

## **“Level of awareness about GM foods is low in the country”**

**Interview with Dr. Suman Sahai, leading scientist and food security expert.**

*Starting in 1993, it has been over 15 years since Gene Campaign, headed by Dr Suman Sahai, has been working to empower local communities to retain control over their genetic resources for ensuring food and livelihood security. Dr Sahai through Gene Campaign has been involved in the fight against the patents granted on Basmati rice, at the national and international level, and was the first to expose the existence of the turmeric patent. The group also campaigned for a law to protect India's biodiversity and provided the first draft of Biodiversity legislation in 1997, a law that was finally passed in 2002. Gene Campaign and Dr Sahai led the national campaign against seed patents and played a key role in the development and passage of the Farmers Rights legislation in 2001.*

*On the introduction of Genetically Modified (GM) crops in India, Dr Sahai has been asking for greater technical competence, transparency and public participation in the regulatory process dealing with GM crops. Gene Campaign seeks accountability of the regulatory systems that are in place today. The group believes that unless the regulatory system becomes more competent, transparent and accountable, the safety of GM products cannot be ensured. Till the system improves, there should be a moratorium on commercial release of GM crops in the country. Dr Sahai spoke to Shalini Yog of HBF on a range of issues concerning Indian agriculture and related issues of food security.*

**Q1: Following the recent heated debate<sup>1</sup> on the proposal to introduce Bt Brinjal in the country, what would be your comment on the proposal by Government of India (GOI) to introduce Genetically Modified crops in the country?**

We need to look at Bt Brinjal and all GM crops in a slightly more nuanced way than the current ‘for’ and ‘anti’ positions that have been taken all round. First the myth has to be dispelled that GM crops are the answer to hunger. After that we need to evaluate on a case by case basis what the proposed GM crop is trying to achieve. Does it fulfill a need or is it a solution in search of a problem. And finally is the question of safety. Do we have a regulatory system and sufficient stringency to ensure that GM products are safe for consumption?

As things stand, there is a bias in favour of agriculture technology which follows through to GM technology as well. The scientific and political establishments in this country, like in

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<sup>1</sup> [The commercial introduction of Bt Brinjal has been put under moratorium by the Ministry of Environment and Forest led by Minister Jairam Ramesh after protests against its introduction in the country. Bt Brinjal was developed by an Indian seed company Maharashtra Hybrid Seeds Co (Mahyco) with technology assistance from US-based multinational Monsanto. Monsanto had given the technology free to Tamil Nadu Agriculture University and the University of Agricultural Science, Dharward for commercial use after due regulatory approval. Mahyco had claimed that Bt Brijnal, which is resistant to pest and also entails far lesser use of pesticides, would be available to small farmers through public agencies. Many environmental groups have been opposed to BT Brinjal saying there are enough number of indigenously developed brinjal varieties in the country and the government should not use Bt crop in a hurry without ‘satisfying’ the health impact. It is widely believed by the civil society organizations that if Bt Brinjal is approved, it would open the floodgate to all the 56 crops including 40 other food crops, which are presently undergoing various stages of approval. This in the absence of a labeling law leaves consumers with no choice.]

most other places, believe that all technology brings good. In agriculture, this belief stems from the success of the green revolution. The green revolution had led to a huge jump in food production in dire times (1960s) when the country was dependent on food imports and therefore the political leadership was very vulnerable. Given India's food dependence on the US, the conflict with Pakistan and the US tilt towards Pakistan, being dependent on US food made India very vulnerable.

Our dependence on food imports was being used as a political weapon against us. From the perspective of the political leadership, the green revolution by doubling food production gave the country a political independence. While celebrating the green revolution, little attention was given to the downside. It was and in the eyes of many, remains, a powerful technology with a huge political impact and so the green revolution still enjoys a high level of acceptance among the scientific & political leadership. It is this acceptance of agricultural technologies that the purveyors of Agbiotechnology cash in on. They spin the same terminologies to evoke the positive impacts of the green revolution. Agbiotech is seldom referred to as such or as genetic engineering, always as the second green revolution, the evergreen revolution....

