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International efforts fail to solve world hunger

<http://www.ifpri.org>; m.rubinstein@cgiar.org and www.ifpri.org/PRESSREL/2005/pressrel20050125.pdf

Global efforts to reduce hunger and poverty by international organizations have not been successful. On a scale of ten, efforts were rated three, so says the Global Governance Initiative Annual Report 2005 released by the International Food Policy Research Institute. Efforts to diminish poverty earned a rating of four.

The report says that if current trends continue, there will still be about 600 million hungry people in 2015, far short of the target of 400 million set by heads of State of the World Food Summit in 1996. To reach that goal, efforts need to be accelerated more than 12 times or "this scenario will not materialize."

Of several recommendations forwarded, the report said that governments should reform agriculture. It noted that "agriculture has a tremendously important role to play in meeting these goals. Investments to enhance agricultural productivity and access to markets would not only increase income for small-scale farmers, but also reduce the cost of food for poor consumers."

The Global Governance Initiative, which issued the report, was created by the World Economic Forum. The Initiative provides an annual assessment of the level of effort being made towards achieving the world's goals by governments, international organizations, the private sector, and civil society organizations.

Tanzania conducts GM field trials

"Tanzania: GM Crop Tests Get Green Light" [Africa News](#)

Annually, red bollworm causes severe damage to cotton Tanzania. Wilfred Ngirwa, permanent secretary for the Ministry of Agriculture and Food Security, recently announced that Tanzania will begin its first field trials of genetically modified crops this year. The first plants that are to be tested are genetically modified cotton plants.

With this announcement Tanzania will become the seventh African country to allow GM field trials, following Burkina Faso, Egypt, Kenya, South Africa, Tunisia and Zimbabwe. Of these countries, South Africa is the only country that has approved the commercial cultivation of GM crops.

In Tanzania, the government-run trials are expected to begin in October and will be supervised by Sokoine University of Agriculture researchers. The research will be conducted in three regions of Tanzania, including Mbeya, Rukwa and Iringa. These regions have been banned from growing cotton since 1968, when there was an effort to stop bollworm from spreading to other regions of the country.

Paul Ntwina, a member of parliament for Songwe constituency, stated that GM cotton will be good news for Tanzania farmers, characterizing it as "our likely liberator." Job Lukonge, of the Tanzania Farmers Association, stated that he was glad that the government started the field trials with cotton instead of a food crop that might raise concerns for some about introducing the product to the human food chain. According to Ngirwa, Tanzania cannot afford to be left behind by technologies that increase crop yields, reduce farm costs and increase profits. It is currently illegal to grow or germinate GM crops in Tanzania.

However, the government is anxious to introduce this technology, and it has developed a policy paper on the legislative framework needed to manage GM production.

Science & Technology options for African agriculture

<http://www.interacademycouncil.net/report.asp?id=6959>

Improving agricultural productivity and food security in Africa involves numerous challenges. The Amsterdam-based Inter-Agency Council released a report entitled "Realizing the Promise and Potential of African Agriculture" which recommended responses to these challenges.

Among five strategic themes, which include building impact-oriented research, knowledge and development institutions, and creating and retaining a new generation of agricultural scientists, is a focus on science and technology options that can make a difference. The report suggested, among others, the need to:

- Adopt a market-led productivity improvement strategy
- Adopt a production ecological approach with a primary focus on identified continental priority farming systems
- Pursue a strategy of integrated sustainable intensification, and
- Bridge the genetic divide

The report said that a substantial amount of additional investment is needed to respond to the specific needs of African farmers so that they benefit from both classical plant breeding and genetic modification. A regional rather than a national approach was suggested to exploit biotechnology. It called for a strengthening of capacity in biotechnology, particularly through public-private partnerships. Life sciences should focus, the report added, on traits such as drought tolerance and resistance to a wide variety of pests and diseases. Concomitant to all these is the need to strengthen research capabilities and regulatory procedures, as well as ensure that biosafety aspects are adequately addressed.

IAC was created by the world's science academies to mobilize the best scientists and engineers worldwide to provide high quality advice to international bodies - such as the United Nations and the World Bank - as well as to other institutions.

GM plants will be used to create AIDS vaccine

Steve Connor. *The Independent*. 13 Jul 2004

GM plants are to be used to grow vaccines against rabies and AIDs, scientists have announced. Europe's first field trial is likely to be carried out in South Africa because of fears of crop vandalism in Britain. The GM crop could dramatically reduce the cost of producing vaccines with estimates ranging from one tenth to one hundredth of the price of conventional immunization. Dubbed "pharming" by its opponents, this is the latest step in technology which allows medicines to be grown in plants. Although the project is concerned with injectable vaccines, other trials under consideration involve extending the research to oral vaccines which might be grown in edible raw food such as bananas.

South Africa's CSIR is participating in the research and is particularly interested in potential vaccines for HIV. The Friends of the Earth GM campaigner Clare Oxborrow said: " Growing medicines in plants has serious implications for human health and the environment. We recognize the need for affordable medicines to be made available to people with life-threatening illnesses but this research could have widespread negative impacts." On the other hand the cost of doing nothing is measured in millions of people who will die from preventable diseases!

Recommended reading for COP delegates

With the coming Public Research and Regulation Initiative conference, as well as the meeting of the parties of the Cartagena Protocol, Dr. Klaus Ammann has recommended several papers to aid participants, readers, and researchers in assessing and understanding important regulatory developments. Dr. Ammann is the Director of the Botanical Garden at the University of Berne, and Chairman of the Biodiversity Section of the European Federation of Biotechnology.

