



Susan Whelan

2003 Sir John Crawford
Memorial Lecture



Fulfilling the
Promise: the
Role for
Agricultural
Research

Consultative Group on International Agricultural Research (CGIAR) is a strategic alliance of countries, international and regional organizations, and private foundations supporting 16 international agricultural research Centers that work with national agricultural systems, the private sector and civil society. The alliance mobilizes agricultural science to reduce poverty, foster human well-being, promote agricultural growth, and protect the environment. The CGIAR generates global public goods which are available to all.

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Fulfilling the Promise: the Role for Agricultural Research

By Susan Whelan
Minister for International Cooperation
Canada

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Ministers, Excellencies, ladies and gentlemen, good afternoon.
Bonjour. Buenos Dias. Hamjambuni.

Many distinguished speakers have stood behind this podium since the inaugural Sir John Crawford Memorial Lecture in 1985. It is with a sense of humility that I accept the honor to be numbered among them.

As I do so, I would like to thank the Government of Australia for sponsoring this lecture and take a minute to reflect on the life and work of Sir John and on the reasons why funds, prizes and at least two lectures have been named in his honor.

I have not had the privilege of a personal acquaintance with Sir John. However, I admire the simple yet noble and profound proposition or objective on which this great gentleman built his sterling contribution to international development. That proposition, that objective, is human well-being through efficient agriculture.

Not surprisingly, as you trace the progress of agricultural development over the last several decades, you see his fingerprints on some of the most challenging and rewarding experiences, experiments and innovations. His role in the green revolution — in India, in particular — is well documented. At the founding of the International Development Research Centre, Canada's unique institutional contribution to development research, he was there as a member of the first board of governors. He was also at the birth of the CGIAR, one of the jewels in his crown as an international public servant. He served as the first chair of the CGIAR's Technical Advisory Committee, a forerunner to the Science Council.

Sir John was more than a man of noble ideas and authoritative speech. He was a person of tireless action and activism. And his activism was founded upon a deep faith in the enterprise of human development, and upon his vision of the role of agriculture in that endeavor.

The question for us today is how to continue to transform the hope and vision of pioneers such as Sir John into things of substance.

Personally, the question is: how can I make a meaningful contribution to the discourse about the way towards the further fulfillment of Sir

John's vision of sustainable development? I am not a scientist. I am a lawyer and a politician. So I have no groundbreaking new research to present to you today. What I bring to this podium is a deep and heartfelt concern about the work being done in agricultural research and development.

In fact, this has been one of the enduring themes of my life. My father, the Honorable Eugene Whelan, was Canada's Minister of Agriculture for 12 years, and he also served as President of the World Food Council. So, a staple of conversation around our dining table was the challenge and promise of agriculture everywhere — from the Canadian prairies to the Russian steppes, from the vineyards of France and Italy to the varying eco-systems of Africa, Asia and Latin America and the Caribbean. My very first speech as a Member of Parliament was dedicated to addressing the role of research in Canadian agriculture.

Today, as Canada's Minister for International Cooperation, I work hard, as you do, to eradicate poverty and hunger in the world. Like you, I believe that agriculture and agricultural research must play an essential role in that endeavor.

What I want to offer you today is my own vision of prosperity through sustainable development. I would like to construct my contribution today on four related pillars. I will attempt:

- a brief review of some of the contemporary challenges that, as scientists and policy-makers, we need to bear in mind as we pursue our various undertakings;
- I will look at some of the new partnerships and arrangements that those of us engaged in agricultural research and in policy-making need to develop to meet the challenges of our times;
- more cautiously perhaps, I will also offer a few suggestions on how the CGIAR might revisit its own approaches and structures as it adjusts its overall vision for agricultural research to the unique challenges and opportunities of the early 21st century; and
- finally, a few brief comments about some of the actions Canada is undertaking through the Canadian International Development Agency as we confront these same challenges and opportunities.

