Alliance of the CGIAR Centers

Increased Investment in Agricultural Science is Key to Avoiding Future World Food Crises

Leaders of agricultural research for developing countries are calling for a massive increase in funding to solve the long-term global threat of high food prices that are rising alarmingly. Rice, wheat and maize are experiencing some of the sharpest increases ever and major price rises have been recorded in meat, poultry, and dairy foods. Food riots in many developing countries – those in Cameroon and Egypt taking people's lives, protests in Haiti forcing the prime minister's resignation – have shocked the world.

"If we seriously want to resolve this current crisis, then we have to renew the research vigor that once was dominant in all aspects of agriculture," says Dr. Emile Frison, Chair of the Alliance of the 15 research centers of the Consultative Group on International Agricultural Research (CGIAR). "Agricultural science can solve many of the problems that lie behind the reasons for such price leaps.

But this means we need to quickly reverse the significant decline in public funding of medium- and long-term research in order to improve the quality of life of the people in the world's poorest regions – a mandate that has been at the core of the work by our centers since the group's founding in 1971."

In the short term, direct food aid may help somewhat, but it is only a temporary solution. It does not address the longer-term problem of how to boost food supply to keep pace with global demand.

Agricultural research will help the millions of farmers in developing countries – where the shortages have hit hardest – to be more productive than they now are. Science aimed at helping these small-scale food producers has been at the heart of the work of the CGIAR, a strategic alliance of donors, partners and international research centers. Research by these centers and their partners over the past four decades has been significant in reducing hunger and improving rural incomes throughout the developing world.

According to the *World Development Report 2008*, investment in agricultural science has "paid off handsomely," delivering an average rate of return of 43% in 700 development projects evaluated in developing countries.

For every $1 invested in CGIAR research, $9 worth of additional food is produced in developing countries, where it is needed most. And the investment continues to pay off, year after year, unlike one-off food aid.

CGIAR science has provided solutions with wide application in developing-country agriculture, excellent rates of return for investment and very good secondary results – for instance, saving children from malnutrition and easing rural living conditions, especially for women.

Such advances include the development of higher-yielding crop varieties, and others that are better adapted to extreme climatic conditions such as flooding and drought. New farming techniques help smallholders get increased yields from poor soils and also prevent land degradation. Better natural resources management practices have improved rural environments. The creation of free-access genebanks means that future generations will continue to benefit from the safeguarding of today's biodiversity.

A key factor in making such research success possible has been the continuing investment and support of the CGIAR's 64 donor members: 21 developing and 26 industrialized countries, four co-sponsors, and 13 other international organizations.

However, despite the obvious value of such achievements, international and national investment in agricultural research has been seriously declining for the past two decades. It is currently far from meeting today's urgent need for adequate food production, let alone the increased requirement for the next two decades when climate change is predicted to cause major crop losses. A meager one-third of global agricultural research expenditure is spent on improving the supply of food in developing countries, home to almost 80% of the world's population.

This decline must be rapidly reversed and funding significantly boosted if the challenge of agricultural development today is to be met and the quality of life in the world's poorest regions improved.

For further information on the Alliance of CGIAR Centers contact:
Office of the Alliance of CGIAR Centers, c/o FAO,
Via delle Terme di Caracalla, 00153 Rome, ITALY
+39 06 57052276 | http://www.cgiar.org/centers/alliance.html