

Chairman's Opening Statement
International Centers Week 1997

WELCOME

Good morning, Ladies and Gentlemen.

I am happy to welcome you all in this new auditorium which is named after the late Lewis Preston, President of the World Bank, friend of the CGIAR and, particularly, a staunch friend-in-need during the greatest crisis of the CGIAR.

In keeping with established practice, this ICW97 business meeting will commence with the Chairman's opening statement, which will be followed by a brief period of commend and discussion. I will then make the Chairman's announcements before moving on to the rest of the agenda. Through most of that agenda, we will be exploring issues that lie at the heart of the system's future effectiveness. We will as well be sharing expectations with the distinguished panel conducting the Third System Review of the CGIAR.

The distinguished panel that has been convened under the chairmanship of Maurice Strong is charged with the responsibility of repositioning the CGIAR to ensure its effectiveness in the next millennium. I urge you to share your thoughts and expectations with Mr. Strong and his colleagues who are committed to a collegial approach to their tasks. They will consult widely and deeply with all stakeholders. We eagerly await the conclusions based on their inquiries.

But we cannot close shop until they have completed their scrutiny. Inactivity by us will not reduce poverty, enhance food security or strengthen the environment. There is much that we must do, and we must be prepared to do some of that, now. As you will hear in greater detail from the Director General of IFPRI later this morning, the closely intertwined problems of poverty, hunger, environmental distress and population increase press upon us. These problems were held at bay by past achievements in which the CGIAR has played an important part, but they are not gone. They demand our dedication to their resolution.

Indeed, our generation is called upon to grapple with this nexus of problems in circumstances that are truly daunting, and redoubled efforts to develop sustainable agriculture, particularly in the world's poor countries, is vital to their solution. To help bring about such a development is our particular task.

Today, therefore, I want to address you on four interconnected issues that challenge us all.

First, the evaluation of where we are and where our problems lie. And this is linked to the nurturing of an evaluation culture in the CGIAR and to the work of the system wide review panel.

Second, the needs and concerns of the scientists as I have heard them.

Third, the financial conditions of the system and some further attention to financial issues.

And, fourth, the changing paradigm of science and partnerships that I think is going to be relevant to how we will address our future mission.

AN EVALUATION CULTURE: WHERE DO WE STAND?

Let me now turn to the first of these challenges, which is how to nurture an evaluation culture. We are all agreed on doing that.

The world acknowledges that our contributions have made a substantive difference. In accepting that acknowledgement, let us honestly assess just how effective we, the CGIAR, have been. We must ask ourselves: Did we indeed make a difference? How much of a difference? How imaginative and efficient were we in using the available resources in making that difference? And, above all, how do we integrate these assessments in the way we undertake our work today?

I feel that today we have too much reporting and not enough evaluation. Indeed, looking at the external evaluations of centers, I am often struck by their great variability. Some are incisive, others are bland. But the question is: Are they helping to sustain scientific excellence?

Should the distinguished external reviewers make more use of internal material produced by the centers themselves? These will be produced, I should add, with methodologies honed and harmonized to the extent possible by the system-wide efforts of an effective impact assessment and evaluation group, an IAEG that would diffuse best practices among the centers. Would such approaches result in better, more systematic peer reviews and externally based quality enhancement devoted to promoting scientific excellence?

These are some of the key questions at the heart of the evaluation culture that we are all nurturing in the CGIAR. Armed with the self knowledge that the evaluation culture brings, let us build on our strengths and confront our shortcomings. For only from that kind of candid self-assessment will we prepare ourselves for the endless challenges, obligations, and opportunities that we encounter. We must meet them boldly, and not be content merely with what is, not content with how to do better with what we have, but dare to dream the dreams of what can be, reaching out to what our imagination and our dedication can create.

THE GROUP: A CANDID ASSESSMENT

For the CGIAR, the stock-taking required for self knowledge has to begin with you, this group, which is the driving force of the system. The size of the group has grown from the original nine members of May 19, 1971 through the 40 strong membership on the eve of the Lucerne Ministerial-Level Meeting to the fifty-seven members of today.

The expansion of the group has also brought about its transformation. From a dedicated set of northern donors, the CGIAR today is a fully South/North enterprise in which all speak as equal partners.

The changed character of the membership has coincided with and encouraged a reaching out by the system to important elements outside the CGIAR, be they the National Agricultural Research Systems (nars), non-governmental organizations (NGOs), or advanced research organizations (AROs), and the private sector as well. These changes have endowed the group with a new dynamism that has renewed and strengthened the exemplary vision of its founders. That dynamism has led to increased confidence in the CGIAR within the international community generally and ESPECIALLY among the co-sponsors.

