

BEFORE THE NEXT FOOD CRISIS . . . SOME POLITICAL
PROBLEMS CONFRONTING THIRD WORLD AGRICULTURE

By

Thomas T. Poleman

August 1977

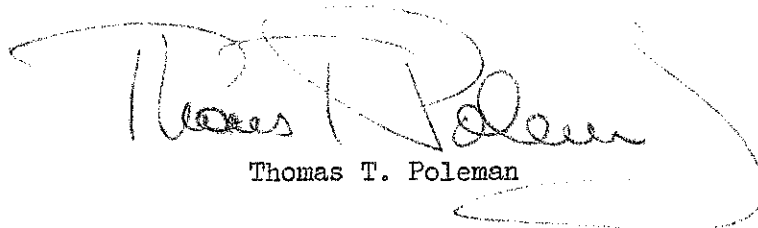
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DEPARTMENT OF
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WARREN HALL

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This brief paper was prepared at the request of CERES, the
FAO monthly, and should appear toward the end of the year. It
is less specific than I would prefer, but FAO can go only so far
in appearing to condone criticism of member governments. But
it does mention the unmentionable: that the bottlenecks to
development in many LDCs are political, something we theorizers
often forget.



Thomas T. Poleman

The following information is provided for your reference:

1. The first section of the document contains the main findings of the study.

2. The second section discusses the implications of these findings for future research.

3. The third section provides a detailed analysis of the data collected during the study.

4. The fourth section concludes the report and offers recommendations for further action.

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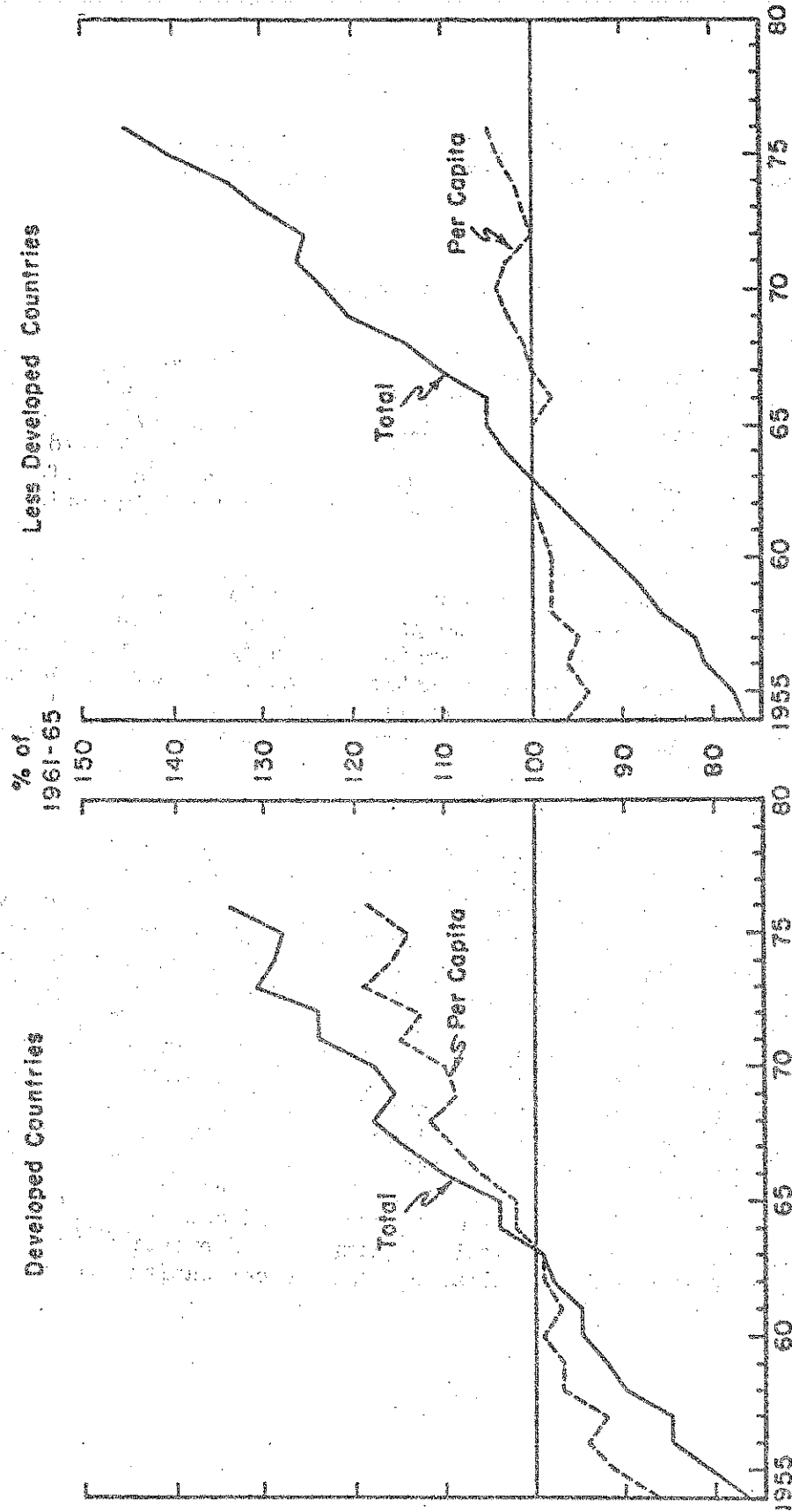
By most standards the state of food and agriculture is good. By the standards of the early 1970s, with its production shortfalls, price rises, and hunger, it is excellent. Harvests almost everywhere have been favorable for two years running. India entered the 1977/78 crop year with an unprecedented 18 million tons of grain on hand. If there is talk of crisis, it is usually in the context of declining prices and mounting carryovers.

