

# Malthusians threaten China with the food weapon

by Rosa Tennenbaum

China's future has become the subject of spirited discussion, and is also the occasion for much contradictory speculation. The "Middle Kingdom," as China was once called, interests the western countries, especially because of the enormous market it represents. The task is to supply and enrich one and two-tenths billion people, who for the most part currently live in the most abject misery. That task, of course, offers opportunities for the industrial countries, especially if the Chinese government were to adopt a clear policy course in the direction of stable, lasting development. This perspective therefore presents not only China, but the entire world economy, with tasks that we can not undertake unless present policies are fundamentally changed.

This is especially true of China's agriculture. Its modest economic recovery has only created a little more buying power, but the demand for such expensive foods as meat and dairy products has already climbed sharply. Previously rice was the most important food, accounting for about 70% of daily caloric intake.

The prospect that Chinese nutritional patterns will change through a rising living standard, has already alarmed such malthusians as Lester Brown, chairman of the Washington, D.C. WorldWatch Institute. In an article entitled "Who Will Feed China?" he paints the specter of more and more Chinese, who always want to eat better.

## Rising demand

The Chinese, Brown complains, will soon be eating as much pork as the Americans. Even though the consumption of animal protein is "minuscule" compared to industrial countries, and even though North Americans still enjoy three times as much red meat and poultry as the Chinese, "what happens if the Chinese start closing the gap in these other livestock products as they have with pork?" he asks. Calves have to be fed grain, in order to be able to produce meat and milk. But even the consumption of milk and dairy products is widely denied to the Chinese at present: During an entire year, the average Chinese consumes 4 kilograms of milk and dairy products—an amount which in industrial countries is consumed in a mere five days (see Table 1).

The Chinese have already started closing in on poultry, Brown complains. Poultry was once a "rare luxury," and today only about 10% of the average U.S. demand is con-

sumed; but, "the appetite for chicken is growing fast" in China, and it will be further encouraged by a government policy which favors poultry meat production, because poultry more efficiently transforms grain into meat than beef cattle or hogs. In the 1990s, consumption of poultry has reached double-digit growth rates. The same is now taking place with eggs. The government is striving for every Chinese to be able to eat twice as many eggs in 2000 as in 1990, or 200 eggs a year. They will have almost caught up with the Americans, who eat 235 eggs a year. For Brown this is a frightful prospect. By then, he reckons, the Chinese population will be 1.3 billion, and they would therefore eat 260 billion eggs a year. That means 1.3 billion hens would have to be raised, which would have to be fed 24 million tons of grain a year. These 24 million tons correspond roughly to Canada's total grain crop.

Demand for fish is also climbing. Since the Japanese have fished the coastal waters to exhaustion, the Chinese have already begun to breed their fish in ponds. Six million tons of fish are being brought to market annually in this way. They, too, are fed grain: 12 million tons of it went to fish last year, a flabbergasted Lester Brown reports.

Even beer is being enjoyed more and more by the Chinese. But if every grownup drinks just one more bottle per year, some 370,000 tons of grain will be needed to produce it, Brown calculates.

Grain is truly a key factor for human and animal nutrition, and for that very reason, the malthusians have set their sights on grain production. The negotiations for the General Agree-

TABLE 1  
**Per capita consumption of grain and livestock products in the United States and China, 1990**  
(in kilograms)

Country	Grain consumption			Milk and products		
	Beef	Pork	Poultry	products	Eggs	
U.S.A.	800	42	28	44	271	16
China	300	1	21	3	4	7

Source: Food and Agriculture Organization, FAO Production Yearbook 1990, Rome, 1991.



*The malthusians, such as Lester Brown of the WorldWatch Institute, are upset that the Chinese diet is improving, with higher demand for meat, poultry, fish, and other high protein foods. But the task of supplying and enriching 1.2 billion people offers opportunities for industrial nations, especially if the Chinese government were to adopt a clear policy course for stable, lasting development.*

ment on Tariffs and Trade (GATT), as well as the agrarian reforms in the United States and the European Union, have placed decreasing grain crops through land set-aside programs and drastic price drops for farmers, at the center of their priorities. The direct consequence of this policy, is that there is less grain available for more people. And that is exactly what Lester Brown and his institute are planning and demanding.

