

# Are Technology & Resources Adequate To Solve World Hunger?

Human hunger is not a new subject for world concern. It has plagued mankind for centuries.

by C. Curtis Cable, Jr.\*

During recent times, fears of world famine hit peaks following the devastation of World Wars I and II. Post-war shortages, increased births and life saving programs contributed to people's fears of starvation. But these fears of widespread starvation subsided because of advances in technology of food production, processing and distribution.

Then, less than ten years ago, two successive years of monsoon failures in southern Asia triggered new fears of famine. Massive aid shipments, however, prevented immediate starvation. And, concerns of prolonged starvation were quickly relieved by a combination of good weather and improved yields of wheat and rice resulting from the Green Revolution.

## Basic Problem

Unpredictable failures in crop production results in year-to-year uncertainties relative to the world food supply. In contrast, the annual increase in world population, and hence the need and potential demand for food can be predicted with much greater accuracy.

The number of people on this planet is now increasing at the *net* rate of about 78 million per year. This is equivalent to another United States every three years! In addition to this increase in population, rising personal incomes of people in many countries, including some in the developing nations, have created new demands for more and better food. Thus, most of the benefits from recent increases in food productivity have gone to people who have money to spend!

The ever expanding demand for more food has been evident for years

and farmers throughout the world have been meeting the challenge head-on. World production of wheat, rice and coarse grain combined have risen from about 830 million metric tons in 1960 to 1,140 million metric tons in 1974.

Per capita food production has increased greatly in the developed nations for several years. And in the ten years 1962-1972, food production increased more rapidly than population in more than half of the 92 *developing* nations. For the world as a whole, food output per capita has increased 22 percent since 1960.

But, in spite of this increased production, today's world is facing another food crisis!

## How did it come about?

In 1972 the U.S. produced record grain crops. However, for the world as a whole, food production fell below consumption for the first time in many years. Reserve grain stocks in United States and other countries, plus 1972 U.S. production were sufficient to offset foreign production deficits. However, it was not enough to also meet new demands for food without sharply reducing our stocks. Commercial sales to Russia and China accounted for a large portion of this reduction.

The next year, 1973, the world grain and food production fortunately rose to an all time high. This prevented the continued depletion of limited U.S. and world food reserves.

The current shortage is partly due to the poor 1974 feed grain crop in the

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U.S. Spring floods, summer drought and early frost in the midwest brought trouble to many U.S. farmers. Canada and southern Asia had similar problems. However, it must be remembered that some of the world's present day food problem is due to *more and more people demanding more and better* food.

## What is being done?

Considerable attention was directed to this population-food problem at the World Population Conference in Bucharest, and at the World Food Conference in Rome. At these events it was "suggested" that the U.S. was primarily responsible for the current world food crisis — and that the U.S. *should* and *could* do more toward reducing this problem.

This hits pretty close to home. The United States is you, and me, and approximately 214 million other Americans. Based on experiences of the past two years, each of us knows that as more foodstuffs are sold overseas and available domestic supplies decline, our supermarket prices climb higher and higher.

If we in the U.S. ship more food products overseas, we will be helping to pay these costs through higher retail prices at home. This hits each consumer right in the family pocketbook!

Also, much of the food we have shipped overseas in past years has been intended to relieve emergency food shortages. Who paid for this food? Although recipient countries may have paid the shipping costs, U.S. taxpayers have paid for a large part of the initial costs. But now, many Americans are asking this question: why can't more of the developed nations demonstrate that they too will help pay for this humanitarian effort?

The surplus food that Americans have shared with starving millions did not miraculously emerge on our nation's farms. Much of it had been accumulated in U.S. government stocks as a result of national policies to protect U.S. farm incomes and stabilize domestic market prices.

## Should We Do More?

In addition to humanitarian issues, there are some practical facts and historical trends which each of us should consider.

In July 1954, the U.S. Congress enacted the Agricultural Trade and Development Assistance Act, commonly referred to as Public Law 480. This

