1967 Mc Dougall Memorial Lecture

MEETING THE WORLD FOOD CRISIS

by

G.U. PAPI
1. - The International Institute of Agriculture

Conflict and accord have marked the life of all peoples at all times. On the other hand, collaboration among governments prompted by the protection of mutual interests is something that is only a little over half a century old. It has always tended to expand because it tries to go thoroughly into the problems of the various countries, to shed light on the needs of less favoured countries, and to stimulate, in the common interest, an inclination in better equipped countries to eliminate poverty and suffering in the others. Those who are familiar with the recent past are in a position to notice an extent and depth in the exercise of co-operation among countries that were quite inconceivable at the beginning of the century.

In agriculture, the first form of international collaboration goes back to the initiative of David Lubin, an American citizen of Polish origin. Convinced that only this co-operation could tackle and solve the agricultural problems common to many countries, he succeeded in enlisting the backing of the authorities in various countries - in the first place of King Victor Emanuel III of Italy - for his idea of setting up a permanent secretariat to collect information on agricultural problems and to support government efforts aimed at solving them. Maffeo Pantaleoni and Antonio De Viti De Marco, two famous economists, designated by the King's confidence, greatly contributed to the realization of David Lubin's plan.

At the Italian Government's invitation, an international conference was called in Rome in May of 1905. Representatives of 40 countries attended it. On the seventh of June, a convention was signed for the establishment of the International Institute of Agriculture.

The convention had two guidelines: publication of information on the different sectors and problems of agriculture, and regulation of agricultural interests common to the farmers of several countries through "conventions", a new formula characteristic of the International Institute of Agriculture.

As for the first guideline - the spreading of information - the art of statistics made it possible to survey many world phenomena. The first world census of agriculture, carried out by the Institute in 1929-30, was the result of ceaseless efforts to induce governments to adopt uniform methods of collection for statistical data.

On this basis, the Institute was able to develop a vast program of studies in the economic and social fields, especially on the commercial organization of the various markets, the system of land tenure, the scientific organization of agricultural work in Europe, the flight from the land in Germany, Czechoslovakia and France. The results of the surveys were published in the Monthly Economic Bulletin and the Economic Commentaries.

In the technical field, the Institute worked out studies on general agronomy, methods of cultivation, animal husbandry, agricultural engineering, mechanization and agricultural industries, and human nutrition and feeding of livestock. "Special sections" dealt thoroughly with several questions of tropical and subtropical agriculture, plant diseases, and forestry.

In agricultural legislation, the Yearbook of the Institute covered the principal national laws, while the Bulletin of Agrarian Law promoted discussions on the salient legal questions concerning agriculture.
As for the other guideline - the regulation of farmers' common interests - the Instituto promoted six international conventions, on organization of the fight against the desert locust, protection against plant diseases, a standardized system for marking eggs, unification of methods for sampling and analyzing cheese and wine, and unification of methods for genealogical records of livestock. Little by little, ignorance and the blind struggle of immediate interests were replaced by the rectitude of international conventions.

Dissolved in 1944 after more than 40 years of life, the International Institute of Agriculture represented the first stage of co-operation and of international public law, the pioneering test of a permanent organization of States, a center of information on, and promotion of, agricultural interests. By hard and obscure work - vanguard work - amidst many difficulties of all kinds, the Institute showed the importance of co-operation among member countries and bequeathed to FAO a range of experience and initiatives crowned with success.

2. - Preference for the study of trade problems

We find several characteristic traits of David Lubin's personality in Frank Lidgett MacDougall's work for the creation of FAO.

In 1942, he met President Roosevelt and set out the idea of an international agency designed to solve the problems of the production and distribution of food. In 1943, as a member of the Australian delegation, he attended the first United Nations Conference on Food and Agriculture in Hot Springs. He became a member of the Interim Commission set up by the Conference. He worked persistently on the Constitution of FAO which was finally founded in 1945. He became its adviser and, later, special assistant to the Director-General. The vicissitudes leading to the new organization were clearly less romantic and pioneering than those of the Institute. However, the trail blazed by it has been fruitfully followed and widened.

At this point I should like to take the liberty of making a personal remark.

