# World food shortage follows imposed import-dependency

### by John Hoefle and Marcia Merry Baker

he current world food crisis is usually portrayed as a grains shortages crisis. Annual world grains output (grains of all kinds, including wheat, corn, barley, millet, rice, etc.) has stagnated, or declined, to around 1,900 million tons or less for the past five years (see Figure 1), at a time when, based on 1980s population figures, over 3,000 million tons of grains produced annually is required to ensure that dietary needs are met globally. There is something radically wrong when the total of the world's grains harvested stagnates, or drops.

The picture is even worse on a per-capita basis (see **Figure 2**). For everyone to have decent daily rations, whatever the relative percentages of cereals, animal proteins, and the other food groups that anyone's dietary preferences dictate, there needs to be well over 14 bushels of grains available in the world food chain per person, on average. But millions are without even their daily bread. For millions, there are fewer than 10 bushels of grain per capita in the food chain.

## Production is below 1980s level of use

An indication of just how low annual grains output is, is that production is *below* the average utilization level of the 1980s (see Figure 1). Today's global grains output of about 1,900 million tons a year, means that annual grains output is dropping below the level of yearly global grains *utilization* (for direct human consumption, livestock feed, seed, and all other uses) which existed

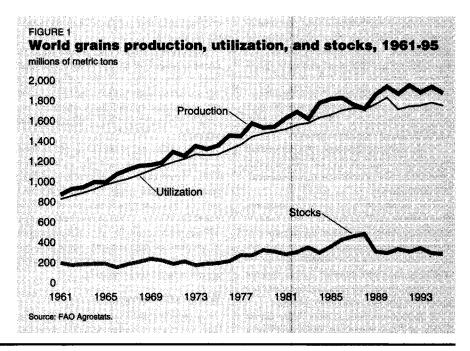
for several years in the 1980s (see *EIR*, Sept. 15, 1995). This means that more and more people don't have the food they need. And whatever stocks of grains were on hand in recent years as carryover from harvest to harvest or reserves for emergencies, have been, relatively speaking, wiped out. Only in exceptional places, such as India, are there, at present, significant reserves.

Today, world grains carryover stocks are at the same absolute levels they were 20 years ago. Stocks have dropped from 460-

490 million metric tons in the late 1980s, down to less than 250 million tons projected for year-end 1995—the level of stocks in 1969.

The only reason that there are stocks reported at all is that consumption itself (for livestock feed, cereals consumption, etc.) is declining. This has been apparent for the past few years.

If this grains gap is obvious on the crude scale of world tonnage statistics, it is even more manifest at the local level, where there



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are millions of undernourished people at points of need around the globe.

Thus, the situation in grains production and shortages is a good marker of the overall food crisis. Dozens of countries, with millions of people, have gone from national self-sufficiency in basic grains, to dependency on imports or donated cereals aid. And now the grain isn't there. **Figure 3** shows the decline in annual global food aid in grains from the World Food Program over the past 10 years, from a peak of 15 million tons, down to little more than 7 million tons this year.

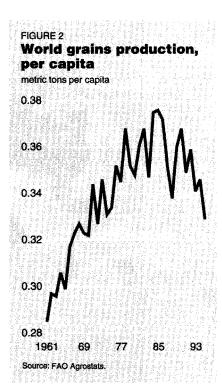
## Decline in national food self-sufficiency

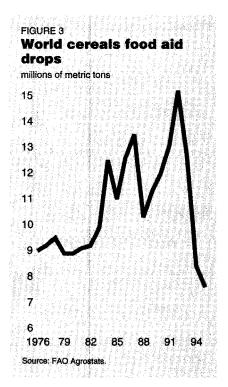
The decline in national food self-sufficiency for certain food items is shown in **Table 1** for 15 selected countries at two points in time, 1963 and 1990. The countries analyzed include the 13 nations specified in National Security Study Memorandum 200 (NSSM-200), prepared under Henry Kissinger in 1974 (see article, p. 15), plus the former U.S.S.R. and China (see **Figure 4**). All 15 nations are hereafter called the "targetted" group.

