴管理了招聘工作并找到了如此恰当的人选。新的非洲农业研究论坛的一项重要任务，将是向全世界表达非洲的观点。非洲需要一个强有力的代言人。国家农业研究国际服务中心对于自己在创造非洲农业研究新未来的过程中发挥的作用深感自豪。

响应改革：对古巴机构改革的评估

一切事物的发生，都离不开人。因此，培养人们创造佳绩的能力，被普遍认为是对机构资源的一种明智使用。但是，对于任何推动变革的主动行动，也应该对该行动的效率如何进行考查。1990 年代，面对异常的挑战，古巴认识到必须立即对本国的农业研究机构进行改革，并对改革的进程和成果进行评估。国家农业研究国际服务中心通过它的“新样板”项目（由瑞士和荷兰政府资助），参与了这项根本性变革的准备工作。

2001 年期间完成了对生猪研究所（IIP）内部能力建设工作的评估，该研究所是组成古巴全国农

业科学和技术创新系统的 17 所研究机构之一。该研究所为了能够开展对农业食物链的分析，特别需要提高机构的能力。这一目标主要是通过在实践中学习的过程来实现的，期间国家农业研究国际服务中心提供了培训材料，同时还提供了技术指导。评估结果清楚地显示，该研究所不仅大大增进了对本国猪肉工业的需要的了解，而且也大大加强了对此需要做出调整的能力。目前正在将取得的经验向整个地区推广。

规划终身教育

学习，享乐其中，接着再很快忘掉大部分刚刚学到的知识，这是许多成年人学习时的遭遇或不幸。人们通常以为任何专家都可以教授自己的专业，这样的想法也会进一步妨碍学习。成人教育要求培训者既有经验，又懂技巧，还要对教育学有透彻的了解；同时，培训本身必须具备非常周密的计划和良好的组织结构，只有这样，培训课程的效益才能长久。2001 年期间，国家农业研究国际服务中心陆续开发了一系列培训方案和培训辅助材料，它们正在使全世界各地的农业研究机构受益。研究管理人员在培训中学会了创造性思维，他们将创新精神带回各自的机构，从而帮助这些机构更好地满足其客户的需要。这些客户中许多是贫穷的农民。教育确实可以帮助人们摆脱贫困。

2001 年中值得特别一提的是农业研究促进发展国际中心（ICRA）与国家农业研究国际服务中心的联合项目："如何成功撰写 INCO-Dev（与发展中国家国际合作项目）课题申请书"。由于欧盟（EU）的 INCO-Dev 项目仅为发达国家与发展中国家组成的合作体提供资金，许多发展中国家的研究机构在申请资助时常常遇到困难。在欧盟资助下，该联合项目针对这种情况提出对策。在联合项目及其帮助台服务的直接推动下，INCO-Dev 项目已批准两项资金申请，价值数百万美元。

国家农业研究国际服务中心希望，随着"为制度创新而学习"这种培训理念被广泛接受，它将有助于在农业研究机构内部孕育一种能够为所有人带来长期效益的教育文化。

支持和加强生物安全系统

面对多种现代农业生物技术，各国可以做出许许多多不同的选择。尽管做起来不如说说那么容易，但是随着使用转基因生物的机会越来越多，做出选择的迫切性也越来越大。无可避免地，在考虑使用转基因生物时，必须同时讨论有关的安全、效益和费用问题。因此，必须深入了解现代农业生物技术对环境和生物多样性以及对农业发展、贸易、生物多样性的保护、经济繁荣和公众舆论可能产生的影响。国家农业研究国际服务中心与弗吉尼亚理工学院合作，在日本、荷兰、瑞士和英国政府的资助下，继续提高它在生物安全方面的专门技能，并将其提供给与国家农业研究国际服务中心生物技术服务项目合作的发展中国家的机构。

生物安全是指以环境安全的方式应用现代生物技术。生物安全审查和决策的质量，以及转基因生物在环境中的安全和适当把握，都与有关人员的培训和经验直接相关。2001 年期间，国家农业研究国际服务中心建立了一个在《卡塔赫纳议定书》规范下的生物安全能力建设框架。它还与全球生物多样性研究所协作，为撒哈拉以南非洲国家设计和主办了培训课程。

作为国际农业研究磋商小组（CG）系统内在生物安全领域采取长期策略并以其报告的客观性和全面性著称的服务中心，国家农业研究国际服务中心正在为全球生物安全系统的发展做出重要贡献，这一作用今后还将进一步扩大。

