



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

# AGRICULTURE IN A TURBULENT WORLD ECONOMY

PROCEEDINGS  
OF THE  
NINETEENTH  
INTERNATIONAL CONFERENCE  
OF AGRICULTURAL ECONOMISTS

*Held at Málaga, Spain*  
26 August–4 September 1985

Edited by  
Allen Maunder, Institute of Agricultural Economics, University of  
Oxford, England  
and  
Ulf Renborg, Department of Economics and Statistics,  
Swedish University of Agricultural Sciences, Uppsala

INTERNATIONAL ASSOCIATION OF  
AGRICULTURAL ECONOMISTS  
INSTITUTE OF AGRICULTURAL ECONOMICS  
UNIVERSITY OF OXFORD

1986

Gower

*Balancing Overproduction and Malnutrition – Implications  
for Policy and Research*

Even a decade back it would have been difficult to visualise a situation where on a global basis supply of food per caput would not only be adequate but progressively increasing. This increase in food supplies has come about without any measurable slackness in population growth or incomes. In spite of severe droughts in some regions, particularly Africa, global supplies are outpacing the demand for food in the market place. Increment to production has principally come from the developed food exporting countries, although some parts of the developing world, e.g. South Asia and Southeast Asia, have also contributed to the increase in food production.

An equally important feature of the current situation is that the relative abundance of food at the global level has not proved a sufficient condition to abolish hunger or malnourishment from the world. Available evidence suggests that during the last decade or so the proportion of people below the poverty line, which is usually drawn on the basis of calorie intake, has declined; yet the number of such people has increased. There are major concentrations of malnourished people in South Asia and sub-Saharan Africa but other developing regions, as well as some developed countries, have also not resolved the problem of poverty-induced malnourishment.

How does one reconcile these two features: abundance of food at the global level and existence of large number of malnourished people in different parts of the world? The answer can be provided by looking carefully into the aspects of (i) overall availability of food at the country level; (ii) effective demand, i.e. adequate purchasing power to buy foods; and (iii) adequate distribution mechanisms to shift more supplies from surplus areas to areas where market for food exists, in a cost-effective way. In the following discussion, we shall be concentrating on the first two aspects. A qualification may be added 'at the outset; we are not considering here the aspect of self-provisioning; this, though important, is a factor of declining importance in the world food system.

OVERALL AVAILABILITY

While food production has increased at the global level, the bulk of the

increases has come from the developed countries whose share in world food supplies is progressively increasing. A part of the increased surpluses is absorbed in these countries as cattlefeed, as the demand for animal products rises relatively more sharply compared with the near inelastic demand for foodgrains. However, the increased demand for cattlefeed is not sufficient to cope with the rapidly growing food surpluses. This has important repercussions for the trade and aid policies of the developed countries.

Among the developing countries three distinct patterns are discernible. The first group comprises the rapidly growing countries (e.g. Asian NICs), where food imports have increased in face of a satisfactory growth in domestic food production. These economies are at a stage characterised by an expanding demand for livestock products, relatively stable demand for foodgrains and shift of resources from agriculture to the non-agricultural sector. Because of the high productivity level in agriculture and despite resource transfer (i.e. labour transfer), the rate of growth of food production is high; but growth in demand for food and feed outpaces incremental supplies. The phenomenon of high rate of growth of domestic agricultural production coupled with high rates of growth of imports can be clearly observed in these cases.

The second group of countries comprises poor countries which are emerging as 'surplus' countries, due to satisfactory growth in food production but less satisfactory growth in domestic demand. India stands out as an important example of this group but other countries, particularly in Asia, are likely to join in the near future. While public stocks are accumulating, the number of malnourished people continues to be large.

We have a third group of countries where food production per caput has declined in recent years. Because of foreign exchange constraints they are not in a position to import adequate quantities of foodgrains to compensate for the loss in food production. Most of the countries of sub-Saharan Africa and a few in Asia (e.g. Nepal) fall into this category.

It is quite clear from the foregoing description that the problem of overproduction is complex, as also are the ramifications for future policy. At the global level, supply prospects seem to be bright. For developed countries as a whole production potential clearly exceeds their domestic demand. With the available infrastructure and technological advantages, they can easily step up their production further and augment the food surplus. The same cannot be said for the poorer countries. The engine of growth for food production is the technology which has a high capital, skill and organisation content. If significant transfer of technology, accompanied by adequate resources and favourable economic environment for the producers is not ensured, the poor countries may be faced with growing deficits.

