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THE WORLD FOOD SITUATION - SOME POLICY ISSUES FOR THE UNITED STATES

by
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Author discusses trends in world food production and major policy issues facing the U. S. regarding the world food situation.

The future is always uncertain. But, future world food needs, and the position of the United States in supplying those needs, is an area of exceptional uncertainty, especially in view of the recent worldwide crop shortfall. At least two circumstances of recent origin compound these uncertainties; these are the energy crisis and the apparent decision of the Soviet Union to tie its domestic agricultural shortfalls more directly to world markets.

The energy crisis may have a great impact on the world food situation. The effects of the energy shortage on transportation availability and cost and on world economic growth could greatly alter world trade in agricultural products. Its impact on fertilizer supplies and fuels for farmers could appreciably change production patterns. But, the energy crisis is so new and so complex, and changes so greatly from day to day, that we have not yet been able to incorporate an analysis of its impact into our economic projections.

Whether or not the Russians are in or out of the world grain markets can also make a very great difference. The magnitude of their recent grain purchases has put a severe strain on world stocks. Unfortunately, we have little basis for judging either the extent or the timing of future Soviet entry into grain markets.

Today, I will briefly sketch some trends in world food production and some results of our projections. I will then list what appear to be some of the major policy issues which already, or soon will, face the U.S. Government in relation to the world food situation.

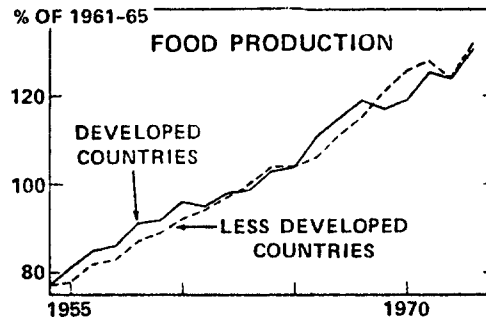
The world's food production has increased rather steadily during the past 20 years. But, growth in food production in the developed countries has been somewhat less than that in the less developed countries. Only in 1972 did production actually decline in both developed and developing countries at the same time (see Figure A). Both regions recovered in 1973 with preliminary estimates showing an increase of about 6 percent in each.

During this period, population has grown more rapidly in the less developed countries than in the developed countries. In contrast to the developed countries, the annual increment to population in the low income nations is high, with little decline in the rate of increase. Growth now exceeds 2.5 percent per year, and the present annual increment is 45 million people.

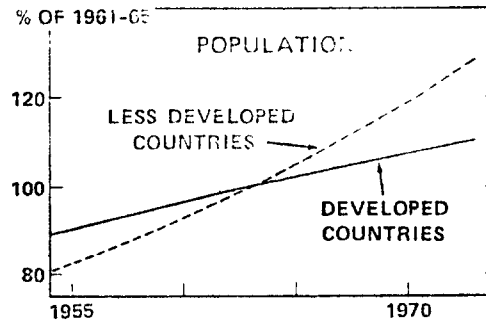
Because of the difference in population growth, the peoples of the developed and less developed country groups have not fared equally well from the roughly equal growth in food production. Population gains in the developing world have absorbed most of the production increase and, therefore, production per capita has increased only slightly (see Figure B).

FOOD PRODUCTION AND POPULATION DEVELOPED AND LESS DEVELOPED COUNTRIES

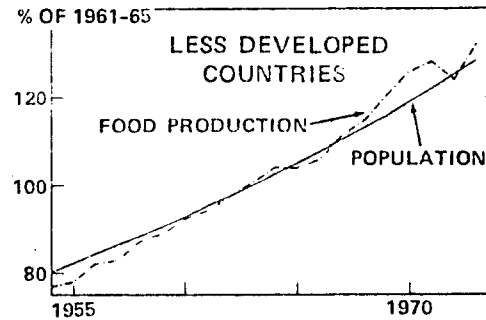
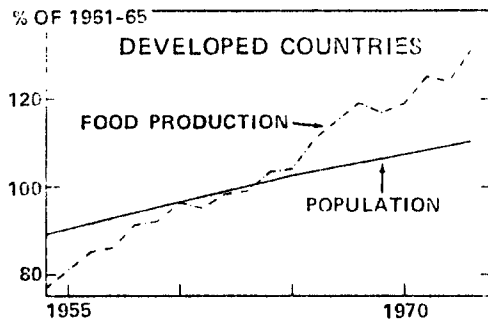
Food production has grown steadily over the past two decades. Growth in the developed countries has roughly paralleled that in the less developed countries.



