

## **Lessons from the GE Crop Debate**

In the early days of their development and commercialization, genetically engineered crops were heralded as a breakthrough technology that would transform agriculture for the better, revolutionizing and increasing crop production, improving nutrition, and reducing environmental impacts. Twenty years later, despite some dramatic commercial successes, these promises have not been attained, and the technology is surrounded by international controversy, rejection in many countries, and rejection by civil society. Some of the controversy revolves around conflicting assessments of benefits and harms from current engineered crops. Others involve broader ethical, environmental, and political considerations. With the help of hindsight, we can gain better understanding of why these conflicts arose and continue. However, in doing so, we must also openly consider the appropriate role of engineered organisms in agriculture and public health, and not merely assume that, barring some minor and addressable risks, they are on balance an undeniable benefit to society. Similarly, assumptions that the rejection or criticism of the technology is mainly a reflection of a misinformed public, and that promulgation of the “right” information or message will change public opinion, reveals a misunderstanding of social problems and challenges faced by genetic engineering and related technologies. Instead, understanding the intersection between genetic engineering and broader social and environmental considerations, global governance issues, broader visions of agriculture and food systems and their mutual compatibility or inherent conflict, are critical for understanding the challenges to genetic technologies.