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Protests against biotech foods

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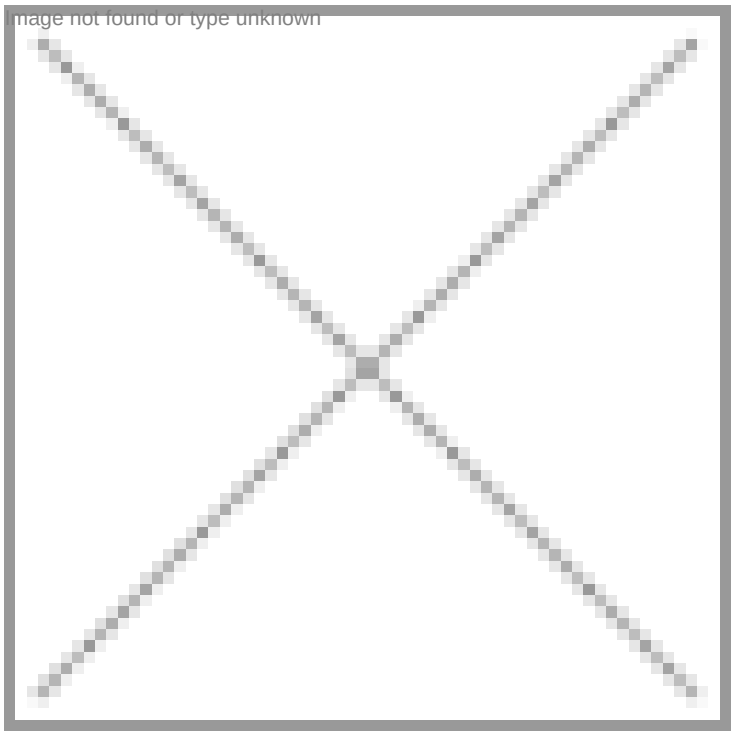
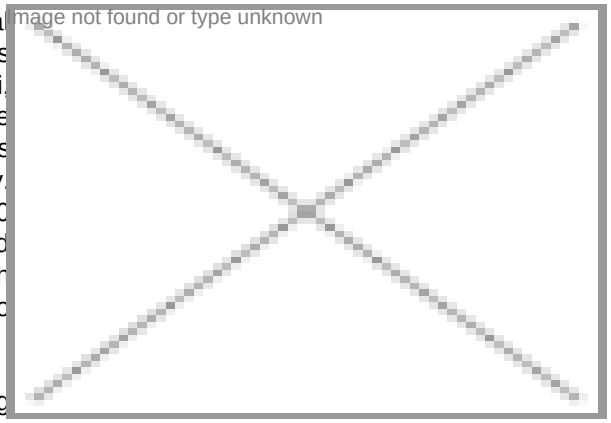


Globally, increasing number of farmers are growing biotech crops every year due to higher returns, but the consumers in Asia are not prepared to bite the biotech foods easily



On September 6, 2011, members of Greenpeace, a global environmental organization gave a new dimension to street protests by organizing a big rally in the heart of India's capital, New Delhi, against genetically modified (GM) foods. Hundreds of Greenpeace volunteers, assisted by celebrity chefs from the city turned New Delhi's streets into a kitchen to cook the world's largest GM-free eggplant curry. This was as part of a public campaign which saw more than 100,000 citizens across India signing a petition against the proposed Biotechnology Regulatory Authority of India (BRAI) Bill, 2011, which seeks to set up an independent biotech regulator for the country to provide single window clearance system for GM crops in the country.

The BRAI Bill has been in the works for more than a decade undergoing several changes incorporating inputs from scientists, civil society activists, farmers and industry leaders. The protests were held when the legislation was scheduled to be tabled in the Indian parliament in August, but it did not happen due to the then raging anti-corruption movement. The anti-GM group moved in with the public protests once again to build pressure against the adoption of the legislation.

There are two fundmental issues agitating the protestors. One, anti-GM activitists believe that the structure of the proposed biotech regulatory body in India will be favorable to the industry and it will pave the way for quick introduction of GM foods in the country. So far, India has allowed the commercial cultivation of only one crop, a GM cotton developed by global agri giant

Monsanto. A regulatory approval in 2009 to allow cultivation of GM eggplants has been kept in abeyance by an administrative order. Two, neither the industry nor the government are in favor of allowing a labeling of GM foods whenever it is introduced to provide choice to consumers.

Says Mr Kapil Mishra, a sustainable agriculture campaigner with Greenpeace India, â€œPeople have a right to say 'no' to GM foods and that is exactly what they have done today (during the protests). We hope that the government would take notice of the voices of its citizens and stop the introduction of BRAI which would become a non-transparent, autocratic body that will lower the bar for the GM crop approvals.â€?

A team of chefs from Le Meridien, New Delhi and Indian Culinary Forum led the cooking of about 342.5 kgs of eggplantcurry, which has been certified as a world record by the Limca Book of Records. A portion of the dish along with more than 100,000 petitions was handed over to the Prime Minister's Office by a delegation of citizens.

Biotech crops in China

China has implemented genetically modified (GM) food labeling since 2004. But there is no clear definition about the labeling procedure. Under Chinese law, the sale of GM foods in China is legal, but manufacturers must disclose clearly on the label that the product is made from GM food.