"Harmony or havoc: can the WTO, Biosafety Protocol and Codex Alimentarius work together?" is a new SciDev policy brief that looks at the complex relationships amongst the three accords. It explores evolving treaty rules, with regard to promoting trade, protecting the environment, safeguarding human health, and recognizing consumer interests. Access the complete policy brief at

<http://www.scidev.net/dossiers/index.cfm?fuseaction=policybrief&dossier=6&policy=54>.

Updates and information on the initiative can be found at <http://www.pubresreg.org>
Download the latest version of the programme at <http://www.botanischergarten.ch/PublicSector/Danforth-2005-03-program-draft-4.pdf>

Improving Food Security in Africa

www.interacademycouncil.net/report.asp?id=6959.

Africa faces a number of challenges to improve agricultural productivity and food security according to a recent report released by the InterAgency Council (IAC) titled, "*Realizing the Promise and Potential of African Agriculture*."

The report provides a number of recommendations to help meet the challenges including the need for increased investments, strengthening public-private partnerships, focusing on certain areas of research and strengthening regulatory procedures and research capacity. Chapters covered include: Introduction; Food Security in Africa; African Agricultural Production Systems and Productivity in Perspective; Science and Technology Options That Can Make a Difference; Building Impact-Oriented Research, Knowledge and Development Institution; Creating and Retaining a New Generation of Agricultural Scientists; Markets and Policies to Make the Poor Income and Food Security; and Strategic Recommendations.

Study Evaluates the Impact of Public Research on Developing Countries

www.ifpri.org/pubs/articles/2005/naturebiotech.pdf and
www.ifpri.org/pressrel/2005/20050106.htm

A recent report released by the International Food Policy Research Institute (IFPRI), highlights the development of biotech crops by 61 research institutes in 15 developing economies. The study documents biotech research on 45 different crops with the majority of the research focusing on improving resistance to diseases and pests, but notes that most of the research is currently being developed in the laboratory, greenhouse or confined field trials with very little available for use by farmers.

According to Joel Cohen, IFPRI Senior Research Fellow and author of the report, "Many people assume that large multinational corporations control the global development of genetically modified foods, but the reality is that poor countries have vibrant programs of public biotech research. Often this research draws upon indigenous plant varieties to cultivate improved crops for local use by small-scale farmers." Cohen also stated, "Poor countries are often unwilling or unable to test commercial GM crops because of national policies or regulatory systems that are not prepared to grant approval for general use.

Researchers in industrialized and developing countries need to work together to provide science-based information for decision makers, so that they can enhance the clarity of regulatory policies and procedures." This study was the first to draw the connection between regulation and specific crops and genetic traits, showing the policy implications of the research.

Recommendations include increasing small-scale, confined field trials to test crops, receiving farmer feedback and improving information sharing among developing countries.

FAO Recommendations on Monitoring the Effects of Biotech Crops

www.fao.org/newsroom/en/news/2005/89259/index.html

A consultation of experts convened at the United Nations Food and Agriculture Organization (FAO), recommended that the responsible release of biotech crops span the entire development process from pre-release risk assessment, to biosafety considerations, and post-release monitoring. The experts recommended involving stakeholders such as farmer groups and community organizations in the process, and protecting agrosystems and livelihoods. The experts acknowledged that a lot of data is already available, and agreed on the importance of identifying and assembling the most accurate information. The group of scientists recommended that the objective of environmental monitoring of biotech crops should be nested within the processes that address broader goals. They also noted the need to adapt any methodology to the specific farming system using a well-designed process.

NOTICEBOARD

2-13 April 2005 - : Training course on plant tissue culture - An international training course on plant tissue culture and transformation techniques will be held at the Agricultural Genetic Engineering Research Institute (AGERI) in Giza, Egypt. It is sponsored by AGERI, Academy of Scientific Research and Technology (Egypt), and the Centre for Science and Technology of the Non-aligned and other Developing Countries (India). The training course is open to participants from developing countries. For more information, contact Prof. Arun P. Kulshreshtha, Director, Centre for Science & Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre), Core 6A, 2nd Floor, India Habitat Centre, Lodhi Road, New Delhi – 110003, India. His email address is apknam@gmail.com.

11-15 April 2005 – BioVision 2005, Lyon, France. For more details see www.biovision.org.

19-22 June 2005 – BIO 2005, Philadelphia, USA. For more details see www.bio.org/events/2005/.

27 – 29 June 2005 – National Agricultural Biotech Council Conference (NABC), Nashville, USA. For more details see www.nabc.cals.cornell.edu

- 1 – 3 July 2005 - 2nd International Greek Biotechnology Forum**, to be held in Athens, Greece. The three-day conference, presented by BIONOVA and EuropaBio, covers all issues of biotechnology, its fundamentals, and its applications. It also promises to showcase about 200 exhibitors from Europe's companies, from the large conglomerates to small and medium-scale enterprises. The conference aims to direct the convention to new markets, specifically to Arabic countries of the Middle East and North Africa. Its programs will cover White and Green Biotech, human disease biology and medicine, and biotechnology transfer and bio-finance. For more information, visit <http://www.igbf.gr>.
- 6 – 10 July 2005** – 9th International Conference on Agricultural Biotechnology. "Ten years After", Ravello, Italy. For more details see <http://www.economia.uniroma2.it/conferenze/icab/2005/Default.asp>.
- 23 August 2005** – 1st International Conference on the Importance of Biodiversity to Human Health (COHAB 2005), Galway, Ireland. For more details see www.cohab25.com.