It is a fact that international collaboration at the beginning of the century coincided with a marked interest of science in the exchanges of goods and services among countries, in the analysis of economic fluctuations, and in the organization of internal markets and stabilising mechanisms of national or international initiative. But this interest does not arise by chance. The so-called "technological progress" - already marked at the beginning of the century and staggering in the last few decades - produces certain events that occur everywhere to some extent: the creation of completely new goods and services, the formation of ever larger business organizations, the opening-up of markets that are wider than the traditional frontiers of each country. As a result, the constant development of technology points up an elementary truth: no country - not even the biggest or most powerful country - is able to solve by its own efforts the problems facing governments and scholars. No country can do without recourse to international collaboration.

Now, the most immediate form of international collaboration is offered by more intense trade among countries. Every country - even if it produces only one commodity - for instance wheat - must import a number of other goods and services and, consequently, export other goods.

It is thus quite natural for governments to deal preferably with the problems of trade among countries, with the problems of price and income stability, and the stability of home and international markets. Again, the need to rehabilitate the economies of countries devastated by war as rapidly as possible guided public interest toward problems that were capable of relatively short-term solutions. The improvement of "fiscal policy" - sets of measures of a fiscal, monetary and direct control nature - is designed by governments to prepare "tools" capable of attenuating the size and duration of cyclic fluctuations on national markets and - when they exist - on the international markets of
certain commodities. It was almost inevitable that the international organizations that came into being after the two world wars should tackle trade problems with energy. It was only later that the other problem — the even more fundamental problem of economic development of low-income countries — began to show up on the horizon of the international community.

3. - The Geneva Conference (1964) on Trade and Development

As a matter of fact, the International Institute of Agriculture in its activity had kept up a certain balance of interest between the problems of intensifying trade and of improving structures. And FAO, for its part, has been a remarkable exception because it has paid attention to a number of problems suggested by Technical Assistance and the gradual changes that are taking place in territories in all continents. However, the prevailing current in literature and economic policy has nevertheless been spreading. And the Geneva Conference in 1964 more than anything fits into this preference for trade problems. It is therefore necessary to take it into serious consideration and see what solutions it could produce.

At Geneva, developing countries insisted on the theory of a "fair return" to be ensured by high prices of primary commodities exported to the markets of industrialized countries. They emphasized that it was necessary for industrialized countries unilaterally to reduce obstacles to the importation of basic commodities, raw materials and industrial products from low-income countries. They suggested that industrialized countries should: (a) change their fiscal legislation, (b) channel the flow of capital to industrial activities to be developed in low-income countries in order to enable them to increase their export capabilities and, consequently, their ability to purchase on the markets of industrialized countries, (c) concentrate their activities on those industrial sectors where technological progress was fastest. For these are the sectors in which industrialized countries might find adequate compensation for the losses suffered as a result of the transfer of light industries to low-income countries.

This is a set of these and arguments of enormous interest. But they should be examined with a little logic to see what is viable and what is short-lived in these somewhat mercantilistic proposals.

4. - We must look at the facts

Liberalization of trade granted unilaterally by the industrialized countries would intensify exports from low-income countries only to a modest degree. Agricultural trade barriers in the more advanced countries concern certain commodities and agricultural materials coming at any rate from nations that are among the richest of the temperate zone: Australia, New Zealand, Britain, Uruguay, not to mention the United States and Canada. They are nations in a particularly advantageous situation to draw profit from any intensification of agricultural trade. On the part of the industrialized countries, however, further liberalization would facilitate exports from low-income countries to a very small extent only.

Tariffs applied by industrialized countries to tropical produce - tea, coffee, cocoa - are not very high. A survey by the GATT Secretariat shows that if in 1956 eight European countries had been able to abolish all internal taxation on the consumption of coffee and all customs duties on coffee imports, the export revenue of low-income countries would have risen by 2.5 percent at most.