### **Domestic supply falls**

China's growing demand for grain contrasts with its sinking domestic production. The Middle Kingdom currently is the home of one-fifth of the world's population, but it has only 7% of the world's arable land, because the majority of this huge country consists of mountains and deserts, which cannot be used for growing crops. Between 1957 and 1986, every year 520,000 hectares of agricultural land were lost to construction and the effects of natural catastrophes. In 1992, some 667,000 hectares, and in the following year, 620,000 hectares were lost, which means that China is losing almost 1% of its farmland every year. If this process continues, then the country, which with .09 hectares per inhabitant has only one-quarter of the world average of farmland available per capita of population, within 50 years will only be able to use .04 hectares per capita for food production, according to government calculations.

From that, the WorldWatch Institute concludes that grain production is dropping by at least half a percent per year, and projects that in 2030 around the crop yields will be about 20% below the current figure. In 1990, 329 millions of tons of grain were harvested, and 335 million tons were needed; the remaining 6 million tons had to be imported. Already by the turn of the millennium, the Beijing government expects that the need will be for 500 million tons, and in 2050 it will be 700 million tons. In 2000, the shortfall will be 187 million tons annually, and that alone will take

up almost the entire world export volume, which last year was 200 million tons.

Meanwhile, the possibilities for buying grain on the world market have shrunk, due to an agricultural policy of deliberate long-term destruction of productive capacities. Thanks to this policy, grain exports of the most important grain-producing countries are now declining. The GATT treaty, if adopted, will force the second largest grain producer in the world, the European Union, to reduce its exports by the year 2000 by around one-third, to a maximum of 13.5 million tons. It shows a monstrous degree of cynicism, when the same gentlemen who are responsible for this destructive policy—among them Lester Brown and his WorldWatch Institute—now “speak of the devil” by now evoking the specter of stagnating or even declining world grain yields.

But unless the Chinese government makes an abrupt U-turn, the malthusians' calculations will be borne out. Already by the end of the millennium, the most populous country of the world will be the world's biggest grain importer. China's import needs will then soon exceed the entire world's production. The country will then not only have to pay a high monetary price, but also a high political price, since the malthusians and their power brokers are already gloating that its dependency in basic commodities such as grain and energy will “offer the best way of influencing China,” as Gerald Segal of the International Institute for Strategic Studies in London bluntly stated recently in the Oct. 5 *International Herald Tribune*. They are quite openly brandishing the food weapon, which they will wield pitilessly as soon as the opportunity arises.

Segal is notorious for being the mouthpiece for the current British “divide and conquer” strategy toward China. For the past two years, Segal has been publishing article after article, advocating what he terms “opening and dividing China.” In reality, his is a policy to foster civil war in the country. Segal went so far as to publish a map in the May-June issue

of New York Council on Foreign Relations quarterly *Foreign Affairs* showing a thick north-south line dividing China's coastal provinces from the interior. Using time-honored British geopolitical tactics, he has attempted to draw not only the United States, but also Japan, Taiwan, and Russia into this operation. His efforts on this front are so far unsuccessful. In fact, Segal is still officially *persona non grata* in Beijing. So it is only logical Segal is now resorting to the food weapon.

The advances which China has made in raising agricultural productivity and increasing grain crops over the past 40 years, irrefutably demonstrate how senseless it is to represent the country's situation as hopeless. If China harkens back to the successes of the Green Revolution, and recreates such a social and business climate, within a very short time it can secure food self-sufficiency, and can free itself from the malthusians' death-grip.

### Government development projects

The Chinese government is very conscious of these problems, and is trying to counteract them. On Aug. 15, the State Land Administration announced that controls over non-agricultural uses of land would be made more stringent. Local authorities are encouraged to bring to the attention of regional authorities any conversion of agricultural land surface larger than 66 hectares, to other purposes, when smaller areas could be used for the same purpose. High-yield soils are under the oversight of the Beijing government, which wants to guarantee, with the help of laws, that they are protected from conversion to other purposes. Ten major agricultural development zones have been organized along the Three Rivers Basin, the Yellow River, and along the central and lower Yangtze River. These regions comprise nearly 40% of the nation's agricultural usable soil, and contribute 37% of the food supply.