Some Contemporary Research Issues

Mr. Chairman, ladies and gentlemen, if we are to build an effective bridge between the achievements of yesterday and the possibilities of tomorrow, we must acknowledge and complete some unfinished tasks while identifying and pursuing the new challenges that confront us. Some have contended, with good reason, that no country has developed without paying attention to agriculture. This is certainly true for Canada. In the late 19th and early 20th centuries, many immigrants were drawn into the Canadian prairies by the promise of free land. What allowed these early farmers to stay and prosper was actually the results of agricultural research that the Canadian government put into the hands of farmers. Specifically, it was the development of a new strain of wheat, Marquis, particularly suited to the prairies.

Similarly, today in developing countries, we look to agriculture to contribute much more than food and raw material for industry. It can, and must, provide solutions to many of the challenges of development, including the need for employment.

In addition to the development issues that have an impact on agriculture, there are important issues facing agricultural research itself — I have identified four of these issues that need to be addressed with the same sense of hope and urgency that characterized the work of Sir John Crawford.

There is an overarching principle that we must accept in addressing these problems. It is a principle with which Sir John would easily identify. It is the need never to lose sight of the ultimate beneficiaries of agricultural research — the poor, including, in most cases, the farmers themselves.

The first issue I would like to address is the discord between scientists and some segments of society regarding the value and validity of agricultural research and many of the fruits of that research. I refer, in particular, to the perception that the application of knowledge and the resulting technology in the biotechnology field is contrary to the public interest. Objectively speaking, the controversy is mostly about transgenic crops.

Unfortunately, however, the media and the public often lose sight of the fact that this transgenic application is merely a subset of genetically modified crops. As a result, the controversy in this one area

threatens the entire field of biotechnology, which has served agriculture very well over many decades.

The troubling and apparently growing divide on this issue — particularly, but not exclusively, in Europe — relates mainly to food safety, contamination of biodiversity, and proprietary rights over resulting technologies.

I have already said that I am not a scientist, but given my lifelong background in agriculture and proximity to political and scientific issues while serving as the Chair of Canada's House of Commons Standing Committee on Industry, Science and Technology, I do have opinions on some scientific matters.

These technologies present real opportunities as well as risks for development and for developing countries. Both the risks and the opportunities need to be assessed in a balanced and dispassionate manner.

What is important is for developing countries themselves to make the decisions about the appropriate balance. It is crucial, therefore, for developing countries to join more forcefully in the debate on this issue. Canada's support to the development of a Centre of Excellence in Biosciences for Africa is intended to help Africans do so.

At the same time, it is imperative that the agricultural scientific community truly engage and address the concerns of the public, both in developed and developing countries. Ignoring what may appear to the scientific community as the misguided or uninformed opinions of the anti-GMO groups could well disrupt the flow of both resources and goodwill to this area of agricultural research that hold significant potential benefits for developing countries.

Although I have chosen to focus on the problems associated with genetically modified foods, I must stress that the divide between science and society is not just about bio-technology.

In general, scientists engaged in agricultural research need to ensure that their intentions, their efforts and their results are communicated not only to their peers, but also to the larger public on whose behalf they are working.

A second area of concern to me is the need for resources to support agricultural research and, indeed, the very sustainability of the agricul-

tural research enterprise. Thankfully, after nearly a decade of declining investments in agriculture by international donors and national governments alike, there appears to be a reversal in the trend. I contend that the donor community made an unfortunate and costly mistake by allowing the reduction to happen in the first place. After all, some 70 per cent of the poor depend mostly on agriculture for their livelihoods. The claim at the time was that agriculture was not performing. But I believe that the sector may have been judged too harshly — judged not by what had been accomplished but by what remained to be done. Nor is it enough to point fingers at governments and donor institutions. The question is: what will be done differently this time, by policymakers, researchers, civil society, all of us to ensure that increased investments are sustained over the long term? How, for example, do we resolve the contradiction between the politician's need to report progress to the electorate every four or five years and the fact that trees do not mature according to politically dictated timelines? Are there ways in which researchers can, for example, demonstrate short-term returns on investments and so encourage political leaders and their constituencies to wait more patiently for even greater returns to come at some future time? This is your challenge. It is often said that if politics is the art of the possible, then research must be the art of the feasible.