爱滋病与农业研究与发展：组建网络，采取行动

“我们都深受其害。”“爱滋病不仅仅是一个健康问题。”在整个非洲大陆，这已成为人们在演说和布道中一再听到的有关爱滋病泛滥的两句祷文，而现在在亚洲和拉丁美洲人们也越来越多地听到了这样的话。但是，以实际行动响应这些呼吁的能力，尤其是在制度水平上，却大大滞后。国家农业研究国际服务中心认为，农业部门应发挥关键作用：因此它正在努力证明，在农业研究和发展政策中引进新的思维可以帮助预防爱滋病毒感染并减轻爱滋病的影响。在来自挪威和加拿大（加拿大国际发展局和国际发展研究中心）赠款的资助下，国家农业研究国际服务中心正在与国

际粮食政策研究所（IFPRI）和联合国粮农组织（FAO）一起，组建强大而热心的网络，将公共和私营组织、非政府组织及农民的组织联系起来，首先在马拉维和乌干达这两个非洲国家开始。它们正在全面致力于采取行动，以便最终降低爱滋病毒的感染率。

对于大多数研究人员和发展工作者而言，农业与爱滋病毒/爱滋病之间的联系并不是显而易见的。国家农业研究国际服务中心及其合作者面对的挑战是使人们更好地了解在农村生计和粮食安全与爱滋病毒感染、爱滋病相关疾病及死亡之间存在的联系，从而使采取的行动更加谨慎，更有针对性，使其效果在几年而不是几十年内即可显现。

富有远见的主动行动：从发展中国家录用科学家大有意义

多年来，数以万计的发展中国家科学家带着自身的技能投身于国际农业研究，然后又将这些经过强化的技能带回各自的国家系统。正是在这种双向技能强化过程的基础上，国家农业研究国际服务中心创立了它的全球协作者项目，这一项目是在三年前为了响应对国家农业研究国际服务中心的服务日益增加的需求而发起的。2001 年，全球协作者项目的参加者已扩展至 17 人，这样的网络是创造性思维的又一良好范例。

协作者项目的参加者对发展中国家面对的挑战极为了解，他们相互之间在语言和文化上往往更加接近，因此能够对国家农业研究机构的各种需要做出恰如其分的反应。通过该项目，他们获得了广泛的经验，并以此加强各自的组织。该项目还使国家农业研究国际服务中心得以满足对其服务日益增加的需求。全球协作者网络是由一个国际组织推动开展南南合作的一个优秀范例。这项工作现已成为国家农业研究国际服务中心为提高自身能力、以新的和更有企业精神的方式支持农业研究与创新的更大努力的组成部分。

聚焦知识产权

国际农业研究磋商小组（CGIAR）的各中心，不管自身愿意与否，正置身于知识产权问题的焦点。在整个 2001 年期间，设在国家农业研究国际服务中心内的知识产权中央咨询服务中心（CAS）继续向国际农业研究磋商小组提供了它的专家咨询服务，以帮助确保在一系列知识产权问题的有效和道德管理方面取得清醒的认识。

可以理解，许多科学家在知识产权问题上感到不安。许多人在相当程度上不清楚他们自己的工作在多大程度上触及或使用了他人的知识产权。科学家们可能对诸如作物培育者的权利以及材料转让协议之类的问题相当了解，但是对于涉及他们在工作中希望使用的资料的一些版权规定却可能不甚明了。例如，这样的资料究竟真的是免费提供的呢，还是仅仅让人可以接触得到，这可能很难区分，而且互联网的存在使得这种区分变得更加困难。

知识产权中央咨询服务中心的首要任务继续包括提高研究人员在需要注意的知识产权问题方面的意识，以及协助各中心发展能力组建适当的管理。国际农业研究磋商小组下属各中心力求最大限度地向外界提供它们的知识。知识产权中央咨询服务中心则使它们能够在公开提供知识的同时，按照法律及伦理道德的要求保护好知识产权。

