INTERNATIONAL
JOURNAL OF
AGRARIAN AFFAIRS
Vol. IV, No. 3, May 1964

Disparities in Pace and Form of Rural Development

Produced by the
University of Oxford Institute of Agrarian Affairs
in conjunction with the International Association
of Agricultural Economists

Price 10s. 6d. net

OXFORD UNIVERSITY PRESS
LONDON

By P. LAMARTINE YATES

European Office, F.A.O.

NEED AGRICULTURE BE DISADVANTAGED IN A GROWING WORLD?

As recently as the seventeenth century—and by the clock of history that cannot be reckoned a long time ago—farm people all over the world used much the same techniques and suffered, one dare not say enjoyed, much the same standard of living whether in France or Formosa, Mongolia or Mexico. They lived less well, it is true, than artisans in the towns; but the gap in standards being small and the urban population insignificant in numbers no social tensions or economic jealousies resulted.

All this has changed. While in some regions the farm people have continued in their old accustomed ways, in others one barrier after another to progress has been thrown down by farmers' own efforts and with assistance from science and industry. Technological agriculture confronts traditional agriculture. The contrast today between farming in Australia and farming in near-by New Guinea is no less than between the supersonic aircraft and the sedan chair. In the most advanced countries farming and farmers prosper, grumble as they may; in most under-developed countries they remain at subsistence level.

Changed also are the relationships between town and country. After enduring for two centuries a poverty more wretched than any rural poverty, the vast army of the Western world's city dwellers has attained by the middle of the twentieth century a level of income which skill for skill greatly surpasses that of the so-called prosperous farmers. This is the gap which worries the farm organizations of the advanced countries. But in the traditional economies the gap has remained the more modest thing it always was.

Such has been the trend over the past three centuries—a tremendous increase in contrasts of income and social amenities between town and country and between continent and continent. Will these trends continue? Will the gap get wider? If we, or the majority of us, dislike these gaps, can anything be done to narrow them? If so, how much and how soon?

There are two basic disparities in the modern world, one between the agricultural and the industry/services sectors of the economy, the other between the developing and the so-called advanced countries. Much of the current controversy as to agricultural policies can be related to these problems.

Differential growth rates between economic sectors result from the nature of man himself, from the fact that his food requirements have an upper limit whereas his capacity to consume other goods and services appears to be without end. Western Europe, for instance, has recently entered the phase of mass purchase of consumer durables, refrigerators, washing machines, automobiles and so on, which the U.S.A. went through in the 1920's; at the same time her food consumption (excluding the processors' and distributors' elaboration of the food) increases rather slowly. There can be little doubt that consumers in other continents will behave in a similar manner when they reach the appropriate income level. In a free market economy the average of wages and salaries in a rapidly expanding sector will be higher than the average in a slowly expanding sector: in Western Europe and North America the observed differentials between farming and the other sectors range from 25 to 100 per cent.

Furthermore, these higher incomes are supplemented by the numerous other attractions of urban occupations and urban living: such items as free week-ends, paid vacations, better housing, varied facilities for education and training, more comprehensive medical and hospital services, beauty parlours and dance halls. In advanced countries the statistics show that in most of the indicators of good health the urban has now surpassed the rural population, while the chances of attaining senior jobs are far greater for those who have had access to the higher education facilities in the cities.

Society has become disturbed at the increasing disparity both in income and amenities between rural and urban areas. Various steps have been and are being taken. The farming subsidies, although historically they came into existence for other reasons, are justified today largely on the ground of reducing the gap in living standards. Similarly, the subsidies, tax benefits and other inducements given to industrial firms to establish themselves in rural areas have in part the same objective. These measures, of course, arouse argument. Some contend that communities which interfere in such ways as these with the free working of the economy hold back economic progress and that with less interference the urban and rural populations would both enjoy greater prosperity. Others maintain that economic planning should be pushed much further in order to achieve something close to equality of income and of amenities between all sectors and all districts.

Turning next to the disparities between countries, here the contrast between (relatively) rich farm populations and poor ones reflects the overall disparities in economic attainment—in short, in *per caput* national income. If average annual *per caput* income among farmers is say \$70 in one country and \$700 in another, it is likely that *per caput* national income in the one case averages about \$100 and in the other \$1,000 to \$1,200. Since economic development means among other things raising the national average from \$100 to \$1,000 and beyond and since in the developing countries the farm population constitutes some 70 per cent of the total, it follows that a central feature in development programmes must be a massive reduction in the farm population and/or an improvement of these farmers' living standards.

