Chapter 6

FOOD AND FAMINE

The anarchic state of world food production is described cogently in the following extract from a speech by Stanford University Professor Ehrlich to the American Association for the Advancement of Science in Chicago:

> World food shortages are likely to increase in frequency and severity. Food gluts in the wealthy nations are illusory. Instead of cutting agricultural production, Japan is subsidising farmers and pushing up the price of its rice to four times that of the world market value.
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> Japan may be wise to preserve every bit of its productive capacity. Ten tons of rice might some day be more valuable than ten tons of Toyotas. The green revolution of increased fertiliser use and better plant breeds is coming to an end.
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> From 1950 to 1984 world grain production kept ahead of population growth; since then it has not, and food supplies from the seas are faltering. Huge tracts of farmland are being lost to the growing cities and some 24bn tons of top soil are being eroded annually; water supplies for agriculture are starting to fail as much in the US as in India. Chemical pest control is 'promoting' previously innocuous species by wiping out natural predators; in California in the late 1970s, 24 of the top 25 agricultural pests were creations of the pesticide industry.
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> Air pollution, depletion of the ozone layer and global warming are threatening food production. With one quarter of all the world's species likely to be extinct by 2025, the 'genetic library', from which man's food plants were originally withdrawn, is also at risk. In the last 25 years some 200m have died of starvation or hunger-related diseases, and over 1bn are hungry today. The population is maintained by consuming, dispensing and destroying topsoil, ice-age groundwater and the micro-organisms, plants and animals that are parts of Earth's life support systems.[1]

Food facts

Optimum daily calory inputs for humans range from 800 for infants up to 3,500 for adult active males, averaging 2,500, but with an absolute minimum for healthy, effective lives of 2,000 calories. Around 1bn world citizens in fact exist on a grossly inadequate input of under 1,600 calories per day.

Average Third World daily food consumptions amount to approximately 0.5kg by weight, of which 5% may be protein; diets often consist of 85% rice. First World equivalents are four times greater, at 2kg of food daily, containing 20% protein, ie meat, fish and dairy products. Many First World citizens in fact consume double the amount which the body can absorb, and ill-health results.[2]

Total calory and protein content of all food produced in the world today is, in fact, over double the minimum requirement of the world's whole population. Sussex University lecturer Simon Maxwell states that: '*There is more than enough food in the world to feed the present population; the amount required to eliminate hunger is small, less than 5% of current total consumption. It is not a failure to produce food that causes hunger.*'[3] In 1970 the UN Food and Agriculture Organisation estimated that the world could feed 30 billion, or six times its then population.

Since 1984, grain production has been falling by 1% pa, with the worst reductions occurring in the Third World. All the current forecasts regarding food production within the Third World are desperate: totally inadequate calories, output growths lagging behind increases in population, and resulting essential food imports absorbing earnings from exports and costing enormous sums.

Around 20% of the earth's surface is cultivatable; of this relatively limited proportion, only about one-third is actually farmed. Approximately one-tenth of a hectare per person is required for basic cereal production. In many countries, particularly in Asia, every conceivable useable patch of land has already been pressed into use; China, for example, feeds 20% of the world's population from only 10% of the world's land.

The necessity to increase vastly the proportion of land farmed properly is clearly critical. Without such an increase, unless present deteriorating trends are reversed, erosion, desertification, toxification, and non-farming conversion are expected to actually reduce existing areas of farmland by around 40% by 2025, in parallel with vastly increasing numbers of mouths to feed. Further, this appalling projection of a 40% reduction does not include the less easily predictable loss of land due to sea level rises following global warming.

Besides augmenting areas of farmland, essential increases in food production will call for the application of about 50% more energy early in the 21st century for fertilisers, pesticides, irrigation and mechanisation.

Famine facts

The hideous plight of hundreds of millions of fellow humans has already been referred to under 'Third World suffering' in Chapter 1, but cannot be repeated too often. The knowledge of just how readily preventable all that massive suffering is, renders it a matter of searing, guilty responsibility for all thinking, caring members of the First World in particular. The terrible facts need to be set out again and again: 10% of humanity, half a billion people, equivalent to all Europeans, are permanently incapacitated by hunger. 20% of humanity, a billion people, the equivalent of all 'Western world' citizens, are permanently hungry. 50% of humanity suffer some degree of malnutrition. And, in worst hit areas, every other child dies of hunger-related diseases before reaching age five.

Those of the many millions suffering from malnutrition who die quickly must, regrettably, be counted the lucky ones. The majority fall victims to lingering sickness and, usually, eventual death from the many terrible hunger-related illnesses, virtually unknown in the First World, which are endemic in the Third World. These include kwashiorkor, marasmus, goitre (sometimes resulting in cretinism), pellagra (even leading to madness), anaemia, beri-beri, blindness (from vitamin A defficiency), bilharzia, malaria, yellow fever, and others.

