

FROM PLATE TO PLOUGH: A FARM QUESTION FOR MODI 2.0

Relevant for: Science & Technology | Topic: Biotechnology, Genetics & Health related developments

© 2019 The Indian Express Ltd.
All Rights Reserved

The writer is chair professor for agriculture at ICRIER. Views are personal

The word satyagraha, meaning polite insistence for truth, is associated with the political movements of [Mahatma Gandhi](#) for civil rights — first in South Africa and, later, in India. The famous 24-day Dandi March (also known as the Salt March), a non-violent civil disobedience act against the British monopoly on salt in 1930, became a symbol of satyagraha.

But today, it is in the news because of the civil disobedience movement launched by supporters of the Shetkari Sanghatana (SS), a farmers' organisation, to defy the Government of India (GoI) when it comes to the planting of herbicide tolerant (HT) Bt cotton and Bt brinjal. SS was founded by the late Sharad Joshi, one of the tallest farmers' leaders in independent India. He gave up his cushy position in the United Nations to fight for the cause of farmers' freedom to choose the best farm technologies, and to sell their produce to the most lucrative markets at home or abroad.

Unfortunately, governments, since Independence, no matter how much they swear by the name of farmers, have constrained our farmers when it comes to access to the best farm technologies as well as the best markets. That's a painful fact which has meant the imposition of massive implicit taxation on the Indian peasantry, to the tune of about \$700 billion (cumulative) during 2000-01 to 2016-17, as per the OECD-ICRIER study (2018).

HT Bt cotton is not legally allowed by GoI. But the government's own committee has estimated that it is being planted on about 15-17 per cent of the cotton area. Growing any GM crop illegally attracts a five year imprisonment and a fine of Rs 1 lakh. But so far, no one has been arrested, and the illegal trade has been thriving for several years. It speaks of not just a massive governance failure, but its connivance with unscrupulous seed companies where thieves are thriving. Farmers want that technology and are buying those seeds in the black market at prices much above those declared by the government for non-HT Bt seeds. Now, when SS supporters are openly defying government regulations, the GoI has suddenly woken up and asked for action from the Maharashtra government. Newspaper reports suggest that one farmer with HT Bt seeds has also been arrested. If the government is really serious in not allowing this, let it show its might by arresting hundreds of thousands of farmers who have already planted HT Bt cotton on 15 per cent of the crop area. And why not first arrest the fraudulent seed companies that have been selling these seeds illegally, and without any patent? Most people in this trade know who these local companies are and whose shelter they have politically. The big multinational companies, who are the original innovators of HT Bt cotton, have stayed away from this messy business. In fact, they have decided to withdraw most of their high bio-tech farm technology from India.

Let us peep into this new brave world of GMOs for better understanding. GMOs have been there on the global platform since 1996 and by 2017, for which I have the latest data, almost 190 million hectares around the world are being planted. A total of about 67 countries have accepted GM crops, of which 24 are planting and others are importing and consuming. GM crops range from soyabean, corn and cotton to papaya, brinjal, and, even apples and potatoes! There are no

cases of human death, disease, or injury. And the landscape ranges from developed nations like the US and Canada to developing ones like Brazil, Argentina, India, Pakistan and China (see graph).

It may be noted that Bangladesh, not shown in the graph, has also adopted Bt brinjal and the area under that is fast catching up. Bt brinjal is an interesting case study as it was cleared by India's Genetic Engineering Appraisal Committee (GEAC) way back in 2009, but our environment ministry, under pressure from NGOs, could not gather the courage to release it. Now that Bangladesh has taken the same technology, and is fast scaling that up, will it not be stupid on our part to presume that it will not enter the Indian side of West Bengal, if it has not already done so? Gol needs to wake up!

Almost a similar situation had arisen in March 2002, when it was found that some Indian farmers had planted Bt cotton. The Vajpayee government examined the whole issue from a biosafety perspective as well as farmers' needs. Then, it took a bold decision on March 26, 2002, to legally allow the planting of Bt cotton, the first GM crop of India and the only one so far. He extended the original slogan of 'Jai Jawan, Jai Kisan', given by Lal Bahadur Shastri, to include 'Jai Vigyan'. He was very clear that our agriculture should be science-based. Look at the results of this one bold decision by the late PM. Today, about 90-95 per cent cotton area is under Bt cotton, and India has emerged as the largest producer — and second largest exporter — of cotton in the world. In a much more detailed study that I did with Kavery Ganguly, we estimated that due to this "gene revolution" India gained about \$67 billion dollars of foreign exchange from extra exports of cotton and cotton yarn, and savings in imports, over the period 2002-03 to 2016-17, compared to business as usual. But, more important are the gains to the cotton farmers whose incomes doubled. And the maximum gain was to Gujarati farmers. In fact, we found that Gujarat's "agrarian miracle" of eight per cent average annual growth rate in agri-GDP during [Narendra Modi](#)'s regime as CM from 2002-03 to 2013-14, was triggered and led by Bt cotton. And, this was the famous Gujarat development model that also helped him become the PM of India. It won't be an exaggeration to say that Bt cotton has been the secret force behind Modi's political successes. Considering this, can India now, under Modi 2.0, emerge as a leader in bio-farm technologies, including GMO? Only time will tell.

(The writer is Infosys Chair professor for Agriculture at ICRIER)

Download the Indian Express apps for iPhone, iPad or Android

© 2019 The Indian Express Ltd. All Rights Reserved

END

Downloaded from [crackIAS.com](#)

© **Zuccess App** by [crackIAS.com](#)