By 1990, there were significant drops in food self-sufficiency over the prior 27-year period. Look first at cereals (Table 1, column one). In 1963, Mexico was 100% self-sufficient in grains output; it was a grains-exporting nation. As of 1990, Mexico was only 79% self-sufficient, i.e., a grains-importing nation. The situation is even worse today.

Elsewhere in the Western Hemisphere, Brazil was about 90% self-sufficient in cereals in 1963, but dropped to 76% self-sufficient in 1990. Colombia remained about the same, staying at only 86-87% self-sufficient. Other nations in Ibero-America (not shown), saw drastic declines in basic grains self-sufficiency. For example, Haiti, in 1970, was close to 95% self-sufficient; but, as of 1990, self-sufficiency had dropped down to 45%.

In Africa, Egypt was 84% self-sufficient in cereals production in 1963, and only 62% self-sufficient in 1990. Ethiopia was over 100% self-sufficient in grains supply in 1963, and dropped down to 81% self-sufficient in 1990. Nigeria remained at 99% self-sufficiency in grains the entire period, but, as will be shown below, grains declined markedly as a component of the daily diet. Other locations in Africa saw drastic declines in grain self-sufficiency. For example, Algeria was 76% self-sufficient in grains in 1970; in 1990, Algeria was only



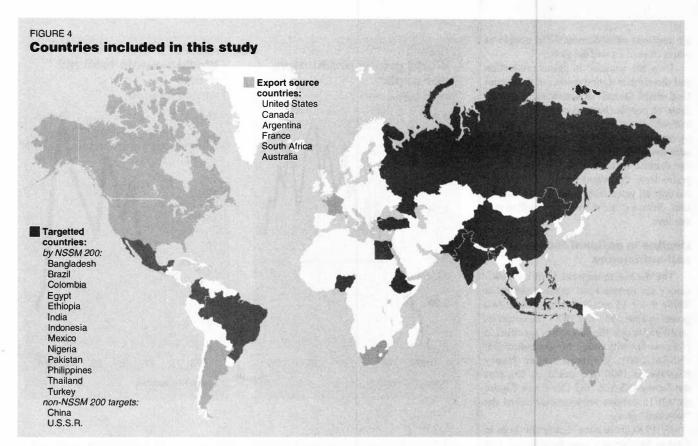


#### TABLE 1 National food self-sufficiency declines, 1963-90

100% = food self-sufficiency; under 100% = deficit; more than 100% = surplus

Nation	Cereals		Pulses		Oils		Milk	
	1963	1990	1963	1990	1963	1990	1963	1990
WESTERN H	EMISPHE	RE						
Mexico	100%	79%	104%	85%	110%	57%	87%	68%
Brazil	89%	76%	100%	96%	105%	118%	96%	96%
Colombia	86%	87%	100%	76%	79%	94%	91%	79%
AFRICA								
Egypt	84%	62%	112%	88%	103%	90%	92%	93%
Ethiopia	104%	81%	100%	100%	142%	102%	99%	95%
Nigeria	99%	99%	100%	99%	207%	102%	82%	69%
INDIAN SUB	CONTINE	ENT						
India	96%	105%	100%	94%	100%	103%	98%	100%
Pakistan	95%	93%	100%	95%	108%	86%	99%	99%
Bangladesh	106%	87%	100%	88%	71%	83%	95%	83%
SOUTHEAST	ASIA	<b>.</b>	2		4	F	K	*
Indonesia	89%	100%	100%	88%	111%	96%	59%	75%
Philippines	83%	80%	97%	47%	266%	110%	6%	3%
Thailand	159%	131%	128%	171%	109%	101%	3%	75%
EURASIA	1		4		d	1		
Turkey	113%	99%	105%	140%	100%	99%	100%	98%
China	96%	99%	95%	111%	100%	100%	89%	100%
U.S.S.R.	87%	89%	100%	100%	94%	90%	100%	100%
Source: FAO Agro	stats.		1977	4 11 11 11 11				

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44% self-sufficient.

