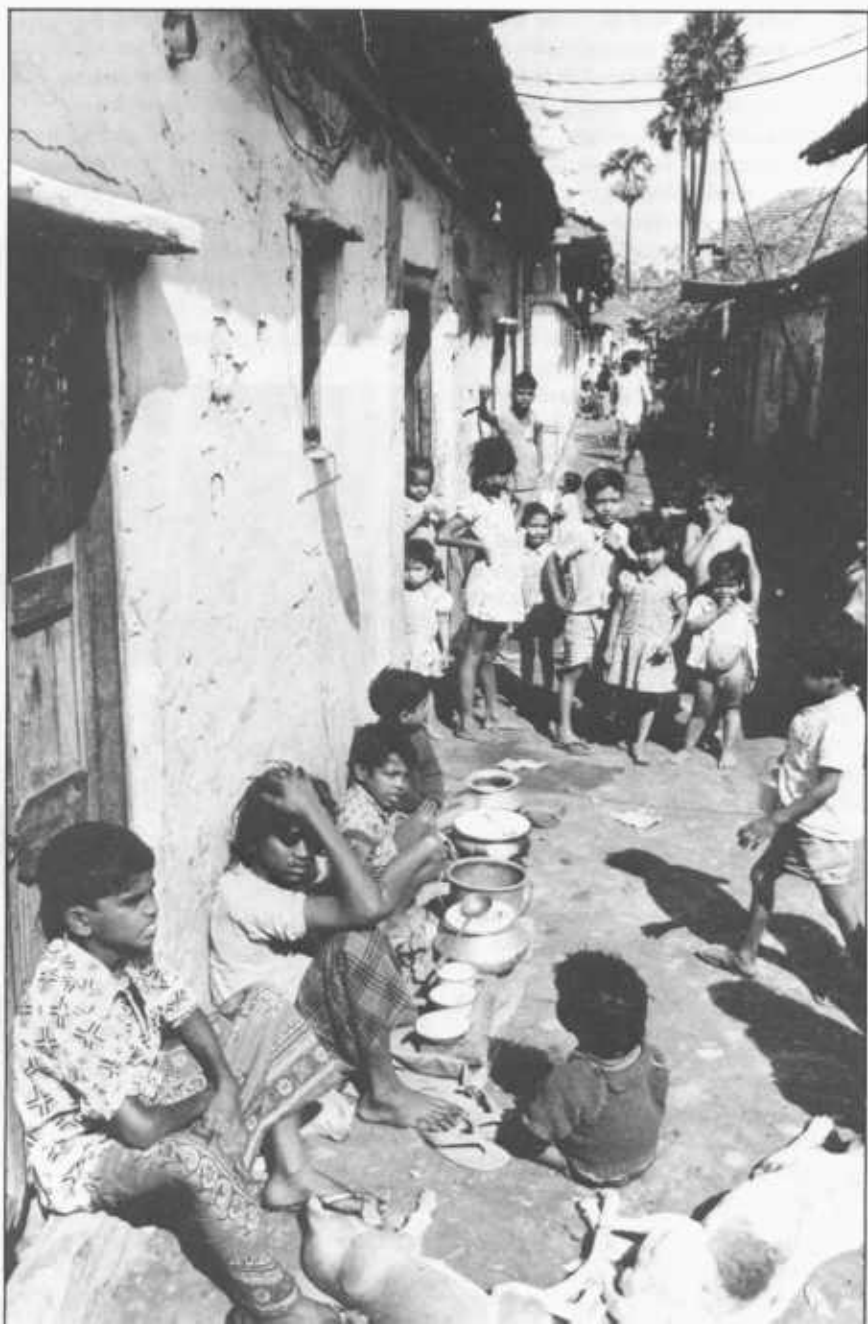


Section One

Prologue: New Thoughts on an Old Subject



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Food, Famine, and a Realistic View

By J. Don Looper

To Americans, food is more than necessary. It is pleasurable, sociable, satisfying, perhaps fattening. But it is never scarce—at least not in the memories of Americans living today. Only in the last decade has the notion of world shortage begun to impinge in a consistent way on the national consciousness.

It is convenient if not altogether realistic to think of this change as dating from July 8, 1972. On that day the leaders of the Soviet Union agreed to a substantial purchase of U.S. grains. Actually they bought much more—spending \$1.1 billion in one year instead of the agreed-upon \$750 million in three years.

