

# Threat to Food Security

**Bharat Dogra**

The United National special rapporteur on the right to food Jean Ziegler recently indicted multinational companies for badly aggravating the food crisis and raising food prices. Speaking at Geneva, Ziegler told journalists, "Until early March, prices of many food articles followed the demand and supply forces. But since then there has been an explosion in prices which is largely due to the role of big corporations and hedge funds."

These big agri-corporations have huge stocks and, aided by hedge funds, they indulged in speculative activities so that food access decreased for poor people while the profits of these companies were inflated. Jean Ziegler therefore called for more effective international supervisory mechanism for transnational companies which increasingly control global food and water systems - in fact a very big share of the food trade is already controlled by five or six corporations.

It is now increasingly realised that the growing dominance of food and agriculture sector by a handful of giant agribusiness corporations is posing a serious threat to food security and well-being of farmers. This dominance starts right from the beginning of agricultural work, i.e. from seeds.

It was noticed about two decades back that the nature of the seed industry was changing in several countries, particularly the rich western countries (although similar changes were soon noticed also in several developing countries). The seed industry had earlier been based on small firms. These firms were now being gobbled by big companies, especially companies which already had big stakes in agri-chemical industry - within a single decade, chemical corporations spent over \$10 billion in buying up seeds companies. In fact the American Seed Trade Association even organised a special symposium on 'How to sell your seed company.'

According to data compiled by the World Bank multinational agroenterprises increasingly dominate the agribusiness sector along the value chain. In year 2004 the market share for the four largest agrochemical and seed companies (the concentration ratio of the four largest companies, the concentration ratio of top four, or CR4) reached 60 percent for agri-chemicals and 33 percent for seeds, (compared to 47 percent and 23 per cent respectively in 1997). The CR4 in biotechnology patents was 38 percent in 2004. As the WDR says, when an industry's CR4 exceeds 40 per cent it is widely believed that market competitiveness begins to decline, leading to higher spreads between what consumers pay and what producers receive for their produce. Coffee has 500 million consumers, and involves 25 million farmers/farm workers, but international traders have a CR4 of 40 percent and coffee roasters have a CR4 of 45%. The share of the retail price retained by coffee producing countries declined from about 33% in the early 1990s to 10 percent in 2002. In the tea value chain just three companies control more than 80 percent of the world market.

This dominance of farming by giant agribusiness companies has proved socially disruptive, ecologically destructive and ruinous for family farmers, particularly in the USA where the dominance of these companies has spread the most rapidly.

Commenting on the illusory surpluses provided by ecologically and socially disruptive practices in the USA, Wendell Berry has written, "The supermarkets are at present crammed with food, and the productivity of American agriculture is at present enormous. But this is a productivity based on the ruin both of the producers and of the sources of production. City people are not worried about this, apparently, only because they do not know anything about farming. People who know about farming, who know what the farmland requires to remain productive, are worried."

Threat to food-security has increased further due to the rapid spread of genetically modified (GM) crops or GMOs in some countries, particularly food exporting countries like the USA, despite the serious threats GMOs pose to the safety of food and farming system. In May 2000 several scientists signed an open letter to express their serious concern about the hazards GMOs pose to environment, food security, human and animal health. This statement of world's scientists was presented to the UN Convention on Biological Diversity in Nairobi in year 2000.

In 2003 the Independent Science Panel, which consists of expert independent scientists from 11 countries covering a wide range of relevant disciplines reviewed the evidence on the hazards of GMOs. This review concluded that many GM crops contain gene products known to be harmful. For example, the Bt proteins that kill pests include potent immunogens and allergens. Food crops are increasingly being engineered to produce Pharmaceuticals, drugs and vaccines in the open environment, exposing people to the danger of inappropriate medication and their harmful side effects. Herbicides tolerant crops - accounting for a majority of all GM crops worldwide - are tied to the broad-spectrum herbicide glyphosate and glufosinate ammonium. These have been linked to spontaneous abortions, birth defects and other serious health problems for human beings, animals and soil-organisms. GM varieties are unstable, with the potential to create new viruses and bacteria that cause diseases, and to disrupt gene function in animal and human cells.

The spread of GM crops has intensified the already serious threat of genetic erosion in farming systems all over the world. Genetic erosion of their plant wealth has proved very expensive for farmers, particularly those based in developing countries. Due to the combined impact of destruction of natural forests, and the introduction of green-revolution type agriculture, which replaced local varieties over large areas by new monocultures, genetic erosion has been taking place on a massive scale even in the countries which have been the original source of much of the plant diversity. Soon thousands of varieties of plants were lost to these countries. However, already several of these had been stored carefully in the labs and gene banks of the developed countries whose scientists had been engaged in these collections for several years. Suddenly, in the time span of a few decades, the natural advantage which some parts of the world had enjoyed for millions of years appeared to have been reversed.

Today several experts agree that more than two-thirds of collected genetic diversity is stored in gene banks in Europe and North America. In a handful of high-security institutions the world's most valuable raw material is stored, and it is unlikely that the countries of origin from where most of this material came will have free access to it. However many giant agri-businesses have obtained

access to this invaluable genetic material thereby greatly increasing their control of the food system.

Today highly influential international fora like the WTO are also being used to strengthen the MNC grip on food system. It is thus extremely important for developing countries in particular to take united action and to co-operate with each other to reducing the growing dominance of a few giant agribusiness companies in the most critical area of food and agriculture. □□□