FIGURE 11 The Greater Carajás region of Brazil



cartel is angling to buy them. Kleinwort Benson investment bank, which is a kissing cousin of RTZ, has been arranging for the sale of 10% of Gazprom's shares. A leading candidate in the running for getting these shares is Enron Corp., which is linked to George Bush, and a subsumed partner in the British-run energy cartel.

As the rush to raw materials hoarding intensifies, the Anglo-Dutch cartel hopes to put itself into a position that, with the collapse of the world monetary system, they will be the sole surviving power. Their thinking is flawed. They do not locate economic wealth where it really is, in the creative force of man's reason: man's individual creative act of discovery, which overturns accepted fundamental axioms, creates a revolution in scientific ideas, which drives the economy forward. Rather, the oligarchy sees wealth as the raw material holdings emanating from Mother Earth. This physiocratic view of economics underpins the plans of the oligarchy to strangle the economy until there is very little human existence left. At this point, all the raw materials in the world won't do them any good.

The cartel's power must be busted apart. The solution that will work is Lyndon LaRouche's method, which Marcia Merry Baker will now discuss.

Do you want to eat next year?

by Marcia Merry Baker

I expect, you would all like to have food to eat next year. A decent diet has plenty of all the food groups—cereals, oils, dairy, animal proteins, spices, and the rest—but for today's purpose, we'll look at just grains.

In Figure 1, we see how, as of around 1990, the world already had a whopping food gap in basic grains. The bar on the left shows the annual level of utilization of grains. Now, this is actual use of grains—at the low diet levels for most of the world. Rice, wheat, corn, oats, rye, sorghum all kinds. The amount of grains required for a decent diet would be twice as high—over 3,000 million tons, off the charts.

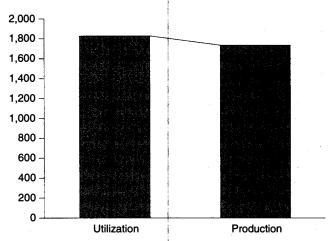
But look at the bar on the right, world grain production. It is below even the paltry utilization levels of 1990.

As you can imagine, you can't continue long eating food you are not producing. This shows conditions for famine. As you can see, we were in bad trouble as of 1990.

Now, break this picture down and look at the basic grains gap in the major geographic regions of the world. In all cases, we are taking the utilization rate at the highest year at or around 1990, and the year of the lowest production

FIGURE 1 World grain deficit

(annual, 1990, millions of metric tons)



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FIGURE 2 South America: grain deficit

(annual, 1990, millions of metric tons)

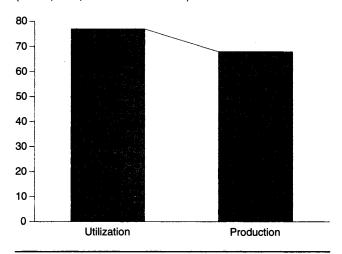


FIGURE 4
Former Soviet Union: grain deficit

(annual, 1990, millions of metric tons)

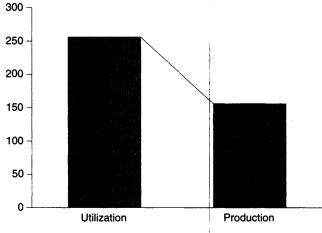


FIGURE 3
Africa: grain deficit

(annual, 1990, millions of metric tons)

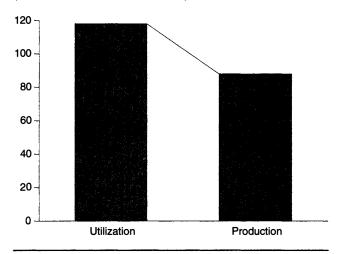
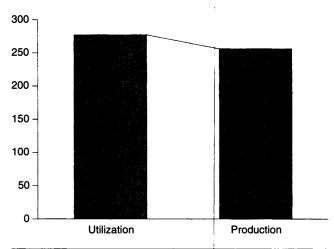


FIGURE 5 **Europe: grain deficit**(annual, 1990, millions of metric tons)



around that time.

In South America, as of around 1990, grains utilization exceeded production on this continent by about 5 million tons (**Figure 2**).

In Africa, grains utilization exceeded production by at least 10 million tons (**Figure 3**). And remember, this is based on *below subsistence* average daily rations in many countries.

In Eurasia, in the geographic region comprising the former Soviet Union, grains utilization could exceed production by an amount approaching 100 million tons—if you take a nearby year of the highest utilization rate, as against a disas-

ter harvest year around 1990 (Figure 4).