Population has grown faster in the less developed countries.



Peoples of the developed and less developed country groups have not fared equally from the roughly equal growth in food production. In the developed countries production has increased much faster than population, boosting production per capita. In the LDC's population gains have absorbed nearly all of the production increase; production per capita has improved only slightly.



POPULATION EXCLUDES COMMUNIST ASIA

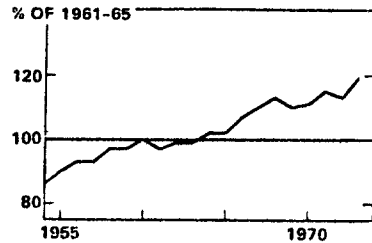
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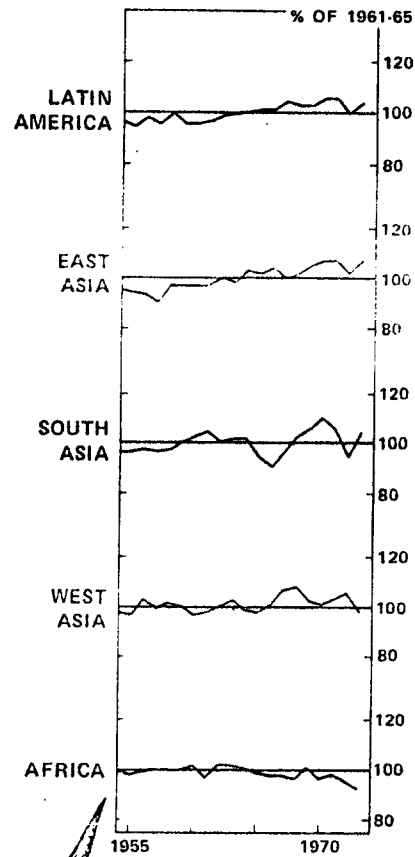
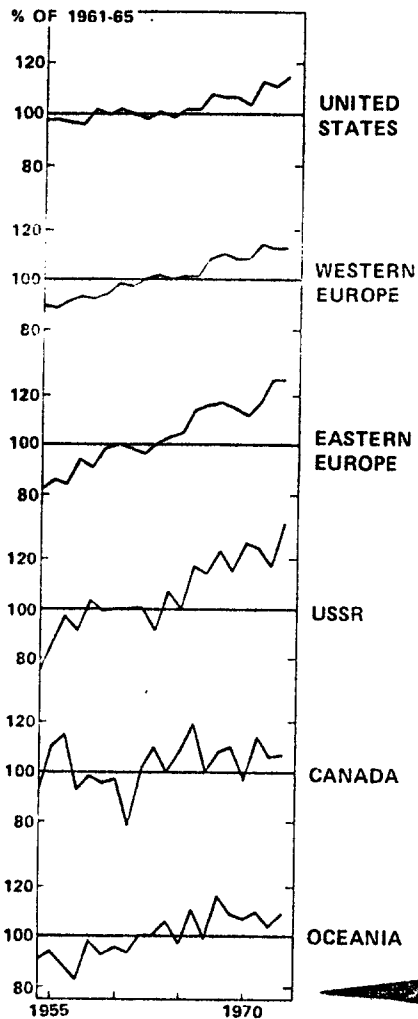
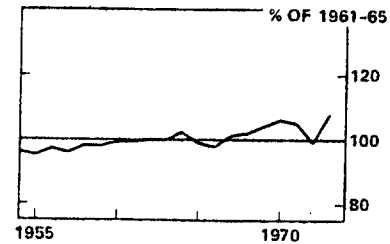
FIGURE A

FOOD PRODUCTION PER CAPITA

DEVELOPED COUNTRIES



LESS DEVELOPED COUNTRIES



The LDC's have gained only 0.4 percent per year. In none of the regions has the index reached 110, and Africa has shown a downtrend since 1961.

