

GLOBAL KNOWLEDGE CENTER ON CROP BIOTECHNOLOGY  
INTERNATIONAL SERVICE FOR THE ACQUISITION OF AGRI-BIOTECH APPLICATIONS

## Strengthening Knowledge Sharing Initiatives on Crop Biotechnology in the Developing World



### FIVE YEAR REVIEW

SEPTEMBER 2000 – SEPTEMBER 2005



## The Global Knowledge Center on Crop Biotechnology

The International Service for the Acquisition of Agri-biotech Applications (ISAAA)'s Global Knowledge Center on Crop Biotechnology, familiarly known as the KC, was established in September 2000, in response to an urgent demand from senior policy makers in developing countries. They requested that an entity be set-up to make authoritative information available to facilitate and support their transparent decision making process with the public regarding crop biotechnology.

The KC is a science-based information network that facilitates the sharing of information and knowledge on crop biotechnology applications. The KC has a global mandate and supports a global information network of nodes called Biotechnology Information Centers (BICs) in Asia, Africa, and Latin America. The KC is based at the ISAAA Southeast Asia Center in the Philippines.

“

**ISAAA should urgently initiate an Information/ Knowledge Center on food biotechnology crops and should network the knowledge to developing countries with a priority need for this information.**”

*Southeast Asian experts who joined a traveling workshop organized by ISAAA in 1999*

### Our Primary Stakeholders

Our priority audience includes policy makers, scientists, the academic community, the private sector, and the media.

Through the KC's network of Biotechnology Information Centers, we are able to reach specific local audiences in each of the member countries to include industry and farmers. Through the multiplier effect of communication, the general public is eventually reached.

### Our Objectives

The KC seeks to facilitate informed decision making among emerging countries with respect to crop biotechnology. As such it aims to:

- Serve as a global knowledge center and network on crop biotechnology.
- Assist national biotech programs in creating an enabling environment for the safe application of crop biotech, through the creation of BICs.
- Generate, process, and package knowledge on crop biotech.
- Facilitate sharing of knowledge among various stakeholders.
- Develop and validate appropriate science communication modalities.

### Our Accomplishments

- Establishment and coordination of a global network of Biotechnology Information Centers and country links in Asia, Africa, Latin America, and Europe. These centers implement various communication modalities to reach local stakeholders that include workshops, publications, and websites.
- A weekly electronic newsletter, CropBiotech Update, which has a subscriber list of over 185,000 people from approximately 200 countries and is translated into eight other languages. The list excludes subscribers of other listservs that pick up news from the Update.
- KC's website, CropBiotech Net, which has been visited by over a million people since its launch in 2001.
- Publications for varied audiences with the Annual Global Review of Commercialized Biotech Crops as the most authoritative single source of information and most cited reference on the subject.
- Documented experiences by developing countries in planting biotech crops in print and video modalities.
- Communication research to better understand specific audience profiles and needs, as well as media monitoring to come up with appropriate communication strategies.

## The Core KC

ISAAA, through the KC, seeks to help national programs facilitate the development of an enabling environment for the safe application of crop biotechnology; and promote the public understanding of crop biotechnology initiatives. It scans the biotechnology environment to get a global perspective of the field in real time mode. Using this information, the KC develops multi-media prototype communication materials, which the different BICs use in their information dissemination, translate into the local languages, or repackage into other forms to suit specific information needs. The BICs are recipients of regular information briefs and backgrounders for media, and key third parties like policy makers and opinion editors.

The BICs provide local updates to the KC so that the core center can facilitate the sharing of information and experiences across the network. Each BIC has a story to tell, and the core KC makes sure that these experiences are shared and analyzed for their respective learnings and eventual possible adoption. This exercise has shown that each country has specific and unique communication modalities to address information needs of priority stakeholders.

"... if 5 billion people speak with one voice, a consistent message that is credible and compelling... that is a force to deal with and this is in your hands."