In Europe, grains utilization exceeded production by a few million tons (Figure 5). This occurs because, when you look at the entire European geographic region, even the great grain surpluses of France in the late 1980s are cancelled out by the grains dependency elsewhere in the region.

Only in Asia, do you see some equivalence of utilization and production—accounted for by the relative self-sufficiency of the Indian subcontinent, China, and the Indochinese peninsula (Figure 6). But again, remember what low dietary levels are standard throughout much of this vast region.

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FIGURE 6
Asia: grain self-sufficiency

(annual, 1990, millions of metric tons)

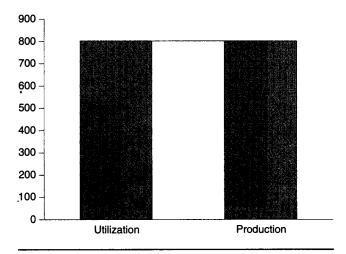
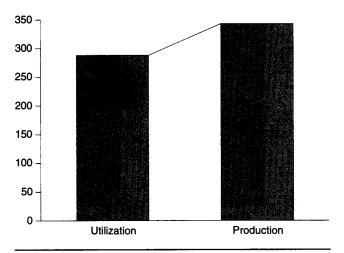


FIGURE 7

North and Central America: grain surplus
(annual, 1990, millions of metric tons)



Where do you see absolute, sizable surplus over domestic utilization? Guess where. Only here in North America—in Canada and the United States—the British Commonwealth and crypto-commonwealth, about 70 million tons (Figure 7).

And in the British Commonwealth of Australia and New Zealand, about 10 million tons surplus (Figure 8).

Of course, the continental scale hides the extremes of grains shortages from country to country. So look now at certain individual countries, according to what degree they were self-sufficient in basic grains as of about 1990 (**Table**

FIGURE 8

Australia and New Zealand: grain surplus

(annual, 1990, millions of metric tons)

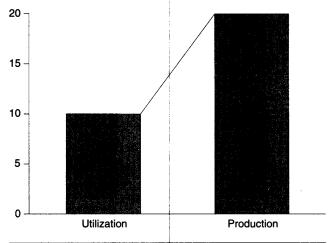


TABLE 1

Decline in selected countries' cereals self-sufficiency

(percent self-sufficient)

	1970	1990
Mexico	106%	73%
Haiti	94	46
Egypt	73	63
Algeria	76	44
Jordan	33	3
Japan	45	25

1). Let's compare that to how they were 20 years ago, in 1970.

We start in the Western Hemisphere. You see that Mexico in 1990 was only 73% self-sufficient in grains. In 1970, Mexico was 106% self-sufficient. In the 1960s, Mexico was a net grain exporter to Ibero-America.

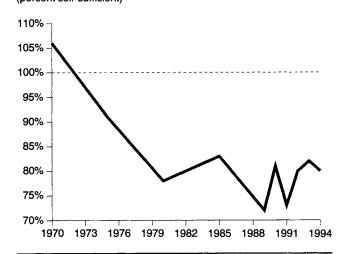
Look at Haiti. In 1970, Haiti was 94% self-sufficient in grains; though, of course, at below-required nutritional levels. But in 1990, Haiti was only 46% self-sufficient, and with still low nutrition.

Turn to Africa. Look at Egypt. It was 73% self-sufficient in 1970. Then in 1990, this fell down to 63%. Look at Algeria. In 1970 it was 76% self-sufficient in grains. This fell to 44% in 1990.

Turn to the Mideast. Jordan was only 33% self-sufficient grains as of 1970. By 1990, this fell down to 3% self-

FIGURE 9

Mexico loses cereals self-sufficiency
(percent self-sufficient)



sufficient, in other words—totally dependent on outside sources.

Look at Japan. In 1970, it was 45% self-sufficient, that is, 55% dependent on foreign sources for grains (not for rice, but for animal feed grains for its meat supplies, and for other uses). And by 1990, this self-sufficiency quota dropped further down to 25%, although Japan is still 100% self-sufficient in rice.

So you see what happened over a 30-year period: Nations representing millions of people became dependent in the extreme for the staff of life.

And don't believe for a moment that food self-sufficiency was lost because some nation overpopulated its turf, and the grass all died. Bunk! The slogan for this time period of the United Nations economic warfare division, called GATT (General Agreement on Tariffs and Trade), was "One World—One Market" (for the "Uruguay Round"), and you and your nation were forced onto the so-called world "free" market for food, controlled by the cartels.