The other factor influencing the adoption of GM technology is the buying of influence in policy circles, both scientific and political. The blandishments take different shapes: research grants, scholarships, research collaborations at the level of government, even such trivial things like foreign trips. This situation is confounded by the fairly low level of awareness about GM technology among people. Despite NGO activism and platforms proclaiming their desire to make India GM Free, the average citizen is not really aware of what this all about and is therefore not contributing to opinion building.

Gene Campaign has recently completed a three years study titled 'Attitudes and Perceptions to GMOs, done in collaboration with the University of Hyderabad. The study, conducted in five states, to assess what farmers and consumers think about GM crops reveals that the educated urban consumers in big cities like Hyderabad, Chandigarh, Jorhat, Ranchi and Nagpur, have an abysmally low level of awareness on the issue. Even in Bt Cotton cultivating areas (Bt Cotton was the first GM crop introduced commercially in India in 2002), the public level of awareness about GMOs is very low. I must add that this data was collected before the current Bt Brinjal controversy. It would be interesting to see whether levels of awareness have changed after the Bt Brinjal reportage in the media

Let me tell you a story to illustrate what I am saying. Some weeks ago after being interviewed for a TV programme, a financial expert who was watching, asked me what Bt Brinjal was! So you see, here was a highly educated man, in Delhi, asking after 'BIG Bt Brinjal controversy', what Bt cotton was!

A large part of the reason why there is such poor awareness about GM foods, even among the urban middle class, is that there is no real consumer movement in this country. In other parts of the world environmental and consumer groups have by and large led the debate on GM crops and foods. Some years ago, Gene Campaign had organized a series of public debates in

small towns, to raise awareness about GM crops and foods and the issues associated with them.

Coming back to the question of the government's next steps after the debate on Bt Brinjal, I do not really think the government has taken the whole Bt Brinjal debate on board as seriously as many believe. The dominant thinking still is that GM crops are necessary to address the problem of producing enough food. It does not seem to matter that there is no evidence for this.

In the absence of a high enough level of public awareness and the lack of a forceful public opinion, it is difficult to frame a public response to the claims being made by the GM industry.

Unless that changes, it is unlikely that we will see the kind of movement as in Europe demanding the right to evaluate GM foods and take a decision on its desirability.

**Q2: Will the government's move to form a National Bio Technology Regulatory Authority address the concerns raised by many experts on the possible adverse impacts of GM crops?**

No, the NBRA is just more of the same.

I have been analyzing the NBRA in all its versions, the third version being the latest. I think the most dominant feature of this draft legislation is the utter confusion in it. There are a number of committees and bodies under the NBRA which overlap to a great extent without defining clear functions and roles. A Chief Regulatory Officer has been appointed in three places; there is also a Chairman of the Regulatory Authority. Several dysfunctional aspects of this set up have been exposed.. A lot of ad hoc power is given to the Chairperson of the Committee, with which he solely holds decision making power in specific circumstances. The concept of placing power with a single person renders the committees ineffective and futile. An utterly indefensible clause in the NBRA is one which threatens and intimidates and has provisions to take action against people opposing GM crops.

Then there is the issue of what will constitute *confidential business information* Three years back we had asked for the data from the safety tests conducted on Bt brinjal, under the RTI.

We asked for the allergenic and toxicity data generated from the safety tests. The Department of Bio Technology replied saying that the data on allergenicity and toxicity aspects of Bt brinjal would not be given since this is 'confidential business information'.

So we have a situation where data on GM crops that has implications for public health and safety can be concealed under the clause of *confidential business information*. The NBRA does not address issues like this.

The NBRA retains all the old ills of the previous regulatory system- no public participation, no mechanisms for transparency, and no liability. The last is of extreme concern and is something the Gene Campaign has been raising for a long time now. There is need for a

labeling and liability law in place. There does exist a labeling law in the food safety bill but NBRA does not link itself to that legislation.

**Q3: How do you think the government should address the issue of food security in the near future?**

To address the issue of food security one needs to understand the reasons of food insecurity, which is neither rocket science nor a state secret. Everybody knows that there are two fundamental situations that create food insecurity. One is that you do not have the means to produce your own food or else you do not have the money to buy food. It is as simple and straightforward as that. To be able to address these two situations governments need to initiate land reforms, there should be equity in access to resources – Who will have priority access to water? Will the Coca Cola Company get the river waters or will the farmers get it?