Thirdly, I am concerned about the very low rates of technology adoption among poor farmers, who most need them. The rate of progress in agricultural development is severely constrained by this problem. Although the rate of return on investments in agricultural research is relatively high, it will be even higher when we resolve the problem of low adoption rates.

One way we may address this issue is to deal with the continuing disconnect between the research and development processes. I appreciate the need for a division of labor between those who do the actual research and those responsible for development. However, there needs to be a more seamless progression from the one to the other. This includes factoring in the role of those responsible for getting new knowledge or technology into the hands of farmers, and the problems of farmers into research and development planning. The impact of HIV/AIDS on agriculture heightens the urgency of addressing this need.

Also, in developing countries, over 60 per cent of the food is produced by women. This fact is often overlooked in the design of new

technology. For example, many of the tools, systems and other products of agricultural research are only suitable for use by men. This matter of gender equality, and the gender dimensions of agriculture and every sector we work in, is a priority for me, for my department, and for Canada. It was also addressed by a fellow Canadian and a founder of the CGIAR, Maurice Strong, when he delivered this lecture at this forum in October 1996.

Limited social and physical infrastructure may also contribute to poor absorption rates. I'm thinking about a lack of access to electricity, schools, hospitals, telecommunications, safe water and roads. Far more needs to be invested in these and other areas to create an enabling environment for rural people to improve their livelihoods. This is why, as a deliberate policy and in keeping with our concept of the division of labor among bilateral and multilateral donors, Canada is encouraging the International Financial Institutions to invest more in these areas.

Whatever the reason for the low adoption rates of technology by poor farmers, we need to correct it. Otherwise, financial and political support for new research may be affected by the perception that all the technology required for agricultural progress has already been developed and is sitting on bookshelves somewhere.

Moreover, we need to recognize that the problem is about much more than money. It is also about the need to view the rural sector less as part of the problem and more as part of the solution. It is about the need for greater symmetry between rural and urban development.

The final contemporary issue I would like to address is the critical one of global climate change and the potential effects on agriculture. I need not remind this audience of the vulnerability of poor rural communities to large fluctuations in normal rainfall patterns such as more severe or more frequent droughts or floods, to unpredictable planting or harvesting seasons, or to severe crop and livestock diseases, any of which could lead to massive instability in rural lives, which we must try to mitigate.

Although climate change will have positive effects for some crops and in some areas, whose benefits we should try to maximize, the effects in most cases are likely to be undesirable and destabilizing. This is particularly true for the most vulnerable populations — the poor living in arid or other marginal regions.

Canada supports the current global approach of building capacity to adapt to climate change, in a participatory way, in vulnerable communities and countries. Agricultural research certainly has much to offer on this front: developing varieties better adapted to new growing conditions; introducing new rural production systems for different markets; and enhancing marketing strategies for non-traditional farm produce to allow farmers to maximize incomes from new crops. I have no doubt your work can make a huge difference in mitigating many of the possible risks of climate change in agriculture, and I am encouraged that many CGIAR centers have already taken up the challenge.

New Consensus and a New Vision

Mr. Chairman, ladies and gentlemen, after decades of differing views concerning development and issues as fundamental as what constituted it, a new vision for international development has emerged.

We have international consensus around the Millennium Development Goals, as well as the means to get there — a partnership with mutual responsibilities, as articulated in the Monterrey Consensus of March last year.

The Millennium Development Goals represent our joint commitment to sustainable development. Agriculture has incredible power to promote sustainable development. With sustainable development comes prosperity, peace and security. With it also comes the freedom for people to make basic choices in their lives.

When people must choose between feeding their family and sending their children to school, they have no freedom. When people must leave their home to seek work in the slums of a city, they have no freedom. When people must use next year's seed for their meals today, they have no freedom or security.

In rural areas, where most of the world's absolutely poor reside, agriculture is central to development. Agriculture has made major contributions to poverty reduction in the past. It can and must do so again. Agricultural research has a pivotal role to play in making this happen. Down through the ages, agricultural development has benefited from many visionaries — people such as Sir John. They were people who could see beyond the horizon. They drew on their knowledge and

creativity to craft effective policies, to create the right institutions and develop the appropriate technologies, both simple and sophisticated. They sowed the seeds of much of what we have today.