More recently a special report of the Third Committee set up by GATT for the expansion of international trade pointed out that "the abolition of dues and levies of a fiscal nature, or a considerable reduction of their high rate, especially in the case of the above-mentioned countries, would favour increased consumption and thereby would make an extremely useful contribution to an improvement of the capacity of exporting countries to earn foreign exchange." But this opinion of the report does not claim to offer a radical solution to the problem of fundamental imbalances in the balance of payments of low-income countries.
The same applies to the proposal that the industrialized countries of Western Europe and North America should "unilaterally reduce" their customs barriers and quantitative restrictions: (a) on agricultural commodities; (b) on raw materials - for instance, cotton and jute; (c) on manufactured products - for example, products from countries with abnormally low labour costs, such as Japan; (d) on the products of light industries which the industrialized countries should transfer to developing countries. In all these cases it would be unrealistic to overlook the danger of profound disruption of national markets unless the more advanced countries proceed in this direction with great caution.

If an industrialized country gives up, at least partly, the production of certain industrial goods in favour of countries from which it can import them later on, its government must help the redundant industries by means of subsidies, of indemnities for the destruction of surplus equipment, and of premiums for the modernization of enterprises that carry on their work. It is indispensable for the government to help unemployed manpower either by relief benefits or by offering them ample opportunities for vocational retraining.

Admittedly, in the long run, a process of modernization in any country can give rise to more efficient production activities which require less protection. However, such a process takes time if developing countries are to be assured of lasting exports of new finished products.

5. - Effective co-operation between low-income countries

At the same time, low-income countries - and these countries first and foremost - must carefully consider all causes of disequilibrium in their balance of payments which is very often due to over-production of agricultural commodities in relation to demand. This imbalance prevents low-income countries from increasing export revenue, or earning stable revenue.

It must be remembered that, of 80 countries now considered as "developing", at least 30 obtain more than half their foreign-exchange revenue from exports of a single commodity, and several others obtain it from exports of only two commodities. As these sums are four times greater than the total amount of grants, loans and foreign investments these countries receive, they should diversify their production at all costs, improve their techniques, and perfect their trading methods.

Likewise - and this is another duty of low-income countries - they should revise all measures of exchange control and all rules that might discourage exports of national products or imports from other developing countries. They should make efforts - and be helped in this task - to start and pursue a process of regional integration to create "external economies" for production enterprises and thereby favourable conditions for growth of their respective economies.

In the long run, developing countries must become aware of certain essential problems before asking other countries to make extensive long-term efforts.

6. - The solution of foreign trade problems is not enough for the growth of low-income countries

Nevertheless, the study and even the solution of foreign trade problems is not enough to ensure the growth of developing countries. Projections worked out by FAO for agricultural commodities attempt to shed light on the export revenue of low-income countries in 1975 and 1985.

Unfortunately, prospects for exports to the markets of high-income countries appear unfavourable because competition from synthetics is growing; the consumption of many commodities is nearing saturation point, and the population growth of industrialized countries is relatively slow.
At the same time, other large-scale phenomena are taking shape. Excluding mainland China, the urban population in low-income countries will perhaps be close to 750 million inhabitants in 1985. This is a much higher figure than the whole population of the developed countries in 1965. As a result, there will be huge daily needs for food and clothing. International trade can help to meet them to quite a large extent. For instance, gross imports of grains -- which have more than doubled in the past 15 years -- should continue to increase and reach 50 to 60 million tons in 1975, compared with 23 million tons in 1961-63. It goes without saying that the regulation of these imports alone will pose greater problems.

In this perspective of population growth and increasing human needs, it is to be noted that the structure of the balance of payments in low-income countries has already undergone profound changes. With increased food aid granted to these countries, their exports to industrialized countries -- even though they have risen in the past few years -- have already been largely exceeded by imports of agricultural produce from industrialized countries.

Recent OECD studies show that if food production in industrialized countries can grow at the present rate -- it will be possible to export "surpluses" (over and above internal demand) to low-income countries. However, these surpluses of developed countries are inadequate to meet the needs of low-income countries, even if one adopts the hypothesis that demand for products will increase at the rate permitted by the lower increase of revenue and that food production will rise to the highest possible degree. The "deficits" of developing countries are roughly of the order of 4 billion dollars in 1970, 14 in 1980, and 60 by the end of the century. These "deficits" are much greater than the export capabilities of industrialized countries.

Moreover, one must not overlook two circumstances: firstly that -- in competition with low-income countries -- the Soviet Union, Eastern Europe and China have become large importers of food. Secondly the availability of food depends largely on sea transport, ports and landing facilities, and means of transport within low-income countries.