This has meant a vast increase in malnourishment and starvation.

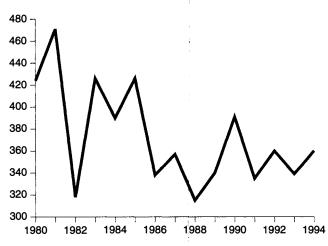
Now, look at one country over this 25-year period: Mexico (**Figure 9**). Here you see how Mexico lost the cereals self-sufficiency it had in the 1960s, and dropped down to about 80% self-sufficiency—meaning 20% dependent on imports—and stayed there. Above the 100% line is exports.

Now, was this gap in Mexico's grains needs made up by imports? No. Utilization of cereals went down. **Figure 10** shows that, on a per-capita basis, annual cereals consumption falls. In 1980, it was about 470 kilograms per person per year; now it's down to 360 kg or less. In 1970, for every Mexican, there were maybe 20 bushels of grains

FIGURE 10

Mexico's per capita cereals consumption

(kilograms per person)



a year going through the food chain. This dropped to less than 15 bushels on average.

At least one-third of Mexican people are now estimated to suffer undernourishment. That's 30 million people. Earlier this year, the government designated 15 emergency hunger zones in Mexico.

Look at all kinds of food dependence in Mexico (**Table 2**). Here is the total tonnage (cumulative) of specific agriculture products, consumed in Mexico over the 1988 to 1994 period, and the percentage of each product imported: Remember, the per capita consumption is falling every year.

		Imported
	1	
Rice		21%
Corn		12%
Wheat		16%
Beans		7%
Soybeans		79%
Sorghum		36%
Cotton (seed)		39%

What you see in Mexico is true for countries on every continent.

Now, stop for a moment, and think of the world food aid crisis in this light.

Earlier this year, the United States announced that beginning in 1995-96, the volume of U.S. annual grain donations to the World Food Program would be cut in half, due to lack of U.S. government grains stocks. This is the first such cut since World War II. Wheat supplies in the United States are so low that there is pressure for the U.S. government

TARIF 2 Mexico's dependence on food imports, cumulative total, 1988-94

Consumption Product (millions of tons		Percent imported	
Rice	3.5	21%	
Corn	117.8	12%	
Wheat	32.6	16%	
Beans	7.8	7%	
Soybeans	19.7	79%	
Sorghum	50.6	36%	
Cotton (seed)	2.5	39%	

to dip into its Food Security Wheat Reserve (intended for international contingencies) to release stocks for domestic

In July, the European Union put a stay on granting new licenses for cartel export companies to ship out European Union grain, until Sept. 7, because grains stocks are so low. I cannot say what will happen after that date. EU grain stocks three years ago stood at 33 million tons, then fell to 17 million tons, and now are less than 6 million tons.

However, any talk you hear about "low stocks" of grains and bad harvests being the cause of today's world food shortages, is just devious, partial truth. What we have just seen about the years of "grains gap," between below-minimum utilization and production, illustrates that there has been a systematic takedown of the agriculture sectors around the world over the past 25 years. Wherever and whenever any sizable stocks were carried over from one year to the next, they were almost 90% in the hands of the cartel companies, and represent food taken out of the mouths of people who needed it. Otherwise, there are a few fortunate situations of food reserves, such as India, where there may be 40 millions of tons of grain in reserve stock at the end of 1995.

On Oct. 16, World Food Day, you can expect to hear all kinds of propaganda from the U.N. about low food stocks, because it is the 50th anniversary of the U.N. Food and Agriculture Organization (FAO), and a conference will be held in Quebec City.

Now look at Eurasia. We focus on Russia (Figure 11). Here you see that over just the past five years, both production and annual utilization of grains are falling. People have done every imaginable thing—turned to plots of potatoes, turnips, and so on.