These purchases were dictated as much by Soviet political decision as by the crop shortfall in that country. Nevertheless that development, coupled with short crops in other parts of the world, sharply altered the global supply picture. These and subsequent events may also have permanently modified America's complacency with respect to food abundance.

In 1973, world crops returned to normal, although reduced stocks continued to be worrisome, leading to a short-lived but well-remembered U.S. embargo on soybeans and related products that summer. In 1974 an even more shocking event took place: America the Bountiful experienced a shortfall in autumn-harvested crops, the result of an unusually late spring, summer drought, and early frost.

The decline was relative—a corn crop down 17 percent from a record crop in 1973 and a soybean crop 21 percent below a 1973 output of enormous proportions. Nevertheless, these declines created uneasiness about U.S. supplies and nervousness about Soviet buying, especially of corn. This brought an official interruption in U.S. corn exports to the Soviet Union in the fall of 1974 and again in the summer of 1975.



800 Reporters

Meanwhile, in November 1974, 130 nations joined in a U.S.-proposed World Food Conference in Rome. Whatever the lasting achievements of that Conference, one thing is sure: It was a roaring success as a media event, attracting 800 correspondents from all over the world and a host of non-governmental organizations promoting their assorted views.

The Columbia Broadcasting Sys-

tem ordered daily coverage on its television evening news, and other networks followed the CBS lead. In a 15-day period, world food subjects won front page treatment seven times in the Washington Post and 10 times in the New York Times. Those papers and a dozen other major metropolitan U.S. dailies sent staff reporters to Rome.

But that was enough. A two-year parade of human tragedy,



Americans have always been complaisant about food abundance, but world shortages in the 1970's began to change the thinking of many.

highlighted by a major drought in sub-Saharan Africa, had used up the video viewer's attention span. In this country, and worldwide as well, the public's concern about hunger began to moderate.

As 1975 moved toward harvest, food moved back to the farm page, and U.S. farmers returned to a more traditional concern—what to do with crops that promised to be bumper and prices that promised to be lower. Both promises came to pass. All U.S. farmers had to show for two years of famine hysteria was a 3-year decline in grain and soybean prices and a 30 percent decline in net income.

The world food situation improved steadily following the 1972-74 period—even when measured on a per capita basis. The United States set new production records for 5 consecutive years before experiencing

another drought-affected setback in 1980.

Still, events of the 1970's had taken a toll on complacency, even among Americans long accustomed to thinking of food abundance as being permanent—as long as the sun shines and the Safeway stands on the corner.

Looking back, even an optimist had to recognize that, compared with the preceding 25 years, the 1970's were a decade of slower growth in world production and greater ups and downs from year to year. Of the nine years ending with 1980, world production had declined rather sharply in four.

Not everyone, moreover, is an optimist. The subject of world food inspires a wide divergence of views on world food questions at any given time. What is the likely extent of



BOB ELBERT

New crop production records were set in the United States during the five-year period 1974-79.

hunger and malnutrition in the future? What should be done about it? How much of the responsibility for change should bear on the United States and other developed nations?

Gloom and Doom

Extreme views are always the easiest to explain and to dramatize. The pessimist can argue that:

1. World population continues to grow, and the world obviously cannot support a trend line that continues upward without end.

2. While per capita food production has risen since the declines of 1972 and 1974, this is mostly a reflection of improvement in developed countries. Per capita production is almost stagnant in the developing countries.

3. Most of the improvement in food consumption has stemmed from an expansion in trade—not from any general improvement in self-sufficiency in poorer countries. And the United States has provided most of the increase in trade. In ten years, U.S. exports of grains and oilseeds have doubled in volume.

4. The agricultural resource base is diminishing, and expanded production is increasingly taxing to soil and water resources. Most of the U.S. farmland held out of production in the 1950's and 1960's has now been returned to crops; meanwhile, farmland is being lost to other uses at the rate of 3 million acres a year.

5. The expansion in U.S. production since World War II is traceable to an explosion in the development and adoption of new research and technology, and we have now reached a scientific plateau. New developments comparable to hybrid corn, for example, will be few and far between.

Those arguments are heard in one

form or another from the alarmist or "faminist" school of hunger thinkers. At the other end of the spectrum is the "foodaplenty" school. Both the faminists and the plentyists can point to history in support of their arguments.