On the Asian subcontinent, the cereals self-sufficiency ratios show no declines for India, which went from 96% to 105% over 1963 to 1990, and Pakistan, which stayed at the 93-95% level. India has managed to stockpile as much as 40 million tons of grains as of year-end 1995, and may undertake certain exports. However, Bangladesh has gone from 106% grains self-sufficiency in 1963, down to 87%, and is subject to wide swings from year to year in grains supplies.

In Southeast Asia, wide annual swings in staple grains are also now common. In 1963, Indonesia was 89% self-sufficient in cereals; in 1990, it was 100% self-sufficient. But in several years since then, it has fallen back to rely on imports. Similarly, the Philippines stayed at 80-83% self-sufficiency levels for 1963 and 1990, but in recent years has seen growing dependency because of shortfalls in rice. Thailand, from which the cartel trading companies export many kinds of commodities (corn, livestock feed, meat, processed foods, etc.), was 159% self-sufficient in cereals in 1963, and 131% in 1990.

In Western Asia, Turkey was 113% self-sufficient in grains in 1963, and was still 99% self-sufficient in 1990.

China, throughout the period, was 95-100% self-sufficient in grains, with changes from year to year from being a net importer or exporter.

The Soviet Union, likewise, remained grains import-dependent throughout the 1963-90 period, showing about 87-89% cereals self-sufficiency.

#### **Grains supply is misleading**

However, restricting the food crisis to the metric of the grains supply situation is a deliberately misleading practice (see article, p. 16) which leaves out the essentials of the crisis that has come, over the past 30 years, to extend throughout the entire national agricultural sectors and food supply systems.

Many of these 15 nations also became supply-short and import-dependent, i.e., experienced food self-sufficiency declines, for other basics in their diet. Also shown in Table 1 are pulses (peas, beans), oils (tropical, olive, corn, or other vegetable fats), and milk (including dairy products other than butter).

Note the sharp declines in food self-sufficiency in non-grains diet staples. For example, for pulses, Mexico dropped in self-sufficiency from 104% in 1963 down to 85% in 1990; in oils, from 110% down to

57%; and in milk, from 87% self-sufficiency down to 68%. Brazil became a source of soybean oil exports over this period—for the cartel companies.

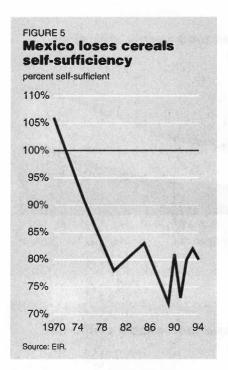
Egypt's self-sufficiency in pulses and oils declined. Nigeria, which had been a source of cartel tropical oils exports, experienced a decline as well. In 1963, Nigeria was 207% self-sufficient in oils, and in 1990, only 102% self-sufficient.

On the Indian Subcontinent of Asia, note the declines in Bangladesh's self-sufficiency in pulses and milk between 1963 and 1990.

In Southeast Asia, various patterns are apparent. The Philippines dropped in self-sufficiency from 97% to 47% in pulses, and also declined as a source of tropical oils commodities for cartel export.

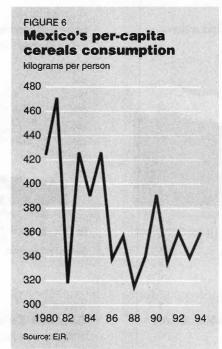
China remained relatively the same in self-sufficiency for these staples. And, likewise, Turkey and the former U.S.S.R. did not experience radical changes.

Overall, the increase in food importdependency during 1963-90, although hailed by United Nations officials and the commodities cartel-backed "experts" and others as reflecting geographical "competitive advantages," "consumers' rights to access world markets," or other such euphemisms, in fact, reflects the impact of successive



years of International Monetary Fund (IMF) conditionalities and Bretton Woods policies, in which developing nations were denied the means to build up needed agricultural infrastructure (energy, water, transport, handling, storage, processing) to provide for national food supplies.

Over this period, nutrition levels have dropped in most countries, as nations were



increasingly forced into food import-dependency. At the same time, cartel commodities companies made a killing in profits off of their domination over both the export-import trade, and domestic food processing and distribution.