Look at the production volumes of grain. In 1992, there was over 100 millions of tons produced. This year, the harvest may sink to 65 million tons. There has not been such a low level since the early 1960s. And no imports are

FIGURE 11 Russia's grain utilization and production (millions of metric tons)

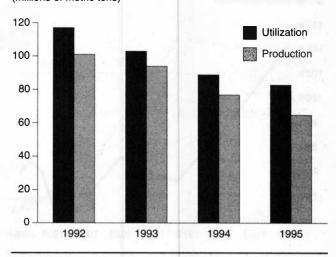
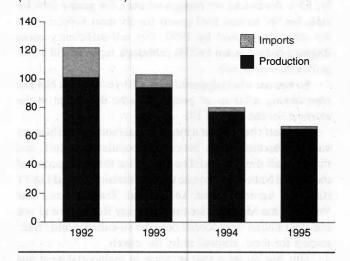


FIGURE 12 Russia's grain imports and production (millions of metric tons)



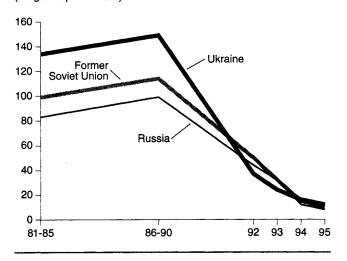
in sight (Figure 12).

Thus you are seeing not one or two bad harvest years, but the breakdown of the economics cycle of reproduction of the physical means of existence of the society. The breakdown of the cycle of inputs and outputs.

We illustrate that here with Figure 13, which shows the falling rates of application of fertilizer per hectare of farmland from the 1980s to this year. It is now down to next to

You could show the same thing about the ratios of other farm inputs essentials: farm machinery, fuel, farm chemi-

FIGURE 13 Fertilizer applied in former Soviet Union (kilograms per hectare)

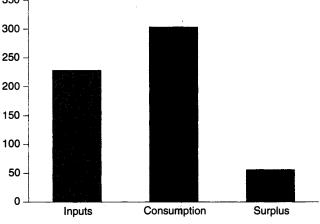


350 300 250 200

U.S. food supply, inputs and outputs, 1967

FIGURE 14

(millions of tons)



cals. Land under the plow itself has shrunken.

Not only that, the inputs are being scooped out of the country. The potash fertilizer has been sold off in the West.

Even the industrial inputs for farm machinery are being carted out of Russia and the CIS republics.

Emergency measures are required

We have reached the point of famine and breakdown that LaRouche warned about back in 1988—the year of the founding of the Food for Peace arm of the Schiller Institute, which has continued to the present. What is required are concerted efforts to build up infrastructure for water, power, transport, and so forth.

Of course, it is true that short-term, emergency actions are also called for. For example, it would be wonderful if tomorrow we would hear that President Clinton had announced an emergency food relief effort, and it were called something like "Operation Flourish," instead of names only going for hurricanes and military actions. We would take such emergency measures as ordering Archer Daniels Midland to immediately cease and desist from processing 5% of America's corn crop into ethanol fuel—for which ADM gets huge federal subsidies—and, instead, ADM would be under orders to mill the corn into supplementary food relief products to save lives in Africa, until permanent infrastructure is built.

We should innovate like that.

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But we must have systematic action, and competent economics. So, what do you do? Think again on how we began this panel discussion—in terms of ratios of the physical economy. Take a benchmark time and place that more or less "worked."

Figure 14 shows the ratio of inputs to outputs in the agriculture sector in the United States in 1967. Look at the relative sizes of tonnages on the left—these are inputs to agriculture (this means steel, chemicals, power, fertilizers, seeds, feed, farm machinery)—228 million tons.

Then look at the outputs of agriculture products consumed—in the middle—303 million tons. And on the right, there is a sizable surplus—55.5 million tons.

We can extract the ratio of tonnages of particular input to output, and apply that to set the targets for volume of inputs needed to reach the tonnages of world food supplies (of all kinds) that we want to create today. Let us consider the requirements for steel and farm machinery.

In 1967, about 1.5 tons of steel were produced as inputs into the economy for the agriculture sector, for every 1,000 tons of food products produced. Therefore, what that means today, if we want about 10 billion tons of foodstuffs of all kinds, is that there should be 15 million tons of steel produced to serve as inputs for the agriculture sector.

Look at farm machinery in the same way. In 1967 in the United States, as benchmark, there were about 2.1 tons of farm machinery produced as inputs for every 1,000 tons of agricultural outputs produced. On the basis of this ratio, if we want 10 billion tons of foodstuffs produced worldwide, then 21 million tons of farm machinery are needed each year.

This 21 million tons of farm equipment is the volume of machinery equivalent to the output of the U.S. automotive industry at its biggest. So this gives you an idea of what we need to create on a world scale to serve agriculture needs adequately. It can be done. There is no other competent way of thinking. This is how to guarantee food for next year, and for centuries to come.