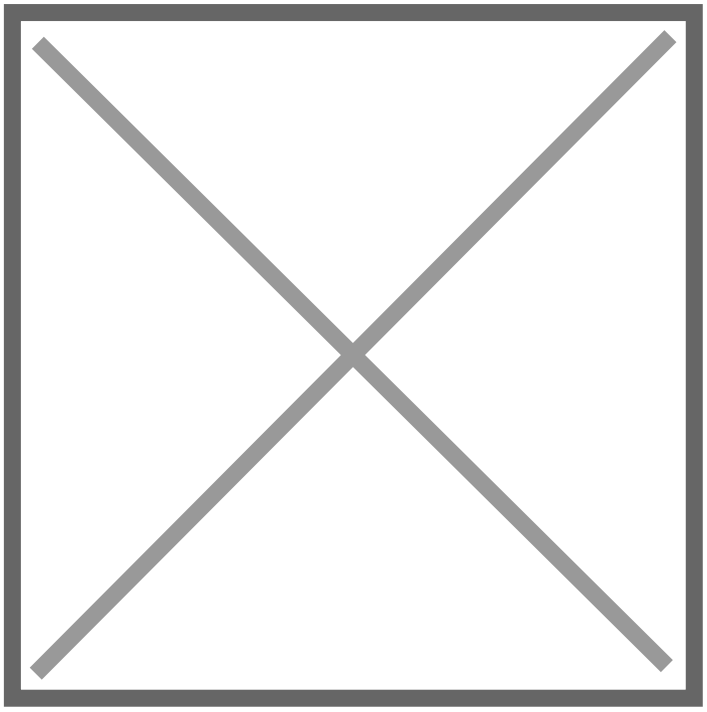
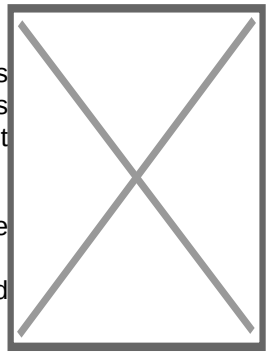
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Public Deception

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First the chemical pesticides. Now GM foods. All are getting promoted with hidden facts



For fifty years, they went on promoting chemical pesticides. They termed the obnoxious chemicals as "safe" provided these were to be used carefully. They continued to brush aside reports of pesticides poisoning and the resulting environmental contamination. They surely had a job to do and they did it remarkably well.

It took three decades for the International Rice Research Institute (IRRI) to realize the gravest mistake of green revolutionÃ¢â?¬â?•pesticides are unnecessary. But by the time the mistake was realized, pesticides had polluted the environment, poisoned the fertile soils, contaminated the ground water and taken a heavy human toll.

It was instead a case of systematic public deception. Knowingly or unknowingly, agricultural scientists were very conveniently used as loudspeakers by the chemical industryÃ¢â?¬â?•an industry, which has since then moved to life sciences. And these scientists didn't spare any effort to turn down all the traditional wisdom and knowledge in pest control as "sub standard" and "backward". The only way to increase crop productivity, we were told, was to use more chemicals.

Not far from where IRRI is located, rice farmers in Central Luzon province in the Philippines had gradually got disenchanted with the indiscriminate use of pesticides. From a peak insecticide use in the mid-1980s, it is now at an historic low. Contrary to what agricultural scientists and the chemical industry had maintained all these years, the decline in insecticides use has been accompanied by an increase in productivity from an average of 2.75 tonnes to 3.25 tonnes per hectare in 2002. It also resulted in savings on an average of up to 1,000 pesos per hectare for these farmers.

Equally significant is the scientific courage with which IRRI's director general, Dr Ronald Cantrell has accepted the reality "It shows that the mistakes of the Green RevolutionÃ¢â?¬â?•where too much emphasis was sometimes put on the use of chemicals for pest controlÃ¢â?¬â?•have clearly been recognized and corrected," adding, "because of their toxicity, insecticides really should be used by farmers as a last resort, and we are very pleased to see that farmers have realized this for many years, especially here in the Philippines." His colleagues at IRRI are now equally critical of the extent and use of pesticides. Says Gary John, an ecologist, "The simple fact is that, in the rest of Asia, most insecticide use on rice is a waste of the farmers' time and money."

But Nobel laureate Norman Borlaug wouldn't agree to that when green revolution technology was being widely applied in Asia. In fact, I remember when Rachel Carlson wrote the path-breaking book The Silent Spring, I happened to interview Dr Borlaug for the Indian Express. The father of green revolution was surely not going to take it lying down. "Rachel Carlson is an evil force," he told me, adding "these are the people who do not want hunger to be eliminated". Ironically, approximately 25 years

after Rachel Carlson's book was first published, Dr Borlaug seems to have finally bowed to public opinion. He is now advocating the use of genetic engineering to reduce the use of harmful pesticides!