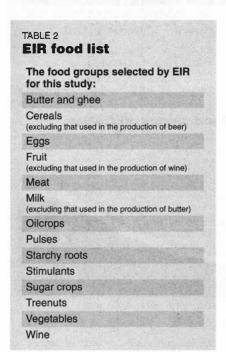
The deficits in food supplies shown in the food self-sufficiency ratios in Table 1, are not measured against what people ought to be eating for a decent diet, but rather, merely show what part of their diet, however inadequate, is imported. Look at what this means in the case of Mexico.

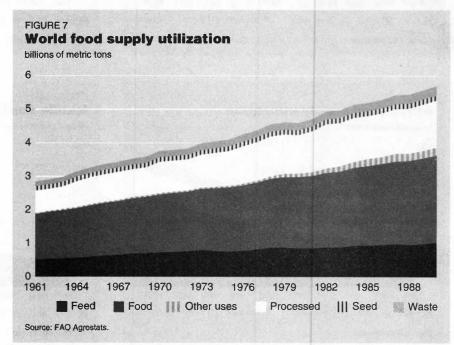
Figures 5 and 6 show the drop in cereals self-sufficiency in Mexico from 1970 to 1994, and the drop in per-capita cereals consumption (whether for direct consumption, or via the animal protein cycle) over the same time period. It is estimated that up to one-third of the Mexican population is now suffering some form of malnutrition. In the spring of 1995, the federal government declared 12 official hunger zones in the republic.

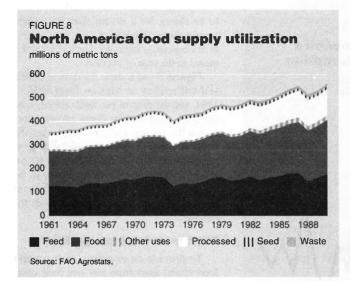
#### Start from food use profiles

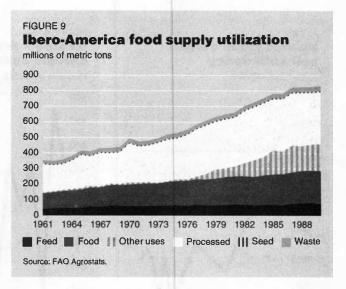
To provide an overview of the world food crisis, apart from any one food commodity, one country, one crop season or harvest, we here publish a series of figures based on the U.N. Food and Agriculture Organization agricultural database. The figures take 14 basic food groups common to most countries' diets, and their tonnages in terms of annual supplies, over the time period approximately 1960-90, in terms of several ratios, including production compared to "supply" (the quantity available from production, plus the net adjustment of stocks, plus the net adjustment for imports and exports), and production and supply per capita.

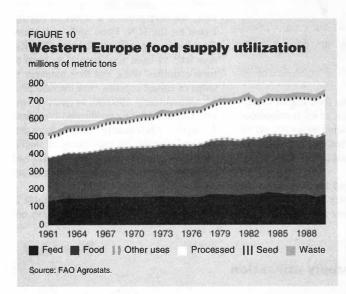
The 14 food groups are listed in **Table 2.** For purposes of comparison, we have not