The consequence of these considerations is that, instead of looking towards the advantages offered by export prospects of high-income countries, such as the OECD member countries, Australia and New Zealand, many people are beginning to ask themselves: How will the developing countries be able to pay for these huge food imports? With their traditional exports? With new exports they may try to develop? With the aid received by them? With private capital flowing into the production of goods and services? But on what conditions can this private influx take place? These are some reasons for increasing doubts that measures taken as a result of national or international initiative to intensify exchanges of goods and services between industrialized and low-income countries and to stabilize food prices and markets can ever correct the basic disequilibrium of the balance of payments in low-income countries.

7. The need for a policy of structure

The fact is that ensuring effective aid is not only a "quantitative" question, a question of masses of dollars to be allocated. The question is to choose carefully the points of attack of the problems facing these countries: emergencies, problems of stabilization of prices and markets, problems of structure. These are three categories which can never be considered in isolation if lasting solutions are desired.

In the past few years, too much importance has been attached to trade relations between industrialized and low-income countries. One has too often forgotten that behind the deficits in the balance of payments there is an even more fundamental deficit. There is a food deficit: a deficit that shows that these populations can produce neither sufficient food to feed themselves nor sufficient other goods and services with which they might obtain indispensable food.
Now, the task of eliminating the food deficit cannot be achieved by trade measures between industrialized and developing countries. The so-called deterioration of the terms of exchange to the detriment of low-income countries is not a commercial phenomenon; it is essentially a phenomenon of structure. Elimination of the gap between need and availability is entirely a question of raising the productivity of the agricultural sector.

In view of the size of the food deficit, the limitation of all food aid (even if one tries to increase it as vigorously as possible), and the chronic disequilibrium in the balance of payments of low-income countries, this food deficit can only be reduced by actions to be undertaken by each country from now onward, in collaboration with other countries. The force of facts leads us to undertake a vigorous "policy of structure": a policy involving, in the last analysis, the best combination and the best utilization of the production factors.

8. - Causes of the inferiority of agricultural income

A policy of structure should first of all identify the cause of inferiority of agricultural income in relation to the income of other sectors of production. These causes are: a marked disproportion among the production factors — for instance, surplus or shortage of manpower in relation to the land, capital, and entrepreneur; impossibility of introducing modern methods owing to economic conditions and limited size of farms; exclusion of part of the population living on subsistence farming from the economic circuit and thus from the marketing of agricultural produce; lack of land organisation to form viable units of cultivation; lack of vocational training; inefficient organization of productive groups; insufficient credit; destruction of crops by pests; waste of money due to excessive military expenditure, prestige projects and inefficiency of the public administration. These are some of the causes.

9. - Remedies

What are the remedies? First of all the causes of inferiority just mentioned must be eliminated. And it must be realized that the possibility of raising real agricultural income does not lie in certain forms of customs protection, or price supports, or export bonuses, or tax relief. The vicious circle must be broken. It must be repeated that unless a country's agricultural income increases, the whole development of the country is braked or proceeds by sectors which are out of step in relation to each other.

In the second place, a policy of structure may aim at raising yields per unit of acreage to increase production, instead of raising the acreages under cultivation. It might promote a more intensive use of fertilizers and pesticides on small and medium-sized farms which, after all, predominate in the sector of food production where increases are most urgent. To be sure, low-income countries could keep up non-food agricultural production for export because, after mineral oil, these crops earn the largest part of foreign exchange. However, as part of these foreign exchange earnings are used to import food, it is up to the policy of structure to decide whether it is economically reasonable to continue using these earnings from non-food agricultural exports to finance imports of food; or whether, all things considered, it would be more advantageous to produce more food on the spot and use the foreign exchange derived from certain exports to import equipment and intermediate goods absolutely indispensable for a higher rate of development.

According to the country, the policy of structure might aim at producing staple foods, particularly grains and pulses, which have a considerable protein content, to improve the quality of the diet, and might only later pass on to increases of animal products as sources of protein and vitamins. The policy of structure should above all emphasize that shortage of food causes inflationary pressures, payment difficulties, increased production costs, and a reduction of investments in agriculture, so that the present situation in most low-income countries can only worsen if food production does not grow considerably.
10. Dynamic conception of a country's economic development

At this point of the analysis, one is tempted to ask why, after all these years of very considerable aid to developing countries, people have become aware of such unsatisfactory results so late. There are many reasons. But one stands out among them: the absence of an adequate explanation of what is a process of economic development.