Will you allow the diversion of two crop-three zones to industrial estates under Special Economic Zone (SEZs) or will you allow them to be agricultural zones? So, there is nothing mysterious about achieving food security. But there has to be a 'will' to undertake the radical changes that are needed. Presently, there is no desire to share resources equitably and let the poor have their share. Although conceptually we have all the answers, there is still no reduction in hunger statistics, infact hunger in the country is rising, to our shame. According to various estimates, one half to seventy percent of our people suffer from hunger of varying degrees. This is a badge of shame.

I come from a place called Tilhar, which is in U.P. The road from Delhi to Tilhar traverses the most fertile part of India, the Indo-Gangetic plain, with rich alluvial soil and plentiful water. A year back I saw a huge township coming up in the middle of this rich agriculture belt that supports 3 crops a year. This is truly criminal. How could the government allow this happen in a region which could be most resilient to climate change and face up to agricultural production losses in crises times.

In order to improve food security, farmers should be enabled to produce food to feed their families as well as the rest of the country. So, basically agriculture must become profitable for the farming community. Governments should invest in soil health, let farmers have access to water and ensure good quality and timely availability of seeds.

There is currently a crisis of seed. We have been working in Jharkhand for the last 10 years. There, as in other rainfed areas, if the farmer loses his own saved seed, no other seed is available. Last year the monsoon was delayed, the farmer lost the first batch of seed and there was no more seed available for him to plant a second batch. The government of Jharkhand took two months to procure seeds from Andhra Pradesh. By that time the season was over and farmers suffered a big set back. To achieve food security, you have to address problems like this.

Landless farmers and sharecroppers depend on livestock as their livelihood source. The village 'common' land was their grazing area. This land has now been declared as wasteland and planted with Jatropha making it unavailable for livestock needs. The Government should

leave these grounds for livestock keepers as designated grazing pastures so that if they can keep their cattle there. The current situation is of utter and complete callous neglect of the fate of rural India. We are in a situation where food insecurity is *created* in this country.

**Q4: Is the government equipped enough to protect the Bio-diversity of the country?**

Yes, the country is equipped. There are laws and policies in place but the question is, is there the *will*, is there the *intention to place biodiversity conservation on priority?*

I served for two terms in the Forest Conservation Committee which has to decide on the diversion of forest land for development projects. At that time I had the opportunity to understand the politics of forest and biodiversity, the claims made on it and the complicity of all concerned in favouring even the most trivial mining projects at the cost of the biodiversity.

What we need is an overarching policy to guide development and protect biodiversity. The Forest Conservation Committee during my time had suggested that there should be a ‘hands-off’ zone which should not be touched and that projects should be restricted to areas that had already been opened up. This was a simple straightforward suggestion, which will not see the light of the day without dedicated *will* to implement.

So, to answer your question, is the government equipped? Yes it is. Will biodiversity get conserved? I don't know.

**Q5: Have the public sector agricultural research organizations done enough to help farmers in augmenting yield?**

There was time when they did and even today there are good places but by and large, the public sector institutions are in a state of decline today. During the last 10 years the Indian Council for Agricultural Research (ICAR) has been a place of masterly inaction and incompetence. Nobody has heard their view on how they plan to deal with climate change or how they will tackle the growing hunger in this country. Now there is a change in leadership and there is an expectation that things will improve.

Study after study, including our own, has shown that farmers believe that scientists have no role in their lives as they do not solve any of their problems. The extension services have broken down; therefore no connection between the scientific and the farming community exists anymore. Agriculture scientists sit in universities in most places and have no direct connection with the farmers as they do not make field visits. The other problem now is that everybody is on the GMO bandwagon so many of the everyday problems of farmers are sacrificed in the pursuit of ‘glamorous’ science and little attention is paid to farmers’ real problems.

**Q6. In your opinion does the currently negotiated EU-India FTA have an impact on food security/livelihood issues? If yes, please elaborate how?**

One of the issues in the EU-India FTA is raising IPR protection for seeds to TRIPS Plus standards, violating the country's own legislation on Breeders and Farmers Rights. This will reverse the long and successful struggle led by groups like Gene Campaign to empower farmers and enable them to have control over seeds. Food security is linked to food sovereignty and control over seed is the first step in this.

*Interview conducted by MS. Shalini Yog, Programme Coordinator, Heinrich Böll Foundation- India Office.*

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