

from Paper
to Partnerships
10-year report: 2000-2010

Global Knowledge Center
on Crop Biotechnology



ISAAA

2000

from paper

A recommendation written on a piece of paper. A graphical model of crop biotechnology communication conceptualized from a brainstorming workshop with global experts. A check issued by an Asian president to Nobel Laureate and ISAAA's founder patron, Dr. Norman Borlaug, as initial support to a global information network. The early beginnings of the Global Knowledge Center on Crop Biotechnology literally started with pieces of paper.

Six senior policy makers from Southeast Asia involved in food biotechnology crops were invited by the International Service for the Acquisition of Agri-biotech Applications (ISAAA) to participate in a two-week Traveling Workshop in Europe and North America (Canada and USA). These leaders had the opportunity to meet with prominent figures from the public and private sectors of agri-biotech in industrialized countries and gain a better understanding of the global situation. They noted that "developing countries have been eclipsed in the dialogue on food biotechnology crops" and that there was lack of current and authoritative information.

In response to the recommendation of the experts for an Information/Knowledge Center, the groundwork was initiated to establish what would eventually become the Global Knowledge Center on Crop Biotechnology, popularly known as the KC. The ISAAA Southeast Asia Center was designated as the hub of the KC in September 2000 with three initial Biotechnology

Information Centers in the Philippines, Thailand and Malaysia.

In 2000, Dr. Norman Borlaug had the opportunity to share his thoughts on the vital role of science and technology in the developing world. During his visit to the Philippines, he helped support ISAAA's new knowledge sharing initiatives. He received from the Philippine president initial seed money to mobilize activities of the KC.

In January 2001, some 24 experts from Asia (China, India, Indonesia, Malaysia, Philippines, Thailand and Vietnam); Africa (Egypt, Kenya and South Africa); Europe (United Kingdom), Latin America (Brazil) and USA shared experiences and brainstormed on strategies for biotech communication. Proposals and developing country commitment from this workshop would pave the way for a global information network.

2010

to partnerships



The Global Knowledge Center on Crop Biotechnology and its growing network of Biotechnology Information Centers, is probably the first of its kind in the world. By building partnerships, the network reaches out to different stakeholders as it seeks a common voice on crop biotechnology.

The KC seeks to facilitate informed decision making among different stakeholders in the developing world. As such it:

- Serves as a global knowledge center and network on crop biotechnology.
- Assists national biotech programs in creating an enabling environment for the safe application of crop biotech, through the creation of BICs.
- Generates, processes, and packages knowledge on crop biotech.
- Facilitates sharing of knowledge among various stakeholders.
- Develops and validates appropriate science communication modalities.

The heart and soul of the network are Biotechnology Information Centers or country nodes located in Asia, Africa, Europe, and Latin

America. These 24 centers are at the forefront of responding to specific science-based information needs, and in promoting and advancing a broader public understanding of crop biotechnology in their respective countries.

In a decade, the KC has assumed a critical and important role in global efforts to enable stakeholders or attentive publics to create greater awareness and understanding of crop biotechnology, contribute to the formation of public opinion, and even frame the debate and shape policy. Through innovative multi-media approaches, networking, and various interpersonal avenues, the information network has enabled policy makers, scientists, academics, media practitioners, farmers, private sector and other interest groups to participate in the discussion and deliberation of issues and concerns. Ultimately, when technology is understood, it is able to be eventually accepted, adopted, and sustainably used.



BIOTECH INFORMATIO



ON NETWORK

reaching the

GLOBAL COMMUNITY

2.1
impressions
billion



The annual Global Status Report of Commercialized Biotech/GM Crops, authored by Dr. Clive James, founder and chair of ISAAA, is regarded as a most authoritative single source of information and most cited reference on the subject. It provides an in-depth analysis of global developments pertaining to biotech crops, distribution of biotech crops by country and crop, global adoption of the major crops, and status of regulatory approvals. The most recent report registered an estimated 2.1 billion impressions, or the number of estimated people who were likely to have come in contact with the media story about the report. Media coverage generated 1564 articles in 29 languages in 68 countries.

3.5 million *visits*

8.3M *page views*



The ISAAA website <http://www.isaaa.org> is the venue for information about crop biotechnology and has a collection of publications, videos, slides, and news available for downloading or online streaming. Visits to the site have significantly increased through the years with the highest number at 50,000 per month registered in 2010. The top country visitors are from the U.S., India, Philippines, France, Germany, China, Australia, Canada, Japan, Great Britain, Italy, South Korea and Brazil. Those from the developing world are steadily increasing through the years. A total of 8.3 million page views and downloads have been reported by webstat systems, mostly for publications such as Brief series, monographs, and derivatives of the global status report (slides, executive summary, and highlights). Google scores the website with Page or Popularity Rank (PR) of 7 (based on a scale of 0 to 10).