Starting about 30 years ago, our explanation of the economic development of a country or region has been based on a rigorous concatenation of "external economies" and "internal economies" with regard to production enterprises. A country's economic development process begins with the creation of "external economies" by the State or by international collaboration. These economies derive: (a) from the production of "general public services" -- administration of justice, national defence, police, public hygiene and health, education at all levels; (b) from the production of "special public services" -- that is, "divisible into sales units" -- transport, postal, telegraph and telephone communications; (c) from the creation of "public works" -- roads, ports, power stations. The production of general and special public services and the creation of public works tend to reduce the "risks" and the "production costs" of the various goods and services in the budget of every consumer and in the budget of every producer. In this way, State activity succeeds in promoting "external economies" with regard to enterprises. It results in the formation of a more favourable environment for the economic growth of the country or region. It is the indispensable premise for the "internal economy" of production enterprises.

In effect, it is technological progress that constantly creates the most unforeseeable economies within an enterprise: that is, the "internal economies." But this creation can go on only up to the stage permitted by the "receptivity of the environment" in which production activity is taking place. All further technological progress requires "other external economies" to come into being: for instance, an expansion of markets, which can be achieved by a process of integration of the economic structures of different countries, is able to ensure greater receptivity to the internal economies brought about by new technologies.

But here again, once the creation of internal economies has reached a certain stage, other "external economies" are necessary -- for example, an influx of foreign capital -- for the application of further technical progress. And so on.

The two series of economies -- external and internal -- condition each other, they harmonize with each other in more effective combinations of production factors; they give rise to "favourable events" for production activity. And it is these "events" that ensure the increase of a country's real revenue. We have already seen it when we mentioned regional integration. This, in extreme synthesis, is a dynamic explanation of economic development. It is quite different from most theories and models of a static or comparatively static nature.

In the light of this explanation of development, we can see how formidable is the task of eliminating the food deficit and, consequently, the deficit in the balance of payments of low-income countries. It is a task that must be begun by the State, or by international collaboration, and must follow a logical sequence, which admits of no demagogic evasion.

There are doubtless vast stores of knowledge in the more advanced countries which, if applied appropriately, could help increase the availability of food. But what a distance there is between knowledge acquired by technology and its practical application in low-income countries. A distance that can only be shortened by a careful policy of structure.
11. Multilateral food aid

It is obvious that the solution of the problems of structure can only be seen in the long run. During an interim period, the duration of which cannot easily be estimated at first sight, the populations of low-income countries need help to survive and, at the same time, to promote their economic and social growth. On the basis of a series of analyses, a document has been submitted to the Committee on Commodity Problems and to the Council which contains (Table X) estimates of total requirements of food aid in developing countries.

The document forecasts an annual allocation of 11 billion dollars for food aid in 1975. Certainly, opinions may vary on the size of the deficits. However, the food deficit will be considerable in low-income countries for several decades to come, and one way of coping with it is precisely bilateral or multilateral food aid.

12. Policy of boosting trade and stabilizing prices and markets

Food aid can cope with emergency problems, with problems of improving nutritional standards, and, at least partly, with certain problems of structural modifications. But the problems of internal and international trade must always be watched and studied.

It is well known that the fluctuations of economic life constitute a measurement of the development of a country or region. To attenuate the size and duration of these fluctuations, every government is forced to pursue a policy of price and income stabilization together with a policy of developing global revenue.

Unfortunately, a policy of stabilization often brings the danger of harm to other countries.

Sometimes production of a commodity enjoying price support tends to grow well beyond the absorption capacity of the home market. Surplus then pile up, and export bonuses are necessary to facilitate the sale of the surpluses to other markets. But in an effort to defend themselves, these markets are ready to limit their imports by using all the well-known expedients. And these defence measures block the exports of the country which has adopted methods of excessive stabilization as well as of the countries maintaining trade exchanges with it. In other words, the defence measures of certain countries have the effect of thwarting the economic development of all countries.