Chronic malnutrition also leads to stunted growth with adult men reaching only 130 cms (4'3") in height; such 'dwarfism' also diminishes the faculties, and capacity for work, and is suffered, for example, by one third of the population of Brazil.[4] Further, a tragic irony of Third World agricultural practices is that either deadly, or improperly used pesticides poison 2 million and kill 40,000 people annually. Susan George points out:

> *Perhaps the most morally revolting aspect of malnutrition is that it is now proven that the baby who lacks sufficient calories and proteins both before and after birth, will be permanently damaged mentally, even in the unlikely event of it being fed properly subsequently, and that this underdevelopment will be passed on inexorably to its children.*
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> This has been confirmed by studies in Mexico, Guatemala and India, one of which showed that for 500 middle-class children only 1% had an IQ below 80, while out of 500 poor children who had suffered malnutrition, 62% had IQs below 80.[5]

Malnutrition and famine are experienced throughout the Third World, but the African continent is usually hit worst of all. The food situation deteriorated generally in the 1980s, but in 1992 took a dramatic turn for the worse. Across Southern Africa, 100

million people faced drastically falling stocks, with the harvest forecast at only 40% of the normal, and the Limpopo river level so low that irrigation was cut by two-thirds. Losses of the vital maize crops amounted to 70% in Lesotho, 80% in Namibia and 90% in parts of Mozambique. In their desperation, hundreds of thousands were driven to eating appallingly bad substitutes for proper food. These included boiled wild okra, crushed tree seeds mixed with millet, baobab bark ground with river silt, and millet ground and fermented into a porridge called 'mahewa'; none of these contain any protein whatever.[7] The final blow to these tortured people is that the same cruel conditions which afflict them bring death on a huge scale to their treasured poultry, cattle and other livestock.

First World influences

No sphere of human activity is 'out of bounds' for the insatiable greed of the money system. Even food, humanity's most basic need after water, is seen not as a right, but as fair game for profit-making. The plunder of the Third World today, under the cloaks of 'trade', or 'business', is even more widespread and damaging than that of bygone colonial days. A UN report has referred to the concept of agriculture being run primarily for profit rather than for feeding local populations, as setting in motion many fundamental changes, including vast increases in land prices and evictions of hundreds of thousands of people. In their ruthless drive for the most productive locations and the cheapest labour, both the multinational corporations and local elites drive the poor off the land. In so doing, they relegate still further the unwelcome (to them) prospect of land reform - the very change well proven to be fundamental to increased output of food appropriate to local needs, produced by well-tried and environmentally friendly methods.

In her mine of information, *How the Other Half Dies*, Susan George tells us that, in a 1967 speech, Louis Lundborg, chairman of the Bank of America, insisted on profit being the only basis for increased food production, saying 'all our efforts will be channelled to those nations which are willing to take the tangible, and often politically unpopular steps to assure the proper climate for investment.' As a result, 'no business like agribusiness' projects in some countries have returned as much as 30% pa on investment, by producing, not for local, pressing needs, but for export to high-paying First World markets. There is ample evidence that MNCs' agribusiness activities destroy everything they touch: local employment patterns, local foodcrop production, consumer tastes, even village and traditional family structures.[5]

One of the most dramatic influences of the First World on the Third was the introduction of the 'Green Revolution' into agriculture - first in Mexico in 1943, and subsequently world-wide. This bore all the familiar 'quick-fix' hallmarks of so many other 20th century scientific developments, such as nuclear energy. What had begun with ingenious biological developments of 'miracle seeds' was soon overwhelmed by manufacturers' pressures to sell the profitable accompanying adjuncts: vast quantities of fertilisers, insecticides, herbicides (to kill the weeds largely encouraged by the fertilisers), heavy machinery, irrigation equipment and so on.

If the 'revolution' had been introduced more carefully, particularly in the context of smaller-scale, owner-occupied farms, it would very probably have been of lasting benefit. As it is, nature has rebelled against such 'sledgehammer' treatment, and initially impressive food output increases have been reversed.

The scenario of cash-crop production developed for two main reasons: land-grabs by the multinationals to produce for profits in First World markets, and pressures on Third World countries to meet debt demands. The profits from agribusiness may not be as high as from extractive activities such as mining or lumber felling, but, provided the

land is not exhausted in the process, at least the resources involved are not totally depleted. Sri Lanka provides a classic example in microcosm of what has happened since, on a world-wide scale: before the British East India Company enforced tea-growing as the virtually exclusive crop in the 17th century, the country had been self-sufficient; similarly Bengal was previously rich in cotton, sugar, rice, butter, poultry, vegetables, pigs and sheep. Dr J E Dutra, president of the International Union of Nutritional Sciences, has explained that Brazil could feed almost half the world, yet it does not even feed its own people; instead, in 1991, it exported food worth £4.2bn to contribute towards its debt repayment.[8]

The insidious intrusions of First World commercial influences, witnessed by tourists the world over, have not spared the food and drink markets; Coca Cola 'welcome arches' can be seen at the entrances to Third World towns. In so far as Third World citizens have access to TV or other mass media, they are assaulted by advertisements plugging the superiority of 'Western model' junk food and drinks which are low on nutrition but high on profit. That is the only significant criterion for multi-nationals like Nestle, whose advertising budget alone far exceeds the total budget of the World Health Organisation.5 Attitudes of, for example, the US elite to the increasingly serious world food situation can be summarised by the following: in 1973, Hubert Humphrey said: 'Food is a new form of power, food is wealth, food is an extra dimension in our diplomacy'.