Famines are as old as the 12th chapter of Genesis, when Abraham went down to Egypt "and there was a famine in the land." No doubt hundreds of famines have been lost to history, but the record of just the last thousand years is tragic enough.

In 1125 a famine reduced by half the population of Germany. Hungary experienced unspeakable hardship in 1505. England records a terrible famine in 1586. Germany had another famine in 1817, and in 1870-72 Persia lost a fourth of its population to hunger.

Some 10 million Chinese died of starvation in 1877-78. Famines in India took 3 million lives in 1769-70, one and a half million in 1865-66, and a half million in 1877. In 1891-92 a Russian famine brought hardship to 27 million people.

But these were food famines, caused by local or regional failures in food production as a result of weather and/or pestilence. What the faminists are talking about now is the prospect of world famine resulting from a global population that overruns our ability to produce food. That's what Malthus had in mind when he published his classic study in 1798.

The Rosy View

The plentyist says the Malthus theory has never panned out. The faminist says that one of these days Malthus will turn out to be right. The plentyist says mankind will not

accept that kind of inevitability—if there's a problem there has to be a solution—and he answers the faminst point by point:

1. Obviously the world must bring population growth under control—for many reasons—and it will do so helped by economic growth in the poorer countries. In 20 years, the world's annual population growth rate has fallen from 2 percent to 1.8 percent, with developed and centrally planned countries accounting for all of the improvement. The developed nations as a group have a population growth rate below .8 percent.

2. There is a huge potential for improved food production in the developing countries along with improvement in purchasing power.

Many of these countries have already shown gratifying progress—improving agricultural production and food consumption over the past decade and assuring greater supplies in years of production shortfall. They include India, Bangladesh, the Philippines, Argentina, Brazil, and Colombia—countries whose populations total almost one billion.

3. International trade, now accounting for less than 15 percent of the food consumed in other countries, may well increase in importance. This is all to the good, reflecting greater efficiency in production and improved variety and quality in the human diet.

The United States has the capacity and the need to substantially expand its agricultural exports, a recognized U.S. policy objective. In the short term at least, the United States is worried more about competition from other exporters than about its ability to meet export demand.

4. Those who belittle the opportunity

to bring additional land into food production are underestimating the potential in the non-Communist world.

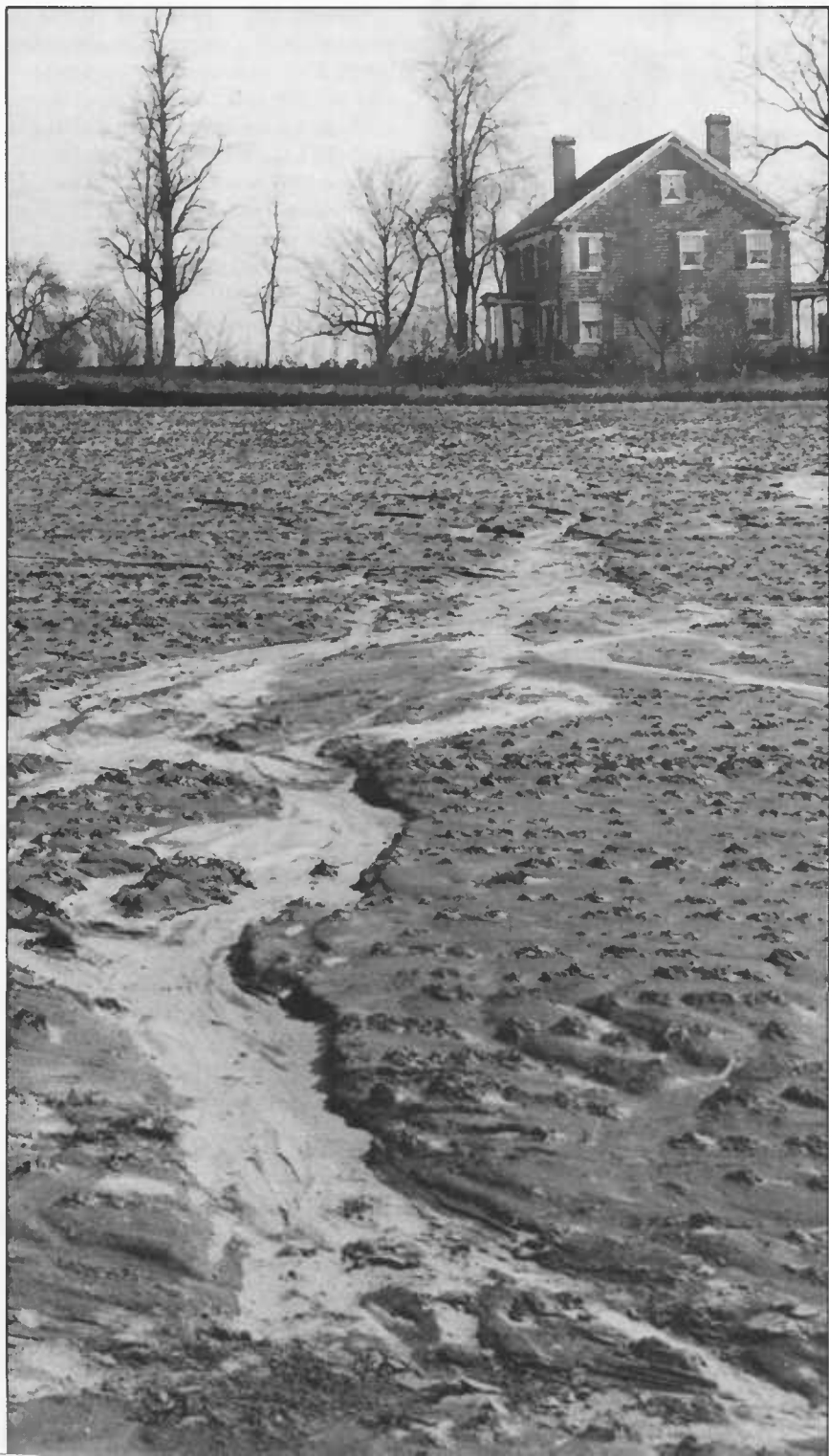
It may be true that Eastern Europe and the USSR have little potential for further expansion. But other developed countries and the developing world including China have a substantial opportunity to expand crop area.