They seemed to have had a certain something that, I hope, and indeed am sure, is shared by those of you here who are engaged in agricultural research. That something is an awareness that, by agreeing to undertake agricultural research with the intent of benefiting the poor, you are assuming an important social commitment. Without wishing to overly moralize what is essentially a work of science, I cannot escape the conviction that there is a moral imperative to what you do. We, in Canada, believe that you understand and are responsive to this imperative.

What Kinds of Partnerships and Arrangements?

Mr. Chairman, this brings me to the question of partnership.

It is increasingly recognized that agricultural development is more than some routine tasks done by farmers and their families down on the farm. Agricultural development involves a wide range of services, issues, concerns and relationships. These include land rights, roads and transportation, marketing and international trade regimes, education and training, gender equality, governance and human rights, public health, communication and participatory development, energy and the environment, information and communication technologies, research and development...the list goes on.

No one person, institution, group or sector, acting alone, can bring all the pieces of this puzzle together in a coherent, efficient and workable fashion. The endeavor of agricultural development requires not only a new vision but also new, bold and inclusive forms of partnership. We need partnerships that are responsive to present needs while flexible enough to confront changing realities.

Some new partnerships — both in agriculture and rural development and in the wider field of international development — are beginning to emerge. For example, there is a new resolve as well as a new partnership under NEPAD, the New Partnership for Africa's Development. With NEPAD, we're seeing a renewal of political will at the highest levels to eradicate poverty, address governance issues and tackle

other pressing challenges facing the continent. The NEPAD agenda also recognizes the role of agriculture in that endeavor, and identifies agriculture as integral to Africa's development.

Canada believes that in addition to the CGIAR and national research and development organizations, bodies such as the Forum for Agricultural Research in Africa and the Global Forum for Agricultural Research have vital roles to play in co-ordination, the promotion of enhanced inter- and intra-regional linkages, and the enhancement of south-south knowledge sharing and capacity building.

However, much more needs to be done to craft the kinds of partnership required for optimal effectiveness in agricultural research in today's environment. With the overwhelming evidence of the link between increased research activity and increased development, the governments of developing countries need to strengthen their own commitment, in terms of both policy and resources, to agricultural development endeavors, including research activities. There need to be research institutions at the domestic level to match the work of the CGIAR at the international level.

This matter of funding is a source of urgent concern for us all. Agricultural research pays huge dividends for development, and this has always been the case. However, while most can agree on the value of agriculture research, there is less agreement about who should pay for it.

When scientists focus on agricultural research that will benefit the poor in developing countries, they produce public goods.

As such, that work deserves public funding. This does not preclude private investments. On the contrary, there could and should be more private investment in the generation of public goods.

But I believe that governments of developing countries must invest more in agricultural development generally, and agricultural research specifically. International donors can supplement, but cannot supplant such investments.

I believe that in order for the CGIAR system to be able to pursue a strategic research agenda capable of tackling the many challenges we have discussed, it needs reliable funding, a healthy proportion of which must be unrestricted, rather than tied narrowly to specific projects. In my opinion, the current balance between unrestricted core,

and restricted project support, has fallen below critical levels and needs to be restored to a healthier proportion. In Canada's view, a 60 per cent level of core funding is necessary, and we will continue to work hard to reflect this conviction in our own contributions.

The World Bank's recent comprehensive evaluation of the CGIAR highlighted impressive rates of return to investments made in the system. I don't think it's a coincidence that these returns were achieved after many years of predominantly unrestricted core support.

Unfortunately, the downward trend of core funding over the past decade has significantly affected the role of the independent scientific advisory body to the CGIAR, the Science Council, which provides guidance on the quality and relevance of science across the entire system. With programs and budgets highly dictated by restrictive project financing in recent years, the relevance of the Science Council's priority-setting and quality control efforts has diminished.