It might be imagined that national and international efforts to promote development are inspired by the motive of trying to close the economic gap between rich and poor countries; and indeed it is true that the activities of a number of people are determined by the moral consideration of trying to reduce inter-country inequalities which in their turn breed envy and may even lead to war. Others, however, are less concerned about the gap, arguing that what matters most for the poor is their actual income level; in terms of arithmetic the poor man's satisfaction in raising his real income from \$100 to \$200 will not be marred by the fact that in the rich country average incomes rise from \$1,000 to say \$1,400 during the same period. Moreover, it is contended that the advanced countries ought to maintain high growth rates to enable the developing countries to augment their export earnings at a rapid pace.

Again, in dealing with this problem as in that of the rural/urban gap there are some who advocate a larger dose of freedom both in national and world markets. These economic liberals deprecate production controls and price fixing at the national level and support the efforts of GATT to reduce tariffs and quantitative restrictions in international trade. Others believe that a prerequisite of development is national economic planning and that international trade needs to be organized and controlled through the concerted action of governments.

So much for the philosophical background. In taking up the challenge of these far-reaching questions one needs to recall what have been the essential features of the development process that has already taken place within the agricultural sector and of the efforts made by governments to promote or retard the metamorphosis.

Although some symptoms appeared earlier, it was not till the middle of the eighteenth century that agriculture really began to struggle out of the straight-jacket of medieval techniques and structure. By the end of that century most of the characteristic features of economic growth were operating vigorously in England and some other European countries—increase in population, shift of labour into non-agricultural occupations, increase in consumer demand total and *per caput*, expansion of output of food and other commodities. For several decades the new centres of industry were provisioned more or less adequately by the farmers who were extending the area under crops, increasing their yields and keeping more animals through the winter.

But towards the middle of the nineteenth century domestic agriculture was beginning to lose the race, unable to satisfy the insatiable demands of the cities. Those countries in which the ratio of total population to land in cultivation was least favourable and where consumer purchasing power *per caput* was rising, began to develop sizeable imports of food. Though not realized at the time, this raised the curtain on the modern era of world trade in agricultural products. Thenceforward for Britain and later also for countries such as Norway, Belgium and Switzerland, there would be no return to the old régime of self-sufficiency. The controversy in Britain in the 1840's over the Corn Laws was the political manifestation of these inexorable economic trends.

Gradually, or indeed rather quickly by the clock of history, European settlers pushed into the best agricultural lands of the rest of the temperate world—the United States and Canada, Argentina and Uruguay, Australia and New Zealand—and found profitable business in producing food for the citizens of their mother continent. Nor was it only food, but also tobacco and agricultural raw materials, cotton wool, hides, and, toward the end of the nineteenth century, the main non-ferrous ores (copper, lead, zinc and tin) of which Europe no longer had sufficient. In our own century, oilseeds, rubber, coffee and petroleum were added to the list, bauxite too and iron ore; and the United States became a major importer as well as continuing to export.

The character of economic development differed sharply between the temperate and tropical countries. Most of the temperate farm produce came and still comes from family enterprises, large indeed by the standards of the European family farm but none the less family units. The tropical products—tin and rubber, coffee and bananas—came from plantations and joint-stock companies. These were islands of capitalistic investment in an ocean of non-market economy.

These investments have been harshly criticized for conferring so little benefit on the countries in which they took place, but in such matters the judgement reflects the climate of opinion conditioning the intellectual processes of the judges. Given the aid-demanding and aid-granting mentality of the 1960's, plantation investment can be castigated as one-sided, as fenced in, as contributing little to local revenues and remitting the profits to faraway countries. Given the private enterprise, profit-seeking motives of 1900, these investments could not have been other than they were. They were made because there was a market demand, chiefly in Europe, for plantation products; there was no effective demand as yet for anything in the tropical countries themselves. In their modest way, moreover, the plantations and mines did make a certain contribution to general development: considerable mileages of roads and railways were built, port facilities were installed, merchanting businesses flourished, and beyond this a certain quantity of local labour became accustomed to the discipline of regular work while a smaller fraction was taught useful skills—the germs of the skilled labour force so much needed today.

