

Farmers Workshop on Jaivika Vaividye and Bija Rakshane

WORKSHOP TO RAISE AWARENESS ABOUT THE TECHNOLOGY, POLITICS, AND LEGAL ASPECTS OF BT BRINJAL AND GENETICALLY MODIFIED ORGANISMS IN GENERAL

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This workshop was organised to help farmers from across Karnataka appreciate the nuances of the debates that resulted in India's Environment and Forests Minister Shri Jairam Ramesh enforcing a moratorium on the commercial release of Bt Brinjal. The purpose of this workshop was to explain how the debate became public and broad based, compelling the minister to take a decision that upheld genuine concerns of farming and consumer communities over the risks involved in GMO technology and not be carried away by poorly informed scientific opinion, as was the case in the decision making process and eventual consensus of the Genetic Engineering Approval Committee that accorded permission for commercial cultivation of Bt Brinjal.

The technical components of the workshop were organised by Environment Support Group and participation and all other logistical support functions were overseen by the Action Aid – Regional Office, Bangalore.

Mr Kshitij Urs of Action Aid started off the workshop by emphasizing that the purpose of the meeting was to evolve possibilities of a collaboration between farmers and agencies such as Actionaid and ESG in order to energise a platform of resistance to the corporate push for introduction of GMO foods. This required a deep understanding of the issues involved. While the workshop would help raise awareness among farmers of the negative impacts of GMO's in food, the primary concern is of the fact that farmers are amongst the first communities to lose control over seed sovereignty, and thus their livelihoods. This was being engineered carefully and orchestrated internationally by highly corporatist and commercialised research initiatives. The only way such propaganda could be challenged is by mobilising farmers and consumers to tackle such economically and environmentally disastrous pressures.

Mr Ganapathy of the “Concerned for Working Children” set the tone for the discussions to follow by raising deep concerns over how a life centered avocation such as farming was being deliberately reduced to a complex and commercialised process so that corporates could control how people grow their food and what they eat. Till a few decades ago, Indian agricultural practices were entirely organic, and thus the farmer was in total control over the traditionally gained knowledge systems of farming, and also over the seeds. Seeds, by cultural definition, were not a commodity, but a life sustaining resource that ought to be shared and exchanged. Attacking this very base, Green Revolution advocates promoted hybrids based on unnecessary and extraordinary investment in fertilisers and pesticides. Now, that very lobby is claiming that such practices have rendered soil, water and food toxic and want farmers to use GMO seeds as an alternative to minimise the use of chemicals. One gets caught in their endless game of taking control over lives and livelihoods, and it seems now that there is no relief from such machinations. However, eminent Gandhian farmer Cherkady Ramachandra Rao, who recently passed away, serves as an extraordinary paradigm of how it is possible to lead a good life based on organic farming and not submitting means of one's livelihood to corporate control.



Mr Kshitij of Actionaid starting off the workshop

Mrs Bhargavi S Rao of ESG started off the presentations by explaining the science and technology behind the genetic engineering of Bt Brinjal. She explained the process in detail, starting with the obtaining of the gene from the *Bacillus thuringensis* soil bacterium to its subsequent insertion into the Brinjal. Each step was explained multiple times with questions arising being clarified along the way, with able assistance from Ms Sharada Gopal. This scientific process was explained as being entirely funded by companies in an

attempt to industrialize agricultural bio resources. This was done in order to move towards privatization and in doing so take away the right of the people to access biological resources that were now part of the commons.

The detrimental effects of introducing GMO foods, she explained include erosion of biodiversity of local varieties, the contamination of natural genetic material by GMO genes – with particularly irreversible effects on organic foods and there being no knowledge of the long term side effects these impacts have on agriculture and food security. She highlighted the shocking nature of the rush to introduce Bt Brinjal, which was based on research of impacts that ranged only between two months and a year, with no conformance to evolving standards for verifying the impacts and viability of such products based on recent science. The economic disadvantages such as the loss of employment especially for women, that industrialised agriculture induces, and the outrageous expenditure incurred by farmers are also factors that need to be considered in appreciating the impact of GMO agriculture. She emphasised the acute control corporates have over farmers by highlighting the fact that a license is required to grow GMO crops. Farmers in western countries who are utilising GMO crops have been forced to regularly purchase seeds from companies and are often sued for any infringement. The multiple disadvantages of Bt Brinjal were clearly seen to outweigh its advantage of combating the stem and fruit borer pests.