But let me ask a contradictory question. Can the expanded and changed group continue to maintain the characteristics, and be run by the rules, that have up to now defined the CGIAR? Do we need to change? And if so, in what direction? Are we now over-structured? Is the informality of the system under strain? Is such informality tenable? Is the appearance of informality being stifled by too many structures of panels and committees?

These are the domestic questions that have to do with putting our own house in order. They relate to the internal workings of the group. In its external relations, the group has to ask itself: How are we going to respond to the rapidly changing world of proprietary science and the increasing politicization of areas such as access to germplasm and intellectual property protection, all of which are critical to the work of the CGIAR?

I will only flag these questions now and urge you to grapple with them openly and frankly throughout these meetings, which have been structured to enable us to deal with issues such as these.

THE CONCERNS OF CENTER SCIENTISTS

These issues, let me add, are among those that exercise the scientists and management at the centers. I have often described my primary function as that of the ambassador of these dedicated men and women to you, the members of the

CG, and to the rest of the world at large. As their ambassador, let me tell you what I hear from them.

I am, as always, delighted to report that across the centers commitment to the mission of the CGIAR is as strong as ever. The centers are staffed by women and men whose extraordinary scientific capacities are matched by their compassion and caring. They value the many signals of confidence and support they have received from members and from the international community at large. They are eager to continue their work unimpeded. And to that end, and in the spirit of being able to soar to the fullest extent that the challenges we all face demand from all of us, they reach out to you here in this group.

They ask for your confidence. Do not micro-manage them. Science cannot be well done if you cannot give your imagination free rein. It cannot be done where endless reporting substitutes for quality enhancement.

They ask for your support. They need the expanded resources to launch the next round of research activities in this never-ending race against time. After all, the *raison d'etre* of the CGIAR group is to enable the center scientists to carry out such research.

They ask for your understanding and your willingness to participate in the common enterprise, not to fragment resources, denying them the broad programmatic support so necessary to make significant advances, not to refuse to cover the costs of the overhead that are imbedded in the project-specific funding that so many of the donors support.

They ask for your commitment to stay the course and to invest in the non immediate, to reestablish the unique characteristics of the early days of the CGIAR, a willingness to stick with research for the long-haul because some of the best and largest payoffs will come only from such sustained efforts.

They ask for your consistency in matching with hard dollars your avowed commitment to the heartland of the long-term scientific research agenda, and they urge you not to be swayed by the passing fashions of the development literature. They know, as you do, that scientific excellence cannot be promoted in an atmosphere where the specter of discontinuity haunts the work.

They ask for your timeliness for delays in payment of agreed and pledged support have created cash flow problems in many centers, and there is an opportunity cost for the stop-gap measures that the centers have to employ in order to keep their work going till the checks arrive.

But, my friends, they do not just ask; they also promise.

They promise the continuation of that stream of output, that high quality research, with high rates of return on investment that have been internationally acknowledged and envied.

We have to face up to the problems I have outlined, if we are indeed to empower the staff of the centers to exert their fullest capacities for the mission to which both we and they are committed. I know that you will give these issues your fullest attention, and that my pleas of our centers' staff will not have been in vain.

But in addition to all of that, I, as their ambassador, feel the need to report one more thing. Unstated though it may be, it is still there; it is important. Despite the commitment and the enthusiasm that motivates one and all, there is among them a certain apprehension, sometimes manifested only below the surface of public discourse, an apprehension that their scientific focus could be weakened by circumstances beyond their control.

These apprehensions are not unlike those enumerated some years ago by Hanna Gray, former president of the University of Chicago, who said that U.S. universities had "arrived at a stage of maturity burdened by too many tasks and too many demands and too great a confusion of expectations."

I think center management and staff sometimes feel burdened by the task and responsibilities inherent in changes within the group. They feel obliged to spend more time on reporting procedures than on research, to satisfy more masters in more ways than before, to immerse themselves in the competitiveness of the marketplace in order to remain financially viable and to meet scientific demands that are sometimes in the nature of a moving target.

They fear, therefore, that changing times could alter the characteristics that have defined the centers and contributed to their effectiveness.

Times have undoubtedly changed. Business as usual is no longer possible. Nobody in the centers contests that. But the challenge that we and the centers must face together is to ensure that the dynamics of change support and do not impair the commitment to scientific quality.

FINANCE: A BALANCE SHEET

Now the third challenge concerns finance. For the fact is that apprehension at the centers is aggravated by concerns over funds. Despite enormous achievements in that area, especially in this time of reducing budgets everywhere, there are still problems that we must confront, and I do not mean just those of timeliness and fragmentation and recognition of the necessary overhead for projects to be executed.