A 1974 CIA Report forecast increasing world grain shortages, which would '*give Washington virtual life and death powers over the multitudes of the needy'. In 1981 the US Agriculture Secretary John Block, said 'food is now the greatest weapon we have, and will continue to be as other countries become more dependent on American farm exports and will be reluctant to upset us*.'

Food price rigging

The odious First World practice of maintaining price levels by storing 'surplus' foodstuffs at vast expense has been referred to in Chapter 2 under 'Food mountains'. Susan George tells us that for a limited number of agents in a position to 'call the shots', food is nothing more than a series of commodities on which money can be made, rather like rubber or gold. A former Food & Agriculture Organisation President complained that 'as soon as production approached quantities equivalent to effective demand, markets became clogged with alleged surpluses, which annoyed governments far more than insufficient food production did'. In the EU, governments practise 'intervention buying' on a broad scale when 'gluts' threaten to drive prices down, and even destroy huge quantities of food to keep it off the market if 'necessary'. At times, millions of hectares of land are deliberately not planted in order to keep prices up. In 1992, for instance, some 5,300 British farmers were receiving £96 per acre to take their land out of production; some are paid as much as £70,000 pa to do nothing.[9] The 1992 Common Agricultural Policy 'reforms' involve compensating farmers who set aside a minimum of 15% of their land, which will result in 1.5m acres standing idle.[10]

Malpractices and waste

In common with so many other essential activities, food production and distribution is plagued by all the familiar problems: maldistribution of land resulting in a lack of personal interest in much of its cultivation, lack of education and training for many agricultural workers and technicians, and the myriad distorting effects of the money market system generally - all leading to long-term inefficient production and improper use of man's most precious asset. For example, over half of all the water diverted or drawn for irrigation in Asia is lost through inefficient storage or distribution; further, the UN estimates that, before long, salinisation or water-logging will afflict half the

world's irrigated areas. Because of manufacturers' concerns to avoid over-production which might weaken profit levels, world output of artificial fertilisers is totally inadequate; US citizens in fact apply more fertilisers to their lawns than India uses for all its agriculture. The return of natural nutrients to the soil, if any, is poorly organised worldwide, except in China where the traditional use of nearly all animal and human waste contributes greatly to their productivity. In the US on the other hand, 1m tons pa of natural manure is not only wasted but actually aggravates pollution.

In the Third World, pesticides are conspicuous by their absence, usually due to their high cost; as a result, around one-third of all crops are lost 'on the stalk'. Following harvesting, appalling food losses result from inadequate handling, storage and processing. In 1984, for example, 180m tons of grain, 10% of the world's harvest, was lost in these ways; between 15% and 60% of fruit, vegetables and fish are lost regularly, particularly in hot, humid Third World countries.[11] Because of totally inadequate facilities and absence of veterinary care, a seriously high proportion of livestock dies prematurely in the Third World.

The practice of using grain to fatten various animals, prior to slaughter for human consumption, represents one of the most glaring examples of the thoughtless selfishness of the First World. Not only does it deprive the rest of humanity of food, but as a practice it is, in fact, grossly inefficient, because poultry, pigs, cattle and other animals waste 70% of the food value of the grain they are fattened on. *In fact, just the grain fed to fatten livestock in the First World would suffice to meet the energy needs of the peoples of India and China put together.* Specifically, UK livestock consumes over 10m tons of grain annually, sufficient to provide a basic diet for 50m people; grain fed to US cattle alone would alleviate several disastrous famines. Finally, the ubiquitous money-market system results in the diversion of vast quantities of rich proteins away from human to domestic animal consumption, through the highly profitable trade in pet foods. In the US, the value of annual food sales for 35m dogs and 30m cats amount to around $3bn; in the UK, pet food protein consumption would suffice for 750,000 people.

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2 World Facts and Trends, McHale
3 *Guardian* 3/1/92
4 *Observer* 26/1/92
5 How the other half dies, George
6 *Guardian* 14/3/92
7 *Observer* 19/4/92
8 Ditto 26/1/92
9 Ditto 9/2/92
10 Ditto 24/5/92
11 Dictionary of Environment & Development, Crump.