850,975

subscribers

510

issues

The *Crop Biotech Update* (CBU), a weekly e-newsletter summarizing global news and research on biotechnology and agriculture with implications for developing countries, is sent to a growing number of subscribers that started with 65 readers in 2000 and now number over 850,975. This list excludes other listservs that pick up news from the CBU. The network of subscribers is probably the largest of its kind in the world. A profile of subscribers shows that they are either scientists, academicians, administrators or managers, and media practitioners. Recipients from the developing world account for over 80%. CBU also releases a bi-monthly *Biofuels Supplement* that highlights news and trends, particularly on energy crops and feedstocks, biofuels programs, processing, and policy and economic issues.

12,240

articles



Variety of MULTI-MEDIA MATERIALS



Cognizant of the information requirements of specific audiences, a communication mix of innovative materials that include publications, videos documenting developing country experiences in crop biotechnology, exhibits, web-based systems, board games, among others, have been developed through the years. Many of these materials have been translated into other languages, distributed by other organizations in their information dissemination activities, and used in instruction, extension, and research. Positive feedback on these materials is documented through email surveys and user testimonials, as well as institutional awards. Communication research through public perception and attitude studies, pre-testing of materials, and media analysis provide empirical basis for development of outputs that meet stakeholders' information needs.

55 translations

Language has ceased to be a problem in accessing information. Communication materials are translated into different languages to increase their global reach. Some of the languages include: Arabic, Bahasa Indonesia, Bangla, Chinese (traditional and simplified), Filipino, French, Japanese, Hindi, Italian, Korean, Portuguese, Spanish, Swahili, Thai, Turkish, Urdu, and Vietnamese. Translations are also done in other local languages within a country such as Telugu and Punjabi in India, and Ilocano and Bicolano in the Philippines.



extensive NETWORKING

CAPACITY *building*



Workshops, trainings, seminars and meetings are organized by the KC and BICs to build capacity of stakeholders in the technical and social aspects of crop biotechnology in their respective country, as well as in the region. Scientists, academics, and regulators undergo communication skills training on responding to biotech issues. Media practitioners are briefed on developments in the field by scientists who in turn have been trained to communicate with them. Exchange visits with farmers, media practitioners, academics, and government officials provide opportunities to experience technology from the perspective of end-users and showcase important biotechnology products especially those coming from private-public partnerships. Members of the information network meet annually to share experiences, accomplishments, and be updated on communication strategies. They are thus able to have a worldview of how best to communicate crop biotechnology.

FEEDBACK



"I use the information in the ISAAA website and publications, especially the Pocket K booklets, to be able to answer and provide examples to those who make any query. The annual global status report is a landmark publication for all agricultural biotechnologists. I use the report summary and Powerpoint presentations in some of my lectures and have seen others doing so. My students visit the ISAAA website frequently to download useful information for their reports."

M. Shahidul Haque
Professor
Bangladesh Agricultural
University

"Updates about biotechnology are important because I am often asked about issues and concerns by colleagues.The principles and techniques for effective biotechnology communication that I learned proved useful in enhancing my interpersonal skills such that I don't get antagonized by those who are anti-biotech. I am conscious about principles of body language, need for voice modulation, and continuity in explaining my messages even when interrupted by other people."

Rosalie Ellasus
Farmer
Philippines

"The (CBU) news from around the world is very important for making objective reports, statements, advices for government and parliament."

Ivan Branzovsky
Ministry of Agriculture
Czech Republic

"ISAAA has enriched my knowledge on trends in modern biotechnology. Information and data from ISAAA's annual global status of commercialized biotech/GM crops reports have been useful in preparing workshop presentations and project proposal literature."

Dr. Charles Mugoya
Program Manager
Agrobiodiversity and Biotechnology Programme
of the Association for Strengthening Agricultural
Research in Eastern and Central Africa

"After receiving the Chinese version of the weekly e-newsletter Crop Biotech Update, I found out that it can be a reference for my work since it has a lot of comprehensive information. I hope my students can also receive such information so that they can view science and crop biotechnology issues more comprehensively. In addition, I think the Chinese translation of the CBU can also be a valuable reference for officials and staff of the Agricultural Management Department, Ministry of Science and Technology, and the National Development and Reform Commission."

Dr. Zhengbin Zhang
Researcher
Institute of Genetics and Development Biology
Chinese Academy of Sciences



24 BICs

Biotechnology Information Centers in Africa, Asia, Europe, and Latin America have become the key source of science-based information on crop biotechnology in the countries they represent. Stakeholders rely on the BICs for updates on the technology and benefit from networking with colleagues, and other groups. BICs support their countries' biotech agenda and reach out to varied publics through different communication modalities.