This is especially true in the Western Hemisphere and in tropical Africa. The United States, for example, has a cropland area of some 413 million acres with an additional 127 million acres identified as land of high and medium potential, according to the 1977 National Resource Inventory. With only some 360 million acres now being harvested, there is obviously additional land that could be brought into production given sufficient price incentives to farmers.

5. The argument that the scientific advances available to agriculture have now topped out resembles the 19th Century fear that "when we run out of whale oil, the world will be plunged into darkness." Actually, the pace of scientific innovation is accelerating to the point of mind-bogglement, and many of these advances will affect food production. Perhaps the most obvious implications are in the science of biotechnology, with its potential for modifying plant and animal heredity. But microscience, materials research, solid state electronics, and other avenues of research also promise new tools for progress in the food sciences.

Most Americans can find a place

Continued demand for agricultural exports could diminish our resource base by accelerating soil erosion and depleting groundwater supplies.





WORLD BANK

Since the U.S. cannot feed the world, ways must be found to increase production within developing countries — possibly through accelerated technical assistance.

between these polar positions. The most optimistic of us must recognize that the world faces serious food problems requiring the best efforts of the best minds in many disciplines. The most pessimistic of us will realize that these forces are already at work, that people are problem-solving animals, and that they are accustomed to winning.

Focus on Trade

Especially in America, the coming decade will see increasing attention to the effects of agricultural trade on the Nation's land and water resources and the environment.

Federal and cooperative efforts in research and conservation are being intensified to assure future productive ability and resource protection without sacrificing the production of food that the world needs and the United States needs to sell. After all, if we should stop exporting, all the cropland in eight Midwestern States could be turned into one vast national park — with entrances near Cleveland, Kansas City, and Grand Forks, N.D.

Overseas sales are a key element in the improvement of U.S. agricultural income, the general economy, and the Nation's international economic position. Conversely, improved farm income — the price incentive — is a key to greater food production in the future, an assured source of supply for American consumers, and the continued application of sound conservation practices on the land.

In any case, American agriculture can not feed the world. The export of U.S. crops will continue to be essential, but by no means can it become the total solution to the world food problem. Ways must be found to expand planted area, increase yields, and improve the quality of food produced within the developing countries. Ways must be found to manage, store, and distribute these products to the end that they actually find their way into hungry stomachs.

As in America, this will require incentives to those who do the work and take the risk. That may be what the subject of food is mostly about — incentive.

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