Pesticides were safe as long as the industry's commercial interests needed protection. Since the same industry has now moved to life sciences and has a huge stake in promoting genetically engineered foods and crops, scientists too have jumped onto the more lucrative biotechnology bandwagon. In fact, such is the desperation to promote the commercial interests of the private companies that even plant breedingÃ¢â?¬â?•which is responsible for the high-yielding crop varieties that ushered in green revolutionÃ¢â?¬â?•is now being branded as a dangerous technology. At a recent meeting at the John Inn's Institute for Plant Sciences at Norwich (UK), I was shocked to hear a distinguished molecular geneticist castigate plant breeding. I am sure when Nanotechnology finally emerges on the commercial horizon, the same breed of scientists will term genetic engineering as a dangerous technology!

Public money is being ruthlessly squandered to provide legitimacy to GM products. "The European Union has spent Rs 325 crore in 15 years to study the impact of GM products. And it has given a clean chit to GM products", screamed a blurb in the last issue of BioSpectrum magazine. Companies in the US are spending
Rs 25-30 crore to comply with the regulatory requirements for a single GM product. In China, Argentina, Australia, Canada, Japan and in Europe, already close to some Rs 10,000 crore has been incurred on field testing and regulating these crops. In India, the GM research on nine crops has cost the industry some Rs 60 crore, and the Department of Biotechnology would end up incurring another Rs 20-30 crore for setting up an ineffective regulatory mechanism.

The simple question that no one wants to ask is: Why spend so much money on something, which offers no additional advantage? Why is no body interested in the cost-benefit analysis of developing GM crops? After all, as a consumer what do I gain by eating herbicide-tolerant corn or herbicide-tolerant soyabean? Why should I eat these genes for herbicide tolerance or for Bt toxin? Why should I take the risk? And in that case, why should we have these GM products in the first place, which require such phenomenal costs to regulate? After all, these crops do not increase crop yields. Nor do they provide any additional nutrient to the consumer. Pests can be easily taken care of by adopting well-known integrated plant protection measures (like the IRRI is now advocating).

Look at the misplaced emphasis. If only the money that has been spent on field testing and regulation was to be diverted to feeding the hungry and malnourished, almost all the 320 million people in India who go to bed hungry could have been well fed. And that would have also helped in getting rid of the mounting food grain surplus of 50 million tonnes that continues to rot under the monsoon rains. If the Rs 325 crore that EU spent on a wasteful exercise of knowing the impact of GM foods, was to be instead given to Nepal, the land locked country would have overcome its acute hunger crisis thereby wiping out Maoism from the mountains of central Himalayas.

If the public money being incurred on GM crops research, regulation and promotion and that too in the name of eradicating hunger and malnutrition, were to be diverted to feed the hungry, the Food and Agricultural Organization (FAO) of the United Nations can meet its target of reducing global hunger by half and that too at least 12 years before the internationally accepted deadline of year 2015. That would mean saving the lives of some 24,000 people who die from hunger and related ailments every day. But no, you cannot ask such fundamental questions. After all, didn't former President Bill Clinton say: "Monsanto is the company which will take us into the 21st century."

We are being repeatedly told that if 350 million Americans are eating GM food for the past 15 years and there has been no adverse reaction, what more evidence is required to ascertain the safety of GM foods. This is exactly what they said when junk food started emerging as a major food industry in the United States. Ignorant Americans, believing these scientists, began gobbling down the subsidized food and carbonated beverages. Today, 62 percent of America's population is obese, and human allergies have gone up by 70 percent in the past three decades.

Not convinced, a US public interest attorney and director of the Alliance for Bio-Integrity, Steven M Druker, filed a lawsuit that forced the US Food and Drug Administration (FDA) to divulge over 44,000 pages of its internal files on GM foods. Accordingly, the FDA's records reveal that its own scientific experts overwhelmingly concluded, "genetic engineering has unique potential to produce unintended and essentially unpredictable new toxins and other harmful substances". They cautioned that a GM food could not be considered safe unless it had undergone rigorous toxicological tests using the whole food. The uniformity of opinion is attested by the FDA official responsible for summarizing the expert input, who reported: "The processes of genetic engineering and traditional breeding are different, and according to the technical experts in the agency, they lead to different risks". (Photocopies of 24 key FDA documents are in a numbered set at www.biointegrity.org)

Nevertheless, FDA bureaucrats, who admit they have been operating under an on-going White House directive "to foster" the biotech industry, disregarded their experts' warnings and covered them up. They then declared there is an overwhelming consensus among experts that GM foods are so safe they don't need to be tested, even though they knew their own experts

regarded them as uniquely hazardous -- and even though they knew there was not a consensus about safety in the scientific community at large, as evidenced in a letter by the FDA Biotechnology Coordinator. (FDA document #8 at www.biointegrity.org). And to deepen the deception, they claimed they were not aware of any information showing that GM foods differ from others in any meaningful way, says Druker.

What more evidence do you need about the dangers of eating GM food?

Devinder Sharma.

Devinder Sharma is a New Delhi-based food and trade policy analyst. Among his recent works include two books: GATT to WTO: Seeds of Despair and In the Famine Trap.