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Foreword

It was during the second half of the 20th century that the international community mobilized to combat world hunger. Since then, international agricultural research has been an important mechanism of development aid. The primary objective has been to create conditions conducive to producing adequate food supplies for the world's population. The Green Revolution — to which international agricultural research Centers of the Consultative Group on International Agricultural Research (CGIAR) have made significant contributions, particularly through varietal improvements — is largely the result of this movement.

Currently, the problem is far more complex in terms of its qualitative, health, economic, societal and environmental aspects. Instead of focusing efforts on combating hunger solely through increased production, research now recommends approaches that, on the one hand, integrate the various aspects of the problem and, on the other, seek to combine all elements of the solution and, finally, divide project responsibilities among the capable actors. The prevailing view of sustainable development in the international aid agenda over the last few years constitutes the most recent manifestation of this change.

In this context of development, agricultural research themes have been transformed and broadly diversified across new disciplinary fields. CGIAR Centers have contributed to these changes and enhanced their capacities in response to these new needs. The newly defined priorities of the CGIAR System, which were approved at its 2005 Annual General Meeting in Marrakech, Morocco, are a reflection of this collaboration between previously established fields of excellence and the consideration of new dimensions of sustainable development. The French national research system has also incorporated these changes that link, for example, production with consumption, the local context with the global, and the environment with the economy. The CGIAR and French agricultural research systems, which are among the most important operating worldwide, are therefore better equipped to provide solutions addressing the multitude of situations across the globe. Projects executed jointly by CGIAR and French teams provide a number of excellent examples that demonstrate the capacity of these two systems to create new synergies in both traditional areas of agricultural research and more innovative fields.

However, the trend of globalizing scientific issues by categorizing them on the basis of their global challenges also creates a number of difficulties. First is the issue of critical mass, because addressing desertification at the local level does not require the same resources as expanding general knowledge on climate change, even if these phenomena are closely linked. Secondly, it tends to blur borders, remove the asymmetries between the North and South, and finally challenge the justification for scientific research specifically devoted to development. It is already quite difficult to ensure that research that has been done specifically for development actually reduces inequality. As there are very few opportunities for non-specialized research to appropriately and spontaneously improve the welfare of disadvantaged people, research for development remains more than ever a necessity for combating poverty as stipulated by the Millennium Development Goals. To succeed, this research must be broadly supported, including by the most advanced research efforts, to ensure that the latest scientific and technological advances are included in its design and implementation.

Thus, through its ripple effect on other actors, cooperation between the CGIAR and the French research system must generate synergies required to overcome the tremendous food, environmental, economic and social challenges of the future. While meeting standards of scientific quality, it must promote international agricultural research that is focused primarily on the specific needs of the South. Its extensive partnership network — extending from the North to the South and including the public and private sectors as well as researchers and civil society — will be the primary guarantee of its success.

This publication is an outgrowth of an evaluation solicited by the Comité national d'évaluation de la recherche (CNER) and appears at the initiative of the Commission de la recherche agricole internationale (CRAI). In its findings, CNER recommended that relations between the CGIAR and France be strengthened. This document first highlights a selection of scientific collaboration between teams from the CGIAR Centers and France. It then presents a description of the institutional frameworks in which the two systems operate and the recent changes currently undertaken. Finally it provides a forum for open and varied discussions on the prospects for agricultural research in coming years. In these ways, this document constitutes a solid foundation for working together to broaden discussions on cooperation between the CGIAR and France, and poses the opportunity for drafting a document detailing an operational partnership strategy.

Denis Després

Secrétaire exécutif de la Commission de la recherche agricole internationale (CRAI)

Foreword

Scientific partnerships are an exciting aspect of work supported by the CGIAR, combining diverse strengths in a continuing effort to combat poverty and hunger, protect natural resources, and increase wealth creation. I am particularly pleased, therefore, to associate myself with Denis Despréaux, Executive Secretary of the French *Commission de la recherche agricole internationale* (CRAI), in jointly introducing “France and the CGIAR: Scientific Partnerships for Agricultural Development,” published by the CGIAR Secretariat.