Can the situation last? Obviously not. So long as agriculture depends on the weather there will be good years and bad, and a bad year for countries at or near the margin means additional privation. Moreover, such weather-induced fluctuations tend to trigger economic responses which act to amplify the cycle of plenty and want. The question is: can these responses be dampened by actions of individual countries or of nations acting together? Or is the next food crisis inevitable?

I. The Last Two Food Crises

One must preface any treatment of Third World food problems by stressing that hunger and want are much more a reflection of poverty and unemployment than of agricultural failure. A common misconception of Third World agriculture is that it is operating at capacity and can go no further without massive additional inputs. In fact, great scope remains for yield increases, and in Latin America and Africa especially, expanses of potentially productive land remain but superficially exploited. Indeed, the record of Third World agriculture has not been all that unimpressive. A glance at the chart reveals that the LDCs over the past 20 years increased output no less rapidly than the developed countries, an achievement all the more remarkable when one considers that few countries have implemented comprehensive and sustained programs of agricultural development. Population growth, of course, absorbed most of the gains, but modest per capita improvement is evident.

CHART 1. WORLD AGRICULTURAL PRODUCTION, 1954-1976*



*Source: Data supplied by Economic Research Service, U.S. Department of Agriculture. Developed countries: North America, Europe, USSR, Japan, South Africa, Australia, and New Zealand; less-developed countries: Latin America, Asia (except Japan and Communist countries), and Africa (except South Africa).

Twice, however, the rate of progress faltered. The first pause came in the mid-1960s, the result almost exclusively of two successive droughts in India. Indian production bulks so large in the LDC aggregate that major fluctuations in its output markedly influence the index for all developing countries.

Recovery was rapid and again closely mirrored the Indian situation. A sequence of favorable monsoons was accompanied by introduction into the Punjab of high-yielding varieties of Mexican wheat. The index of production for all low income countries rose steeply, as did per capita availabilities. These were the years when we first began to hear of the Green Revolution. The situation in Northwest India and Pakistan, together with the introduction of high-yielding, stiff-strawed, fertilizer-responsive rice in wetter portions of Asia, led many to believe the situation had been fundamentally altered and that feeding the world's rapidly increasing population no longer posed problems.

The factors underlying the second pause--the food crisis so recently ended--were more complex and involved the developed as well as the developing countries. In brief, it resulted from an unhappy coincidence of four main influences: an intentional running down of stocks and a holding down of production in the United States; unprecedented prosperity and rising demand in Europe and Japan; unfavorable weather in the Soviet Union, India and the Sahelian zone of Africa; and a general relaxation of attention to agriculture in the LDCs. The last mentioned is difficult to quantify, but it is evident that the early Green Revolution euphoria was accepted by many governments as justification for a shifting of priorities and redirecting investment and pricing policies away from agriculture.

One is tempted to call the food crisis of the early 1970s the Soviet crisis, since the instabilities of that country's farming sector were responsible for the extreme volatility. Certainly it was triggered by the short crop of 1972 and prolonged by the failure of the 1975 harvest. But to term it such would be misleading. It was truly "world" in that the price rises were general and in that it exposed the weaknesses of the international agricultural order. "International" is the operative word: most affected were the countries trading in the world market. Least involved were the largely self-reliant economies of the Third World. They were mainly affected in that the surpluses of the developed countries, previously to be had in quantity and on concessional terms, were available not at all or at newly inflated market prices.

