

American production is the key to increasing the world's food supply

by Chris White and Sylvia Brewda

During the 1984 crop year, the United States exported approximately 83 million metric tons of wheat and corn, representing approximately one-third of the total cereal exports (including rice) throughout the world.

Of this amount, the Soviet Union imported 10.6 million tons, Africa received 11 million tons, and Japan, Western Europe, and East bloc countries bought up most of the rest.

In the 1984-85 crop year, however, the Soviet Union has already received 19 million tons of U.S. grain, and holds contracts for almost 3 million more. If these contracts are fulfilled, and if the ongoing plunge in U.S. food production is not reversed, the United States will be fattening our enemies on the flesh and blood of those who should be our friends.

The United States occupies a unique position in the food supply capability of the world. Throughout the 1970s, Americans provided over half of the cereals moving between countries. In 1980, for example, this meant an export of almost 115 million tons.

In contrast, the other major exporting areas produced as follows: Canada exported 22 million tons, France 21 million tons, Argentina 19 million tons, and Australia 14 million tons of cereal.

However, the exports of France and Argentina are largely absorbed in Western Europe and South America. Australia sends over half its production out of the immediate area, but that production is extremely variable, reflecting the relatively low intensity of technology used in Australian farming.

Thus, the United States represents the single major source of food which can be used to avert a crisis in any area of the world, providing a bridge to the achievement of self-sufficiency.

How much is needed?

The recipients of cereal, on a world scale, have been the East bloc, Japan, and Africa. China has moved from a net importer of 14 million tons in 1980 to a cereal exporter at the present time. In 1980, the East bloc imported 53 million tons, 20% of the total traded, Japan just over 32 million tons, and Africa approximately 17 million tons. As a result of the dirigist policies of the European Community, Western Europe as a whole was only importing 7.5 million tons of cereal

in 1980, compared to 20 million in 1970.

The amounts of cereal imported must be compared with the availability of food in each area. According to FAO figures, the imports of cereal by Russia made up 18% of the amount available in 1980. In Africa, imports made up 19% in the same year. In Japan, for contrast, imports provided 65% of the available cereals. However, the additional imports changed the amount of cereal available per inhabitant from 0.70 to 0.86 metric tons per year in Russia, and from 0.16 to 0.20 in Africa. It has been calculated that the maintenance of a healthy diet with sufficient animal protein requires the availability of 1 metric ton of cereal per person per year, while the mere continuation of life requires a minimum of 0.22 tons or approximately 20 ounces per day. Thus, without imports, the inhabitants of Africa would have been well below the minimum for life.

World cereal requirements

If the world's population were to be fed at a level of one ton of direct and indirect cereal consumption per annum, the total harvest worldwide would have to be well in excess of four and half billion tons in each year. Two-thirds of this total would be consumed by animals, for meat or dairy products. The remaining third would be for direct human consumption.

Such a level defines the maximum requirement for cereal production at present population levels. Though grain production worldwide could be increased significantly, very rapidly, the principal limiting parameter would not be the cereal production as such, but the livestock breeding and raising capacity that would have to be developed on the basis of the expansion of such cereal production.

Without the livestock production, world cereal production would have to be increased by about 15% to provide the supply to keep the world's population as a whole, at or above the minimal level calculated to keep body and soul together. That is an extra 175 million tons of cereals, worldwide every year.

To expand production between the two limits thus defined would be to begin to shift the world onto a pathway which would ultimately make a solution to the food crisis possible. Over time, starvation could be eliminated, and the diet on

which most of the world's population depends, made up primarily of cereal and root products, cassava, manioc, yams, and so forth, could be shifted toward the protein-dense forms of the food spectrum, typified, for example, by the American diet of the mid- to late-1960s.