Food production per capita has trended upward 1.5 percent per year in the developed countries. In each of the regions the index of food production per capita has reached or exceeded 110 at least 3 times in the 20 years.

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FIGURE B

At the same time, growing world affluence over the long-term, mainly in the developed nations, has meant a decided shift toward higher animal protein diets. The result is unprecedented long-term growth in feed grain and oilseed demand and an acceleration of world trade in these commodities as more and more nations are opting by reasons of growing wealth for livestock-based food policies.

In contrast to the generally steady growth in world food production over the years, 1972 turned out to be extremely upsetting to national food policies and government budgets around the world. Currency devaluations, a worldwide crop shortfall, and unusual grain purchases on the world market have all contributed to an uncertain world food market.

The Soviet Union, Argentina, Australia, India, Africa, Southeast Asia, and even the United States registered sharp production declines. Poor weather was the major cause. The Soviet shortfall generated the largest world purchases of grain ever...about 30 million tons, most of which was for delivery in 1972/73. This involved 18 million tons from the United States of which 13 million tons were shipped. The Soviet purchases, combined with our expanded exports to the Peoples' Republic of China and Eastern Europe, spelled a fivefold increase in fiscal 1973 U.S. farm exports to communist countries over the year before. It is interesting to note that our largest wheat export market in the past 6 months has been the Peoples' Republic of China (2.7 million tons). Russia, with 2 million tons, was second, Japan and India followed.

Devaluation of the dollar has further strengthened the foreign commercial demand for U.S. farm goods. In the last 2 years the dollar depreciated on the average by about 17 to 18 percent when compared to the currencies of our major agricultural trading partners. This, in effect, gave them discount coupons for shopping in the United States. However, the dollar has recently increased in

value on the world market; for instance, earlier this month, Japan devalued the yen by about 7 percent. This latest shift was largely the result of the much greater impact of the energy shortage on Japan than on the United States.

The net result of short crops, devaluation, and expanded trade with major world economic powers was a tremendous surge in world grain exports in FY 1973... a one-fifth increase of about 24 million tons. Much of this accelerated import demand had to be satisfied through stock draw-downs.

World crops look generally better this crop year. The United States produced record soybean, wheat, and corn crops. The Soviets have announced a record total grain harvest at 222.5 million metric tons. It appears as if their grain imports this year will be less than half as much as last year's. These imports will be based on last year's purchases.

India's rice and coarse grain harvests are good. Flooding hurt Pakistan's fall grain harvest. The sub-Saharan food situation, after 5 years of drought, will remain critical. In parts of Ethiopia, serious food shortages exist.

If good weather continues, world grain production may increase by over 90 million tons this year. But, high demand and reduced stocks may hold prices at high levels.

The poor nations, already with production problems of their own, are increasingly concerned that short supplies and high prices will severely restrict their import plans.

Prospects for U.S. agriculture in the next 3 to 4 years are particularly interesting to us, made especially so by the turnabout in farm policy after 40 years of supports and controls. Our domestic markets are now directly interfacing with international markets. This combination has pushed up food prices and raised U.S. farm incomes. Will this continue? Have we now reached the promised land for American agriculture?

In ERS, we see a recovery to a generally upward trend for world agricultural production and food supplies. But, the factors we have just discussed--devaluation, growing world feed grain demand, plus inflation--make it unlikely that farm prices will fall to levels we experienced 2 years ago. However, it appears that the recent past has been a very special time. Whereas we're likely to continue to feel the effects of the farm policy change and the generally higher prices, it seems unlikely that the bad world food situation will continue on and on.