Резюме

Триумф трансформации

Произвести существенные изменения непросто на любом уровне, но это особенно трудно для организации, на которую возложена ответственность в масштабах континента. Когда участники программ СПАРР (программа Всемирного банка по проведению сельскохозяйственных исследований в Африке) и ФАРА (Форум по сельскохозяйственным научным исследованиям в Африке) решили, что обновленная программа ФАРА, взяв на себя проблемы, которые в настоящее время стоят перед национальными сельскохозяйственными научно-исследовательскими системами, должна постепенно организовать помощь им, ИСНАР был приглашен для выполнения роли менеджера переходного периода. Оказались бесценными длительный опыт ИСНАРа по управлению институциональными изменениями и его установившаяся репутация нейтральной и эффективной организации. 2001 год войдет в анналы Африканской сельскохозяйственной науки, как год начала существования нового форума по сельскохозяйственным научным исследованиям в Африке (ФАРА) в качестве организации, которая и находится в Африке, и возглавляется и управляется африканцами.

В 2001 году также произошло назначение д-ра Монти Джоунза на должность первого исполнительного секретаря ФАРА. Д-р Джоунз - многоуважаемый и хорошо известный ученый, который до принятия новой должности работал в Ассоциации селекции риса Западной Африки. ИСНАРу выпала честь руководить процессом отбора соискателя на новую должность, что и привело к назначению на нее достойного кандидата. Не последней из задач ФАРА станет представление всему миру перспектив Африки в области сельскохозяйственных исследований. Африке нужен влиятельный защитник ее интересов. ИСНАР гордится ролью, которую он сыграл в формировании нового будущего сельскохозяйственной науки Африки.

Результаты реформы и оценка институциональных изменений на Кубе

Человеческие ресурсы играют наиважнейшую роль в том, что происходит. Вот почему развитие возможностей людей добиваться лучших результатов широко признается как целесообразное использование институциональных ресурсов. Но, выдвигая любую инициативу для изменений, нужно выяснить, насколько эта инициатива эффективна. Столкнувшись с невероятными трудностями в течение девяностых годов, Куба поняла, что нужно немедленно изменить структуру своих сельскохозяйственных научно-исследовательских учреждений и, соответственно, провести оценку процесса, который привел к изменениям, и его результатов. ИСНАР был привлечен к работе по подготовке этой радикальной реформы как участник проекта под названием “Новая парадигма” (финансирование правительств Швейцарии и Нидерландов).

В 2001 году завершилась оценка процесса развития потенциала научно-исследовательского института свиноводства (ИПП), одного из 17 институтов в составе национальной системы научно-технологических инноваций в сельском хозяйстве. Для ИПП было очень важно построить институциональный потенциал, чтобы проанализировать сельскохозяйственно-пищевую цепь. Это было достигнуто в основном при помощи процесса "обучение посредством практики" с использованием учебных материалов ИСНАРа. ИСНАР также обеспечил техническое руководство. Итог оценочного процесса ясно показывает, что институт теперь значительно лучше понимает потребности производства свинины в стране и может направить свою деятельность на их удовлетворение. Полученный опыт был применен во всем регионе.

Планирование обучения взрослых слушателей

Учиться, пользоваться плодами обучения и затем быстро забыть большую часть из того, что было выучено - судьба многих взрослых студентов, или упущенная ими возможность. Процессу обучения также мешает всеобщая уверенность в том, что любой специалист может обучать своему предмету. Обучение взрослых требует преподавателей, которые имеют опыт, навыки и широкое понимание образовательной науки. Если мы хотим, чтобы то, что было усвоено во время занятий, запомнилось надолго, обучение должно быть очень тщательно спланировано и высоко структурировано. В течение 2001 года ИСНАР продолжал разработку целого ряда учебных программ и материалов для обучения по ним. В настоящее время это приносит пользу сельскохозяйственным научно-исследовательским организациям во всем мире. Люди, стоящие во главе науки, которые были подготовлены для того, чтобы быть созидательными в своем мышлении, приносят инновации в свои институты и помогают им лучше реагировать на потребности клиентов, многие из которых являются бедными фермерами. Образование может действительно помочь людям выбраться из бедности.

Особый интерес представляет совместный проект ИКРА-ИСНАР (ИКРА - Международный сельскохозяйственный научный центр с ориентацией на развитие) под названием "Как написать предложение, которое выиграло бы конкурс программы ИНКО-ДЕВ" (Программа международного сотрудничества с развивающимися странами). Этот проект, финансируемый Европейским Союзом, появился потому, что организации многих развивающихся стран испытывают трудности при попытке получить финансирование по программе ЕС ИНКО-ДЕВ. Эта программа финансирует только те консорциумы, которые существуют на базе партнерства развитых и развивающихся стран. В результате действия этого проекта и благодаря обеспеченной им помощи ИНКО-ДЕВ уже утвердил два заявления на финансирование на сумму в несколько миллионов долларов.

