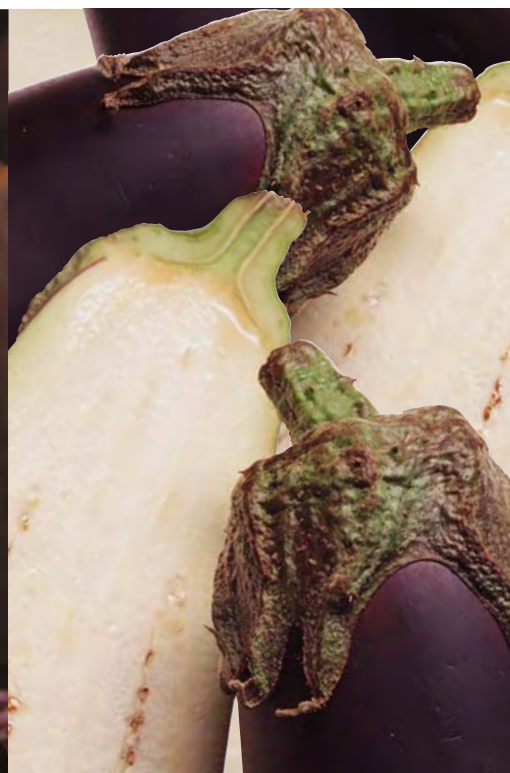


Agricultural Development through Biotechnology

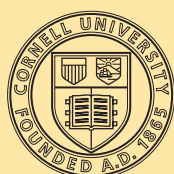
Agricultural Biotechnology Support Project II



Benefits for the Community



Increasing Food Security



Cornell University



USAID
FROM THE AMERICAN PEOPLE

Helping Reduce Poverty and Hunger

The increase in crop yields during the first Green Revolution relied heavily on innovations such as improved irrigation techniques, mechanized farming equipment, and purchased inputs such as fertilizer and pesticide. Large-scale farmers, however, were the primary market for these technologies; small-scale and subsistence farmers often lacked the necessary means to acquire them. Today, agricultural bioengineering allows for genetic improvement of seeds and has the potential to benefit all types of farmers and consumers, including those who are resource poor.

Benefits for the Community. The mission of the Agricultural Biotechnology Support Project II (ABSP II) is to help farmers and consumers worldwide make informed choices about using agricultural bioengineered products. We seek to accomplish this mission by partnering with those people in developing countries—scientists, regulators, extension workers, farmers, and general public—who must make decisions about what foods to grow and eat. In cases where communities decide that an agricultural problem is best addressed through biotechnology than through traditional means, we support the safe and effective development and delivery of the desired bioengineered crop.

Building Local Capacity. Through a large consortium of public- and private-sector institutions, ABSP II helps provide information and infrastructure

to boost food security, economic growth, nutrition, and environmental quality. Our objective is to build on-the-ground expertise in scientific research, management, licensing, policy development, and outreach. By helping build these capacities, ABSP II seeks to achieve its broader goal of reducing poverty and hunger. We currently work in Bangladesh, Uganda, Kenya, Mali, India, Indonesia, and the Philippines. We also assist regional organizations in Africa—such as the Western and Central African Council for Agricultural Research and Development (21 member countries) and the Association for Strengthening Agricultural Research in Eastern and Central Africa (10 member countries)—to build their expertise in biotechnology research and policy development.

Increasing Food Security. Where demand exists, ABSP II supports the safe and effective development and commercialization of bioengineered crops as a complement to traditional agricultural approaches. We use actual crops—banana, cassava, chickpea, eggplant, groundnut, papaya, potato and sweet potato, rice, sunflower, and tomato—to help strengthen developing countries' research, regulatory, and distribution systems. Our products drive capacity-building, are accessible to farmers, contribute to the productivity of agricultural systems, and improve lives.

Innovative and Pragmatic Solutions. To ensure that product development stays focused on real needs, we begin every project by bringing together local-level stakeholders to set priorities. Then ABSP II works with stakeholders to design and coordinate work plans for the development and commercialization of each product; facilitate public-private partnerships to boost mutual incentives and sustained, long-term investments; monitor and evaluate the impact of our activities; and improve awareness of the science behind bioengineered crops.

While increased agricultural productivity is the anticipated short-term outcome of the project, ABSP II also aims to increase scientists' and policy-makers' understanding of markets, regulatory environments, and the commercialization requirements of bioengineered crops. By working in these areas, ABSP II expects to secure long-term outcomes such as an overall increase in the availability and security of food sources, with attendant benefits to local nutrition. Increased farm productivity and improved market opportunities also expand rural economies.

Recognizing that successful delivery of bioengineered crops depends on satisfactory biosafety regulation, ABSP II collaborates with other initiatives of the United States Agency for International Development (USAID) to promote safe and effective agricultural biotechnology in Africa and Asia. Impact assessments are conducted to provide forward-looking evaluations of the market-level consequences of all biotechnology products supported by ABSP II.





PRODUCTS BEING DEVELOPED

ABSPH collaborates with American and international partners for the development of the following products:

- Cassava mosaic disease-resistant CASSAVA
- Feathery mottle virus-resistant SWEET POTATO
- Black sigatoka- and nematode-resistant BANANA
- Multiple virus-resistant TOMATO
- Fruit- and shoot-borer-resistant EGGPLANT
- Late blight-resistant POTATO
- Drought-tolerant RICE
- Salt-tolerant RICE
- Tobacco streak virus-resistant SUNFLOWER and GROUNDNUT
- Pod borer-resistant CHICKPEA
- Papaya ringspot virus-resistant PAPAYA

Some of Our Consortium Partners

U.S. Public Institutions
Michigan State University

Ohio State University

University of California, Davis

Virginia Polytechnic and State University

National and Regional Partners
Association for Strengthening Agricultural
Research in Eastern and Central Africa
(ASARECA)

Bangladesh Agricultural Research Institute
(BARI)

Department of Science and Technology,
Philippine Council for Agriculture, Forestry,
and Natural Resources Research and
Development (DOST-PCARRD)

Forum for Agricultural Research in Africa
(FARA)

Institut d'Economie Rural (IER)

Institut du Sahel (INSAH)

National Agricultural Research
Organization (NARO), Uganda

Program for Biosafety (PBS)

Research Institute for Agricultural
Biotechnology and Genetic Resources,
Indonesia (ICABIOGRAD)

Tamil Nadu Agricultural University (TNAU)

University of the Philippines, Los Baños
(UPLB)

Western and Central African Council for
Agricultural Research and Development
(CORAF)

Private-Sector Entities
East-West Seeds, Indonesia

Maharashtra Hybrid Seed Company
(MAHYCO), India

Sathguru Management Consultants (SMS),
India

CGIAR Center and Other International
Institutions
Asian Vegetable Research and Development
Center (AVRDC)

International Crops Research Institute for
the Semi-Arid Tropics (ICRISAT)

International Institute for Tropical
Agriculture (IITA)

International Service for the Acquisition of
Agri-Biotech Applications (ISAAA)

Indonesian Vegetable Research Institute
(IVEGRI)

Nongovernmental Organizations and
Foundations
Donald Danforth Plant Science Center





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Building Local Capacity



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