

Malthusians predict end of world, push food policies that guarantee it

by Rosa Tennenbaum

The Washington, D.C.-based Worldwatch Institute released a study of global economic trends in July, which has gotten a great deal of publicity around the world. "Postmodern Malthus: Are There Too Many of Us to Survive?" was a typical headline, in a feature-length synopsis by institute president Lester Brown, published in the *Washington Post* on July 18. The study, "Vital Signs 1993; The Trends That Are Shaping Our Future," by Lester Brown, Hal Kane, and Ed Ayres, is a malthusian tract, aimed to document the institute's thesis that the growth of human population is overwhelming our "finite planet."

On the contrary, as *EIR* and its founder Lyndon LaRouche have shown, it is not population growth, but the policies of the malthusians themselves that are destroying the world economy, causing widespread poverty and misery. The statistics assembled by the Worldwatch Institute serve as an effective indictment of the monetarist doctrines that have sucked investment out of the productive economy—industry, agriculture, infrastructure—and instead created a speculative "derivatives" market in excess of \$10 trillion in the United States alone.

"When the history of the late 20th century is written," the Worldwatch study forecasts in its opening statement, "the '90s may well be seen as a decade of massive discontinuity. Long-established global trends that had been rising for decades—such as the seafood catch per person, growth in the nuclear arsenal . . . coal use, and cigarette smoking rates—are now falling. Others that were going nowhere, or at best rising slowly, are suddenly soaring: the generation of electricity from wind, the use of compact fluorescent bulbs, and reliance on U.N. forces to keep peace, to name just three."

This statement accurately describes the present situation: While the vital, highly productive areas of production shrink, the unproductive and senseless areas of the economy are extended. The result of this policy is that supply per capita of the population in all important areas of production has decreased constantly in the past years. Only the production curves of bicycles, wind power, and so forth, are still going up.

The trends in food production and supply shown by the study are particularly stark, and it is those that we will consider in this article. World population will increase each

year by an average of 91 million, according to the report, and in order to maintain the current level of food consumption, agricultural production must constantly grow. Yet precisely the opposite is now the case: All areas, from fertilizer production to irrigation infrastructure to final harvest figures, are constantly decreasing, so that, according to the study, the 91 million people added each year can only be fed if the consumption of those who are already there is decreased. Additionally, the lack of that technology with which the rapid growth that existed between 1950 and 1984 could be achieved, is preparing the way for "increasing distress." The decreasing per capita grain harvest and fish catch have led to a "dramatic reversal in global supply of protein." This change in direction already has clear and devastating consequences for the world population.

Fertilizer use

The area of cultivated land is very limited, and to cultivate land demands much time and high investments. Despite that, the harvest has increased enormously in the last four decades. The reason for that was the intensification of use of mineral fertilizer year by year. Since 1950, the area under cultivation for grain was enlarged by one-fourth, while the use of fertilizer increased by a factor of 10, from 14 million tons to 140 million. In 1950, an average 5.5 kilograms of fertilizer was used per capita; in 1989, it was 28 kg. Thanks to this, twice as many people could be fed per hectare as in 1950.

But since 1989, the consumption of fertilizer has sunk from 28 kg to 23.9 kg per capita, a decrease of fully 15%. In the most important agricultural producers, the United States and the European Community, fertilizer use has stagnated since then, while it has drastically decreased in the countries of the former Soviet Union and in eastern Europe. Only in India and China has the use of fertilizer increased slightly. The report draws the conclusion that "the era of rapid continuous growth in world fertilizer use, which lasted from mid-century to the mid-eighties, has come to an end. With the response of crop yields to additional applications of fertilizer diminishing, it is no longer clear where future gains in grain output will come from or whether they will be adequate."

The grain harvest increased in 1992 by 3% in comparison to the previous year, but it was 8% smaller than the record

year 1984. The yield of soybeans, at 114 million tons, reached a new record, but per capita of the world population, it stagnated. Between 1950 and 1979, the soybean harvest increased yearly by around 6%; since then, it has fallen to 1% per year. Per capita, the amount increased from 7 kg to 21, and then sank to approximately 18 kg. This is a very important decline, since soybeans represent the most important components of vegetable oil and fat and a valuable source of protein. The bean responds less well to improved fertilizer; larger harvests are possible only if the land in cultivation is increased. The "dramatic turnaround in the worldwide supply of protein" that is identified in the report is for the most part derived from that.