ИСНАР надеется, что более широкое внедрение его философии обучения - обучения для институциональных инноваций - поможет улучшить культуру образования в сельскохозяйственных научно-исследовательских организациях, что в будущем принесет выгоду всем.

Поддержка и улучшение систем биологической безопасности

Имеется целый ряд современных сельскохозяйственных биотехнологий, среди которых страны должны сделать свой выбор. Это и так легче сказать, чем сделать, но этот выбор становится еще труднее, потому что увеличивается возможность использования генетически преобразованных организмов. Решение об их использовании идет рука об руку с обсуждением проблем безопасности, преимуществ их использования и затрат. Таким образом, необходимо иметь полное представление о возможных воздействиях современной сельскохозяйственной биотехнологии не только на среду и биологическое разнообразие, но и на развитие сельского хозяйства, торговлю, защиту биологического разнообразия, экономическое процветание и общественный резонанс. Работая совместно с Политехническим институтом штата Вирджиния при финансовой поддержке правительств Японии, Нидерландов, Швейцарии и Великобритании, ИСНАР продолжает укреплять свой опыт в области биологической безопасности и распространяет его на организации развивающихся стран как часть работы биотехнологической службы ИСНАРа.

Биологическая безопасность - это безопасное с точки зрения окружающей среды применение современной биотехнологии. Качественный обзор биологической безопасности и процесса принятия решений, безопасное и соответствующее обращение с генетически модифицированными организмами в окружающей среде напрямую связано с обучением и опытом людей, занимающихся этим делом. В 2001 году ИСНАР разработал концепцию наращивания потенциала биологической безопасности согласно Карфагенскому протоколу. В сотрудничестве с Глобальным институтом биоразнообразия была разработана программа и проведены подготовительные курсы по биологической безопасности для стран региона Африки южнее Сахары.

Являясь одним из центров Консультативной группы по международному развитию в области сельского хозяйства и обладая репутацией организации, представляющей объективную и сбалансированную отчетность, ИСНАР вносит значительный вклад в развитие системы биологической безопасности во всем мире и надеется расширить эту роль в будущем.

СПИД и НИОКР в сельском хозяйстве: развитие сети для действий

“Это касается всех”, “СПИД - это больше, чем проблема здоровья” - это некоторые из заклинаний эпидемиологов СПИДа, повторяемых в речах и проповедях по всей Африке, а теперь также все более и более в Азии и Латинской Америке. Но возможность реагировать на эти призывы, особенно на международном уровне, сильно отстает. ИСНАР считает, что сельскохозяйственный сектор играет ключевую роль, а, следовательно, демонстрация новейшего мышления в сельскохозяйственных научных исследованиях и политике развития может помочь предотвратить ВИЧ инфекцию и уменьшить последствия СПИДа. При поддержке норвежских и канадских грантов (гранты СИДА - Канадское агентство по международному развитию и ИДРС - Международный институт развития науки Канады) вместе с ИФПРИ (Международный научно-исследовательский центр по пищевой политике) и ФАО (организация по сельскому хозяйству и продуктам питания при ООН) ИСНАР строит сильные энергичные сети, которые связывают общественные, частные, неправительственные организации и фермерские ассоциации - для начала в двух африканский странах, Малави и Уганде. В настоящее время они полностью посвящают свою деятельность принятию мер, которые приведут к уменьшению количества ВИЧ инфицированных.

Связь между сельским хозяйством и ВИЧ/СПИДом не является очевидной для большинства ученых и тех, кто работает для развития науки. Задача, стоящая перед ИСНАРом и его партнерами, - улучшить понимание связей между сельским образом жизни и пищевой безопасностью и ВИЧ инфекцией и болезнями, связанными со СПИДом и смертью. Необходимо, чтобы эти действия были бы более осознанными и целенаправленными, чтобы эффект от них люди ощутили как можно раньше.

Перспективы набора ученых с юга

Многие годы десятки тысяч ученых из развивающихся стран, которые принесли свой опыт в международную сельскохозяйственную науку, повысив квалификацию, возвращались в свои национальные системы. Двусторонний процесс обмена опытом является краеугольным камнем, на котором ИСНАР основал свою программу глобального партнерства, запущенную 3 года назад в ответ на увеличивающейся спрос на его услуги. Сеть глобального партнерства, которая расширилась до 17 стран в 2001 году, продолжает быть великолепным образцом инновационного мышления.