This poses a considerable threat to the system as a whole. It also renders ineffective the strategy of those of us who are committed to a system driven by objective science. Declining core funds have also had the effect of forcing the various centers within the system to broaden their research mandates in order to increase their opportunity to access financial support. This trend, over time, could render the research mandates of the respective centers indistinguishable, one from the other. The instability of core funding also threatens the preservation of our plant genetic resources — perhaps one of our most precious endowments.

I encourage other investors to consider the issue of core support carefully so that we may collectively return to a more sustainable financing scheme for the CG system.

An Evolving CGIAR

Mr. Chairman, ladies and gentlemen, Canada recognizes the critical importance of what you do at the CGIAR. Maurice Strong, chair of the Third System Review, also said that "the CGIAR was the best public development investment bar none." I believe him. I join the entire development community to applaud your contributions to agricultural research over many years, and to encourage you to even greater achievements today and into the future.

Even as I applaud the CGIAR for its efforts, I believe that the CGIAR should always be ready to answer the call to even higher levels of performance — a call consistent with Sir John's ideals, and dictated by the needs and realities of our times.

I am aware that the CGIAR has been working for some time now on renewal, and on adaptation and change — the concept of Challenge Programs, for example — to better serve stakeholders. I applaud those efforts and urge you to continue them. It is not for me to prescribe your evolution, but I would like to offer two organizing principles, which I hope could help guide you.

Experiences of the past must generate wisdom about the future. Today we know much more than we did in the 1970s about small-holder agricultural systems managed by the poor in rural areas. We now know that inherently, these systems are highly integrated and extremely complex. Acting on even a single component affects system dynamics as a whole. Therefore, I wonder if the CGIAR's organizational model, based mostly on commodities and on agro-ecologies, is still the optimal one for addressing the systems that we must urgently improve?

Similarly, developing countries have communicated the heavy burden placed on them by having to respond to the disparate objectives and priorities of a large number of donors descending on them simultaneously. In response, donor countries and organizations are increasingly working on enhancing local ownership, stronger partnerships and improved coordination, both within and among themselves. With the consensus implicit in this call and response by developing and developed countries respectively, one wonders whether the CGIAR should not consider revisiting its organizational and operational modalities. Perhaps just as developing countries prefer to develop a single strategic partnership with all donors based on a large program rather than a series of small projects, they may prefer to deal with the CGIAR in an integrated manner, rather than having to relate to several CGIAR centers concerned with various specific crops or with multiple farming problems.

In this way, the CGIAR will be moving towards better reflecting the principles of strengthened effectiveness, becoming a more integral part of the new and emerging partnerships to which I alluded earlier.

Through Canadian Eyes

Having articulated our new vision for development, we now need to pursue it; and Canada has begun to do so. We recently changed the way we engage in development in order to strengthen the effectiveness of our assistance. Relying on the experience of decades in development, as well as numerous international studies, we are sharpening our approach to make a bigger, more positive impact on social and economic progress in developing countries.

Just over a year ago, I launched a new policy statement on strengthening aid effectiveness for my department, the Canadian International Development Agency, or CIDA. It identifies four key principles for our work: supporting local ownership of the development process, improving donor coordination, untying aid, and focusing our aid.

Then, after a considerable period of consultations with key stakeholders in Canada and abroad — to which the CGIAR productively contributed — I launched a new policy on *Promoting Sustainable Rural Development Through Agriculture*.

This new policy statement focuses on achieving integrated, equitable and sustainable development. It identifies programs in developing countries that will create new opportunities for the rural poor, that will build a knowledge base for sustainable agricultural development, and that will strengthen partnerships in this sector.

With this policy, we are reversing the trend that saw support for agriculture decline over the past decade. By 2005–06, CIDA's investments in the sector will reach \$300 million CDN annually, and \$500 million by 2007–08.

Conclusion

Mr. Chairman, ladies and gentlemen, I have sought to share these thoughts with you against the backdrop of the vision and dedication of the man whose commitment, caring and compassion have brought us together at this forum. Implicit in the details of Sir John Crawford's life and work is a call to all of us towards acts of courage and service.

