

# Environment and Food Crisis

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The food crisis that the world is now experiencing has its roots deeper in agriculture and economy which are part of the environment the present world system has moulded and manipulated. The relations the world dominating economies have established over the last few centuries are not only touching the lives of the billions in all the continents, but also are touching and going to touch all the flora and fauna, identified / analyzed and yet-to-be-identified / analyzed. Commodity has established the relationship in the human-world. Capital driven successful efforts have been made or ventures are being made or planned to make all flora and fauna commodities that have established or are going to establish relations with these flora and fauna. “[C]ash nexus has become the sole connection between human beings and nature” (Foster: 1994). MNCs with the support from states made to facilitate the capital’s drive are in this business of establishing the relationship. None and nothing are spared by capital to maximize its profit while trade, etc. are mere modes for taking share of it. The type of relations capital establishes in these ventures and adventures adversely affect environment making it one of the causes behind the present food crisis. “Capitalism today is in its essence what it was at its birth, a juggernaut driven by the concentrated energy of individuals and small groups single-mindedly pursuing their own interests, checked only by their mutual competition, and controlled in the short run by the impersonal forces of the market and in the longer run, when the market fails, by devastating crises” (Sweezy : 1989 in Foster: 1994). The present world food crisis, in essence a crisis of the world system and essentially a crisis in agriculture, economy and environment, starkly brings forth these facts.

“Between 1970 and 1990, the world’s deserts expanded by about 120 million hectares, more than the amount of land currently [during the period the reference was made] cultivated in China. In the years 1970-1990, an estimated 480 billion tons of topsoil was lost, an amount about equal to India’s entire cropland” (Foster: op. cit.). Will not it affect the food production? There are other “contributions” by capital that adversely affect environment and in turn agriculture and food production. Bangladesh, a small land in size but lively with 150 million hard-working, struggling and innovative people, is an example.

Farmers, from different parts of Bangladesh, participating in a research on agriculture raised the issue of degradation of soil. The farmers were from the southwest, south, east, north and the central regions. They told: (1) the colour of soil changed; (2) soil hardened; (3) water carrying capacity of soil decreased; (4) salinity and acidity in soil increased (in the southern region); (5) soil turned loamy; and (6) soil fertility declined. The farmers from Manirampur under the district of Jessore in the south-west region told that it was easier to plough 20 years ago than of today. At that time, it required less physical strength than now. The bullocks, engaged for ploughing, also get tired within a shorter period of time now-a-days than they used to 20 years back. Twenty years ago it took 6-7 hours

for a farmer to plough a land of 42 decimals. Now, with the soil getting hardened the farmer can plough half of that land within that time. The problems they mentioned were based on their day-to-day experiences (Chowdhury : 2004).

The areas the farmers took part from in the participatory study included almost all the agro-ecological and hydrological regions. In all the regions the common “thread” connecting the farmers was the cultivation of HYV paddy. In most places it was monoculture or near-monoculture.

Loss of topsoil was a major phenomenon in many of the areas covered during the study. In Ghatail, in the central region, the farmers reported loss of topsoil. It is in the Madhupur area. Pineapple and lemon planters in Srimangal, in the northeast region, had the same experience. A mantree, head of a Khasi settlement, and a betel leaf planter in Srimangal had similar observation. The fisherpersons around Haail Haaor, a large saucer-like land depression adjacent to Srimangal, expressed the same concern. They told that the water coming down the hillocks around the Haaor, through the chhaaraas, streams down the hillocks, now-a-days carry along soil and silt into the Haaor. This, on the one hand, shows the washing down of topsoil from the hillocks and, on the other, increases the silt in the depression that in turn adversely affects bio-diversity, especially the fish population there. In Chauddagram near Comilla in the eastern region the farmers reported that sand comes down through the streams down the hills of Tipperah across the international border and the sand accumulates on farm land, covering the topsoil there. The farmers in Sherpur and Netrokona in the northern region down the hills in the Meghalaya across the border had the same bitter experience. The situation cannot be comprehended fully if not loss of land due to construction of roads and other “development” projects are taken into consideration.

The farmers reported increased use of fertilizer to keep the yield level stable. Farmers in Beerol in the district of Dinajpur in the northwest region had to apply fertilizer five times more than they used more than two decades ago. The same was told by the farmers from all other regions.

There is increase in the incidence of insects, etc. and the farmers are to use insecticides, etc. in increased quantity. In a few areas it was, as was reported by the farmers, a 4-fold increase. Workers in tea gardens in Srimangal reported increased incidence of insects, etc.