Хорошо ориентированные на проблемы, стоящие перед развивающимися странами, партнеры, которые часто ближе к ним по языку и культуре, способны с пониманием относиться к нуждам национальных научно-исследовательских институтов сельского хозяйства. Через программу партнерства они приобретают

опыт, который в свою очередь укрепляет их собственные организации. Программа также дает возможность ИСНАРу удовлетворить большее количество запросов на свои услуги. Сеть глобального партнерства служит прекрасным образцом сотрудничества при содействии международной организации. Эта работа теперь является частью большой программы ИСНАРа по применению новых и более творческих подходов к поддержке сельскохозяйственной науки и инноваций.

Проблемы авторских прав в центре внимания

Центры Консультативной группы по международным сельскохозяйственным исследованиям, неважно, чувствуют ли они себя комфортабельно по поводу прав на интеллектуальную собственность или нет, в связи с этим находятся в центре внимания. В течение 2001 года Центральная консультативная служба по авторским правам (КАС), которая работает в здании ИСНАРа, продолжала обеспечивать Консультативную группу советами своих специалистов, помогая проливать свет на эффективное и этическое управление целым рядом вопросов, связанных с интеллектуальной собственностью.

Многие ученые совершенно оправданно беспокоятся по поводу прав на интеллектуальную собственность. Многие показывают определенную степень неосведомленности по поводу того, как широко в их работах используется интеллектуальная собственность других людей и как часто их интеллектуальная собственность используется другими. Ученые могут быть хорошо информированы по поводу таких вопросов, как права селекционеров и договоры о передаче материала, но они могут быть менее информированы об авторских правах на информацию, которой они желают воспользоваться в ходе своей работы. Например, может оказаться не совсем понятным, является ли такая информация абсолютно бесплатной или просто доступной, а Интернет сделал такое различие еще более трудным.

Перед КАС стоят следующие задачи - доведение до сознания исследователей вопросов об интеллектуальной собственности, которые необходимо рассмотреть, и помощь центрам в развитии потенциала для обеспечения соответствующего руководства. Центры Консультативной группы стараются обеспечить максимально возможный доступ к своим знаниям. КАС дает им возможность это делать, одновременно защищая интеллектуальную собственность, руководствуясь требованиями законодательства и соображениями этики.

تحت إشراف منظمة دولية ويمثل جزءا من جهود أوسع نطاقا يقوم بها المركز لتعزيز قدراته في مجال تطوير مبادرات جديدة لدعم البحوث الزراعية وتجديد مؤسساتها.

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تسليط الضوء على الملكية الفكرية

إن مراكز المجموعة الاستشارية للبحوث الزراعية، سواء رغبت بذلك أم لم ترغب، هي في مركز الضوء فيما يتعلق بقضايا الملكية الفكرية. فخلال عام 2001، واصلت الدائرة الاستشارية المركزية المعنية بالملكية الفكرية والتي يوجد مقرها في المركز تقديم المشورة لمراكز المجموعات الاستشارية من أجل ضمان إدارة فعالة وأخلاقية لمجموعة واسعة من القضايا المتصلة بالملكية الفكرية.

يشعر العديد من العلماء بالقلق إزاء حقوق الملكية الفكرية وكثير منهم لا يرى مدى تأثر أعمالهم بالملكية الفكرية لبعض الجهات أو استعمالهم لها. وقد يكون العلماء أكثر إلماما بحقوق مربي النباتات أو باتفاقات نقل المواد الوراثية، غير أنهم أقل إلماما بحقوق الملكية التي تحمي المعلومات التي يرغبون في استعمالها في أعمالهم. فيصعب على سبيل المثال التمييز بين المعلومات المتاحة بدون مقابل أو المعلومات المقيدة الاستعمال، وجاءت الشبكة العالمية (الإنترنيت) لتعقد عملية التمييز هذه.

