



MEXICO has a large number of wild corn variety. Since 1998, GM crops and particularly GM corn is banned in the country. The Jan/Feb, 2002 issue of the World Watch journal however reports that a team of scientists studying corn varieties in remote parts of Southern Mexico have found Bt corn. Contamination has become a common fact of life for Mexican farmers. Before the ban Mexico was doing field trials of the GM crop. Farmers are still planting seeds taken from some 4-5 million tonnes of corn that Mexico imports from US annually (supposedly not GM). The team of scientists working with indigenous people in Oaxaca, Mexico, detected the genetic material from a variety of seeds patented and sold by one of the leading biotech corporations like Novartis or Monsanto. They also found genetic material in the corn that could prove harmful to a wide range of butterflies, moths and a host of other insects

INDIA. Cotton also called the 'white gold' is the most important cash crop. The government called in Monsanto Enterprise in 1990 with Bt cotton but they were not allowed to do field

trials as environmentalists objected. In 1995, permission was granted to Maharashtra Hybrid Seeds Company (MAHYCO), an Indian subsidiary of Monsanto to import seed. Rs 5 crores was spent in the project.

The activists protested again saying that this was a round-about way to gain inroads into the country. In the meanwhile American Bollworm, a major pest caused a loss of Rs 10 billion in 1999. The agriculture ministry now went ahead with greenhouse trials. In 2001, the Genetic Engineering Approval Committee (GEAC) intervened and called for further trials as more and more tracts of cotton cultivation was falling prey to bollworm. The same year, Indian Council of Agricultural Research (ICAR) conducted large-scale trials. It agreed that hybrid seeds should be encouraged and paradoxically said that crop rotation and not monocrop of cotton can help save the cotton plants from pests. A couple of months back, in 2002, GEAC finally gave a green signal to Bt cotton.

So who is responsible for contamination in the Mexican wild? And in India if genetic resistance declines in future, causing crop failure, who should be held liable?

When a consumer buys a product from a store or farmers buy seeds for their farm, they buy it assuming the product is guaranteed and will not cause harm. Those who have been harmed by some adverse environmental or health effect of GMOs has no authority to turn to. To get compensation they would have to make a claim against the foreign GM producer. Claims against foreign companies would probably not work because they are subject only to their own national laws. Difficulty also arises as effects of GMOs are not felt immediately.

Scientists and environmentalists want strict laws dealing with GMOs. "The country or company selling the product, should label the product so that the buyer knows what they are buying."

Controlling the Genie

China is taking its GMOs seriously. GMO research in the country was of US\$112 million in the year 1999. By the year 2005, it will increase by 400 per cent. About 2 million Chinese grow Bt cotton. China increased the area under Bt cotton to 7000 square kilometers in 2000, which is about 20 per cent of Chinese cotton acreage. Production cost also decreased by 28 per cent between 1997 to 2000. There has been a marked reduction in the use of pesticide by 80 per cent. Despite all this, environmentalists say that in some tracts of crop, resistance to the gene is evident.

China also has stringent GMO laws. In June 2001, a comprehensive labelling system on GMO seeds and food products was introduced. The new law safeguards biodiversity, environment, and human health, against the potential adverse effects of GMOs.

In India the agriculture minister says that very soon all agri

product importers will have to fill in a mandatory form notifying the authorities whether the product is a GMO or not and help labelling the product. But this is not enough say environmentalists. They want stricter laws and the rights of the farmer to be upheld. With all restrictions lifted from imports of food and allied products recently, they say the poor farmer will suffer all the more. P.K. Ghosh, former advisor to Department of Technology says: "Transgenic crops suitable for one environment may not be suitable for another. That is why countries which have rich biodiversity should be cautious"

Buckling down to consumer pressure and concerns by the environmentalists, the European Union recently decided that all derivatives of GM food and animal feed products sold in the EU should be labelled. European parliament voted to introduce the toughest GM labelling and trace ability rules in the world. This was a set back for the transnationals advocating against this. The US is adamant. In its recently published report, it has cited benefits to farmers adopting first-generation genetically engineered (GE) crops.

81 per cent of the seed market the world over is controlled by 15 companies