This publication is a collaborative response by CRAI and the CGIAR to a recommendation from the Comité national d'évaluation de la recherche (CNER) that France should scale up its scientific and financial collaboration with the CGIAR. CNER expressed this view last year in a report entitled “La recherche agronomique française pour le développement: enjeux internationaux” (French agricultural research for development: international challenges). The report, which was featured in the July-September 2005 “Letter to CGIAR Members” from the Chair and Director, went into specifics in a number of areas and proposed that the focus, structure, and funding of the France-CGIAR partnership should be re-examined, re-invigorated, and intensified.

We are fortunate that follow-up discussions on these and related issues could be quickly launched with the help of Daniel Rocchi who has been seconded by the French Ministry of Agriculture and Fisheries to serve as Senior Liaison Officer at the CGIAR Secretariat. He is the coordinator of this publication. We are indebted to him for a text that is rich in substance, well-focused, and alive with new ideas. It gives readers a snapshot of a productive partnership, points the way to new agricultural research mechanisms, and sets out perspectives on international agricultural research of the future.

The quest for renewed forms of scientific partnership is in keeping with the role France has played in the CGIAR from the Group's inception, providing the CGIAR System with intellectual, institutional, and financial support. France and other founding Members believed that the knowledge which sparked the “green revolution,” adapted to local conditions, could be effective throughout the world's developing regions. Their optimism has been fully validated by several independent studies – and by observable changes in the lives of the poor who have benefited from the results of agricultural research.

However, the application of high quality science and policy advice to solve problems associated with development is not simply a matter of looking back at past achievements. Science continuously looks ahead: identifying new challenges and seeking to overcome them. Despite the tangible impact of agricultural research for development, some formidable challenges remain.

For instance:

The demand for food could double by 2050, as an additional 2 billion are added to the global population. The demand will diversify, when incomes rise and consumers spend more on better and higher value foods. The need to produce more food will intensify pressure on natural resources which are already under stress.

The need for increased production is complicated by global climate change which threatens agriculture with a productivity decline of up to 30 percent in the absence of corrective action. Some estimates predict yield declines as early as in 2020.

Twelve million hectares are lost annually through desertification that affects the lives and livelihoods of over 2 billion people in some 110 countries. Deforestation causes land degradation which creates economic, environmental and social hardship for the poorest of the poor who live in fragile environments.

Problems associated with water remain acute. Nearly two-thirds of the world's population is expected to live in water-scarce or water-stressed areas by 2025 unless current trends are reversed. Agriculture uses 70 percent of all fresh water.

The world is losing biodiversity at unprecedented rates. Some 10 percent of the world's tree species are threatened. The world's marine fisheries are overexploited.

Poverty remains a particularly acute problem in Africa. Overall, the global rate of poverty reduction in the last decade was less than a third of what is required to meet the Millennium Development Goal of halving poverty by 2015. It was six times less in sub-Saharan Africa. More than two million African children die every year before they reach the age of one. At the same time, child malnutrition causes stunting, weak vision, and blindness. Among adults, nutrient deficiency weakens the immune system, thereby increasing the extent and severity of HIV/AIDS, and the spread of other diseases.

Global poverty is aggravated and growth blocked by the difficulties that developing countries face in their attempts to secure fair access to fair markets for their agricultural products. The Doha round of talks – widely touted as a “development round” -- has again failed; and the impact is on the livelihoods of several million farmers in developing countries. To place the issue in perspective, it is useful to remember that domestic subsidies and related support for agriculture within industrialized countries amounted to over \$350 billion in 2005 while total ODA that year was less than \$3 billion.

These challenges cannot be ignored and, certainly, will not disappear of their own accord. The French-CGIAR partnership will therefore remain critical for agricultural research as a pillar of agricultural development, while we focus our actions and resources on confronting these challenges together with our partners in developing countries. The CGIAR System brings to this task, years of accumulated global experience. The people-centered and holistic approach that French institutions adopt strengthens that experience. The CGIAR will continue to be enriched by ideas emanating from the French scientific community. We value in particular the strong philosophical approach to public policy associated with France. We have done much together. We can and will do more.

Francisco J. B. Reifschneider
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