تتمثل مهمة الدائرة الاستشارية المركزية في مواصلة تعزيز إلمام الباحثين بالمسائل المتصلة بالملكية الفكرية وفي مساعدة مراكز المجموعة الاستشارية المركزية على زيادة قدراتها في مجال إدارتها. فمراكز المجموعة الاستشارية المركزية تسعى إلى تمكين أكبر عدد ممكن من الحصول على المعلومات التي بحوزتها ودور الدائرة الاستشارية المركزية هو تمكينهم من ذلك وبنفس الوقت حماية الملكية الفكرية وفقا للتشريعات والاعتبارات الأخلاقية.

وأمريكا اللاتينية. غير أن الوسائل والإمكانات المخصصة لمواجهة الوباء والاستجابة للنداءات لا تزال قليلة ولا سيما على صعيد المؤسسات. ويسود الاعتقاد في المركز بأن القطاع الزراعي يمكن أن يكون له دور رئيسي في ذلك، حيث يسعى المركز إلى إثبات أن إعمال فكر جديد في مجالي البحوث الزراعية ورسم السياسات سيحول دون انتشار العدوى بفيروس نقص المناعة ويخفف من الآثار السلبية للمرض. ويقوم المركز، بدعم مالي من النرويج وكندا وبالتعاون مع المعهد الدولي للبحوث في مجال السياسات الغذائية IFPRI ومنظمة الأغذية والزراعة FAO، بإرساء شبكات قوية وطموحة تربط بين المنظمات الخاصة والعامة والمنظمات غير الحكومية ومنظمات المزارعين للعمل، في مرحلة أولى، في بلدين إفريقيين هما ملاوي وأوغندا. وهذه الشبكات ستعمل على وضع الإجراءات التي تؤدي في نهاية المطاف إلى تخفيض نسب العدوى بفيروس نقص المناعة.

إن العلاقة بين الزراعة وفيروس/مرض الإيدز غير واضحة بالنسبة لأغلبية الباحثين والعاملين في مجال التنمية. والتحدي الذي يواجهه المركز وشركاؤه هو تعزيز الفهم بالعلاقة القائمة بين الحياة في الريف والأمن الغذائي من جهة، والعدوى بفيروس الإيدز والأمراض والوفيات المرتبطة بمرض الإيدز من جهة أخرى، لتكون التدابير المقترحة مبنية على المعرفة الكاملة لهذه العلاقة وأدق استهدافا للفئات المعنية، وبالتالي تحقيق نتائج ملموسة خلال بضع سنوات وليس في غضون عقود من الزمن.

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مبادرة لرؤية بعيدة المدى: استقطاب علماء من الجنوب عمل منطقي

مع مرور السنين عاد عشرات الآلاف من الباحثين من الدول النامية الذين عملوا في مراكز البحوث الزراعية الدولية إلى بلدانهم الأصلية ومؤسساتهم الوطنية حاملين معهم خبرات أوسع وتجارب أعمق. وتمثل هذه الطريقة في تعزيز القدرات في كلا الاتجاهين حجر الزاوية الذي يستند إليه المركز في إطار برنامج "الخبراء المشاركين الدوليين" الذي انطلق منذ ثلاث سنوات استجابة للطلب المتزايد للحصول على خدمات المركز. وتمثل شبكة الخبراء المشاركين الدوليين التي بلغ عدد أعضائها 17 في العام 2001 مثالا للتفكير المتجدد.
إن الخبراء المشاركين في البرنامج بحكم تفهمهم للتحديات التي تواجه الدول النامية، وارتباطهم العضوي بثقافاتها ولغاتها، قادرون على الاستجابة لاحتياجات مؤسسات البحوث الزراعية الوطنية بصورة إيجابية. ويكتسب هؤلاء الخبراء من خلال البرنامج تجارب أوسع نطاقا تعزز بدورها فرص وضع مبادرات جديدة لتطوير المؤسسات التي ينتمون إليها. كما ويتيح البرنامج للمركز إمكانية الاستجابة لعدد أكبر من طلبات الحصول على خدماته. ويشكل برنامج الخبراء المشاركين الدوليين مثالا باهرا للتعاون فيما بين دول الجنوب

ويأمل المركز في أن يتيح الانتشار الواسع لفلسفته في مجال التدريب (التعلم من أجل تجديد المؤسسات) إرساء ثقافة التعلم داخل مؤسسات البحوث الزراعية من شأنها أن تعود بالنفع على هذه المؤسسات على المدى الطويل.

