

GDEST India – U.S. Workshop on Agricultural Biotechnology for the Global Public Good

SUMMARY OUTLINE

October 4-6, 2006

Chennai, India

Background

In the face of increasing population pressure and diminishing natural resources, sustainable agriculture and food production are vital for our continued survival as a species. Despite constant advances in technology and improved agricultural practices, a substantial portion of the world's population is plagued by malnutrition, starvation, and lack of clean drinking water. Children are especially vulnerable to malnourishment and their normal development depends on proper nutrition and adequate caloric intake. In addition to the physical well-being of its citizens, the continued prosperity, economic health, and security of every society depends on its ability to wisely manage its agricultural resources.

Agricultural production in many countries is threatened by drought, soil depletion, erosion, desertification, water shortages, and salinization. Overpopulation, urbanization, and industrial pollution impose additional stresses on agricultural yields, as does increasing resistance of destructive pests to insecticides and herbicides. In addition, in an era when fossil fuels are becoming scarcer, agricultural products, bi-products, and waste are increasingly seen as a source of renewable energy, a positive trend that nonetheless could very well add additional burdens on soil and water resources. Overcoming these challenges and ensuring the continued sustainability of agriculture is therefore a major concern for every nation.

The biotechnology revolution has and will continue to radically change the practice, efficiency and applicability of agriculture. If used creatively and sensibly, agricultural biotechnology promises to improve the livelihood, health, and well-being of millions of people worldwide. It is within this context that the GDEST India-US Workshop on Agricultural Biotechnology was first initiated.

Program Objectives

The objectives of the workshop are to facilitate interactions between leading scientists and engineers and their foreign peers, as well as young investigators to expand common understanding, strengthen cooperation, and pool efforts to address emerging agricultural biotechnology issues faced by both India and the United States.

Date and Venue

Date: October 3-6, 2006

Location: Auditorium

Venue: Central Leather Research Institute
(Council of Scientific & Industrial Research)
Adyar, Chennai 600 020 India
Tel: 91-44-24910897 or 91-44-24910846
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Contents:

This workshop will address the themes agreed upon by a bilateral Program Committee.

- Three days of presentations.
- Ample student and junior scientist interactions – including an open dialogue, poster sessions and young scholar presentations.
- Half-day visit to local laboratories or research facilities that expand the understanding of the state of biotechnology in Indian.
- Evening public/media access event – Hindu Media Resource Center.

Proposed Panel Topics

- 1.) Mechanisms of Plant Defense: Pathogens and diseases of crop plants
- 2.) Comparative Genomics: Genome analysis of crop plants
- 3.) Abiotic Stress Environments
- 4.) Bioenergy: Plants and Future Energy Prospects
- 5.) Metabolic Engineering: Biofortification and Pharmacology Issues
- 6.) Biotechnology: Looking Toward the Future

Inviting Participants

The U.S. National Academies will invite approximately 15 American renowned scientists and experts in the field of agricultural biotechnology to present talks at the workshop. The American delegation will also include some members of the GDEST Oversight Committee, members of the Office of the Science and Technology Adviser to the Secretary of State, and National Academies-based GDEST staff. Our Indian counterparts will also invite 15 prestigious Indian academicians and scientists as well as a large audience (150 or more) that includes up-and-coming graduate students, postdoctoral fellows, and junior scientists and engineers within the field.

Working language

All presentations, talks and materials will be conducted in English.

Sponsors

National Academy of Agricultural Sciences of India (NAAS)

U.S. National Academies

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National Academy of Agricultural Sciences of India (NAAS).

U.S. National Academies

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