There are two kinds of obstacle to accomplishing this. Defense of either is, in consequence, the advocacy of genocide. On the one hand, within the United States there is the ideology of the free market, which argues hysterically, as was done in the last depression of this century, that the crisis is a crisis of over-production. If production levels are brought down, it is argued, prices for grains will rise, and then another investment cycle can begin. For the last two years the level of world production of cereals has fallen absolutely, with the major declines enforced in the United States.

The consequences of this idiocy are to strengthen the forces represented by the International Monetary Fund and its "conditionalities" policies. Under the slogan of the free market, food becomes a weapon deployed on behalf of the establishment of an international financial dictatorship, and genocide.

The second obstacle, reinforced by IMF conditionalities, and the associated doctrine of "appropriate technology," is the enforced persistence of peasant-based subsistence agriculture within the developing sector. Let us review briefly the principal economic parameters associated with the crisis in world food production.

Table 1 shows the world's production of all cereals from 1972 through 1982. It will be noted that production is divided

Table 1
World cereal production
(billion metric tons)

	1972	1976	1980	1981	1982
World	1.264	1.474	1.558	1.644	1.697
Developed	0.665	0.761	0.768	0.803	0.823
Third World	0.599	0.713	0.790	0.841	0.823

evenly between the developed sector and the Third World. Of the total amount produced, approximately 600 million tons are consumed by human beings. Approximately 20% is produced inside the continental United States. The combination of the United States and Western Europe accounts for approximately 30% of the world production total.

Of total production, about 240 million tons are traded between nations, with the Russian imports from the world as a whole accounting for about 20% of the total, 50 million tons a year, and more. For these purposes Russia, and its satellite nations, are included within the "developed" nations.

Then compare the world's cereal production with the distribution of the world's population between the advanced and the developing sectors (**Table 2**). Rough division shows

Table 2
World population
(billions)

	1972	1976	1980	1981	1982
World	3.825	4.125	4.418	4.493	4.571
Developed	1.092	1.130	1.167	1.175	1.184
Third World	2.733	2.995	3.251	3.318	3.387

that the Third World is not itself capable of producing the minimum amount of cereal products required per person to keep body and soul together. Fully one third of the cereal available from outside the developing sector to make up the difference is taken up by Russia and Japan, leaving less than 150 million tons available per annum to supplement the production capability within the Third World itself.

Table 3 shows the total agricultural land reported to be available worldwide, and how the total is divided between

Table 3
World agricultural land
(billion hectares)

	1972	1976	1980	1981	1982
World	4.596	4.608	4.621	4.629	4.627
Developed	1.362	1.358	1.364	1.374	
Third World	3.234	3.250	3.257	3.255	

the advanced-sector nations, and the Third World. This total can in turn be divided between land employed for pasture, and land employed for cultivation of crops, such as cereals. Here the rule of thumb is that one quarter of the reportedly available agricultural land is available for crop cultivation. The other three-quarters, are named pasture, but are, for most of the world, idle land from the standpoint of modern methods of cattle and livestock management.

Agricultural land in turn is about one-quarter of the world's total land area, which is divided as shown in **Table 4**.

Thus it appears that Third World nations, as a whole,

Table 4
World land area
(billion hectares)

	1972	1976	1980	1981	1982
World	13.062	13.062	13.062	13.062	13.062
Developed	4.657	4.657	4.657	4.657	4.657
Third World	8.387	8.387	8.387	8.387	8.387

have more land available for agriculture, relative to total land, than the advanced-sector nations do, and that the per-hectare yields obtained from that land are one-third the level obtained in the advanced sector as a whole. Discounting the distortion introduced by the inclusion of backward Russia, U.S. and European yields per hectare are up to two and three times greater than those achieved in the Third World.

Despite those modern-day physiocrats, and their neo-Malthusian co-thinkers, who argue that "Mother Nature" is the source of all wealth, advanced-sector dirt is not five to seven times more fertile than Third World dirt. Blood and soil ideologies aside, dirt is dirt all over the world. The differences in yield obtained per hectare of dirt reflect different divisions of labor in agriculture, as distilled from differing levels of technology.