II. Food Aid

This reduction in food aid availabilities had an effect out of proportion to the quantities involved. Third World agriculture remains heavily subsistence oriented, so that only a fraction of output enters commercial channels. Compared to this fraction imports can be appreciable and what would appear to be modest swings in total

availabilities can have major effects on price. Indian grain production in 1972 was seven million tons less than the 105 million ton harvest of the preceding years, but the price of wheat rose by almost 50 percent during the subsequent 24 months. Though this was far less than the four-fold increase experienced by North American wheat prices during the same period, it had a catastrophic effect on what the poor could afford to purchase.

But at the same time that the absence of concessional food from abroad exacerbated the plight of the poor, it also had a constructive effect--giving a number of governments the political stiffening and feeling of urgency needed to bring about renewed inducements to agriculture. Among major Asian rice producers, India, Burma, Thailand, Malaysia, Indonesia, and the Philippines all experienced a shift in the terms of trade toward agriculture. By how much it is difficult to say, though 20 percent may not be wide of the mark. What is clear is that this shift goes far toward explaining the recent increases in output and the relatively comfortable position of these countries today.

This two-way thrust of concessional food is all the more important when one weighs it as a possible means for alleviating the effects of future swings in production. To the man in the (developed) street, food aid is what the name implies: relief to those otherwise unable to feed themselves. Historically, however, surplus disposal has been as much, if not more, in the minds of donor countries, and political considerations have played a significant part in determining who receives what. Until recently this has certainly been true of shipments moving from the United States under Public Law 480--fully 80 percent of all food aid. Apart from the 15 million tons of grain shipped to India during the crisis of the mid-1960s, true emergency relief--as to Bangladesh following hurricanes and to the Sahel--has amounted to less than a tenth of the total.

The merits of such nonemergency shipments are increasingly questioned. About a fifth of the North American rice harvest now finds its way abroad under concessional terms and the disruptive effects this million tons can have on the world rice market is well known to the trade; I travelled extensively in Southeast Asia in early 1976 and heard about little else. But the principal objections center on the disincentives to increased production in recipient countries.

Again, it cuts two ways. If the farm sector in Europe and North America sometimes seems possessed of political clout out of proportion to the number of people involved, it is just the opposite in the LDCs. There it is the urban minority which typically has the power to make or break. The political leader is understandably anxious to avoid aggravating them, and one means for so doing is with imports of cheap food from abroad. It was the politically articulate few who most vigorously objected to the price rises attending the recent stimulation of Asian rice production--and brought down at least one government. And so it may be that the next food crisis could be hastened by a clamor, now that things no longer look so bad, that such incentives are no longer necessary.

III. Food Security

A number of proposals have been put forward to guarantee the developing countries a greater measure of food security while avoiding the pitfalls of past food aid operations. One of the more innovative, proposed by D. Gale Johnson, calls for the developed countries collectively to undertake to make up to each developing country the amount by which its grain output falls below some predetermined percentage of trend production. Such an insurance scheme is attractive not only for the stability it could introduce to Third World markets, but for the incentives it could offer recipient countries to begin modest storage programs.

But to be effectively implemented it would require a fineness of tuning hitherto rare in the annals of international cooperation. Selecting what percentage shortfall should trigger the transfer of grain would be a complex task. Were it set too low there could be no incentive for developing countries to hold reserves and the size of grain transfers could be so large as to depress prices and hamper production in the recipient country. Conversely, were it set too high the objective of stability could be lost. The percentages would presumably vary from one LDC to another, and it is easy to imagine the conflicting pulls of consumer and producer groups in councils for their determination. Still the proposal is the type of constructive new suggestion which should be explored with priority.^{1/}

IV. Third World Strategies

Desirable as such international insurance measures may be, they must take a decidedly second place to efforts by the LDCs themselves. Today this may sound trite, but it was not so many years ago that warnings of coming food crises were treated with derision by many Third World leaders. That they no longer do so is hopefully a lasting contribution of the anxieties of the early 1970s.

But it is one thing for the problem to be recognized, quite another for remedial strategies to be implemented. I noted at the outset that the developing world's food problems are part and parcel of the broader problem of poverty and unemployment. Eliminate poverty and a people will be able to effectively demand from agriculture the abundance of which it is capable; eliminate poverty and history tells us that spiraling population growth can quickly be controlled. What history does not tell us, however, is how to carry out development in such a way that its benefits will be widely shared and poverty eliminated, and around this tragic fact swirl the great political dilemmas of the Third World.