Protein requirements are growing

In order to improve the supply of animal protein to a significant degree, the protein component of animal feed must be increased, and more animals must be fed with more protein. "With the grasslands that support cattle, sheep, and goats now fully used or, in many countries, overused, continued growth in output of meat, milk, cheese, and other livestock products is closely tied to feeding grain," the report states. "To do this efficiently requires a protein supplement, typically soybean meal. Future gains in livestock output are thus keyed to the ability of the world's farmers to keep expanding soybean output, a difficult undertaking in a land-scarce world."

Meat production grew slightly in the year reported on, by 1%, to 176 million tons; per capita of the population, however, it sank by 1% in the preceding year. Cattle herds shrank worldwide by 2%, which means that 2% less beef is available per capita. World beef production sank per capita to 9.4 kg, the lowest level in 30 years. Production of lamb stagnated, while that of hogs and poultry increased. The latter two are not pasture animals, and must be fed a great deal of grain. Beef production cannot be significantly increased, according to the report, because of the lack of pasture land. This fact, in combination with a decreasing amount of grain per capita and stagnating yield of soybeans, "are bringing the era of rising meat consumption per person to an end," the report says. The meat supply per capita of the world population has decreased, in any case, since 1990.

The catch of fish, an additional important protein source for human beings, decreased from 100 million tons in 1989 to 97 million in the following year, and has stagnated since. Overall, 17.8 kg of fish was caught per capita, 8% less than in 1988, and less than 1968. The reason for that is that fishing was restricted by draconian means. The European Community, for example, decided to reduce its fishing fleet by at least one-fifth. That naturally has consequences for world nourishment. "After adding an average of 2 million tons to the world's food supply each year from 1950 to 1989, fisheries may have ceased to be a major source of more food," the institute declares.

Grain reserves down

The world supply of grain at the beginning of this year was 341 million tons, 19 million more than the preceding year. Daily, 4.7 million tons of grain is consumed by humans or used for animal feed, so that the present supply will suffice for 73 days. In 1987, there was enough grain for 104 days in storage. With a devastating prospect for this year's grain harvest, the picture worsens drastically, and the report points out that if the supplies fall below the 60-day level, prices will become extremely unstable, even at times doubling, as during the world food crisis of 1972-73.

If we consider also the changes in yield, then we get a more complete picture. The decrease of yield during the 1980s in 49 countries containing some 846 million human beings, reduced the consumption of food in these countries. "Since there was no substantial drop in food prices nor a major increase in food aid to these nations, food consumption per person must have declined among hundreds of millions of people," the report correctly concludes. Or put another way: Had these countries had more capital, they could have better fed their people, and supplies of food would have been drastically reduced.

Land use shrinking

Land in cultivation is stagnating all over the world, and the amount of irrigated land is decreasing. In 1992, some 695 million hectares of grain was harvested, 5% less than in 1981. The tragedy becomes truly clear when we express this in terms of the world population. Since the middle of the century, the amount of land in grain production has decreased. At that time, 0.23 hectare was available per capita; today, it is only 0.13 ha, precisely one-half. The loss could be made up largely through better harvests that are attained by increased use of fertilizer and better crops. Between 1950 and 1981, the land in grain production was increased by a total of 24%, a growth of 0.7% per year. Since then, harvest increases have stemmed exclusively from the increased productivity of the land. In the year 2000, less than half of the arable land will be available per capita than in 1950, and it will further decrease in the following decades because of population growth, according to the Worldwatch Institute. We should add that agricultural policy, with its long-term destruction of productive capacities in agriculture, darkens this picture even more.

The institute emphasizes that three parallel developments in world agriculture are particularly important: First, the amount of land for grain production has shrunk worldwide since 1981; second, the increase in irrigated land since 1978 has "dramatically" decreased; and third, many plants react less well to additional fertilizers.

In light of all this, how irresponsible, indeed criminal, is the agricultural policy of the European Community and the United States, with the forced reduction of harvests and shut-down of millions of hectares of arable land, relegating millions of people to hunger and starvation.