"... Let us put into place a knowledge base that would allow the public, all the segments of society, to be better informed about the technology that can contribute to a better quality of life that hopefully will alleviate hunger, malnutrition and poverty."

Dr. Clive James, ISAAA Chair,  
addressing participants to the ISAAA Network  
and Planning Workshop held in  
Bangkok, Thailand, 2001

## The CropBiotech Net Website



In terms of global reach, the CropBiotech Net ([www.isaaa.org/kc](http://www.isaaa.org/kc)) and a component feature, the electronic newsletter, CropBiotech Update, are significant strategies to get information on crop biotechnology out to as many stakeholders as possible. CropBiotech Net is the KC's official website and provides regular updates, documents, downloadable materials, and global status reports on crop biotechnology. Through the years the website continues to evolve in design and content to suit specific client needs.

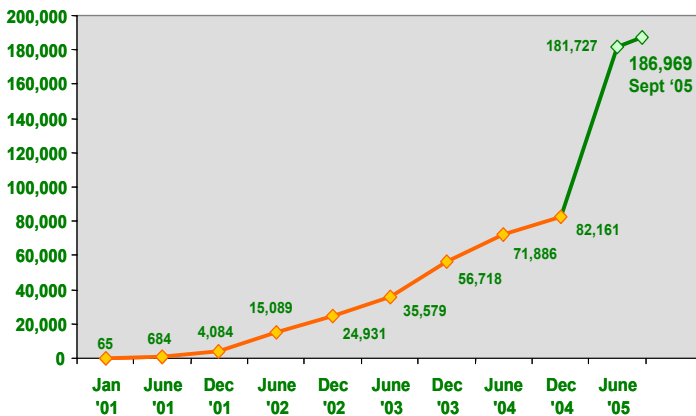
### WEBSITE STATS AND USAGE

- Over a million visitors have seen the site since 2001. On the average, about 1,300 people visit the site daily. Visitor sessions started with only about 600 in 2001 and now average 40,000 per month, from an all time high of 50,000 in January 2004.
- Top visitors to the site come from the United States, Canada, Japan, United Kingdom, France, Germany, Netherlands, Australia, Italy, Brazil, Belgium, and India.
- Total hits rose from 70,000 in 2001 to over 2 million in 2004. From January to September 2005, an average of 175,000 hits per month was recorded.
- Visitors download materials from the website, particularly the weekly news, and publications like institutional briefs and multi-language versions of the annual global status report on biotech crops.
- The website is a top URL for both Google and Yahoo web searches on "crop biotechnology".

## CropBiotech Update: Reaching the South

To offset the predominantly developed world clientele of the website, the KC has taken an active effort in reaching more stakeholders in the developing world through the CropBiotech Update, a weekly e-newsletter. The Update summarizes global news with implications for developing countries, features important personalities and institutions, and provides links or electronic copies of relevant documents and reports.