^{1/} A six percent shortfall would seem a not unreasonable trigger. It would have resulted in total shipments averaging about four million tons of grain between 1955 and 1973, with peak movements in 1966 and 1973, respectively of 15 and 13.5 million tons.

In agriculture the equity problem devolves from the selectivity of the various technical improvements that are constantly being made. The high-yielding varieties, for instance, are not designed to be introduced alone, but call for a host of complementary inputs: fertilizers, water, disease control, and the like. To the extent that an innovation is specific to particular ecological conditions, benefits will clearly be restricted. Equally obvious is that those best able to command the new inputs--the larger and wealthier farmers--will reap a lion's share of the benefits.

This much history would have us expect. The changes which transformed European and North American farming during the 19th century were similarly selective. The difference lies in the cities. A hundred years ago the disgruntled or displaced farmer looked to the cities for opportunity. Industry was growing, and as industry then had high labor requirements, virtually all who left the land found jobs. Today the movement to town rests on less solid foundations. Though urbanization in the LDCs is proceeding at a breakneck pace--many of the larger centers are doubling in size every eight or ten years--most of the cities remain administrative and trading centers. Though industry is growing, the bulk of it is capital-, not labor-demanding. Jobs are far fewer than people in search of them.

It is thus more in the context of urban and industrial failure, rather than agricultural, that the various new strategies proposed for Third World development should be judged.

If these strategies have a common feature--and the variations are legion--it is the emphasis they give to the landless and the small farmer: the 50 percent or so of the labor force thus far bypassed by the forward march of development. Not only must he be persuaded that his future lies in the countryside, not town, but his growing affluence, and the rapid increase in food production it reflects, is seen as the driving force behind transformation of the whole economy.

Have such strategies a chance of success? There are grounds for optimism. We sometimes forget how recent is the application of the scientific method to food farming in the Third World. It dates no farther back than the mid-1940s and enormous scope for improvement remains. Breeding work until just a year or two ago concentrated on wheat, rice, and maize; and even for these crops yields in the LDCs have reached but a fraction of their level in the developed countries. There is every reason to believe that other smallholder crops offer similar possibilities.

The snags lie in creating the political climate under which the strategies can be introduced. The selectivity problem alone dictates that investment in rural development be on an unprecedented scale. Such investment will be at someone's expense. Farm-to-market roads may mean fewer urban expressways. More credit to farmers could mean less to manufacturers. Certainly a pricing structure designed to give greater incentives to agriculture would mean dearer food for urban

consumers. In every instance it would be idle to pretend that those who found their interests no longer catered to would submit silently.

In emphasizing these difficulties my point is not that the new strategies are unrealistic and should not be attempted. It is to warn that solutions will not come easy and will require political leadership of the highest order.

V. Guidelines for International Action

With solution of the Third World's food problems seen constrained as much by political as technical considerations, what attitudes and policies ought to be espoused by the international community. I venture to conclude with a few which may not be on everybody's list:

1. An excellent start, though a mentally wrenching one, would be for us to stop thinking in terms of a world food problem. Problems there are aplenty, but the extent to which those of the developing and developed countries impinge on each other is minimal. In the industrialized nations they revolve around the perennial questions of managing reserve stocks, price maintenance, and in not a few countries, holding down production. In the developing world the need is to expand production and economic participation quickly. We should recognize that the initiative for this must lie with the individual LDCs and that it is likely to involve pricing and investment policies which may prove politically very painful. They should be encouraged to bite the bullet.

2. That food aid--the traditional response to crisis conditions--can in the long-term be counterproductive from the point of view of the recipient country should be recognized, and to the extent it is pursued as a means of surplus disposal, steps should be taken to minimize the effect on producer price incentives. One method for so doing would be to channel surplus stocks into an internationally managed insurance program along the lines proposed by Gale Johnson. A second would be targeted assistance to the nutritionally most vulnerable, outside of commercial channels, through maternity and child-health clinics.

3. The developed world's principal aid, however, should take the form of technical assistance to agricultural research institutes and credits to underwrite the capital works needed to complement the new varieties--irrigation systems, fertilizer plants, and the like. To a maximum degree these works should be designed to benefit the smaller farmers. But no matter should they not. It is unrealistic to expect agriculture to absorb the totality of population growth. Industrial employment must be stimulated by granting Third World countries freer access to the international marketplace. That low wages afford them a comparative advantage in labor-intensive manufactures goes without saying. Less widely appreciated is their growing advantage in such energy- and pollution-intensive activities as steel and aluminum smelting. In not a few instances this would be at the expense of jobs in the developed countries. But if a North-South confrontation is to be avoided, and something approaching global equality achieved, the political accommodation and sacrifice must be worldwide.