While four continents were being opened up, albeit patchily, to feed the workers and machines of Europe and North America, events in those latter regions by no means stood still; and though development in each of the two differed in nature and timing, especially timing, each was destined to create a lot of trouble for the trade of the backward continents.

North America enjoyed violent upsurges of demand during 1914–18 and during 1939–45, when Europe was war-ravaged, and in addition benefited from the revolution in consumer durables during the 1920's. To these stimuli the responses of agriculture, mining and industry were enthusiastic. The United States became a major exporter of industrial goods, creating intense competition in third markets for European exporters, who were bogged down in the stagnation of the inter-war years. United States and Canadian minerals were supplying their industries and were being exported, while the U.S.A. became the first big producer of petroleum. North American farm products continued a major element in world markets. Considering the vast expansion between 1914 and 1964 in domestic demand for all kinds of goods, the most significant observation is how little of this spilled over into demand for imports. At the end of fifty years North America was more self-sufficient than at the beginning.

In Europe growth was delayed. The destruction of World War I could have led to a long post-war boom but the chances were frittered away in the 1920's by political and economic mismanagement culminating in the great depression to which Europe was only part-contributor, the depression which was currently interpreted as a specially deep trade-cycle trough but which was more truly a first signal of the new chronic malaise of world commerce. Europe was not so stagnant, however, below the surface; agricultural and industrial research opened new possibilities which were put into practice with dramatic results after World War II.

Indeed, during the last eighteen years Western Europe has staged a development performance unparalleled by any region in any like period of time. This restored her shattered economy and then raised *per caput* living standards far above the levels of 1938. But, and this is the most significant feature, the hectic growth of national product failed to stimulate any important growth in imports of most primary products. European farmers, sustained by price and income supports, pushed production ahead so rapidly that imports of temperate products could hardly expand, while substitute and synthetic materials were supplanting the raw materials traditionally imported from overseas. Petroleum was a notable exception but benefited only a handful of developing countries. Research and technology have made Europe more self-sufficient now than at any period since she first industrialized, and this trend seems certain to continue even if, by reason of her land/man ratio, she cannot attain the degree of self-sufficiency of North America.

International trade in primary products has now been carried out on an important scale for roughly 100 years and, in the opinion of many, has hardly lived up to the expectations of earlier politicians and economists. It has attracted more blame than praise. It was, according to some theorists, the principal cause of the trade cycle. It dumped the products of sweated 'foreign' labour in European markets to the ruin of local farmers and manufacturers. It inspired strong manifestations of unneighbourly behaviour in the shape of tariffs, quantitative restrictions, 'sanitary' regulations, *et al.* The hopes and needs of the developing countries for foreign exchange have been cruelly disappointed. The industrial countries have used their monopoly position to depress prices of the primary products they import, and have subsidized the manufacture of substitute synthetics. One could extend the list of adverse criticisms for a page or more.

Looking back over the happenings of the hundred years an historian can easily record the many actions taken to impede or deflect the flow of goods, but he would be more exercised if he tried to demonstrate that the general welfare would have been enhanced had a particular barrier been increased, reduced or removed. To take but one example: whenever cane sugar became a serious menace to the established beet industry of Europe almost all governments increased their subsidies and protection. Was this determination to maintain an existing investment justified? Was it true that the crop rotation in Europe could not have survived without this cash root crop? Did the farming of the countries which allowed free import of cane sugar suffer conspicuously? How far did the overseas cane producers suffer from the curtailment of their European market? Did the steps later taken in the Chadbourne Agreement to limit competition between Java, Cuba and other cane-sugar exporters improve the world market or would a continuation of unrestricted selling have ended in a more rational geographical distribution of world production? Even if these and other relevant questions could be answered there would remain the complex task of compiling, in some common unit of measurement, a balance-sheet of the gains and losses of all the participants—Javanese, Indians, Cubans, Americans, Filipinos, Czechs, Frenchmen, Germans and the rest. In a real world, unlike the convenient world of models, these questions can never be answered satisfactorily; the balance can never be struck.

Although the above example concerned a clash or at least an alleged clash of interest between industrialized and developing countries, the same clash may occur in the reverse sense, namely a developing country protecting its own farmers. Import substitution is an objective included in almost all economic development plans and it is reasonable to expect to achieve such substitution more easily in farm products than in most manufactures. Several countries in Asia, Africa and Latin America, which formerly spent much scarce foreign exchange on foodstuffs, have become or will soon become self-sufficient in their staple cereal, be it wheat or rice, and subsequently in other foods too. This, of course, hurts not only temperate but also tropical food exporters; but much of the new production is achieved by instruction rather than protection and hence could hardly offend the economic purist.

