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India Rejects First GM Vegetable, Hampering Monsanto (Update1)

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(Adds share price fall in sixth paragraph.)

By Jay Shankar and Thomas Kutty Abraham

Feb. 10 (Bloomberg) -- India's government rejected the nation's first genetically modified food after protests by farmers, hampering the expansion of seed makers including Monsanto Co. in the world's second-most populous nation.

"There is no overriding food security argument for Bt brinjal," or genetically modified eggplant, Environment Minister Jairam Ramesh said at a press conference in the capital, New Delhi, yesterday. "Our objective is to restore public confidence and trust in Bt brinjal." A moratorium will be imposed until safety studies are carried out "to the satisfaction of the scientific community," he said.

Ramesh, 55, had to balance the technology's promise to help feed a nation growing by 18 million people a year, more than the population of the Netherlands, and concern that food safety and threats to biodiversity haven't been investigated. Monsanto, the world's largest seed maker, supplied the gene for the vegetable and introduced genetically modified cotton in India in 2002.

"This will delay the government's plan to tackle food security," said M. Khadi Basavaraj, dean at the University of Agricultural Science in the southern city of Dharwad, who advised an independent panel which passed transgenic brinjal as safe in October. "It now feels there were not enough tests to prove it's safe. The government has taken the right decision."

To gauge the nation's mood, Ramesh held seven public meetings in major cities. "I cannot ignore public opinion and I can't ignore science," the minister said after four hours of debate with farmers, scientists and environmental activists in Bangalore on Feb. 6.

Pest Protection

The brinjal, or aubergine, had been genetically modified by the Maharashtra Hybrid Seed Company Ltd., known as Mahyco, in which St. Louis-based Monsanto has a 26 percent stake. Shares of Monsanto India Ltd. fell as much as 7.5 percent today in Mumbai, and traded down 4.3 percent at 10.12 a.m.

A gene known as cry1Ac from the soil bacterium *Bacillus thuringiensis*, or Bt, and sourced from Monsanto has been introduced to help it fend off common borer pests.

Monsanto spokesman Christopher Samuel yesterday referred calls to the Mumbai-based seed maker. Maharashtra Hybrid said in a statement it respected Ramesh's decision and will follow the government's directives. "Mahyco is confident that sound science based on evidence obtained over nine years of rigorous testing will prevail," the company said.

Brinjal is a staple that India also exports to the U.K., France, Germany, Hong Kong, and Canada, according to the National Horticulture Board.

Cotton Success

"While we feel relieved that Bt Brinjal will not be on our plates right away we feel that we also lost a chance to change the paradigm of agriculture in this country," Rajesh Krishnan, who campaigns against genetic engineering for pressure group Greenpeace said in an interview from Bangalore.

India's farm ministry wants GM technology to be part of efforts to raise production of staple foods, following the success of transgenic cotton introduced in 2002.

GM cotton, including that of Monsanto's Bollgard varieties, now accounts for 80 percent of planting and had doubled yields by 2008. India moved from a net importer to the world's No. 2 producer and exporter.

The success of Bt cotton shows Indian farmers "are not opposed to new technologies," M.K. Sharma, Maharashtra Hybrid's general manager, said in Feb. 3 interview.

Pesticide Risks

With existing varieties of brinjal, Indian farmers have to spray pesticide on as many as 80 days in the six-month crop cycle, Sharma, said in Mumbai. Larvae that bore into plants wipe out as much as 70 percent of yield, he said.

"Alongside these losses, there is also the problem of health risks as farmers use pesticides without precautions or masks," said Sharma.

Farm Secretary T. Nanda Kumar said before the announcement that GM is just one technology that India can apply to increase food security. "It could be the technology of better seeds, it could be the technology of using less water," he said in interview in New Delhi. "Ultimately it's going to be combination of all these."

GM plants "are studied much more extensively than any other plant product in the world, and provide equal or greater assurance of safety," Gyanendra Shukla, Monsanto's India director, said in a statement before the decision.

While the U.S. and Canada have grown genetically modified crops like corn and soybean for years, resistance remains strong in Europe, where some

countries rejected the use of crops changed to increase resistance to drought, pests or specific herbicides. Germany's BASF SE has had a GM starch potato stuck in the European Union's approval process for 14 years.

Incomes Rise

By 2015 there may be 120 different "transgenic events" in commercial crops worldwide, from 30 in 2008, said a report by the European Commission's Seville, Spain-based Institute for Prospective Technological Studies. As many as 33 may be developed in India, the report said.

While 456 million Indians live on less than \$1.25 a day, according to a 2008 World Bank report, as a nation they are eating more than ever. Twenty Indian cities are projected to see household income grow 10 percent annually up to 2016, New Delhi's National Council of Applied Economic Research said.

Whether India can meet demand for food worries Prime Minister Manmohan Singh. There's a "false sense of security" that availability of food has ceased to be a concern for the South Asian nation, he said on Feb. 1.

Rising food costs accounted for 80 percent of December's inflation when wholesale prices rose an annual 7.3 percent, the fastest pace since November 2008, after the weakest monsoon rains since 1972 pushed up prices.

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