"My attendance in seminars has exposed me to the most up-to-date statistics on the economics and adoption levels, global acceptance issues and trends in modern biotechnology. This has given me the confidence and ability to authoritatively discuss and share the socio-economic, policy and technical aspects of the technology in many fora. The National Assembly, Ministry of Agriculture and related agencies, do appreciate my knowledge and consult me regularly for advice on various biotech issues."

Serunjogi Lastus Katende
Member of Parliament for Kiboga County
East Constituency in Uganda

"I attended a two-day seeing-is-believing tour where farmers interacted with scientists undertaking research on Bt cotton. I was able to understand what this technology is all about and to hear from the experts about the technology; if adopted, it could benefit not only my country but other cotton growing countries. This workshop is an eye-opener and it clarified the many questions and concerns that I had."

El-Hadji Karim Ouédraogo
Farmer, Burkina Faso

"I had read and written about biotechnology for several years. But I had never come face to face with genetically engineered crops. This completely changed with my visit to (cotton fields in) South Africa."

Wandera Ojanji
Journalist, Kenya

"I visit the Biotechnology Information Center and use many of their publications to enhance my research. It provides links to biotechnology-related articles. I also visit their virtual library and download many related articles."

Saddia Gelani
Research Officer
University of Karachi, Pakistan

"If we had not been involved (in seminars and workshops), we would not have been exposed to many issues like biosafety, public acceptance, intellectual property, and commercialization. We wouldn't be able to understand and address these issues sooner, especially in terms of biosafety."

Umi Kalsom Abu Bakar
Director, Malaysian Agricultural Research
and Development Institute, Malaysia

"The interesting and informative materials provided by ISAAA in the form of videos, Pocket Ks, CDs and booklets really help students, researchers and academia in understanding the emerging scenario of biotech crops. These information materials really help in answering queries of all stakeholders especially beginners opting to take a career in agricultural biotechnology. We are updating our knowledge base from the current status of biotech crops globally, in-country, and other biotech related news."

Anil Kumar Gupta
Professor, G.B. Pant University of
Agriculture and Technology, India

"I find useful the videos on biotechnology which I show during sessions with elementary to middle and high school students. It is easier to relay concepts or give information in a form which the audience prefers such as video."

Muhammad Herman
Head of Molecular Biology Research
Division, Indonesian Agency for
Agricultural Biotechnology and Genetic
Resources Research and Development,
Indonesia

a model for **SCIENCE COMMUNICATION INITIATIVES**

Deliberate science communication efforts have contributed significantly towards an informed public, science-based decision-making, technology acceptance, and stakeholders with increased capacity, equity, and empowerment. The information network has a wealth of experiences in communicating crop biotechnology that it continues to share with the global community.

As early as 2002, an external reviewer had noted that “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.” Today, it continues this distinction and has grown to be a model for knowledge sharing initiatives.

The Global Knowledge Center on Crop Biotechnology and its network of Biotechnology Information Centers face another challenge ahead – not merely as a support system to a thriving biotech arena – but as one ready to help meet the Millennium Development Goals by 2015 and ISAAA’s vision to see that the technology is harnessed to its full potential and will benefit at least 20 million farmers in 40 countries mostly from the developing world.

from paper
to Partnerships...



past and current **DONORS**



- Agricultural Biotechnology Support Project II (ABSPII)
- Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA)
- AGBIOS
- Atlantic Philanthropies, Inc., U.S.
- Barwale Foundation, India
- Bayer CropScience, Germany
- Bejo Sheetal Seeds Pvt. Ltd, India
- Common Fund for Commodities
- CropLife International
- Department of Agriculture, Philippines
- DuPont
- Fondazione Bussolera-Branca, Italy
- Ibercaja, Spain
- JK Agri-Genetics, India
- Maharashtra Hybrid Seeds Company (MAHYCO), India
- Monsanto Company
- Office of the President, Philippines
- Philippine Council for Agriculture, Forestry and Natural Resources Research and Development- Department of Science and Technology (PCARRD-DOST), Philippines
- Program for Biosafety Systems (PBS), International Food Policy Research Institute (IFPRI)
- Rasi Seeds Ltd, India
- The Rockefeller Foundation, U.S.
- Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEAMEO SEARCA), Philippines
- Swiss Agency for Development and Cooperation
- Syngenta
- U.S. Agency for International Development (USAID)
- U.S. Department of Agriculture
- Vibha Agrotech Pvt. Ltd, India

CONTACT

REGIONAL CENTERS

ISAAA AfriCenter

International Livestock Research Institute Campus
Old Naivasha Rd.
Uthuru, Nairobi 00605, Kenya
<http://africenter.isaaa.org>

ISAAA AmeriCenter

417 Bradfield Hall
Cornell University, Ithaca
New York 14853, USA

ISAAA SEAsiaCenter

3rd Floor, Khush Hall
International Rice Research Institute
Los Baños, Laguna 4030, Philippines