Another category of arbitrary interference with international trade embraces preferential systems, free-trade associations and common markets. Examples are the former preferential system of the French Empire, the Ottawa preferences of the British Commonwealth, and more recently EFTA, EEC and LAFTA. Much has been written about the trade-increasing and trade-diverting effects of these groupings. Clearly the countries which create and join these clubs do so in the expectation of benefit and usually their hopes are fulfilled, at least for a time. They do not feel obliged to calculate the consequences for third countries, though they may find it politically expedient to mitigate any short-term ill effects; whether the medium- and longer-term effects turn out positive or negative could never be computed anyhow.

A further category of intervention in world trade is the intergovernmental commodity agreement. During this century quite a number of agreements have been negotiated, some for agricultural, some for mineral products. Certain of these agreements undoubtedly influenced the volume and direction of trade in the short run and also prices, often in bizarre fashion. Few of them can claim success in their principal objective, namely the stabilization of international commodity trade; moreover, the history of all these agreements shows surprisingly little advance in the techniques of control. It is now increasingly realized that control of trade can become effective only if it is reinforced with joint discussion and control of the production policies in the chief exporting and importing countries concerned, in short if it embraces supply management.

World trade in farm products during the past hundred years has in fact recorded a much less miserable performance than many people suppose. Its longest period of expansion was, of course, the period up to World War I. From the late 1870's up to 1913 (see Table 1) the volume of exports of primary products more than trebled, as indeed did world trade as a whole; in other words, the trade in both primary products and manufactures was expanding at about the same speed. Moreover, during this period world population increased by only

26 per cent, though the increase was greater than this in Europe and North America, the areas responsible at that time for the bulk of world trade.

At the beginning of this period, Europe and North America together accounted for 62 per cent of world exports of primary products, and at the end for 63 per cent. Using today's classification and definition of 'industrial' countries and 'developing' countries one may observe that in this thirty-five-year period each of the two main groups, taken as a whole, was expanding its exports of primary products at about the same pace. (This was in marked contrast to the growth of manufactures where the United Kingdom was losing ground to the U.S.A. and Japan.) It is true, however, that within the underdeveloped world rates of growth of exports differed enormously from country to country as certain territories like Argentina, the Dutch East Indies and Malaya expanded rapidly while many others hardly moved at all.

From 1914 there followed three decades of mixed experiences. The economies of North America and Oceania were stimulated strongly by each world war but received a severe setback in the slump of the 1930's. By the end of the 1940's Oceania's exports of primary products had increased nearly two and a half times by volume—much more than those of North America. For Asia, Africa and Latin America it was a period when they increased their exports rapidly and captured a rising share of the world market. All three continents (excluding Japan) more than doubled the volume of exports of primary products and increased their share of the market from 35 to 47 per cent.[1] Only Europe had a thoroughly bad time. Devastated in two wars, racked by inflation, depressions, political opportunism and economic obscurantism, her economy stagnated. Her trade increased less than that of any other continent, her share of world imports of primary products declining from 72 to 54 per cent and of world exports of manufactures from 81 to 53 per cent.

Since 1950 the world trade situation has taken quite a new turn. Commerce in primary products rose in twelve years by more than 50 per cent. As an annual growth rate this exceeds that in any other decade of the past hundred years. It confounds the critics who before World War II prophesied that agricultural trade was destined to decline. It is a trend too persistently ignored by the Jeremiahs

[1] *Forty Years of Foreign Trade*, P. Lamartine Yates, Allen and Unwin, London, 1959, p. 47.

among contemporary commentators. Moreover, it occurred during a period when farm production in the chief importing regions, North America and Europe, was rising far faster than domestic consumption of farm products and when synthetics and substitutes were coming into use faster than ever before.