There are still issues that are masked by the aggregate figures. Indeed, the aggregate figures look very good. At ICW96 the group approved a 1997 research agenda financing plan calling for funding of approximately \$325 million and center income of \$14 million. The estimate of the Finance Committee is that these targets will be achieved in spite of adverse exchange rate movements.

For 1998, funding projections indicate that we could meet or exceed the \$335 million endorsed by the group in Cairo. Although the current funding outlook is positive overall, there have been some contradictory developments which cannot be overlooked.

First, all centers have not benefitted evenly from improved funding, and the reasons for this situation need to be dispassionately examined.

Second, two centers, ICRISAT and IRRI, had to undertake major staff restructuring programs that were painful to the staff affected, their families and the centers. These painful changes were different in the short-term but may benefit center programs over the long-term.

Third, certain system-wide initiatives endorsed time and time gain still remain unfunded.

In addition, however, all centers, even those that are said to have achieved their targets or exceeded them, cannot overlook the increasingly complex issue of the composition of funding. The imbalance between restricted and unrestricted funding continues to be a serious source of concern.

More seriously, shifts in such composition can affect continuing programs and commitments to staff, for neither the dollars nor the staff skills are fungible. Now this results in the paradoxical situation of a center having an aggregate amount of money that matches or exceeds the estimated target but still having to lay off staff and discontinue certain activities. In short, the system is becoming over-constrained by the fragmentation and the restrictions of the funding.

Please recall that the original intention when we moved to the matrix structure was to recognize the fixed and variable overheads and the need for a vector of unprogrammed funding for the centers to function. That is just not happening. The appeal to shift as much money as possible to the southeast corner of the matrix has been heeded by some, but many others have found it difficult to do so. The consequences are what we are witnessing now.

You will doubtless hear a lot more about this from the Finance Committee, but the issues, I want to submit to you, are not beyond our ken to resolve. We can with imagination and dedication find ways around the restrictions in order to be able to meet the needs of the centers and empower them to the fullest extent possible.

PARTNERSHIPS

As we move on now, to consider partnerships and the changing paradigm of science, let us remind ourselves that the principle of partnership was unequivocally endorsed at Lucerne. An effective system of partnerships must unite all actors, national and international, public and private, South and North, formal and informal institutions of the civil society, at the community level, at the grassroots. The NGOs and private sector committees that we have created are a part of that manifestation.

Now the Global Forum, established with the encouragement of the CGIAR, brings together all the elements of the global agricultural research system -- the NARS, the AROs, the IARCs, private sector, NGOs, national and international, regional and local, all are accommodated within the Global Forum.

This is the only organization of its kind, and the CGIAR has a central role to play within this global construct, to help make it a reality. During the course of ICW, you will have an opportunity to discuss the Global Forum's proposed plan of action, and to add to the substance of that proposal.

The concept of partnership, moreover, is integral to our fourth challenge: research paradigms.

THE SHIFTING PARADIGMS OF SCIENCE

Now I see a double shift in the research paradigm. The first of these shifts is well-known to all of us but has not yet been achieved, and that is the integration of crop-specific research, which has been so successful in the past, into a broader, more holistic vision that brings in the concepts of sustainability and eco-regionality and looks to achieving results that will increase productivity and profitability of complex farming systems at the smallholder level.

The second shift is to utilize the most cutting-edge work associated with genetic mapping, molecular markers and biotechnology to accelerate the breeding process and achieve the promise of all that science can do for the poor and the environment.

Let me say a word about biotechnology before I return to genetic maps and molecular markers.

In Cairo, when we discussed the promise and perils of biotechnology, we agreed that these questions must be scrutinized in the light of reason, in the presence of the evidence, and not governed by emotion or prejudice. For it is only through such scrutiny that a productive consensus can be fashioned out of the diverse aspects -- science, agriculture, law, farmers' rights, the working of the civil

society, the private sector, partnerships with NARS, AROs and more -- all of which impinge upon a truly complex situation.

To provide for more detailed examination of these issues, we set up two panels to work under the auspices of TAC. One of them is devoting its attention to proprietary science and intellectual property right issues; the other with technical questions. Also, as promised in Cairo, several special events in October allowed the issues of biosafety and bioethics to be examined by a high-powered group of experts. You will be hearing reports on these developments later on.

Let me now set aside biotechnology and return to genetic mapping and molecular markers and address first, the changing scientific paradigm implicit in this area of work; and second, the need for expanded systemic relationships with advanced research organizations or AROs.

As many of you may know, important work is being done on genomics, genetic mapping and identification of quantitative trait loci or QTLs. The question about the application of this knowledge to our scientific mission raises challenging possibilities that have been recently sketched out in a paper by Steven Tanksley and Susan McCouch (please check spelling) published recently in "Science". The gist of their argument is that by locating QTLs in the wild relatives of major crops species and using these in plant breeding, it will be possible to make major advances on the yield front and other complex characteristics.