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دعم نظم السلامة البيولوجية وتعزيزها

تملك جميع البلدان خيارات عديدة في مجال التكنولوجيا الحيوية الحديثة في مجال الزراعة. ولئن كان القول أهون من الفعل، يتعين على تلك البلدان وعلى وجه السرعة انتقاء خياراتها نظرا للتزايد السريع الوتيرة في استخدام الكائنات المعدلة جينيا. فلا مناص، عند استخدام هذه الكائنات، من مناقشة قضايا السلامة والأرباح والخسائر لهذا الاستخدام. وعليه، يتعين فهم الانعكاسات الممكنة للتكنولوجيا الحيوية الحديثة ليس فقط على البيئة والتنوع البيولوجي بل أيضا على التنمية الزراعية والتجارة وحماية التنوع الحيوي والنمو الاقتصادي وموقف الناس. ويواصل المركز، بالتعاون مع معهد فرجينيا المتعدد التخصصات وبتمويل من حكومات كل من سويسرا وهولندا واليابان والمملكة المتحدة، تعزيز خبراته في مجال السلامة البيولوجية وإتاحتها لمؤسسات الدول النامية في إطار خدمات التكنولوجيا الحيوية التي يقدمها المركز.

إن السلامة البيولوجية هي الاستخدام الآمن بيئيا للتكنولوجيا الحيوية الحديثة. وترتبط القدرة في الإشراف على السلامة البيولوجية واتخاذ القرارات بشأنها وكذلك المناولة السليمة والمناسبة للكائنات المعدلة جينيا ارتباطا مباشرا بمستوى تدريب الأشخاص العاملين وخبراتهم. وفي هذا المجال، وضع المركز في عام 2001 إطار عمل لبناء القدرات في مجال السلامة البيئية بموجب بروتوكول قرطاجة. كما أشرف المركز على تصميم وعقد دورات تدريبية في مجال السلامة البيئية لفائدة دول أفريقيا جنوب الصحراء بالتعاون مع المعهد العالمي للتنوع الحيوي.

إن المركز، بخبرته الطويلة في التعامل مع المسائل المتصلة بالسلامة البيولوجية بموضوعية وحياد، يساهم مساهمة كبيرة في تنمية نظم السلامة البيولوجية على الصعيد العالمي وينوي تطوير دوره في هذا المجال في المستقبل.

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الإيدز والبحوث الزراعية والتطوير: نحو إرساء شبكة للعمل

"نحن جميعا متأثرين بذلك" و"الإيدز أكثر من مجرد مشكلة تمس الصحة" هي من العبارات المتصلة بوباء الإيدز والمتداولة في الخطابات والبيانات على صعيد القارة الأفريقية وكذلك بشكل متزايد على صعيد آسيا

الزراعي. وقد اكتسبت عملية تنمية القدرات هذه أهمية كبيرة بالنسبة للمعهد للأولوية التي أعطاها لإجراء تحاليل للسلاسل الغذائية. وقد تم تحقيق ذلك من خلال التعلم والتدريب الميداني باستعمال ما قدمه المركز من وسائل تدريبية وإرشاد وتوجيه. وتبين نتائج التقييم بجلاء أن المعهد اكتسب الآن قدرة أكبر في تفهم القضايا المرتبطة بتربية الخنازير وفي الاستجابة لمتطلباتها البحثية. ويجري الآن تطبيق الدروس المستخلصة على المنطقة برمتها.

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التخطيط للتعلم مدى الحياة

من قدر وسوء حظ العديد من الكبار المتعلمين أن ينسوا ما تعلموه وما كسبوه أثناء مرحلة التعلم من خبرات وتجارب. ومما يعيق عملية التعلم أيضا أن هناك من يعتقد خطأ أن أي اختصاصي يمكنه أن يدرس موضوع اختصاصه، إذ أن تعليم الكبار يتطلب مدربين من ذوي الخبرة والمؤهلات والفهم الضليع لعلوم التربية وإلى وضع خطة محكمة ومدروسة للتدريب إذا ما أريد للفوائد الناتجة عن الدروس أن يكتب لها البقاء.

لقد واصل المركز خلال العام 2001 وضع سلسلة من برامج التدريب واستحداث مواد تعليمية إيضاحية تستفيد منها حاليا وبنجاح مؤسسات البحوث الزراعية في العالم أجمع. فمديرو البحوث الذين تلقوا تدريبا كافيا ليكونوا كمبدعين في تفكيرهم يساعدون دون شك على إدخال تجديدات في المؤسسات التي ينتمون إليها وعلى الاستجابة على نحو أفضل إلى احتياجات زبائنهم الذين هم في الغالبية من فقراء المزارعين. إن التعلم يمكن أن يكون وسيلة فعالة للخروج من دائرة الفقر.