While the signs are conflicting, we come out somewhere between those who see a new era of continuing high farm incomes and prices and those who see us dropping back to the levels we had before all these things began to happen. More likely, we may find that both prices received and prices paid by farmers will be higher than 2 years ago but that the relationship between them may be such that it will be no easy thing to show a profit.

Of course, a big factor in the U.S. commodity markets during the next 3 to 4 years will be international trade. In general, our ERS projections to FY 1977 assume that price and other effects of the 1972 crop shortfall will have been worked out and that trade will return to a more normal pattern. We look for our 1977 wheat exports to fall substantially below the anticipated 1973/74 level of 1.2 billion bushels. Feed grains will also drop below the 39.7 million tons expected in 1974. Soybeans, however, will make a continued strong showing in 1977, well above the 525 million bushels that we look forward to in 1973/74. Rice and cotton exports will also increase. We're assuming normal weather, no significant change in policies of foreign governments, and continued growth in the world economy.

Over the longer haul, we have projected levels of demand, production, and trade of food grains and coarse grains to 1985. We have projected two alternative levels, both of which foresee steady

growth in world demand for livestock feeds. The first is based upon an assumption of continued growth in import demand, constrained by high prices and policies of major importing countries to attain self-sufficiency--essentially a return to trends established prior to 1972. The second is a higher demand alternative which assumes that animal production will be encouraged in grain-importing countries leading to heightened demand for feed-stuffs.

The higher world demand under our second alternative assumption, if it happens, should translate into a substantial increase in demand for U.S. coarse grains and oilseed meal with some impact on the demand for our wheat. Our projections suggest that the United States could meet nearly all the world's increased import demand for coarse grains. The largest part of the growth in world import demand for oilseed meal probably would be supplied by the United States, although other suppliers, such as Brazil, would likely play a large part. The developed exporting countries will supply the less developed importing countries with increasing imports of wheat, with an important share from the United States.

Our projected production and trade of the less developed countries should permit their per capita consumption of grains to increase slightly over the base period. But, their increasing imports of grain may severely strain their ability to pay.

A recent ERS study indicates that American farmers have the potential to substantially increase their output of major agricultural products to levels consistent with these projections.

The study assumes: (1) normal weather, (2) no controls on land use as there were from 1954 to 1973, (3) prices for farm products high enough to encourage farm investments, and (4) sufficient supplies of fossil fuels and fertilizer at reasonable prices.

We believe that a 50 percent increase in feed grain production, a 33 percent increase in wheat and soybean output, and a

doubling of rice production over 1973 could be achieved by 1985. Part of the increase would come from expanded use of cropland, primarily from acreage formerly diverted under Federal supply management programs and from cropland pasture. But most of the increases in output would be expected to come from higher yields. With additional incentives, even more land could be brought into production, and yields could conceivably scale higher, even with present technology.

Several main issues accompany the present uncertainties over the world food situation. These are:

Will world production of food increase faster than the growth of world population?

I think it will, as our projections suggest. The steady uptrend of the past 2 decades is likely to continue. A rise in per capita availability is much more likely than a decline because the economic and political forces demanding more food are very strong. There is a great potential for increased production of food in the world, and if the economic and political signals are strong enough, governments, farmers, suppliers of agribusiness inputs, and even research scientists will respond.

Will there be starvation in the world?

Our projections suggest that world production of food per capita will increase. But, they also indicate that production in the developing countries as a group may not keep up with demand and, in some countries, may not even keep up with population. They may have to import increasingly large amounts of food. While those with rapidly growing economies, such as Taiwan and South Korea, may have the foreign exchange to import food, others may not. They may have to depend on concessional programs.