### CropBiotech Update Subscribers, 2001-2005

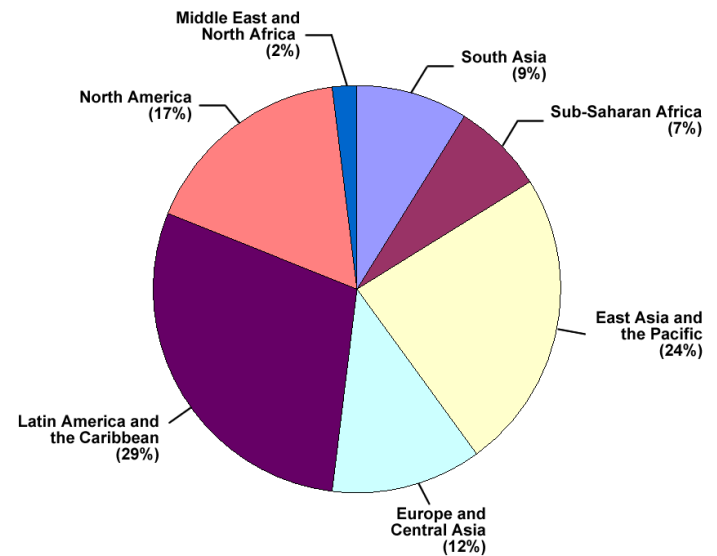


It has a subscribers' list of more than 185,000 people from approximately 200 countries (72% developing countries and 28% developed countries). This figure includes recipients of the Update translations in Arabic, Bahasa Indonesia, Bangla, Chinese, French, Italian, Portuguese, Thai, and Vietnamese. Not reflected here are readers of other e-newsletters and websites that either pick up or translate many of the news. This network of subscribers is probably the largest of its kind, reaching 10 times more subscribers than that of similar services, and growing at an average rate of 2,000 subscribers per month.

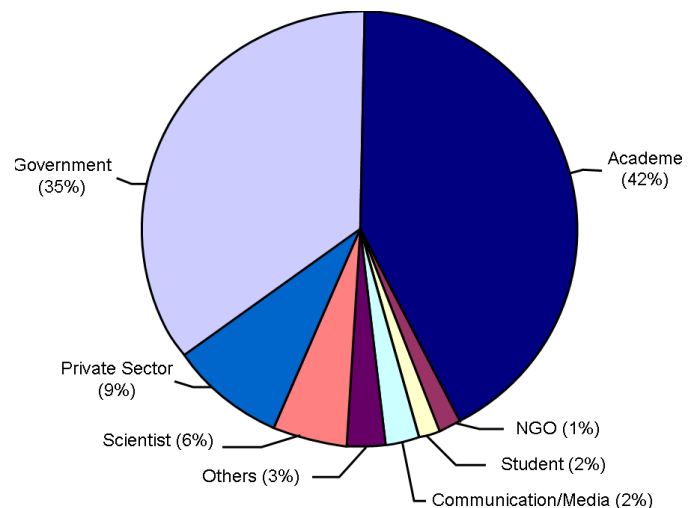
A subscriber e-survey is conducted annually to gather feedback on reader satisfaction, readership of other e-newsletters, and suggestions for improvement. In July 2005, respondents from 71 countries representing the academe, management, science community, regulatory system, and the media gave overwhelming positive feedback. They found the Crop Biotech Update informative, provided the latest/up-to-date information on biotech, and a "good mixture/right balance of

technical advances, regulatory, biosafety, and political issues." They also liked its conciseness, easy-to-read summaries, and interesting "side" information. The Update was used as an instructional material by teachers, is the "subject of discussion between different disciplines in the company," serves as a useful index, and provides "notices about important research steps in basic research that could later be used for applications." Favorable feedback was also given to the easy-to-review titles with hyperlinks, neatly formatted layout, and good links.

### Distribution of profiled CropBiotech Update subscribers by developed/developing countries



### Distribution of profiled CropBiotech Update subscribers by profession



**“(The Crop Biotech Update) helps resource poor researchers in developing countries to keep abreast of the developments in this area.”**

**George Thomas, Scientist  
Rajiv Gandhi Centre for Biotechnology, India**

**“It gives up-to-date information on the status of commercial biotech. This is one that I read from cover to cover.”**

**Mpoko Bokanga  
Executive Director, African Agricultural  
Technology Foundation, Kenya**

**“It provides me with significant information which I do not get from any other source.”**

**Dr. Julian Kinderlerer  
Professor of Biotechnology Law  
Sheffield Institute of Biotechnological Law and  
Ethics, United Kingdom**