The unbelievable scenario that the entire Bt Brinjal experimentation could amount to a “theft” was also explained. As per the Biological Diversity Act of 2002, any organisation that has a commercial intent to conduct experiments with any biological resources of India has to seek prior permission from the National Biodiversity Authority. Where local varieties are involved, the NBA is duty bound to consult local biodiversity committees, and accord permission on the latter's consent and based on a benefit sharing agreement. Mahyco and its local collaborators UAS Dharwad, Tamil Nadu Agriculture University and its international partners USAID and Cornell have clearly violated this legal requirement, thus making the entire experimentation a case of theft of 6 local Brinjal varieties under the Act. Bhargavi explained that based on a complaint by ESG, action has now been initiated by the Karnataka Biodiversity Board and the case is under investigation.



Mrs Bhargavi S Rao explaining the technology behind Bt Brinjal

Questions arose from the participants about how a process with such adverse side effects was legally allowed by the government. Sharing their anxiety, Bhargavi explained that the collusion between government and corporates was so deep that the failure to get the Bt Brinjal through has now got them thinking on enacting new laws that make biotechnology decisions secretive and undemocratic with draconian measures built in to treat activists and dissenters as unlawful.

This session was then followed by a presentation by Mr Leo F Saldanha of ESG who took the participants through a brief journey of the nature of power behind biotechnology in general and Bt Brinjal in particular. He explained how Mahyco, an Indian company, has 26% of its stocks held by US TNC Monsanto. It was Monsanto which introduced some of the worst agricultural pesticides like DDT, and also warfare chemicals like Agent Orange that was employed by the US to defoliate forests in Vietnam during the war. The same machinery is now being employed to take control of biotechnology and its uses in agriculture, especially food production. Working in tandem with USAID (a wing of the US Government that is known to finance programmes with an imperialist strategy), the Agricultural Biodiversity Sustainable Programme (ABSP) was launched in India, by involving Cornell University. The first major engagement was to develop Bt Brinjal by engaging two local universities namely University of Agricultural Sciences, Dharwad and Tamil Nadu Agricultural University.

It was in fact Monsanto that had introduced Bt Cotton over a decade ago, and within that short period had monopolised the entire cotton seed market. Now that many local competitors had overwhelmed its market control by producing other varieties of Bt Cotton, Monsanto was unable to make money out of the seed trade. It recently put out a press release stating that its Bt Cotton was ineffective against the bollworm that it was intended to control. What it turned out to be was a very intelligent corporate strategy to give up using the Bt Cotton seeds and instead adapt to a new hybrid of cotton that Monsanto had put into the market. What the farmers were not told is that this new variety is four times more expensive and that this was an effort to kill all competitors in the seed market by wrongly discrediting the efficiency of the existing Bt Cotton seeds in the market. Clearly the strategy is one of monopolising the seed market, he said. Leo explained how unwittingly accepting Bt Brinjal would have resulted in such disastrous consequences. This would effectively have opened up the legal flood gates for a rush of other GMO foods that would have wiped out hundreds of local varieties, as farmers may have simply not saved the seeds for posterity. All things considered, the primary question remained one of retaining seed sovereignty, for without that, life as a farmer would be one of bondage to corporates – in many ways one of returning to colonial times.



Mr Leo F Saldanha of ESG explaining the power play involved behind Bt Brinjal

beauty and became a collectors items in aquarium international trade. Such unregulated trade resulted in bringing this species close to extinction in less than a decade, with the result now that it is on the Red List of International Union for Conservation of Nature and Natural Resources. A similar fate awaits many plants on this exempted list as several are already threatened and could well be exported into extinction given the weak regulation within the country for tradable commodities. Participants were briefed that this matter was brought to the notice of Sri. Jairam Ramesh and he has continued to defend this notification, even though with the assurance it would be with a strict watch. This leaves little room for comfort as even the most guarded species, the tiger, is now within years of reaching a stage of extinction in the wild.



Participants Interacting In The Discussions

A related concern that was also discussed is how the Ministry of Environment and Forests had secretly de-listed 190 plants from the purview of the Biological Diversity Act, provided they are traded as commodities. Even though this exemption is to assist exporters of normally traded plants, it is exports in fact that cause extinction of various species, as has become the case with the “Miss Kerala” fish species. Until a decade ago, this fish was found in abundance in many rivers and streams of Kerala. But towards the end of the 1990s, the species was identified for its

Towards the end of the day, there was an exchange of ideas between the participants about what could be done to deal with the problems at hand. The general consensus arrived at was to unite farmers and organizations so as to strengthen the opposition to GMO foods, beginning with Bt Brinjal. Participants also resolved to take legal action against Mahyco and its collaborators for accessing local varieties of Brinjal without seeking prior permission of the Local Biodiversity Committees and National Biodiversity Authorities.

In addition participants resolved to petition the Parliamentary Standing Committees on Agriculture to recommend to the Government not to allow GMOs in the cultivation of food crops.

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