AFRICA

AfricaBio

15 Stopford Road,
Irene Centurion 0062, South Africa
Website: <http://www.africabio.com>

Burkina Biotech Association

01 BP 2547 Ouagadougou
Burkina Faso

East and Central Africa

Biotechnology Information Center (ECABIC)

ILRI Campus, Old Naivasha Rd.
Uthuru, Nairobi 00605, Kenya

Egypt Biotechnology Information Center (EBIC)

9 Gamaa St, Agricultural Research Center
Agricultural Genetic Engineering Research
Institute (AGERI)
Giza 12619, Egypt
Website: <http://www.egypt-bic.com>

West Africa Biotechnology Information Center

Institut d'Economie Rurale
Rue Mohamed V
BP 258 Bamako, Mali

ASIA

Agbiotech Vietnam

House No 12B, Block 13B
Trung Yen 11 Street, Trung Yen New City,
Trung Hoa Precinct, Cau Giay District,
Hanoi, Vietnam
Website: <http://www.agbiotech.com.vn>

Bangladesh Biotechnology Information Center (BdBIC)

Department of Biotechnology
Bangladesh Agricultural University
Mymensingh 2202, Bangladesh
Website: <http://www.bdbic.org>

Biotechnology Education & Information Center (BEIC)

Department of Plant Sciences
University of Colombo
Colombo 03, Sri Lanka
Website: <http://www.slbic.org>

Biotechnology and Biosafety Information Centre (BBIC)

Department of Plant Pathology
National Center for Genetic Engineering and
Biotechnology (BIOTEC)
Kasetsart University
Kamphaengsaen, Nakhon Pathom
73140 Thailand
Website: <http://www.safetybio.agri.kps.ku.ac.th>

China Biotechnology Information Center

Chinese Society of Biotechnology
33 Beisihuan Xi Lu, Zhong Guan Cun
Beijing 100190, P R China
Website: <http://www.chinabic.org>

Indonesian Biotechnology Information Center (IndoBIC)

c/o SEAMEO-BIOTROP
Jalan Raya Tajur Km. 6
Bogor, Indonesia
Website: <http://www.indobic.or.id>

ISAAA South Asia Office

c/o ICRISAT, NASC Complex, DPS Marg,
Opp. Todapur Village, New Delhi 110012, India
Website: <http://www.isaaa.org/india>

Malaysia Biotechnology Information Centre (MABIC)

Monash University
2-5-40 Jalan Lagoon Selatan, Bandar Sunway
46150 Petaling Jaya, Selangor, Malaysia
Website: <http://www.bic.org.my>

Nippon Biotechnology Information Center
NPO Hokkaido Bioindustry Association (HOBIA)
c/o Hokkaido Collaboration Center
Kita-21, Nishi-12, Kita-ku, Sapporo
Japan 001-0021

Pakistan Biotechnology Information Center (PaBIC)
H.E.J. Research Institute of Chemistry
Dr. Panjwani Center for Molecular Medicine and Drug Research
University of Karachi, Karachi, Pakistan 75270
Website: <http://www.pabic.com.pk>

SEARCA Biotechnology Information Center
SEAMEO Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA)
College, Los Baños, Laguna 4031, Philippines
Website: <http://www.bic.searca.org>

AMERICAS

Celeres
R. Engenheiro Helvio Felice
119-Altamira, Brazil
Website: <http://www.celeres.com.br>

Inter-American Institute for Cooperation on Agriculture (IICA)
Coronado, San Jose 11101
Costa Rica
Website: <http://www.iica.int>

PeruBiotec/ Peru Biotechnology Information Center
Avenida Paz Soldán 225, A-25,
Lima 27, Peru
Website: <http://www.perubiotec.org>

Zamorano Biotechnology Information Center (ZBIC)
Biotechnology and Crop Protection Programs
Zamorano University
Tegucigalpa, Honduras

EUROPE

Bulgarian Biotechnology Information Center (BgBIC)
AgroBio Institute
8 Dragan Tsankov Blvd.
1164 Sofia, Bulgaria

Center for Information on Biotechnological Innovations (IBERCIB)
Escuela Agraria de Cogullada
Obra Social y Cultura de Ibercaja
Zaragoza, Spain
Website: <http://www.ibercib.es>

Fondazione Bussolera-Branca
via Castel del Lupo 5
27045 Mairano di Casteggio
Pavia, Italy
Website: <http://www.lefracce.it/fondazione.html>

Russian Biotechnology Information Center (RuBIC)
IACGEA, 60-Ietiya Oktyabrya 7-1
117312 Moscow, Russia
Website: <http://www.iacgea.ru>



Global Knowledge Center on Crop Biotechnology
ISAAA SEAsiaCenter
DAPO Box 7777
Metro Manila, Philippines
knowledge.center@isaaa.org
<http://www.isaaa.org>