There is loss of local varieties of paddy with the introduction of HYV. Many of the local varieties of paddy accustomed to the local environment, according to the farmers, are no longer available now. That is hundreds in number. There is, the farmers participating in the study observed, also negative change in the cultivation of pulse. Old village women in Laksam near Comilla reported the loss of varieties of leafy vegetables. It should be mentioned that many varieties of leafy vegetables were traditionally a major source for nutrition for the poor, especially during the lean periods.

“There are...circumstantial evidences which indicate that the use of insecticides has reduced the natural population of fish, bird, pollinators, arthropods, and vertebrate predators and parasites. ...The emphasis on growing more tobacco...has changed the cropping pattern in certain areas [in the] country. With...financial and technological support...tobacco cultivation

expanded quickly during the first half of 1970s, in areas like old Kushtia and a part of Jessore district. Fuel for curing tobacco was essential and the tobacco growers did not have any other option than to buy available trees to meet their requirements. Within 2-3 years, almost all the big trees in and around the tobacco growing areas of these two districts, were cut down and used as fuel for curing tobacco.... [O]nly after a few years the tobacco cultivation sharply declined due to shortage of fuel. The fuel shortage was so acute that the farmers of these areas quickly switched over to commercial cotton cultivation. The main purpose of their cotton cultivation... was to meet their fuel requirement for cooking purpose. ... Most of the farmers complained about the rapid decrease of cotton yield in greater Kushtia district. According to them, increased incidence of insect – pests and very low soil moisture were the two major reasons for the decrease in cotton yield. They also pointed out that insect – pest problem was becoming more and more acute and has increased to such an extent that they had to spray insecticide every week ...” (Islam:2000). Now, at least one multinational cigarette manufacturing company is making inroads in the hill region, in the southeast, of the country by luring farmers for producing tobacco there.

Agricultural scientists have mentioned that degradation of soil is possibly the most serious threat to future sustainability of agriculture in Bangladesh (Karim, et al: 1994). More than 60 percent of the soil in Bangladesh is showing symptoms of depletion of organic matters. Newspapers quoting research findings reported inadequate nutrient content in soil. Referring to farmers, agricultural scientists and agricultural research institutes a number of press reports informed that yields were declining.

Added to these “misfortunes” are the “benevolent” acts of industrial units dumping their wastes in the crop fields and water bodies (Chowdhury: op. cit.). The Bangladesh parliament was informed in July, 2001 that there were 1,176 industrial units in the country that were heavily polluting the environment. The High Court of the country asked the concerned authority to ensure pollution control measures in 903 industrial units that were identified as polluters. It was found during a field investigation that a lot of industrial units in Chittagong in the southeast, in Tongi, Narayanganj, Narseengdee, Shayampur and Manikganj near the capital city, in Noapara in the southwest, in the northern region, in Kushtia in the west and in Fenchuganj in the northeast were polluting crop lands or water bodies or the both by dumping wastes and effluents there. The farmers reported loss of crop and fruit and the fisherpersons reported loss of fish resources. Other than these there were reports of increased incidence of diseases.

“In Bangladesh ... water resources play a vital role in economic development. The expansion of agriculture sector ... can only be achieved through intensive use of land, for which expansion of irrigation is essential” (*Task Force Report: IV*). The report cautioned that withdrawal of groundwater for irrigation would lower the water table. Findings from a study on the issue showed reduced availability of water for irrigation (Chowdhury: op. cit.). The “green revolution” has increased the thirst for water and that is sucked out from beneath the surface. Now it has begun taking its toll.

What happened to the climate in Bangladesh along with the degradation of soil and its fertility, increased incidence of insects, etc. loss of topsoil, less availability

of water, polluting crop lands and water bodies? A participatory study, conducted in Bangladesh, on climate change found nothing but anomalies in the weather all over the country that affected agriculture production (Chowdhury: op. cit.). The farmers, fisherpersons, housewives, teachers, local government leaders, journalists, development workers, traders and others from the northwest, northeast, north, east, south, west, southwest and central regions in the country participating in the study found the following: (1) "Summer-temperatures have gone down comparatively over the last 15 years. ... Temperature during summer was not usual. ...The summer seems to be like rainy season. ... [H]ad to use quilt during the summer of 2001. ...The summer was late in 2002. ...During the summer the temperature was very high. ...There was unusual rain. ...We have not experienced such high temperature in the last 30 years. ...During summer, it rain[ed] like ...the rainy season." (2) "It does not rain during the rainy season. It rains either earlier or later. ...[In 2001] the rainy season was like the summer. There was no rain... [W]e feel there are only two seasons –the winter and the rainy season. We fail to identify or feel the rest of the four seasons. There was more rain than usual during the rainy season. ...The monsoon was longer... There was less rain during the rainy season. The rain during the rainy season has decreased over the yeas." There were similar narrations of irregularities in the rhythm of other seasons and all these adversely affected agriculture production: crop, fruit and fish. Moreover, there were health related problems suffered by human beings and animals, wild and domestic. Does not this cost the national economy? The economists serving the MNCs know the answer better.