Shanghai Daily recently reported that consumers in Shanghai complained to the local authorities against the manufacturer that they were misled into buying the oil and they were not inclined to buy GM food because of health concerns.

Concerned about their health, some 40 people protested against GM foods outside the Ministry of Agriculture in Beijing, according to a news coverage by Global Times on September 13. The report noted that the protesters had signed a joint letter asking the ministry to stop advocating GM staple grains in China. About 80 people signed the letter, including experts and some former government officials.

Quoting a top agriculture expert China Daily noted that GM food in China is unlikely to be commercially available for large-scale planting for at least three-to-five years. A GM variety of rice is close to commercialization in China. GM maize is mainly used as animal feed in the country. But the new rice variety must still undergo at least two years of regional trials before it can be approved for commercial planting, under national regulations.

Considering the constraints on natural resources in China, particularly land and water, the government will definitely look at biotechnology to raise food production in the long term. Sharing his thoughts at a panel discussion on biotechnology on September 8, moderated by The Wall Street Journal as part of a conference on sustainable agriculture in the Organization for Economic Cooperation and Development, Sir Gordon Conway of Imperial College, London, said he expected China to approve GM crops for mainstream cultivation as early as 2012. He said, â€œThey have got 30-40 (GM crop tests) underway right now.â€?

So far, the Chinese government has issued safety certificates for production of eight GM plants, including cotton, rice, maize, tomatoes and sweet peppers. Cotton is the only plant allowed for commercial farming.

Contrary to this street protest, the Foundation of Biotechnology Awareness and Education (FBAE), a Bangalore-based non-profit organization started in 2001 to spread biotechnology awareness has been lobbying in favor of the Bill. FBAE asserted that Bt brinjal was safe for human consumption and requested the Prime Minister to intervene urgently to ensure that the moratorium on commercial production of Bt brinjal was immediately lifted.

The activists opposing the commercialization of Bt brinjal have asserted that Bt brinjal would seriously affect the use ofbrinjal in the Alternative and Complementary Systems of Medicine (ACSM) in India, through 'loss of synergy'. Reacting to the voices of protesters, FBAE came up with a special report on the Use of Brinjal in Alternative Systems of Medicine in India. Explaining the highlights of the report, Prof C Kameswara Rao, coordinator, FBAE said that contrary to what was being propagated, eggplant is not used in any Indian system of medicine and hence the claim that Bt brinjal would affect brinjal's use in Indian medicine was aimed at exploiting the lack of scientific awareness of the issue.

Scientists, who are in favor of commercialization of Bt brinjal are of the opinion that the moratorium on Bt brinjal was strongly influenced by those opposed to agricultural biotechnology than by credible, critical, and balanced scientific judgment of technologists and biosecurity experts on Bt Brinjal.

Says Dr T M Majunath, an eminent agricultural scientist and a former head of Monsanto's India research center, â€œConsidering that the product efficacy, biosafety and environmental safety of Bt brinjal were evaluated for over seven years in India, as per international standards, involving over 200 scientists and more than a dozen public and private sector

research institutions, Bt Brinjal should be commercially released without further delay.â€?

Field trials in the Philippines

Mahyco, the Indian developer of a local Bt brinjal crop, donated the technology to public sector institutes in India, Bangladesh and the Philippines, in 2006, for incorporation in open-pollinated varieties of brinjal for the use of small resource-poor farmers. Sharing of knowledge and experience of the regulation process for Bt brinjal in India could greatly simplify and lighten the regulatory burden in Bangladesh and the Philippines by eliminating duplication of the significant effort already expended by India, thereby contributing to the important goal of harmonizing regulations between countries.

In Philippines, Bt eggplant field trials commenced in 2010 in seven sites despite massive protests by farmers and consumers. Of the seven selected trial sites, Davao City, Baybay in Leyte and Santa Barbara in Iloilo, have issued municipal resolutions banning the field trials. The field trials were also conducted in Davao city last October, but the plants were uprooted by the local government to uphold a resolution banning the trials. In June this year, the MindaNews reported that the North Cotabato provincial board has endorsed the field testing of the controversial Bacillus thuringiensis eggplant or Bt Talong without mentioning the date of commencement.

The adoption of Bt Brinjal is expected to help millions of farmers by reducing the use of synthetic insecticide up to 77 percent and losses from the brinjal shoot and fruit borer (SFB), resulting in an increase in marketable yield and reduction of cost of production. There would be about 60 percent consumer benefit as well. A recent publication from India's National Centre for Agricultural Economics and Policy Research noted that Bt Brinjal adoption would add between 30,000 to 119,000 tons to the total production of brinjal, depending upon the extent of cultivation in different states. The absolute annual gain at the country level from Bt brinjal cultivation would be about $120 million at an adoption level of 15 percent, about $240 million at 30 percent and $485 million at 60 percent adoption levels.

GM supporters aver that over 25 years of research experience, and more than 15 years of commercial cultivation in about 30 countries have demonstrated that Bt crops are effective and safe for use. The benefits from Bt technology have been amply demonstrated in India by the commercial cultivation of Bt cotton since 2002, which lifted India to the position of second largest exporter of cotton. However, as the street protests indicate, it may not be easy for the Indian government, embattled by a series of corruption scandals, to push through the biotech legislation that easily.

- Narayan Kulkarni