TABLE 1. *World trends in population, production and trade, 1876–1959*

(Index numbers, 1913 = 100)

		Production		*Trade volume*		*Trade unit values*†	
	*Population**	*Manufactures*	*Primary produce*	*Manufactures*	*Primary produce*	*Manufactures*	*Primary produce*
1876–80	79	25	..	31	31	102	104
1896–1900	90	54	76‡	54	62	82	77
1911–13	99	95	93	94	97	98	98
1926–30	111	141	123	113	123	145	128
1931–3	117	110	120	81	116	100	68
1934–5	120	133	125	84	114	117	85
1936–8	124	158	135	100	125	120	93
1948–50	145	238	156	132	116	233	259
1951–3	151	297	176	178	133	248	289
1954–6	158	341	191	216	156	244	271
1957–9	166	381	203	251	182	259	257

* From 1948 excludes Soviet countries.
† In terms of current U.S. dollars.
‡ 1900.
Source: *Industrial Growth and World Trade*, A. Maizels, Cambridge University Press, 1963, p. 80.

The rosy picture admittedly includes certain shadows. First, the agricultural products expanded less rapidly than minerals and far less than fuels. Secondly, the developed exporting countries increased their trade at a much greater rate than the developing countries; in other words Asia, Africa and Latin America have lost most of the ground they had gained between the world wars. Thirdly, one must allow for the fall throughout the period of the relative prices of primary commodities, especially of farm products. This much publicized movement needs to be seen in its historical perspective. Measured from the years around 1948–50 the fall has certainly been substantial —25 per cent or more up to 1962—but the immediate post-war years were unusually favourable for primary products; in fact, except during the Korean boomlet they 'never had it so good'. Their subsequent fall did no more than to bring them by the end of the 1950's into the same relationship to the prices of manufactures as had existed in 1911–13 and in 1876–80 (see Table 1). Finally, from the end of 1962 commodity prices rose by more than 20 per cent, recovering a great part of their previous losses. At the time of writing terms of trade historically considered are indeed highly favourable to primary products.

It may be wondered, therefore, why there is so much grumbling. The volume of exports has risen at unprecedented speed and at prices that are not really low. The truth is that we are judging today's events not by the yardstick of history but rather by a new yardstick, namely, the needs of the developing countries—in particular their need to increase their foreign-exchange earnings to support their economic growth. These needs have been quantified. The United Nations for its 'development decade' of the 1960's has set an objective of 5 per cent cumulative annual growth in the gross domestic product of the developing countries. Accepting the U.N. estimate of 1·2 as the average income elasticity of demand for imports into these countries (higher in some, lower in others depending upon the composition of the imports), then foreign exchange earnings would have to rise by 6 per cent per annum.[1] This is the new yardstick which brings a new dimension both to world trade and to the problems of the location and growth of agricultural production.

So, where have we arrived and what have we achieved after a hundred years of feverish effort in spreading economic activity from Europe to the four corners of the earth? The European concept of farming was carried to the wide open spaces of North America, Argentina, South Africa, Australia and New Zealand (more recently also to the virgin lands of Siberia) and there adapted to the prevailing conditions of man-shortage and land-abundance, establishing capitalistic (though family operated) enterprises producing essentially for export. All went well as long as markets were expanding but when at last the rate of growth of Europe's population and her income-elasticity of demand for food both began to fall, troubles arose and were aggravated by a new technical leap forward in Europe's own agriculture. Meantime in Asia and the rest of Africa and Latin America farming remained

[1] *World Economic Survey 1962, Part I, The Developing Countries in World Trade*, United Nations, New York, 1963.

medieval, almost neolithic, apart from islands of European investment in plantation crops; and this stagnation went unquestioned until suddenly after World War II came political emancipation accompanied by the cry for economic development. Judged by the aims and objectives prevailing a hundred years ago, the achievements of the past ten decades must be reckoned rather satisfactory, but in the light of today's aims and aspirations new and far-reaching issues are posed by the present state of world agriculture.

Among the new issues three are selected here for further comment. First, how may the outlook for world trade in farm products affect (*a*) the economies of the developed food-exporting countries and (*b*) the future balance of payments of the developing countries? Secondly, what agricultural adjustments in the industralized countries will best contribute to their own further economic growth and what may be the scope for food aid from these countries to lower income ones? Thirdly, what should be the role of agriculture in the developing countries and how can it be harnessed to assist overall economic growth? The one or several answers given to each of these questions will inevitably have repercussions on many other aspects of national and international policy. Moreover, the three issues are partially interrelated so that what is accomplished in one field may hinder or facilitate the achievement of positive results in the other two.