و من بين المشروعات التي استحوذت على الاهتمام خلال العام 2001 المشروع المشترك بين المركز والمركز الدولي للبحوث الزراعية ICRA تحت عنوان "كيفية صياغة اقتراح ناجح في إطار برنامج التعاون الدولي مع الدول النامية". وجاء هذا المشروع الذي موله الاتحاد الأوروبي استجابة للمصاعب التي واجهها العديد من مؤسسات الدول النامية عند سعيها للحصول على موارد مالية في إطار برامج التنمية التي يمولها الاتحاد الأوروبي والتي تقتصر على تمويل المشاريع التي يشارك فيها مؤسسات من البلدان المتقدمة والدول النامية. وكنتيجة مباشرة لهذا المشروع وما تضمنه من مساعدات عملية وافق برنامج التعاون الأوروبي في مجال برنامج التعاون الدولي مع الدول النامية على طلبين للتمويل قيمتهما عدة ملايين من الدولارات.

انتصار للتغيير

ليس من اليسير تغيير الأمور على أي مستوى كان بهدف خلق واقع جديد، وعندما يتعلق الأمر بمؤسسة لها مسؤوليات على مستوى قارة بأكملها، فإن التحدي يكون كبيرا للغاية. فعندما قرر أعضاء كل من البرنامج الخاص للبنك الدولي المعني بالبحوث الزراعية في أفريقيا (SPAAR) ومنتدى البحوث الزراعية في أفريقيا (FARA) وضع صيغة جديدة لمنتدى البحوث الزراعية في أفريقيا لمساعدة نظم البحوث الزراعية الوطنية في مواجهة التحديات، كُلف المركز الدولي لخدمات البحوث الزراعية (المشار إليه فيما يلي باسم "المركز") بالإشراف على المرحلة الانتقالية استنادا لخبرته الطويلة في مجال إدارة تغيير مؤسسات البحوث الزراعية وما يتمتع به من كفاءة وحياد. ويعتبر العام 2001 سنة خاصة في سجل البحوث الزراعية في أفريقيا حيث إنه شهد تأسيس المنتدى الجديد كمنظمة إفريقية بحتة من حيث التشكيل والقيادة والإدارة.

وسجل العام 2001 كذلك تعيين الدكتور مونتي دجونز كأول أمين تنفيذي للمنتدى، وهو عالم مشهود له بالكفاءة العلمية ويحظى بتقدير الجميع وكان يعمل في المركز الإقليمي لغرب أفريقيا لتنمية زراعة الأرز إلى حين تقلد مهامه الجديدة. ويعتبر المركز أن تعيين السيد جونز هو إجراء موفق تماما ذلك أن المهام الرئيسة للمنتدى الجديد تقديم منظور أفريقي جديد، وأفريقيا بحاجة إلى صوت قوي يمثلها. ويفتخر المركز بمساهمته في صياغة مستقبل جديد للبحوث الزراعية في أفريقيا.

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الاستجابة للإصلاح: تقييم التغير المؤسستي في كوبا

إن البشر هم عامل التغيير الأهم. ومن المسلم به أن تنمية الموارد البشرية، بهدف تحقيق نتائج أفضل هي من الوسائل المعترف بها في الاستخدام الرشيد لموارد أي مؤسسة. غير أنه من الحكمة أيضا بالنسبة لأي مبادرة للتغيير الوقوف على مدى نجاعته.
واجهت كوبا تحديات استثنائية خلال التسعينات أقرت نتيجتها بالحاجة الملحة إلى التغيير في مؤسسات البحوث الزراعية لديها وإلى تقييم عملية التغيير ونتائجها. وقد ساهم المركز من خلال مشروعه "المعالم الجديدة" (الذي تموله الحكومتان السويسرية والهولندية) في الإعداد لهذا الإصلاح الجذري.
وضمن هذا الإطار، تم في العام 2001 الانتهاء من تقييم النشاطات المتعلقة بتطوير القدرات البحثية في معهد بحوث الخنازير وهو واحد من 17 معهدا تشكل الشبكة الوطنية الكوبية للعلوم وتطوير التكنولوجيا في المجال

الملخـــص