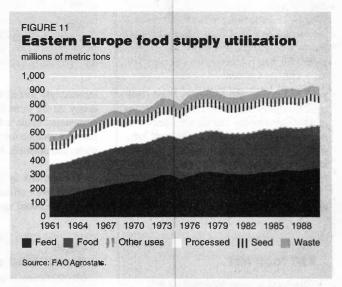


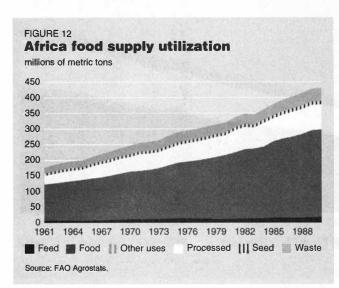


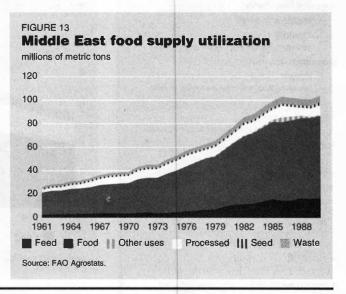


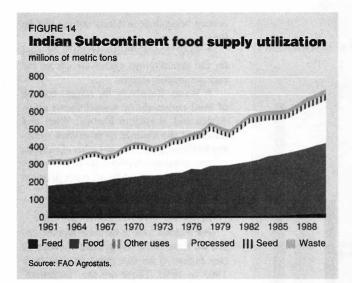


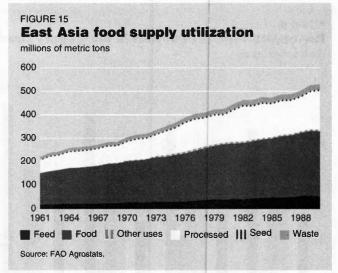












listed seafoods.

We begin by looking at the world profile of annual utilization of the total tonnages of these 14 food groups, and major geographic regions. We then proceed to look at the food supply and import-dependency ratios on a per-capita and national basis for two selected groups of nations, as explained below.

Figure 7 shows the total tonnages of annual use of the 14 selected food groups, from 1961 to 1990, in terms of how much tonnage goes for feed (food for livestock), food (direct human consumption, the largest tonnage), "other" uses (ranging from using biomass for fuel, to plastics), processing (intermediate stages of food preparation), seed, and waste.

The increase from less than 3 billion tons of basic food commodities in the food supply to close to 6 billion tons over the roughly 30-year period, comes out to a change per capita of from about 2,050 pounds of food commodities per person in 1963, to about 2,200 pounds per person in 1990. However, on a regional and national scale, the volumes and ratios differ greatly.

The next series of figures (**Figures 8** through **15**) show the food supply utilization profiles for major geographic regions—the Western Hemisphere, western and eastern Europe, Africa, the Middle East, the Indian Subcontinent, and East Asia.

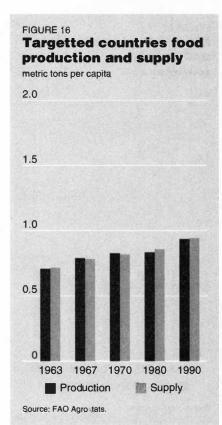
Some of the most striking differences, even at this gross level of aggregation, are noted, taking each of the uses for food commodities in order shown on the graphics.

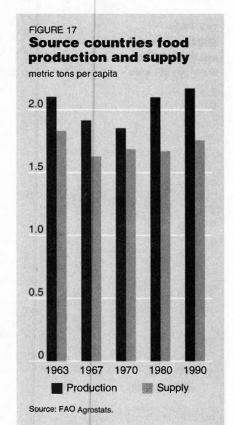
• Feed for livestock. North America and Europe show relatively the largest volume of agricultural commodities going into livestock feed. In contrast, very little goes for livestock feed in Africa or in the Indian subcontinent.

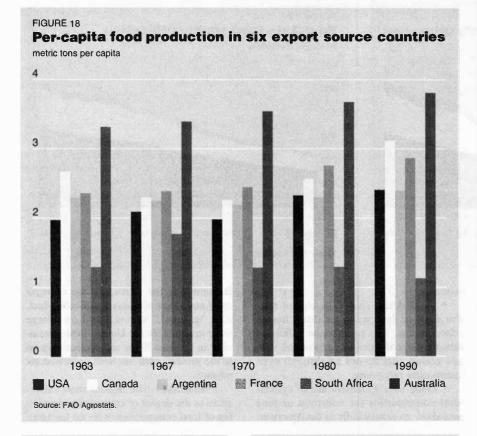
- Food. Africa shows the highest relative share of food going for direct human consumption. This reflects the extensive subsistence production of cassava and various grains, that do not go through even intermediate processing.
- Other uses. Extensive use of agricultural commodities for non-food or feed uses show up dramatically in the Americas.