A closely related issue to the question of whether or not there will be food enough for the world is whether or not there may be mass starvation in

certain parts of the world. I also doubt this, but with somewhat less assurance than I feel about the world's overall production of food. As the problems in the Sahel and in Ethiopia demonstrate, it is still possible for large areas and large numbers of people to find themselves short of food. The policy issues for the U.S. Government come down to questions of the amounts and kinds of aid, including technical assistance and food aid. With the decline of our surpluses, the U.S. Government is now in a position of having to decide whether or not to produce food specifically for aid purposes. This is a very complicated issue. The use of surplus food for aid programs is not at all the same thing as the use of resources to produce food to be given away as aid. Those resources may be more productive if used for other purposes, such as for programs to increase production of food in those countries and areas which are hardest hit by shortages.

Even if there should not be mass starvation, there are very likely to be pockets of starvation or serious malnutrition. This raises important issues as to the future of U.S. food aid programs. What should be the size and nature of U.S. programs to handle food crises born of natural disasters? What should be the kinds and the nature of technical assistance specifically related to such starvation situations as those in the Sahel and in Ethiopia? What is likely to be the need for special feeding programs for pregnant mothers, infants, and school children? Such programs have been among the most successful of the U.S. food aid programs. How will they be affected by the disappearance of surpluses? We are expanding domestic food aid to our own disadvantaged; will we pull back our food aid to the foreign disadvantaged at the same time?

Are the affluent taking food from the poor?

Increasing affluence has a major impact on the world food situation. As incomes rise, consumers want more livestock products, which require large amounts of feeds and, in turn, large amounts of the world's agricultural resources.

In a short-run situation of extraordinary shortages, there is no doubt that the high levels of consumption of the rich cause higher prices and less food for the poor. But, I believe that agricultural production can, in the longer run, respond very well to increased demands from increasing affluence, and that therefore it is possible for us to feed both the affluent and the very poor at increasing levels of nutrition. We now believe U.S. farmers will produce enough this year to alleviate present shortages. However, it does seem to me that moral issues arise when extraordinary food shortages occur. Should limits be placed on demand perhaps by rationing? This is commonly done during wars. There are of course many practical problems.

Will prices fluctuate widely or will they be relatively stable in the future?

It is impossible to predict the occurrence of a combination of circumstances that could again bring about great fluctuations in our farm prices. Foreign demand is the most dynamic element affecting the total demand for U.S. agricultural products. It is the fastest growing part, and exports now take a large share of our production. Exports are also the most unstable part of demand, since many countries look to imports to fill shortfalls in their own production. One bad year affecting a number of countries greatly increases the demand on world markets. U.S. markets, now closely linked to world markets, feel the brunt of the surge. Prices rise rapidly when stocks decline to very low levels. Our experience during the last 18 months has demonstrated that this combination can bring great fluctuations in prices.

Of course, this situation was greatly influenced by the unprecedented decision of the USSR to enter world markets to fill its shortfalls. This should cause us to consider whether we can accept the Soviet's entrance to our food market at any time they choose. Our market and production news is public information and the Russians have it. Unfortunately,

the information does not flow both ways. The recent US-USSR agreement will help but much will still be unknown. Would more U.S. Government control--say in the form of export licensing--be appropriate in cases where we deal with state trading entities?

The Director General of the Food and Agricultural Organization of the U.N. has suggested international consultation and agreement on principles of government stockpiles of grains. This could have beneficial effects in stabilizing world grain prices. This subject will undoubtedly be an important topic at the World Food Conference next November. Many countries use export and import controls, long-run trade agreements, and other devices to insulate their markets against disturbances from foreign sources. However, such devices have objectional features and conflict with policies seeking freer trade.

What are chances for, or even the need for, farm trade liberalization?

U.S. policy has long sought reduction of world farm trade barriers through multinational negotiation. Our own trends toward a market oriented agriculture, reinforced by the 1973 farm bill, are clearly consistent with a freer trade environment. The liberalization issue is particularly critical now that the United States is participating in major new international trade negotiations which began last September with representatives of 90 GATT member countries.

International cross-winds on the liberalization issue are blowing even more freely than usual. Some Americans, looking at our phenomenal growth in farm exports, are beginning to question whether we even need to worry about the issue. Maybe, they say, demand is sufficiently strong to maintain a healthy growth in our exports without seeking to lower trade barriers. Yet, probably most observers, recognizing that the recent expansion has been caused by short-term developments which may not occur again soon, still feel that liberalization is vital for sustained growth.