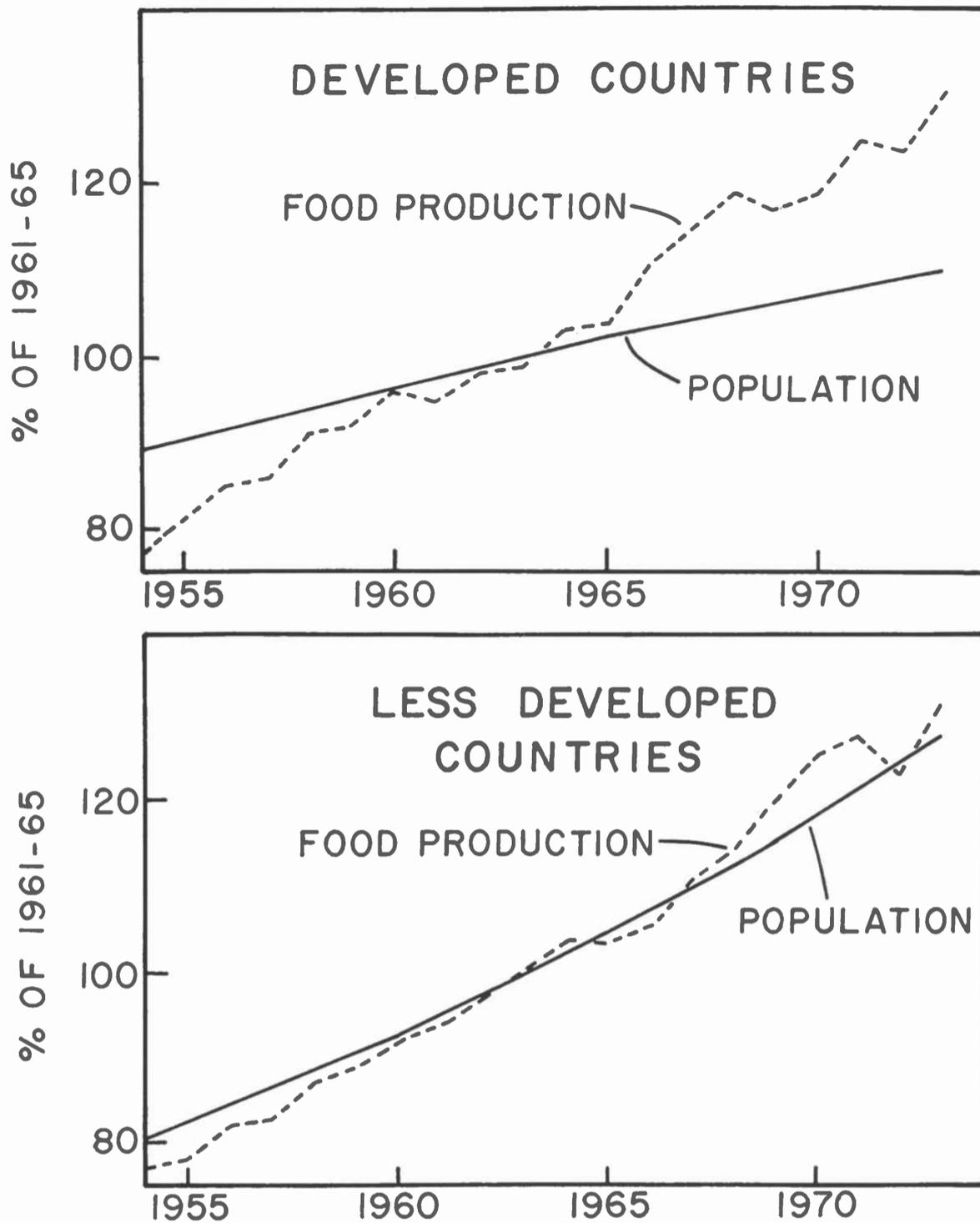


Figure 1. Food production increases steadily in developed and less developed countries as shown in charts above. The major difference is that population growth in less developed countries is keeping pace with food production.

act provides for concessional sales of U.S. agricultural products to foreign governments, and also provides for shipments of food donations. Today, after 20 years, the value of all shipments under P.L. 480 total \$25 billion, and more U.S. produced food has gone overseas under Public Law 480 than provided by all other foreign aid programs in the world *combined!*

However, the United States has realized some benefits from the P.L. 480 programs. More than half of our commercial agricultural exports today are to countries which originally were

recipients of concessional sales under P.L. 480.

#### *Another Point of View*

World exports of five major grains — wheat, corn, oats, barley and sorghum — have tripled in the last 20 years.

The U.S. provided 30 to 40 percent of the world's total exports of these five grains in the 1950s and 1960s. Now during the two years 1972-73 and 1973-74, *half* of the world's exports of these grains was supplied by the United States. During these two years the U.S. provided 45 percent of the

world's wheat exports, and 55 percent of the feed grain exports. In doing this, our reserves were substantially reduced. Now, the 1974 U.S. feed grain crop fell 20 percent under expectations!

World exports account for a relatively small proportion of total grain production. During the past four years world exports of all five grains varied between 12 and 16 percent of world population. Foreign producing countries exported 10 percent of their total output while the U.S. exported between 16 and 32 percent.

In addition to these five grains, other food products also enter into world trade and aid programs. Today in the mid-1970s, total trade and aid account for only about 10 percent of *all food produced by all nations.*

This means that 90 percent of the world's total food production is *consumed in countries where it is produced.*

#### *New Direction in Efforts*

Food aid will continue to be important in meeting emergency needs. However, for the long run it does not appear that "more and more food aid" is the final answer for solving human hunger. Developed, and developing nations, must work together to provide food production expertise *which can be adapted to existing cultural and social conditions in food-troubled countries.*

Beginning with the people — as they are and where they are today — increased efforts must be made to expand food output and to more effectively coordinate its storage, processing and distribution. The world has the necessary resources and technology to substantially increase food output. However, peoples in many nations of the world *need to learn how to adapt this technology to their limited resources.* And, they must have an incentive to do so!

Peoples in *all* nations, including the U.S., must place greater emphasis on food and the other necessities of life. Wide highways, big factories, tall office buildings, grand parks and recreation facilities and other symbols of industrialization may be a noble goal. However, world political leaders must accept the simple fact that wages earned in businesses, industries and governments are of little long-run value if there is an inadequate food supply.