On the regional level, another 16 agricultural development zones have been established; within the next five years each province will have its own development zone, with the task of significantly raising the productivity of at least 33.3 million hectares—one-third of the total farmland of the country—by the year 2000. In addition, some 33 million hectares of wasteland, dry regions, shorelands along the rivers, marshes, and eroded fields are being opened up for food production. They will be transformed into forests, meadows, fish ponds, or even tillable land as circumstances permit.

The government development program aims at uniting agriculture with the sectors of processing, warehousing, and transport of agricultural goods. Peasants are supposed to be encouraged to diversify their fields, and in the future, to plant vegetables, fruit, and tea alongside cereals and cotton. Agricultural research will be stepped up, and these projects supplied with improved seeds and concepts for the effective processing and storage of the crops. This research is to be pursued in outlying areas around the major cities and in the export-oriented zones along the eastern coast, which they are to supply with food. Further agricultural-industrial regions

and high-tech/agricultural zones are to be identified in the planes or hilly areas.

A weak point in this program is financing. Five billion yuan (about \$600 million) is supposed to be the credit flow into these projects over a five-year period—a modest sum. Moreover, in the last few years the allocations to agriculture by the government have been steadily eroded. Last year they were cut by one-third in comparison to 1992, making it necessary to shut down one in every six land development centers. Moreover, Beijing has its eye on leasing farmland to foreign investors—a very dangerous idea, since this would open the country to the machinations of the western food cartels.

Between 70% and 86% of China's farmland, according to government estimates, is soil of low fertility, which must be enriched by irrigation and fertilizer inputs. Out of 100 million hectares, 20 million have very scant fertility, 20 million are too dry, and another 13 million have hilly, rocky terrain. Raising the yield capacities of these fields is a task which has the utmost importance. China can do this by hooking up with the successes from the Green Revolution era.

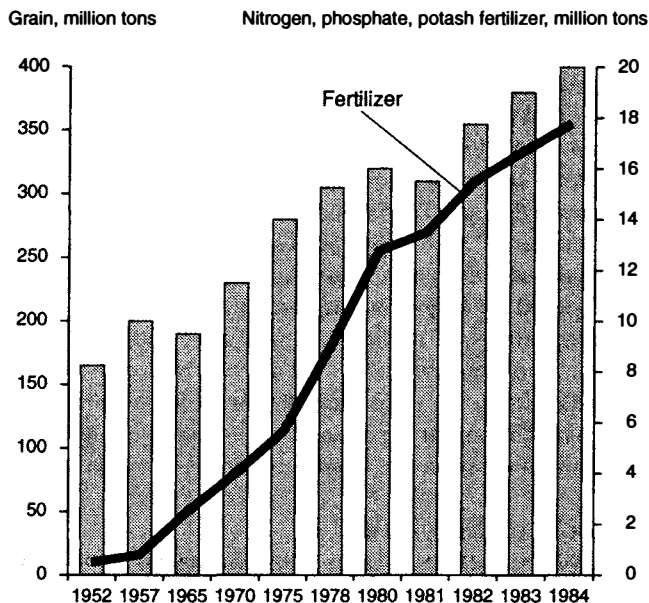
### The Green Revolution

Over the last three decades, the Asian countries, especially China, India, and Korea, have been able to drastically increase their capacity to feed themselves. In the last 25 years, the yields of rice fields have doubled. Although the population in these countries grew by some 80%, thanks to the increase in crop yields, not only have these people been fed more, but during this same period consumer prices have fallen by about 40%, while the total consumption increased by about 25%. The revolution in rice farming, which is mainly due to the use of better seeds, much more fertilizer, and more irrigation, was able to protect the population in this part of the world from great famines.