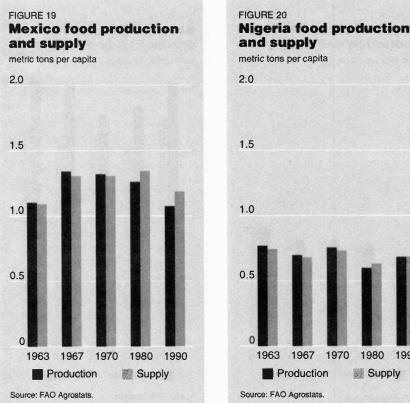
Beginning in the 1970s, the use of sugar cane and other biomass for alcohol fuel, e.g., "gasohol," was initiated on a large scale in Brazil. In the United States, beginning in the late 1970s and increasingly up to the present, corn has been processed for ethanol.

Processed. The regions show differences in the degree of intermediate processing of food commodities, with the least pro-









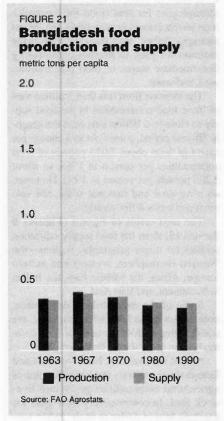
cessing being done in Africa and the Middle East.

- · Seed. The necessary volumes of seed for the annual crops cycles are shown for each geographic region.
- Waste. Relatively the largest volume of food commodities wasted shows up in Africa and in eastern Europe. What this reflects is the absence of protection-storage facilities, pesticides and other chemicals, refrigeration, and transportation. Loss rates to waste add up to 40% in many tropical regions.

#### Who eats, and who doesn't?

For a closer look at the food supplies crisis, we focused on two groups of countries (see Figure 4) for five points in time from 1963 to 1990. There are the "targetted" nations, the 13 designated in the Kissinger NSSM-200, plus China and the former U.S.S.R. In contrast, there are the "export source" countries—the United States, Canada, Australia, France, South Africa, and Argentina. These latter six nations together are the origin for a large percentage of the total tonnages of food products that the commodities cartels control and use to dominate world trade and food supplies (see article, p. 25).

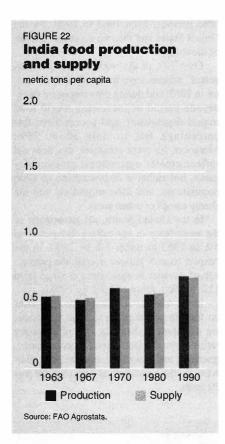
Compare Figure 16 with Figure 17, and



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1980

Supply



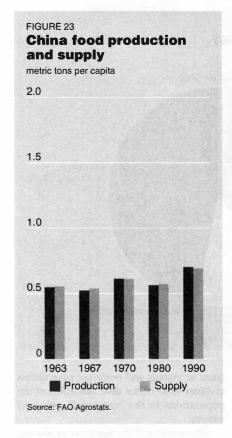
you see that, per capita, the levels of food production and supply are about the same in the "targetted" nations; but in the "export source" group of nations, production far exceeds supply.

Moreover, the level of production and supply in the targetted nations is less than a metric ton per capita per year, whereas in the "export source" nations, there are about 1.75 tons of food supply per capita per year.

Over 1963-90, there is an increase in the per-capita production and supply levels in the targetted countries, from 0.7 metric tons in 1963 up to 0.9 tons in 1990, but the targetted nations group never comes close to even the 1963-67 level of supplies per capita in the "export source" nations.

Furthermore, Figure 18 shows the food production per capita in each of the six "export source" nations. Look at the high tonnages in Australia and Canada, in particular—the Commonwealth nations used as postwar "granary" economies for London-interlocked commodities cartels.

Now look at certain individual nations in the other group, the "targetted" nations, in terms of levels of production relative to supply (Figures 19 to 23). Shown are Mexico, Nigeria, Bangladesh, India, and China. In none of these nations does production or



supply come near that of the "export source" nations.

#### **Diet deteriorates**

While Figures 19 to 23 indicate how low the absolute tonnages of food production and supplies are in the targetted nations, the deterioration in the composition of the diet can be seen by looking in more detail at the constituent food groups that make up the diet. Look, for example, at Nigeria.