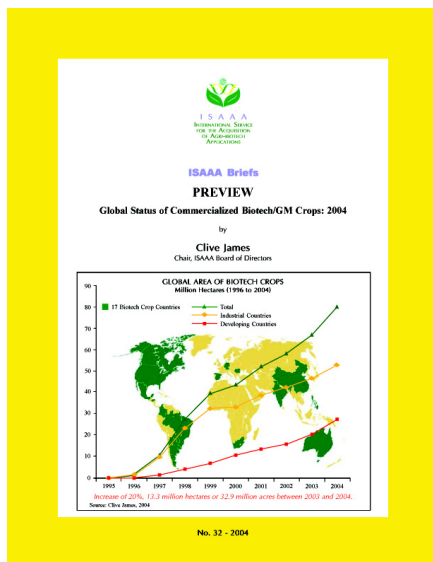


technical materials on various issues of biotechnology, as well as issue briefs, brochures, and monographs. Most widely read are the Pocket K (Knowledge) series, which are packaged information on crop biotechnology products and related

issues. These materials, which now number 20, are updated as often as new information is made available and have been translated into 16 other major languages of the South.

Articles on the Center’s activities, as well as on issues surrounding crop biotechnology, are published in peer-reviewed journals, semi-technical publications, international proceedings, and popular magazines.

## Publications

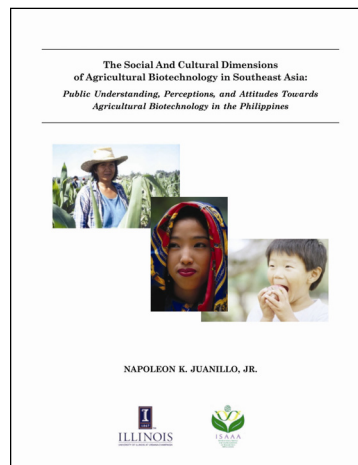


ISAAA is probably most associated with its Annual Review of the global status of commercialized biotech crops, which is published as ISAAA Briefs. These reviews are written by ISAAA’s Chairman of the Board, Clive James, and have become the most authoritative single source of

information about the status of commercial use of biotech crops globally, and the most-cited reference on the subject.

The 2004 Review generated extensive global exposure, with over 800 media stories in principal newspapers in 32 countries and with over 135 million impressions around the world. These publications are also freely distributed to over 4,000 recipients in developing countries. Other publications include popular and semi-

## Research Projects



An important activity to complement the KC’s knowledge management function is the generation of “robust” knowledge. The KC initiated a research project in 2003 on “Public Understanding and Diffusion of Biotechnology in Southeast Asia: Constraints and Challenges to Informed

Decision Making”. It provides an in-depth and comprehensive discussion and analysis of the dynamics of public discourse and decision making among key stakeholders on agricultural biotechnology in Southeast Asia. A follow-up study is currently underway to analyze changes of public opinion over time.

Media monitoring and analyses are conducted regularly to provide a basis for determining what journalists consider as important to merit public opinion, and also give an idea of the agenda-setting function of the media.

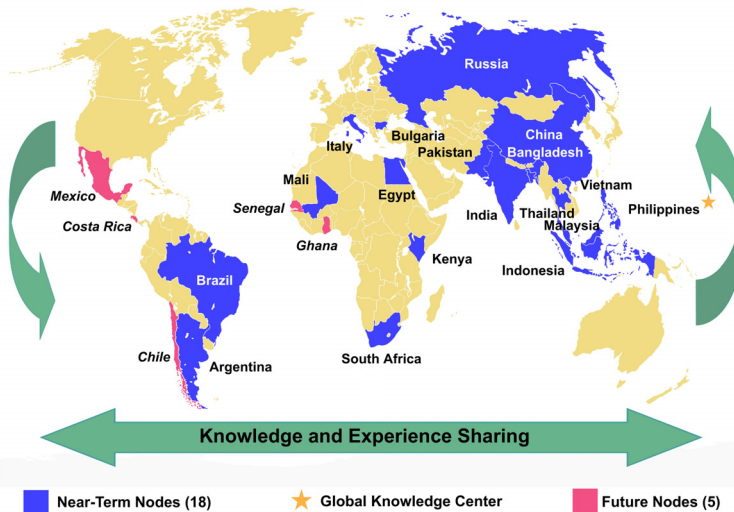
## Process Documentation

A growing niche for the KC is the documentation of information, practices, and events related to the use of certain biotechnologies in developing countries. This involves documenting story patterns on crop biotechnology experiences from the perspectives of various stakeholders so that such learnings can be shared with other people.