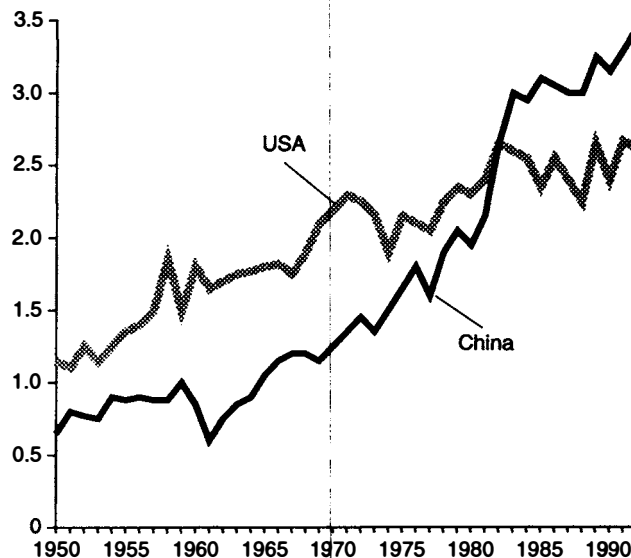
The 1978 agricultural reforms, which gave the land back to the peasants and their families to cultivate, led to a stormy development in China's agriculture. Within only six years, the grain crops increased by one-half, from an annual 200 million tons to 300 million tons. Thus, the Middle Kingdom, already in 1984, outstripped the United States as the world's biggest grain producer, relegating it to second place. The rice harvest nearly tripled from less than 2 tons to over 4 tons per hectare, while the wheat harvest nearly quintupled, from 0.7 tons to 3.4 tons. (See **Figures 1, 2, and 3.**)

The enormous energy which was liberated by the 1978 land reforms was supported by inputs of more mineral fertilizers, better seed stocks, and more irrigation. Especially the increase in fertilizers played a key role. In the 1950s, the entire national use of fertilizers was barely 0.3 million tons; in the decade after land reform, China's peasants tripled their use of mineral fertilizers from 7 million tons to 20 million tons. There was a corresponding increase in crop yields, from 170 million tons to over 400 million tons. These rates of increase have significantly slowed down, since the government cut back on subsidies for fertilizers 11 years ago; last

**FIGURE 1**  
**Grain crops and fertilizer inputs in China, 1952-1984**

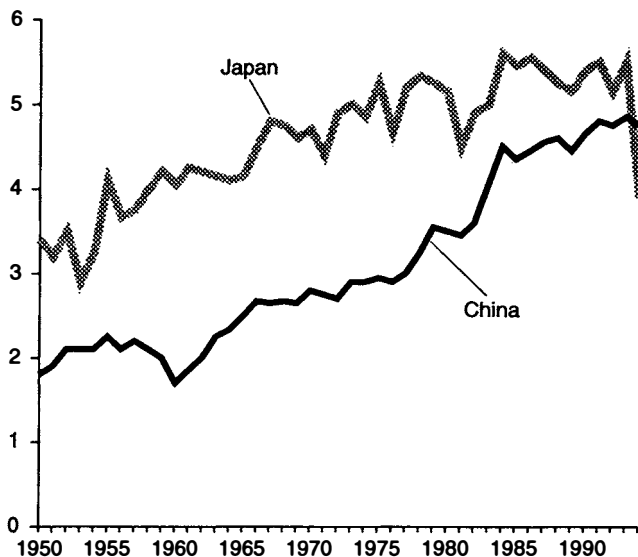


**FIGURE 3**  
**Wheat crop in United States and China**  
 tons per hectare



Source: USDA

**FIGURE 2**  
**Rice crops in China and Japan**  
 tons per hectare



Source: USDA

year, the growth with nearly 30 million tons of fertilizer only amounted to 50%.

A further key factor is irrigation. Around half of the farmlands today are irrigated. Between 1950 and 1978, about

1.2 million additional hectares were opened up to irrigation each year, and total irrigated area expanded from 12 million to 45 million hectares. Since then, the ambitious growth rate has slackened to a scant 200,000 hectares added per year. Both factors, fertilization and irrigation, influence the crop yields decisively. To build irrigation systems requires large investments, which, however, have the quickest payback, since the crop yields immediately increase fourfold.

The big question is: Will China will take these advances further, or will Beijing end up choosing a course of paying attention to doomsayers like Lester Brown and political manipulations like those of Gerald Segal. The Middle Kingdom stands at a crossroads. The situation can be very rapidly overturned, and that would threaten social chaos. Farm incomes, already much lower than in the urban centers, are constantly dropping. Often, peasants obtain often only worthless paper in exchange for the goods they deliver, and they are sinking further and further into misery and want. This is why uprisings and unrest are becoming much more frequent in the agricultural regions.

If Beijing stays on this course and also chooses to join GATT, and thus chooses a free-trade policy instead of a policy of domestic social and economic development, then the situation will indeed become hopeless. Grain production will fall; the GATT regime will take care of that. Under those circumstances, there is no possibility that the country can meet its own needs, not to mention developing the rest of its economy. And then the question will not only be who will feed China, but, who will feed the human race?