The export of agricultural and forestry products which has expanded so rapidly since 1950 is shared among a large number of countries. More than half the exports (see Table 2) come from the high-income countries which predominate in cereals, livestock and dairy products, wool and forest products. These countries likewise have a substantial stake in the export of fats, oilseeds and vegetable oils, cotton, citrus and other fruits, wine and tobacco. The developing countries are chiefly interested in tropical beverages, sugar, jute and rubber but also have considerable exports of oilseeds and cereals (mainly rice) and a fast-growing export of forest products. For more than half their exports of farm and forest products the developing countries sell in competition with the developed countries.

The future prospects for trade in agricultural commodities are naturally of vital interest to both groups of countries but they more deeply affect the low-income countries for two reasons: first, more than half their total exports consist of farm products compared with only 25 per cent of the exports of the high-income countries; and secondly, they tend by the very nature of their growth efforts to be in more chronic balance-of-payment difficulties than the high-income

TABLE 2. *Pattern of trade of the high- and low-income countries in important agricultural commodities, 1957–9*

	*High-income countries**		*Low-income countries†*		*World trade as percentage of world production*
	Gross imports c.i.f.	*Gross exports f.o.b.*	*Gross imports c.i.f.*	*Gross exports f.o.b.*	
	million U.S. $ per year				
1. *Total food beverages and tobacco*	13,531	7,328	3,439	7,839	
Basic foodstuffs	9,039	6,397	2,986	4,051	
Cereals	2,269	2,422	1,612	906	10
Livestock products	1,700	1,294	172	375	6
Dairy products	910	1,166	382	45	7
Sugar	1,333	298	391	1,216	33
Fats, oils and oilseeds	1,778	803	359	986	32
Citrus	431	190	14	168	16
Other fruits	618	224	56	355	..
Tropical beverages	3,295	198	303	3,164	
Coffee	2,252	41	121	2,059	60
Cocoa	519	21	19	505	81
Tea	524	136	163	600	70
Wine and tobacco	1,197	733	150	624	..
2. *Agricultural raw materials*	4,567	2,237	441	3,113	
Cotton	1,528	745	251	1,174	58
Wool	1,613	1,276	39	394	..
Jute	151	4	24	169	73
Rubber	1,002	72	104	1,238	97
Other	273	140	23	138	..
3. *Forestry products*	4,254	4,204	788	368	..
Unprocessed or semi-processed‡	1,939	1,497	323	342	
Processed§	2,315	2,707	465	26	
ALL LISTED COMMODITIES	22,352	13,769	4,668	11,320	
ALL COMMODITIES	74,410	72,110	29,690	26,390	

* Western Europe, North America, Oceania, Japan.
† Central and Latin America, Africa and Near East, Asia and Far East (excl. Japan).
‡ Round wood, sawn wood and wood-based sheet materials.
§ Wood preparations, newsprint, other paper and board.

Source: *Agricultural Commodity Projections for 1970*, FAO, Rome, 1962, pp. 1–6.

group. Projections up to 1970 have been published by FAO covering the principal agricultural commodities, showing possible trends in demand in the chief import markets and it may be useful to recall what these signify for each of the two groups of exporters.

By far the more dismal prospects are those of the high-income exporters. Two of their most important export groups, cereals and dairy products, are both in surplus (excepting only certain unrepeatable temporary alleviations such as the mass purchases of grains by the U.S.S.R. and China). Commercial exports of these are far more likely to decline than to increase. Prospects are somewhat better for meat, wool, cotton, oilseeds and oils with projected increases over a twelve-year period ranging from 15 to 25 per cent. In forest products, while demand will be strong, it is doubted whether sufficient can be produced in the forests of the high-income countries to augment their exports substantially. Altogether this group of countries must reckon with the probability that the long era of expanding markets for their primary produce is approaching an end and that for them the future lies in increasing the export of manufactures and services.

Clearly this outlook is more painful for a country highly specialized in export farming, such as New Zealand, than for the United States, and hopes are entertained of opening new markets elsewhere to compensate for the stagnating demand of the traditional importers. Exports to Japan, for example, have grown rapidly in recent years embracing a wide range of foodstuffs, and this trade may well increase materially. Even higher hopes are placed by certain people in the potential demand of the really low-income countries with their hungry millions. In the medium term, that is the next two decades or so, such hopes are surely doomed to be dashed. These countries are one and all striving to expand their agricultural *exports*; the last thing they intend doing, save in dire emergency, is to devote part of their always insufficient supplies of foreign exchange to the *import* of farm products. This is not to say that in the long run, when domestic purchasing power has been built up, those among these countries which have really scarce and poor agricultural resources relative to their population might not join the ranks of commercial importers of food; it is wise not to anticipate unduly the date at which this could occur.