Therefore, every government must seek a balance between the line of development and the line for stabilization of prices and markets. Every government is forced to take into account the repercussions of its own policy of stabilization on the policy of others. Every government is forced to promote, first, an assiduous confrontation of economic policies and, then, as far as possible, co-ordination with the countries which say they have the same objectives. For only by thorough confrontation and an attempt at co-ordination can one discourage every government's tendency to limit its own imports and thereby to retard all development of the countries maintaining trade relations with it.

13. Problems of structure. Special funds

The fundamental motive power for a country's economic and social development lies in the gradual solution of structural problems. Organic international collaboration must cope with this solution without letup.

The creation of special funds, such as the fund proposed by the Director-General -- supplies of fertilizers, pesticides, farm machinery to raise the yield per unit of acreage instead of raising acreages under cultivation -- is doubtless the preliminary condition for any policy of structure. The documents prepared by the
Secretariat contain an assessment of future needs for production requisites in developing countries; and appraisal of additional international aid needed to ensure such supplies; and the ways and means of wider and more effective multilateral aid than that already being provided. It involves orders of magnitude open to continuous correction on the basis of further data and information. But one fact is certain: every responsible government is realising that, without further delay, developing countries should be enabled to produce the greatest possible quantity of food commodities and wherever economically convenient - to reduce imports considerably. However, the creation of special funds, which is highly desirable, is still only a partial and temporary solution. It is necessary to seek more organic solutions.

14. - The Work of FAO

With adequate preparation, courage and a spirit of sacrifice, FAO has undertaken a task of long and exacting labour. Three stages may be distinguished in it. First stage: projections for agricultural commodities in 1975 and 1985. These projections may be compared with beams of light which, on the basis of certain assumptions, outline a number of possible dimensions concerning a number of factors, in the not too distant future, such as population, consumption, production and foreign trade. Second stage: regional and sub-regional studies, with suggestions which begin to give shape and substance to the policy of structure best suited to each region, and thereby to the very essence and content of the Indicative World Plan. Third stage: in co-operation with the representatives of the countries concerned, and at their own request, our Organization will have to start assisting them to draw up development projects, country by country in each region. This procedure alone can avoid disproportions of economic expansion among countries and assure each country in a region of maximum development and integration with the economy of the others.

On this basis and through this three-stage preparation - as on the basis of a process of progressive integration among the countries of the same region - it will be possible finally to determine: (a) the main problems of structure to be solved in each country in order to achieve the most satisfactory results; (b) the order of magnitude of expenditure indispensable to ensure the development of each country in the region; (c) the maximum expenditure each industrialized country and each developing country can put up according to their respective capacities and devote to the gradual growth of the less advanced countries; (d) the extent of phasing, over a number of decades, the financial effort required for the complete development of low-income countries.

There is no doubt that the determination of and the search for the financial means needed for the economic expansion of low-income countries is a problem which alone would merit months of discussion. In a general way two periods may be distinguished. The first period extends from the present situation to the completion dates of the various country projects in each region. During this period, it must be realized that it will be equally indispensable to help these countries to feed themselves adequately, while promoting their own economic development to some extent at least. Bilateral and multilateral food aid and the special funds that may be set up should fulfil this initial requirement. Then, will come the need to finance the practical implementation of development projects in each country, when these have been completed. This expenditure may also be considered to be temporary, to the extent that the countries will succeed in increasing their production and in avoiding the need for food aid.

We have so far shown our reluctance to use big words and follow transcendent philosophies. Beyond prodigies, beyond myths, beyond land reform industrialisation, and gifts without limit, the few lines we have sketched may give a conception of more effective aid to low-income countries. Above all they allow developing countries to catch sight of the start and the achievement of FAO's undertaking in a future that is no longer indefinite. The undertaking of FAO, as an agency for international collaboration, is a practical way to enable the countries to help themselves and to reduce their dependency on industrialized countries, which should gradually shrink in the decades to come.
It is not superfluous to add that we have tried here to underline some technical solutions for gigantic problems facing all peoples of the world, whether in developed countries or elsewhere. However, the radical solution of these problems lies in a far more complex and vaster field than the technical field. The radical solution of these problems lies in the moral field. Technology, alas, retains its importance. But it is bound to represent a very small advance unless the leading class of each country regards as an essential element of its success and survival the moral elevation needed to bring about justice and peace in the service of human beings.