There has been substantial rise in world trade in foodgrains, and the amount of food aid has also increased significantly. These developments have softened the impact of food scarcities in a number of countries,

particularly in the countries facing natural or man-made calamities/emergencies. However, the pricing and timing of these deliveries have many a time exacerbated the food problem. For some commodities, e.g. dairy products and sugar, so-called trade could hardly be distinguished from dumping of the surpluses of the developed countries, which in turn ruined the incentive structure for the domestic producers in the developing countries.

More than trade, the international scene in recent years has been dominated by capital movements. These capital flows, though enormous in quantitative terms have not been directed, to any significant extent, to relax the capital constraints on agricultural development in poor countries. The international aid as well as commercial investment in agriculture has not kept pace with the requirements of the developing countries' agriculture.

The likely results, of these developments are: (a) the tempo of growth in agricultural output in the developing countries may further slacken down, and (b) the concentration of food surpluses in developed countries may further accentuate. Thus, a global increase in food production by itself does not ensure adequate availability of foodgrains in the poor countries unless they augment their domestic production or create the wherewithal to import food from food surplus developed countries. Given the aid and policy regimes, the latter is not an easy option.

### EFFECTIVE DEMAND

The availability of food in a country or a region by itself is not likely to resolve the problem of hunger or malnutrition. The access to the available supply is a function of effective demand. Wherever the rate of growth in an economy is substantially high generally the impact is felt by large sections of the society. Even in those circumstances certain sections of population are bypassed, or do not benefit from the 'percolation effect'. These belong to the households who do not have productive assets and the members do not possess skills or physical stamina. The situation is worse in the economies where the growth rate is modest – a more common occurrence. If the slow growth is occurring in economies where the asset distribution and earning opportunities are highly skewed, the number of 'bypassed' households will be large and their plight will be worse. The problem of removal of malnutrition cannot be disentangled from the problem of rate and pattern of economic growth.

Faced with acute disparity in purchasing power a number of countries have attempted to provide subsidized food to poorer households. In a much larger number of cases such attempts are made to cover food-insecure households during periods of drought, flood or other natural calamities. While there are several examples of successful interventions during emergency situations, the state interventions in more normal times have seldom proved comprehensive or cost-effective. This has given rise to a series of questions on target-group specific actions for

providing food to poor malnourished people. These range from identification of target groups to the design of the delivery systems.

## RESEARCH AND POLICY ISSUES

The theme papers submitted for this topic by John Mellor, T. N. Srinivasan and others, and subsequent discussion in the plenary sessions and group discussions have thrown up a number of researchable issues. It is not my intention to present a fully fledged research agenda on over-production and malnutrition. My purpose here is to highlight some of the conceptual and the policy issues on which the agricultural economic profession should provide guidance. These issues would include:

1. To what extent can we equate malnutrition with poverty? T. N. Srinivasan has raised serious doubts on the calorie-linked poverty measures. However, no one has come out with a better indicator of poverty. Although we need not spend too much time on 'head-counting', in any discussion on poverty alleviation proper identification of the group for which the remedial measures are suggested is the first step.
2. Why does not 'percolation effect' of growth cover all segments of population and generate adequate demand for food? Why are certain sections 'by-passed' in the growth process? Is asset redistribution the only alternative for ensuring wide response to economic stimuli?
3. What are the relative costs and benefits of target-group oriented public interventions, such as
  - (a) subsidized employment,
  - (b) subsidized distributions of foodgrains,
  - (c) direct feeding programmes?
4. How to strike a balance between food self-sufficiency and the trade-oriented self-reliance. Are these strategies relevant at different stages of growth (i.e. when 70 per cent of the labour force is in agriculture, compared to a stage when 20 per cent is in agriculture), or depend on the composition of output-mix (i.e. single commodity orientation of agricultural exports versus diversified export-crops sector), or predicted on available 'slack' in the food and non-food sectors?
5. What role should be assigned to price and non-price factors in augmenting food production? Should reasonable stability in food prices be considered an important goal of agricultural policy? What are the costs and benefits of such policy?
6. How does international trade in agricultural commodities affect domestic agricultural production in developing countries? To what extent should considerations be given to the 'border' prices in allocation of resources for different crops?
7. Should poor countries which have reached 'self-sufficiency' in foodgrains production pursue a deliberate policy for diversification of

their agricultural and rural sectors? What are the relevant models for such diversification (Japan, Western Europe)?

This does not exhaust the list of researchable topics or the issues which have policy significance but reflect, in our view, the over-riding concerns of the policy makers both in the developed and the developing countries.