The outlook, at least up to 1970, for the low-income group of food exporting countries is rather less dismal. Projections for sugar and tropical beverages indicate a more than 40 per cent expansion of imports by the high-income countries during a twelve-year period. Tropical timber may also do well. Rice, rubber, jute and cotton may enjoy a modest expansion. The combined picture for the products which interest the low-income exporters suggests a growth of 2 or slightly over 2 per cent per annum in volume of exports of farm and forest products. This makes no allowance for possible changes in unit prices which in view of the expected pressure of supplies are more likely to drop below than to rise further above the present levels. Thus export earnings might rise by somewhat less than 2 per cent.

Whatever the figures turn out to be it is now commonly accepted that the developing countries cannot from farm products earn foreign exchange at the rate necessary to finance their industrial growth. Various proposals have been put forward and will be discussed at international conferences in the coming months and years which might alleviate this situation: among these are reductions in tariffs, reduction or removal of revenue duties, diminution of differential duties on processed farm products, regulated expansion of the use of synthetic substitutes, faster growth rates in primary product importing countries, refunding of import levies, schemes of compensatory financing. Undoubtedly, in each of these fields some action could be taken which would promote trade, though none by itself could exert any substantial influence. Without wishing to belittle the importance of unremitting efforts in all these directions, it must be recognized that the total improvement possible through such measures would not be of the order of magnitude required to solve the payments problems of developing countries.

Better export prospects, it is true, are indicated for other commodities. Demand for minerals should expand faster than for farm products; petroleum looks an especially favourable export for those lucky enough to possess some; manufactures should in the long run prove the most promising of all though many and powerful resistances to accepting these from 'cheap labour' areas remain to be overcome in the industrial countries. Adding up all the prospects in merchandise trade, as the United Nations has done,[1] and making allowance for short- and long-term investment as well as for financial aid on an augmented scale, a gap is revealed in the developing countries' 1970 balance-of-payments of some $11 billion which, if a number of mitigating proposals were all fully adopted, might be reduced to $4 billion.

The developing countries can, of course, themselves contribute to a solution of the dilemma by devising ways of reducing the import component of their development programmes. This component, after all, can be and has to be varied according to current realities. One can, if need be, pull oneself up by one's own efforts. The United

[1] *World Economic Survey, 1962, Part I, The Developing Countries in World Trade,* United Nations, New York, 1963.

Kingdom, being the first country to industrialize, could not look abroad for the machinery and equipment she needed. The U.S.S.R., largely for political reasons, has used very limited quantities of imported goods in building up her great industries. Whether the developing countries will be saved from taking this harder course depends upon the extent to which the advanced countries can quickly improve the volume and organization of both trade and aid. It would be imprudent to expect that international trade in farm products can be increased sufficiently to make a major contribution to this effort; equally, however, any deterioration in trade flows could make the success of the operation infinitely more difficult.

In the industrialized countries, all of which during the past fifteen years have shown such a remarkable capacity for economic growth, the broad outline of the farm problem is familiar enough. In almost all these countries the agricultural sector is too large and its output grows too fast. Although labour is transferring from agriculture to other sectors at an unprecedented pace and although in many instances labour productivity on farms is rising as fast as or even faster than in factories, the absolute level of labour productivity remains low, especially in Europe, relative to that in industry and farm earnings average only half to three-quarters the amounts earned by workers of comparable skills in other sectors. Nearly all the governments in this group of countries provide farming with price and/or income support, in many cases on a massive scale.

Within the group important differences may be noted. It is not only that in New Zealand, Australia and North America most or much of the farming is oriented toward export whereas in Europe with few exceptions it supplies the home market, but more the fact that in the former countries farms are large-scale business enterprises whereas in Europe the great majority are micro-units over-manned and over-capitalized. Europe faces the huge task of structural reform to increase the effective size of the farm enterprise and to attain a more rational use of farm capital and farm labour. Thus while in the high-income exporting countries the main hope of agricultural progress lies with technological improvement and innovation, in Europe it lies in two directions: first, in technology and secondly in a radical reform of the physical and business structure of the farming industry.