The obstacles to trade liberalization have always been formidable and they remain so. However, the Trade Policy Research Center in London holds that high prices in world commodity markets have improved chances for multilateral negotiation. One of the long-standing causes for resistance by the European Community to U.S. efforts to achieve freer trade has been the fear that greater exposure to world markets would seriously injure their agricultural sector because EC farm product prices have been way above world prices. This fear should be reduced if world commodity prices remain strong.

On the other hand some European spokesmen have recently argued against freer trade. They maintain that the present tight food situation dictates that all-out food production is called for and nothing should be done that might reduce incentives to producers anywhere.

Interestingly enough, these two contradicting views are in turn contradicted if you believe, as our projections show, that the tight grain situation will ease in the years ahead.

The oil crisis is another threat to trade liberalization. Reasons for the threat are several: (1) if the oil crisis leads to a general recession with lower profits and higher unemployment, there would be strong pressures for trade protection. While this might affect industrial more than agricultural products, it would undoubtedly affect the negotiating climate. (2) The staggering balance of payments deficits that are almost certain to be caused by the high oil prices will also discourage the granting of trade concessions. (3) The monetary upheavals caused by the oil crisis will make it more difficult to achieve world monetary reform. The European Community has insisted that monetary reform proceed apace with trade reform.

These are some of the cross-currents affecting the trade liberalization issue. We must also keep in mind that

our Trade Bill has still not passed the Senate and that the House-approved measure contains provisions on withholding the "most favored nation" clause and restricting credits to the Soviet Union. The Administration objects strongly to these House provisions.

Will the current energy crisis hamstring U.S. agricultural productivity?

The current shortage of natural gas and the prospects for its further curtailment will restrict production of anhydrous ammonia, a basic ingredient of nitrogen fertilizers.

Yet the situation seems not quite as severe as thought earlier. Recent elimination of price controls on fertilizers and subsequent price increases have eliminated much of the economic incentive for fertilizer exports thus easing the U.S. supply situation. In addition, the Agriculture Department recommended that ammonia producers get a higher priority in natural gas allocations. This should further ease the tight fertilizer outlook.

Fuel is another problem. Farmers only use about 3 percent of the nation's gasoline, diesel fuel, and electricity. But, they will be hard-hit by the sharply escalating prices as well as by possible spot shortages. The upcoming spring planting period will be critical. Diesel fuel will be tight in the spring, gasoline supplies will remain tight through the summer, and LP gas could be short for next year's crop drying. Fuel prices this coming year will be 25 percent or higher than last year.

In view of the world's uncertain food situation, U.S. agriculture's traditional propensity for productivity must be protected. Agriculture must get high national priority in fuel allocation and sufficient supplies of natural gas must be assigned to the manufacturing process for nitrogen fertilizers.

We are "guardedly optimistic" that the energy crisis in foreign countries will not seriously curtail exports of our agricultural commodities. A major

short-run problem is a shortage of bunkering fuel for ocean vessels; recent announcements of increased oil production by major Arab oil-exporting countries may ease this problem. Higher fuel costs, however, will lead to increased transportation costs.

A projected drop in world economic growth, if serious enough, could have a negative impact on agricultural trade. The Organization for Economic Cooperation and Development was forecasting some slowdown in economic growth in developed countries even before the energy crisis hit. A prolonged severe shortage of oil could substantially worsen this economic slowdown.

* * * * *

Recent events in the world agricultural economy have had unsettling and sometimes grim impacts on the budgets of both people and nations. At the same time, we can look forward into the long-term for a more normal situation where food supplies continue to outpace demand, however slightly, as has been the case for the last 20 years. But it would be entirely inappropriate for us to ignore the short-run and take solace in the long-term. The issues we have discussed demand attention...unless they receive it, we may, instead, have to drastically alter our opinion on our long-run projections.

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