The situation crosses the limit of grave as cyclones and floods visit the land more than regularly. What happens as the cash crops like tobacco that feed the MNCs and exportable delicious commodity that takes away farm land to get produced step in the stage of agriculture? It is the profit-mongers and the propagators of unleashing the forces of market sitting in the offices of the multilateral, actually unilateral, agencies that know the best. What happens if one of the actors is the trading capital with the characteristics of plundering other than trading? A trading capital takes away a portion of surplus value but the capital with the characteristics of plunder takes away all including the soil under its own feet and robs away all including itself. The local actors have no autonomous authority but to act as part of the world system that has historically defined its character and role. Despoil is its only survival hymn. Events, mis-events, incidences and mis-incidences have showed it over the decades. The world system patronizes it.

Then there is the structural adjustment programme imposed by the world leader in monetary affairs. In Bangladesh the concrete measures and strategies included in the agricultural adjustment policies were among others phasing out of consumer subsidies, elimination of economic subsidies and greater private sector involvement in the distribution of agriculture inputs and equipment to farmers (Hafeez Rahman: 1991). What happens if the programme for structural adjustment is put on the head of all these? Mr Saifur Rahman, former finance minister of Bangladesh, as a private citizen, shared his observations and experiences that at least forms a primary part of the answer: "In 1981, the IMF withdrew its commitment for further lending under the EFF programme with

Bangladesh due to over shooting of the credit target by a small amount. I am suggesting that the subsequent adjustment programme the Government has accepted since 1982 has had a severe recessionary effect on this country. There is no development growth in this country. The adjustment measures that have been imposed on the agriculture sector and in every sector have caused a serious recession in the country during the last few years. ... We had to build an emergency foodstock. But they said this was an extra budgeted expenditure. ... Then is it not correct to say that the EFF programme does not look critically at the country's particular situation? The same is true in the case of public sector pricing policy today, i.e., water, power, telephone, railway, fertilizer price increases. ... [W]hether it is the railways, fertilizer, water or power it is a somewhat unrealistic policy response to increase prices. ... The IMF or the World Bank structural adjustment policy makers should have given more attention ... to the institutional reform policies rather than price rise policies. They are not much interested in institutional reforms. ... They insist in the earlier stages but give up when the implementation really begins. ... We exported every wretched thing that we could export at that time. ... Now again we see this continuous insistence on devaluation when we do not have exportable surplus. ... Under donor advice credit was expanded to the private sector, but restricted to the public sector. There was 130% credit expansion to the private sector.... Wheat production increased from 400,000 tons to 1,200,000 tons in 1981. Now, it has suddenly suffered a set back for the next few years. There was a reduction in wheat production because the subsidy on rentals of irrigation equipment which we use to give under the sectoral credit had to be abolished resulting in the farmer's disenchantment with the production of wheat in this country. The agriculture sector is the most seriously affected in the programme. ... Negotiation should be two-sided and should not be reduced to a one-sided stricture saying that you take it or leave it just because Bangladesh is in a weak position since it needs foreign aid" (Rahman: 1991). It should be mentioned that the views expressed by Mr Rahman does neither reflect views of the government of Bangladesh nor as of a minister.

What happens if after all these there is encroachment of rivers, canals, water bodies and forests and demolishing of hills and hillocks by the plundering capital? Will not it affect agricultural production, life and economy?

Now the questions to be put forward: (1) Who reign over the agriculture, particularly the businesses related to synthetic fertilizer and insecticides, etc., seeds, irrigation equipments and spare parts, and fuel and what are the relationships between these and the package known as the "green revolution" and whose interests are being served by the "green revolution" and who the actors are on the stage and behind the screen? (2) What the ties are there between these factors / actors and profit at the cost of Bangladesh environment to be paid only by the people of this resource-scarce land? (3) Who has made the climate change inevitable or whose interest it served? The voice of complaint will utter a single name: the present world system. (4) Is there anyone other than the people of Bangladesh to pay for the losses? It is none, and all in the world know this answer.

If the “story”, hard fact, of the present world food crisis, the great hunger 2008, thus tracked down the crop lands, forests, rivers, hills and lakes across the continents and oceans will reveal that one of its roots is in the degradation of environment through spoiling of nature by capital for maximizing its profit. The “story” is much more cruel and crude in many lands and in lives of many hapless souls.

**Source :**

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