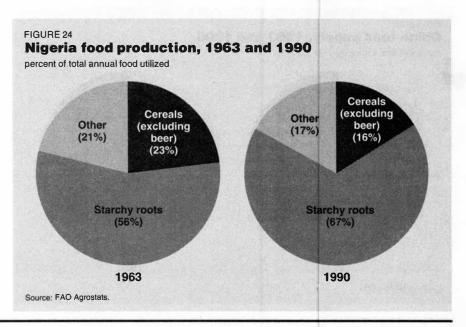
Figure 24 shows the relative percentages of the different food groups that make up the total annual food utilized in the country, in 1963, and then in 1990. We are looking at production, because it is about equivalent to supply in Nigeria.

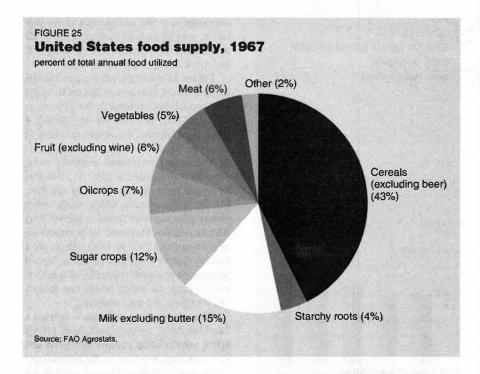
The largest component is starchy roots, about 56% of the diet in 1963. In 1990, this has gone up to almost 67% of the diet. Mostly, this is cassava, which, along with a variety of companion foods, is part of West African cuisines. However, the increased use of cassava from 1963 to 1990 reflects not a dietary preference, but rather a forced reliance on the root vegetable as a heavy-bearing crop, on which people can subsist, i.e., it's filling, but not nutritious.

This monoculture reliance is labeled a "success story" by cartel-affiliated groups active in promoting cassava in Nigeria and Zaire, such as, for example, the International Institute of Tropical Agriculture and the International Food Policy Research Institute.

What is shown as the "other" segment on the Nigeria food charts, is the total of all 12 other food types. In 1990, this included 5.4% vegetables; 3.5% fruits; 2% peas and beans; 1.6% sugar crops; 1% meats, and even lesser amounts of the remaining food groups.

For comparison, look at the shares of different food groups in the U.S. diet in 1967 (**Figure 25**). This shows supply, not production, because the United States is a cartel





"export source" nation. The most striking feature of the U.S. food supply, is the variety and quantity of many different foods.

For further comparison, look at the relative shares of food groups in the food supply in China, in 1963 and in 1990 (Figure 26).

#### **Burden of producing food**

These data document the worsening inadequacies in the food supplies of many nations, from the 1960s to the present. But, producing the food supply, however inadequate in amount and make-up, nevertheless involves most of the time and effort of the populations in the "targetted" group of

One measure of the burden of producing the daily diet is the relatively large percentage of workers engaged in agriculture, as opposed to manufacturing, construction, and socially necessary tasks such as education, transport, and other infrastructure. Figure 27 shows agricultural workers as a percentage of the total work force, for five

time periods, from 1963 to 1990, for the United States and the two economic groups of the study.

Over 70% of the work force of the "targetted" nations were in the agricultural sector in 1963; and during the subsequent threedecade period of increasing world food import-dependency, and poorer diets, this percentage fell to only about 58%. Moreover, for most countries, this does not reflect greater agricultural productivity gains, but rather a dispossession of farm populations, and their migration into the shanty camps of urban areas.

In the United States, the percentage of the work force in agriculture dropped from 5% in 1963 to under 3% by 1990. In the "export source" nations overall, the percentage of workers in agriculture dropped from 11% in 1963, down to 4.5% by 1990.

In the next installment of this EIR series on food import-dependency and free trade, we will show in detail the lack of necessary ratios of inputs (fertilizers, mechanization, transport, and other infrastructure) that characterizes the agriculture sectors over the past 30 years.