Projects were initiated to document the experiences related to the adoption of Bt corn in the Philippines, tissue culture banana in Kenya and Tanzania, and Bt cotton in India.

## KC's Biotechnology Information Network



The heart and soul of the KC is its growing network of Biotechnology Information Centers, or BICs. The first center, based in the Philippines and set up in 2000, is joined by centers in Bangladesh, China, India, Indonesia, Malaysia, Thailand, and Vietnam in Asia; and Kenya, Mali, and Egypt in Africa. The KC has strong links in Brazil and Argentina. Also within the network are BICs in Bulgaria, Russia, and Pakistan which are independent nodes funded by their local governments.

These centers are at the forefront of responding to scientific information needs, and in promoting and advancing a broader public understanding of crop biotechnology in specific countries.

The BICs have established their own identities, and are now recognized locally as one of the main sources of crop biotechnology information. They are engaged in various communication and networking activities, such as:

- Workshops and seminars (e.g., risk communication workshops for scientists)
- Stakeholder dialogues (e.g., farmers, religious leaders, local government units)
- Website development
- Translation and development of publications and documents

The country nodes have taken the lead in getting people to engage in fruitful exchanges regarding crop biotechnology.



### EXTERNAL REVIEW, 2002

**“The outputs to date from the investments on the Global Knowledge Center on Crop Biotechnology clearly show value for money... No other place in the developing countries performs such functions as the KC does in this subject.”**

**Dr. Gelia T. Castillo, National Scientist of the National Academy of Science and Technology of the Philippines and an eminent sociologist**

# Looking Beyond

ISAAA has fully integrated a systems approach to its efforts at transferring appropriate technologies for the developing world through research, capability building, and knowledge sharing. It is the latter which has particularly captured a niche in ISAAA's operations as it hinges on the very core of creating an enabling environment for biotechnology debate based on sound science and transparency.

More importantly, the network of Biotechnology Information Centers has enabled ISAAA to constantly reach out and become a positive force in the developing world for crop biotechnology. The different BICs have also grown to cultivate and nurture a common purpose, even with the existent cultural diversity, political differences, and communication modalities being used. In the words of an external reviewer, the network "has evolved into a working science communication center, which engages the science community as much as the different 'publics' in this era of changing relationships between science and society."

ISAAA is building on its wealth of experiences, and its varied insights and perspectives. It will continue to grow and be strengthened by its strongly linked regional and international network of national information and knowledge resources to concretize its goal of being the collective voice of developing countries with respect to crop biotechnology.

## DONORS (PAST AND CURRENT)

- Philippine Government
- Rockefeller Foundation, US
- Bussolera Branca Foundation, Italy
- MAHYCO Research Foundation, India
- Swiss Agency for Development and Cooperation
- Atlantic Philanthropic Service, US
- US Agency for International Development
- US Department of Agriculture
- Syngenta
- Monsanto
- Dupont Pioneer
- Bayer CropScience, Germany
- CropLife International

The International Service for the Acquisition of Agri-biotech Applications (ISAAA) is a not-for-profit organization that delivers the benefits of new agricultural biotechnologies to the poor in developing countries. It aims to share these powerful technologies to those who stand to benefit from them and at the same time establish an enabling environment for their safe use.

The Global Knowledge Center on Crop Biotechnology is a science-based information network responding dynamically to the needs of developing countries on all aspects of crop biotechnology. Its activities include maintenance of an internet website, expert networking, continuous scanning of the agri-biotech environment, and multi-media communication.

To contact the Global Knowledge Center on Crop Biotechnology, visit the website: <http://www.isaaa.org/kc> or email: [knowledge.center@isaaa.org](mailto:knowledge.center@isaaa.org).

For information about ISAAA, please contact the Center nearest you:



**ISAAA**  
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