



Global Sharing of Knowledge and Technology on Crop Biotechnology to Alleviate Poverty

“The International Service for the Acquisition of Agri-biotech Applications (ISAAA) has two major missions. One is to share knowledge on biotechnology, particularly biotech crops. We share this knowledge with the philosophy that we share it freely, but we respect the rights of others to make decisions based on that knowledge. So we are engaged in knowledge-based decision making. The major mission, the goal of ISAAA is to alleviate poverty and hunger in developing countries through the use of biotechnology.”

Clive James
ISAAA Founder
& Emeritus Chair

ISAAA'S Niche

ISAAA is a not-for-profit international organization that shares the benefits of crop biotechnology to various stakeholders, particularly resource-poor farmers in developing countries, through knowledge sharing initiatives and the transfer and delivery of proprietary biotechnology applications. ISAAA's global knowledge sharing network and partnerships in the research and development continuum, provide a powerful combination of science-based information and appropriate technology to those who need to make informed decisions about their acceptance and use. In addition, an array of support services completes the holistic approach to agricultural development and ensures effective implementation and timely delivery of crop biotechnologies. These services include capacity building for policy makers and scientists; regulatory oversight on such issues as biosafety and food safety; impact assessment, and science communication.

Knowledge Sharing Initiatives



The Global Knowledge Center on Crop Biotechnology based at the ISAAA Southeast Asia Center in the Philippines, was established to facilitate the process by which authoritative information is made available to developing countries. Popularly known as the KC, the center's activities support transparent decision making with the public on issues related to crop biotechnology. The KC has a global mandate and supports an information network of Biotechnology Information Centers (BICs) and country links in Africa, Asia, Europe and Latin America. The combined efforts of the KC and the BICs have made a significant contribution to a global informed debate on the attributes, responsible use and acceptance of the technology.

The network uses a modality of communication strategies (publications, e-newsletter, websites, videos, stakeholder workshops, and study tours) to help provide an enabling environment for the understanding of and safe application of crop biotechnology. While the core KC addresses the concerns of a global community, the BICs are at the forefront of local initiatives to advance a broader understanding of crop biotechnology, such as information needed by policy makers and scientists in deciding on regulatory options for example. All BICs uphold the mission of sharing factual and accurate information based on scientific principles and public engagement.

Annual Global Biotech Crops Review & other Publications

ISAAA is very much associated with its Annual Review of the global status of commercialized biotech crops. It is regarded as the most authoritative single source of information and most cited reference on the subject. Highlights of the Review are available in more than 50 languages and has generated over 4 billion impressions (estimated number of people reached by the articles). In addition, the weekly e-newsletters, the *Crop Biotech Update* and the *Biofuels Supplement*, are received by subscribers in 150 countries. Other publications include science communication and public perception monographs, technical Briefs, semi-popular Pocket K (knowledge) series, and brochures.



Africa Asia

AfriCenter was established in 1994 with the mission to enhance food security and reduce poverty in sub-Saharan Africa through appropriate biotechnological interventions. To achieve this mission, the Center focuses on three principal areas: communication and knowledge sharing, crop biotechnology transfer and policy outreach.

Communication and knowledge sharing. The Center coordinates four Biotechnology Information Centers (BICs) – in Kenya and Uganda, for Eastern and Central Africa, in Mali and Burkina Faso, for Francophone West Africa, and in Egypt, for the Arab-speaking North Africa). Communication and knowledge sharing in the BICs is accomplished through collection, packaging and dissemination of information, capacity building, policy outreach, networking, building partnerships and fostering joint initiatives to share resources, experiences and expertise.

AfriCenter also contributes to ISAAA's flagship e-newsletter, the Crop Biotech Update (CBU), a weekly newsletter that captures global developments in crop biotechnology to enhance the understanding and appreciation of the technology.

Crop biotechnology transfer. Transfer of crop biotechnology comprises all aspects of Agri-biotechnology acquisition including regulations, biosafety and enabling policy frameworks. The Center has been involved in technology transfer initiatives for tissue culture banana, tree biotechnology and regeneration of bamboo to diversify the food-base in Kenya.

The Center is also currently involved as a partner in the development of two biotech crops for Africa, namely: the Virus Resistant Cassava for Africa (VIRCA) project and the Water Efficient Maize for Africa (WEMA) project. The VIRCA project aims to develop genetically enhanced virus resistant cassava varieties for Africa while the WEMA project is developing drought-tolerant and insect-pest protected maize varieties, to improve yields under moderate drought stress and protect it from insect damage.

Policy Outreach. This entails facilitating the development of biosafety regulations and the creation of enabling policy environment that facilitates sound decision-making relating to biotech crops. With this initiative, *AfriCenter* in partnership with Program for Biosafety System (PBS) aims to help develop a sound and vibrant Agri-biotechnology regulatory infrastructure within sub-Saharan Africa.

The SEAsiaCenter based in the International Rice Research Institute in the Philippines serves as ISAAA's global coordination hub. It also facilitates activities that focus on the improvement of crops, coupled with institutional support and capacity building initiatives on biosafety, science communication, and knowledge and appreciation of biotechnology tools and applications.

Eggplant. ISAAA is supporting the development of a fruit and shoot borer resistant (FSBR) eggplant in the Philippines. This project is being spearheaded by the Institute of Plant Breeding of the University of the Philippines Los Baños (UPLB) through a partnership with the Indian Maharashtra Hybrid Seeds Company Ltd. (Mahyco), Cornell University, and the United States Agency for International Development (USAID) under the Agricultural Biotechnology Support Project II (ABSP II).

As support activities in the development of biotech crops, increased capacities on biosafety, science communication, and knowledge and appreciation of biotechnology tools and applications are being undertaken through the conduct of seminars and workshops. Participants in these capacity building activities include researchers from the public sector, members of the academe, staff and extension workers of the Department of Agriculture, farmers, and other interested stakeholders.

Information, education and communication (IEC) and biotech outreach activities are also being initiated to enable continuing public information and knowledge sharing on the benefits of biotechnology and its products. Biotech outreach activities revolved on raising general awareness on biotechnology, existing regulatory system, adoption of commercialized biotech crops and status of new products in the pipeline, and mobilizing grassroots stakeholder support for biotechnology.



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