Much has already been done. Much, however, remains to be done. The "doubly green revolution" envisaged by Gordon Conway, that is even more productive than the first green revolution and even more "green" in terms of conserving natural resources and the environment, has yet to materialize. Some 800 million people are still hungry. More than 1.2 billion people in the world are absolutely poor; and environmental degradation, to which agriculture often contributes, is still a problem of global proportion. Some scholars argue that the earth is already reaching its ecological limits.

The challenges may seem overwhelming, but I believe that many of the solutions are to be found through agricultural research. So I look to you, the CGIAR and your partners, to continue pursuing this task.

It has been said that investing in research is an act of faith; faith you will recall is "the substance of things hoped for, the evidence of things not seen." But Canada's continuing faith in the CGIAR's research is increasingly justified by the evidence we have in fact already seen. Your ongoing commitment and dedication inspire us with greater confidence that your work will continue, literally, to bear much fruit for the benefit of the earth's current inhabitants and of generations yet unborn.

Thank you.

Susan Whelan's Biography



Appointed to cabinet in 2002, the Honourable Susan Whelan was first elected to the House of Commons in 1993 and was re-elected in 1997 and 2000. She served as Chair of the Standing Committee on Industry, Science, and Technology from 1997 to 2002, during which time the committee tabled a number of reports, including: "Research Funding—Strengthening the Sources of Innovation," "Productivity and Innovation—A Competitive and Prosperous Canada," "A Canadian Innovation Agenda for the Twenty-First Century," and "Bill C-23, An Act to Amend the Competition Act and the Competition Tribunal Act."

Ms. Whelan served as Parliamentary Secretary to the Minister of National Revenue from 1993 to 1996 and was an active member of the Standing Committee of Public Accounts and the vice-chair of the Standing Committee on Finance from 1996 to 1997. She has also been a director of the Canada-United States Interparliamentary Group and Chair of the National Auto Caucus.

Concerned with matters of public health, Ms. Whelan is a former member of the Metropolitan Hospital Foundation Committee in Windsor, and served as a director of the Essex Region Conservation Foundation and the Alzheimer Society of Windsor and Essex County.

In her private career, Ms. Whelan was a lawyer with McTague, Clark, and with Yuffy, Roberts, Goldstein and Manzocco in Windsor, Ontario. She studied commerce and law at the University of Windsor (LL.B.) and received her Juris Doctor from the University of Detroit. She was called to the bar of the Province of Ontario in 1990, and is a member of the Law Society of Upper Canada. She is a former member of the Canadian Bar Association, and the Essex County Law Association.

The Sir John Crawford Memorial Lecture has been sponsored by the Australian Government since 1985 in honor of the distinguished Australian civil servant, educator, and agriculturalist who was one of the founders of the Consultative Group on International Agricultural Research. Sir John (1910–1984) was the first Chair of the CGIAR's Technical Advisory Committee.

Sir John Crawford Memorial Lecturers

- 1985 Robert S. McNamara, United States
- 1986 Bukar Shaib, Nigeria
- 1987 Amartya Sen, India
- 1988 Helen Hughes, Australia
- 1989 Jacques Diouf, Senegal
- 1990 M. S. Swaminathan, India
- 1991 CGIAR Twentieth Anniversary Commemoration
- 1992 Enrique V. Iglesias, Uruguay
- 1993 James Gustave Speth, United States
- 1994 Alex F. McCalla, Canada
- 1995 Shridath Ramphal, Guyana
- 1996 Maurice F. Strong, Canada
- 1997 Omar Kabbaj, Morocco
- 1998 Peter C. Doherty, Australia
- 1999 Michael Lipton, United Kingdom
- 2000 J. Craig Venter, United States
- 2001 Nafis Sadik, Pakistan
- 2002 Mohamed El-Ashry, Egypt
- 2003 Susan Whelan, Canada

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CGIAR Secretariat

A Unit of the CGIAR System Office
World Bank 1818 H Street, N.W. Washington, D.C. 20433 USA
t: 1 202 473 8951 f: 1 202 473 8110
e: cgiar@cgiar.org cgiar@worldbank.org

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