The world's labor force as a whole (Table 5) is about 1.5 billion people. One third of the total is located in the advanced

Table 5
World labor-force
(billions)

	1972	1976	1980	1981	1982
World	1.379	1.482	1.591	1.628	
Developed	0.484	0.520	0.544	0.550	
Third World	0.885	0.962	1.047	1.078	

sector. Different than the Third World nations, the advanced-sector labor force, reflecting the different age composition of the population, is about one half of the population as a whole. In the Third World nations, the reported labor force is about one third of the population as a whole. The difference is partially accounted for by the greater number of children, and partially by the hard reality that the capital-base does not exist to put people to work.

We can further divide the world's labor force into those employed in agriculture, and those employed in industry (Table 6).

The differences in proportional composition of the labor

Table 6
World industrial and agricultural workers
(billions)

	1972	1976	1980	1981	1982
World Ag	0.745	0.783	0.817	0.813	
World Ind	0.297	0.330	0.366	0.391	
Developed Ag	0.089	0.078	0.068		
Developed Ind	0.185	0.200	0.213		
Third World Ag	0.656	0.705	0.749		
Third World Ind	0.112	0.130	0.153		

forces reflect the different levels of productivity that prevail in the world, and determine world food production capabilities.

For example, within the nations of the advanced sector, the North American region sustained a ratio of 1 farmer to 77 members of the region's general population in 1972, and in 1982, of 1 farmer to 96 members of the population. If the numbers of those fed by exports out of the region are considered, each such farmer fed many more people than the regional total alone. Western Europe, for its part, maintained 22 and 32 people per farmer in the cited years. In the nations of the developing sector the ratio of peasants to total number of people is stagnant over the period, 1:5 to 1:5.5.

The Third World peasant, however, was only capable of feeding about two such persons by his own labor. The differing levels of productivity are the consequence of technology, and the absence thereof.

Such productivity is reflected in the ratio of industrial workers to farmers and peasants, as indicative of the economy's investment in providing the farmer or peasant with the means to dominate and subdue nature. In North America in 1972 there were 11 industrial workers for every farmer, 14 by 1982, and in Western Europe 4 and 6, respectively, but the numbers of both farmers and industrial workers had declined overall. In the developing sector, this ratio is reversed, for there is a continuing ratio of two peasants to every industrial worker.

The availability of technology enhances per-capita as well as per-hectare yields. Compare the different per-hectare productivities referenced above, with the different per capita productivities obtained in the advanced sector and Third World.

Each of the farmers in the advanced sector, including the distorting factor of the peasants of Russia and Eastern Europe, produced 12 tons of cereals in 1981. More narrowly, the combined per-capita output of the 12.6 million farmers of Western Europe and North America was 43 tons each. On his own, the American farmer produced about 150 tons of cereals. Against this, the Third World peasant produced approximately 1 ton.

Among the financial circles associated with the IMF and the World Bank, that is, those who have promoted the policies called "appropriate technology" which have enforced the maintenance of this ratio of backwardness, the result of their effort is seen as a vindication of the incompetent theses plagiarized from the Venetian Gianmaria Orta by Parson Thomas Malthus nearly 200 years ago.

Geometrical rates of population growth must, they say, outstrip arithmetical rates of increase in food production. Therefore, the conclusion is drawn, there are limits to a population's ability to grow, because there are limits to its ability to feed itself. When those limits are reached, the Horsemen of the Apocalypse are supposed to be unleashed to correct the imbalance.

Such views are now openly propounded by the World

Bank, as in its latest annual report. What Olympian arrogance! While the IMF blocked credit for Third World development, the World Bank insisted that modern technology not be applied to Third World agriculture. The consequence, famine, was predicted at the time, and is the consequence of policy implemented by the IMF and the World Bank, not the working of this kind of cited arbitrary law.

