

India Drowning In Pesticides

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The issue of toxics and poisons in the food system has once again moved to the Centre of National Concern. CSE's study on pesticides in Coke and Pepsi shows that three years after the Joint Parliamentary Committee, no action has been taken by the cola giants. Pesticide content continues to be 25 times higher than norms in Pepsi brands and 22 times higher than norms in Coke brands. And the toxics like phosphoric acid and ethyl glycol continue to be added for which the Supreme Court has served notice on the cola companies.

Meantime, in spite of India being self-sufficient in wheat with 73 million tonnes of production, under US pressure India is importing pesticide laden wheat. On 4th of August 2006, the Supreme Court of India admitted a Public Interest Litigation filed by *Navdanya*, related to toxic wheat imports.

The Indian Supreme Court admitted *Navdanya's* petition challenging the Government's decision to import wheat. The Indian Government, under US pressure after the signing of US—India Knowledge Initiative decided to allow wheat imports even though imports were not necessary and consignments fail to meet health and phyto-sanitary norms.

The Government has significantly relaxed quality specifications for import of wheat. This comes out clearly through a comparison of the standards laid down in the State Trading Corporation of India's (STC) latest tender of May 8 with those in its previous tender floated on February 20.

The wheat that arrived from Australia in April 2006 at Chennai Port was unfit for consumption as the pesticide content was 0.25 ppm (parts per million) which was 500% over the permissible level of 0.05 ppm.

While succumbing to pressure, the State Trading Corporation's tender of May 8 does not mention its earlier specification that imported wheat be "free from moulds", and similarly, against the earlier stringent specification that the wheat "shall be completely free from *Argemone mexicana*, *Lathyrus sativus*, dwarf bunt (*Tilletia contraversa*) and ergot (*Cleviceps purpurea*)", it stops at the first two. It permits presence of the other two fungal pathogens - dwarf bunt and ergot fungi - to the extent of 0.005 per cent and 0.01 per cent respectively. There are also a couple of other relaxations, including *Bromus rigidus*, an exotic weed seed, which is missing from the tender.

While the international quality parameters are being tightened the world over to ensure that invasive alien species do not use the vehicle of commodity trade to enter into a country, India is busy relaxing the quality norms thereby opening the floodgates to noxious weeds, deadly insect pests and dreaded plant diseases and pesticides

Violating the norms of the Codex Alimentarius and the International Plant Protection Convention, to both of which India is a signatory, no scientific sampling was done to ascertain the percentage of alien matter, dust particles and pesticides residues.

Past experiences show that several of the minor weeds that came along with PL-480 wheat shipments into India during sixties have turned into biological nuisances, often becoming a national menace. The noxious Parthenium weed came with American wheat and now occupies 15 per cent of the country's geographical area.

So far 35 lakh tonne of wheat import has been finalized. Recently, eight companies have submitted bids for supplying four lakh tonne of wheat to the State Trade Corporation. Cargill is the biggest bidder for maximum quantity at 3.4 lakh tonne and AWB has offered to supply about 2.2 lakh tonne. However, none has offered to supply the entire four lakh tonne.

India is the second largest producer and consumer of wheat. If India's wheat production is undermined by imports, there will be global scarcity and increase in wheat prices. This case is critical for the defense of food sovereignty of India's farmers and people everywhere.

While wheat imports bring pesticides, domestically too the pesticide industry is spreading pesticides in the food system. Corporations selling toxic pesticides are stating that India will lose Rs 550,000 million in the current summer season if adequate doses of pesticides are not applied. They estimate an annual crop loss of Rs 900,000 due to incidence of pests in both summer and winter seasons (*Financial Express*, August 1, 2006).

There is a false assumption prevalent in society that without pesticides India cannot grow enough food, and hence food safety has to be sacrificed for food security.

However two decades of practice and promotion of organic farming show that biodiverse organic farming increases productivity while reducing pesticide and fertilizer use. Food safety and food security go hand in hand.

Experience and studies show that organic farming based on principles of diversity and agro ecology is the only sustainable method of controlling pests. Pesticides in fact do not control pests through creating resistance and resurgence, they create pests. Pests are a symptom of an unstable, non-sustainable agriculture. Ecologically balanced agriculture has no pest damage. The most effective pest control mechanism is built into the ecology of crops, partly by ensuring balanced pest-predator relationships through crop diversity and partly by building up resistance in plants. Organic manuring is now being shown to be critical to such a building up of resistance.

The Green Revolution strategy fails to see the ecology of pests as well as that of pesticides because it is based on subtle balances within the plant and invisible relationships of the plant to its environment. It therefore simplistically reduces the management of pests to the violent use of poisons which are in reality were chemicals. It also fails to recognize that pests have natural enemies with the unique property of regulating pest populations.

In De Bach's view, "The philosophy of pest control by chemicals has been to achieve the highest kill possible, and percent mortality has been the main yardstick in the early screening of new chemicals in the lab. Such an objective, the highest kill possible, combined with ignorance of or disregard for, nontarget insects and mites is guaranteed to be the quickest road to upset resurgence and the development of resistance to pesticide."

De Bach's research on DDT induced pest increase showed that these increases could be anywhere from thirty-six fold to over twelve hundred fold. The aggravation of the problem is directly related to the violence unleashed on the natural enemies of pests. Reductionist science, which fails to perceive the natural balance, also fails to anticipate and predict what happen when that balance is disturbed.

Thus Bt Cotton was introduced to control the bollworm. However, as a recent study by the Chinese Academy of Science and Cornell University shows, Bt Cotton farmers have to spray 18.22 times, which are more than 3 times higher than sprays on conventional cotton. The study further reveals that farmers spend 40% more on pesticides designed to kill an emerging secondary pest. Secondary pests like Mirid are rarely found in cotton prior to adoption of Bt Cotton. In the Indian trials of Bt Cotton, showed that non-target species like Aphids and Jassids are 300-400% higher on Bt Cotton than in non-Bt Cotton.

Farmers suicides are concentrated in Bt Cotton areas because of high costs of seeds and pesticides. In spite of Bt Cotton failing, the Government is preparing to commercialise Bt Brinjal. This will increase pesticide use, not decrease it. And in addition it will introduce new health risks from the toxic Cry1Ac gene, and genes for antibiotic resistance such as npt11.

India stands at a watershed in the food economy and food culture. On the one hand corporations like Coke and Pepsi are pushing hazardous cold drinks, corporations like Monsanto selling toxic genetically engineered seeds, and corporations like Cargill and AWB importing toxic contaminated wheat. And the government is coming to the aid of corporations through liberalized imports and deregulation of the food industry through the recently introduced Food Safety and Standards Act 2006.