Characterization based on screening exotic germplasm for relevant QTLs, they argue, adds an important dimension that the traditional method of phenotype-based screening can miss. Genetic linkage maps based on molecular markers have made it possible for QTL to be identified, studied and applied in crop breeding.

Indeed, Tanksley and McCouch have stated that "using phenotypic evaluation to determine the breeding value of an accession is likely to be misleading, especially with respect to quantitative traits. Thus, we have been screening germplasm in a way that fails to explain its full potential. The paradigm needs to shift away from selecting parents on the basis of phenotypes to evaluating them directly for the presence of useful genes. The tools that make such an analysis possible are molecular maps and the integrative power of QTL analysis."

Now if we accept this thinking, then it argues for the expansion of our efforts at genetic as well as phenotypical screening and characterization of our germplasm, based on the relevance of the traits for particular agronomic characteristics. Close collaboration with NARS in this area would also be eminently desirable.

It is also notable that the work of this type would benefit from crossing the traditional commodity specific lines. We are discovering that the architecture of the

genomes for monocots has much in common across species, an observation that also holds for dicots such as tomatoes and potatoes.

Thus, not only is there some possible benefit of working across centers, but also of reaching a critical mass of CGIAR staff working on the same problems who could beneficially work physically as a group located within a particular advanced research organization that has specialized expertise in this or another area of advanced research.

That paradigm, therefore, opens up a new way in which we can combine resources across centers and tie them with AROs in a new way. The CGIAR scientists that could be placed in such an ARO could also be supplemented with NARS scientists and, in fact, include post-doctoral trainees from around the developing world. This would build bridges across the system, strengthen the networking of scientists and help engage some of the best AROs more closely with problems that interest the CGIAR membership.

I invite you to think about this idea. I invite the AROs to consider this suggestion and to come forward with their proposals. I invite the donor representatives of the industrialized countries to encourage their AROs to make such commitments as a way to also adding to the research effort in a fashion that may not require additional funding from the same sources that provide the current funding for the CGIAR.

Let me hasten to add that the suggestions I am making do not imply that such AROs would have a monopoly on the relationships between the CGIAR scientists and their colleagues elsewhere. What I have suggested would help build systemic links with particularly well-placed AROs and would help build teams of scientists around thematic areas, an effort where we already know the value of networking. For instance, experience tells us that the Rockefeller networking programs have been highly successful, and we would be carrying that idea even a step further.

Now this is not all. We could also think of building other partnerships as and when appropriate with others in the developing countries, in the private sector, and in the civil society. Now that set of partnerships would probably be located around the CGIAR centers rather than AROs and would strengthen the linkages through particular research consortia around clusters of problems such as those that I outlined to you in Cairo.

If we can properly handle the IPR issues, then we could envisage the possibility of one day establishing working relations with the private sector companies while protecting our commitment to the NARS and to the world, acting in such a way that, for example, the private sector could pay into a consortium *ex ante* and would share the results *ex post* by having patent rights to it only in the North, while the CGIAR centers would have the patent rights and give them away for free in the South.

Such approaches could then begin to transform the reality of the international agricultural research system, radically, redefining the role of the CGIAR as facilitator and enabler of more open access for the South, while remaining involved with the best science everywhere in the world.

These approaches would, as well, help to build a reality around the rhetoric of partnerships and collaborations as we enter the age of the knowledge based society. They would enable us to take yet another step in the direction of harnessing science to serving the needs of the poor and the environment.

I urge you to give some thought to these ideas.

Envoi

Ladies and gentlemen, when Gulliver, the fictional character made famous by Jonathan Swift, visited the mythical land of Brobdignag, he encountered a down-to-earth philosopher who "gave it as his opinion that whoever could make two ears of corn or two blades of grass to grow upon a spot of ground where only one grew before would deserve better of mankind and do more essential service to his country than the whole race of politicians put together."

We face an even greater challenge, not only of growing two sheaves or more where only one grew before, but of doing so in a manner that does not despoil the land on which the crops multiply or diminish the water that sustains them. To overcome new challenges, we must ceaselessly examine the effectiveness of our science to meet these challenges, and have the courage to change our research paradigm when necessary. It is our privilege not simply to help define the new paradigms, but also to guarantee that they can effectively be implemented.

Now we can temporize, wait and let others define our future. Or we can grasp the opportunities, courageously using them as the occasion for greater renewal, greater effort, greater achievement, greater impact. The future beckons. Let us move forward to meet it. Let us fashion it to the pattern of our dreams, not for ourselves, but for the marginalized millions who are entitled to better tomorrows.

Thank you for your attention.