Modern agriculture, and thus food-production capabilities, were developed as nature was forced to give way before the spread of science. Machinery replaced animals, chemistry supplied Mother Nature's own deficiencies, and the combination, in the advanced-sector nations, over time, has reduced the amount of society's labor that has to be allocated to food production as such.

The Third World cannot produce at advanced-sector levels because it has been deprived of such technology, typified by the capacity to produce tractors, and fertilizer. **Table 7** and **Table 8** show world production of tractors, and nitrogen

Table 7

World tractor production
(millions of units)

	1972	1976	1980	1981	1982
World	1.449	2.058	1.744	1.665	1.602
Developed	1.340	1.863	1.571	1.478	1.425
Third World	0.109	0.195	0.173	0.187	0.177

Table 8

World nitrogen fertilizer production
(millions of metric tons)

	1972	1976	1980	1981	1982
World	34.059	43.755	55.292	56.349	56.524
Developed	30.682	38.325	46.636	46.931	45.788
Third World	3.377	5.430	8.656	9.418	10.736

fertilizer, which depends on energy-intensive technology, over the decade 1972 to 1982. It will be noted that world production of tractors has been in steady decline since 1976, and that fertilizer production worldwide has been stagnating, but declining in the advanced-sector nations. Such declines correlate with the escalating shortage of food supplies worldwide.

In the case of tractor production alone, shut-down capacity in the United States accounts for about 200,000 units of the annual production loss. Back in 1972, the United States produced one-quarter of a million tractors each year. By 1982, that amount had collapsed to 60,000, where it has remained.

The year 1982 was also the last in which the world's

production of cereals grew. The proponents of the "over-production" thesis, with the IMF, began to cut back absolutely on the amount of food that is grown. The stage is set for massive genocide.

Both U.S. and African output fell

Since 1980, the situation has deteriorated massively. In 1983, the last year for which reasonably reliable figures are available for African food production, the entire continent produced 61 million tons of cereals, no more than 0.12 metric tons per person. In that year, thanks to the federal PIK program to hold down production, the United States production of wheat and corn, our major cereal exports, dropped to 173 million tons, 60 million tons below the 1980 level and 115 million below that of 1982. In 1984, crop production in the United States returned to 266 million tons, but Africa's food production fell further as droughts and population dislocation worsened.

Meanwhile, the Soviets continued to buy up America's crops. In 1984, the U.S.S.R. was the single largest purchaser of American wheat, and second only to Japan in purchase of corn. In the months since October 1984, the Soviets have imported over 12 million tons of U.S. corn, 41% of all corn which has left the country and 2.9 million tons of wheat.

As a consequence of policies aimed at savagely retrenching industrial activity in the advanced sector, while simultaneously reducing food production capacities, the world's dependence on the United States granary has grown enormously.

The USDA, unbelievably, appears to be worried that the Soviets might not fulfill their contractual obligation to purchase yet another 1.6 million tons of wheat before September. This grain, which will be added to the Soviets' strategic stockpile, could instead be used to maintain the lives of some 70 million persons in Africa. Even though such levels of nutrition are inadequate, they could at least keep people alive in the most devastated areas until the infrastructure projects required to make Africa self-sufficient can be completed. Total Soviet imports of cereals could feed nearly 250 million people at the level of 250 kilograms per annum.

Further, reports from around the country indicate that the acreage planted in 1985 will be at least 25% below that of 1984, leading to production of no more than 200 million tons. Lack of fertilizer and pesticides may lead to lower yields on the acreage which is planted, decreasing final production even more. Officially, wheat reserves are down to 30 million metric tons, and corn reserves were depleted by the PIK program, to the point that the USDA was forced to buy corn from some farmers to fulfill its obligations to others.

If we had supported our farmers as they, and we, require, we would not be forced to choose between supplying our enemies and saving our friends. And if our government were not caught in the moral and strategic insanity of the "free-market" doctrines, we would not be choosing to help our foes.