In Europe, where there remains so much scope for modernization and where the prices of farm products are sustained at high levels, government policies for agriculture have become the focus of international criticism. One school of thought argues that what European farming needs is more competition. A gradual abandonment of external tariffs and domestic support measures, it is suggested, would force under-employed labour to leave the farms, bring down the inflated prices of farm land thus facilitating an amalgamation of holdings into larger units, stimulate a more rational deployment of working capital and open the door to imports. By augmenting the labour force available to industry and commerce this would promote further economic growth in those sectors. Another school starts from the fact that European farmers together with their dependants number some 70 millions whose incomes compared with other sectors are low and whose real living standards (including non-monetary components) are still lower. It is argued that to try to effect a redistribution of resources by applying harsh economic pressure to an under-privileged sector would be unacceptable in a democratic society and that other alternatives must be sought. While stressing that changes are in fact occurring rapidly—20 per cent of the farm labour force leaving during the last decade, miniscule holdings disappearing by the hundred thousand—many practical suggestions are put forward which might further facilitate structural reform and labour mobility. Moreover, these suggestions are today being seriously debated in farmers' own professional organizations. This would have been unheard of ten years ago.

The controversy between these schools of thought inspires much of the debate when agricultural topics are discussed at international meetings: for instance, during the abortive negotiations for United Kingdom entry into the Common Market, the U.S.–EEC 'chicken war', the Franco-German struggle over the shape of a common agricultural policy, the commodity committees of GATT, the 'Kennedy Round' and the U.N. Conference on Trade and Development. Neither side finds it easy to substantiate a claim for either virtue or consistency in their own behaviour in these matters. The truth is that where economic and social objectives conflict, most of the affluent societies, no matter where located, tend to give preference to social considerations in forming the value judgments that basically determine their policies. The point has been well put by Dr. Blau:[1]

A high-income community tends to become *relatively* less concerned with the

[1] 'Commodity Export Earnings and Economic Growth', G. Blau. Paper presented at Chatham House Conference on 'New Directions for World Trade', Bellagio, September 1963.

possible burden of higher prices paid by its consumers (particularly since the change in import unit values is reflected only very partially in the prices paid by consumers at retail level) and more concerned with the particular interests and social rights of its producers. The latter claim that full mobility in the interests of economic adjustment need not be fully implemented in a high-income society, which can afford the luxury of placing a higher value on social considerations and on the advantages to producers and workers of established forms of activity and environment.

When later commentators look back with hindsight on the debates of the 1960's it may be reckoned ironical that those who most strongly urged European governments to accelerate agricultural modernization were those who hoped to increase their sales of farm products to Europe. The very fact that Europe, unlike her rivals, can take a double approach to farm progress, namely through improved technology *and* through structural reform, implies that by the same token she has far greater opportunities for cost reduction. Her extremely favourable soils and climate and the phenomenal success achieved by her handful of fully modernized farms indicate that after the needed reforms are carried through she might become one of the really low-cost producing areas of the world.

These changes could contribute powerfully to bringing the average earnings of the farming sector closer to parity with other sectors. But within Europe, and to a lesser extent also in other high-income countries, there remains another problem of income disparity, that between the remote and the prosperous areas—whole countries (e.g. Finland) where the poverty of physical resources coupled with remoteness from markets denies the population the chance of attaining the general level of prosperity, and whole regions such as northern Scandinavia and the Alps where similar conditions obtain. It has actually been asserted that the only remedy for mountain farming is to abolish all mountain farmers; by the same reasoning all Finns should leave Finland.

Here one approaches a field in which the issues are many and complex. Indeed, a general discussion of whether and how the geographical distribution of economic activity within a nation, or within a continent, should be influenced would lead too far away from the theme of this paper. Comment must be limited to a few considerations which bear directly on the regional disparities in *agricultural* living standards.

First, the functions performed by the disadvantaged group should be correctly evaluated. For instance, in the Alps the mountain farmers are the unpaid landscape gardeners of the tourist resorts. One has only to visit the Swiss National Park to see how quickly the land becomes an ugly desert when the farmers are removed. Next, one does not know what the future holds in store. Finland, for instance, might locate enormous reserves of petroleum or natural gas and become able to develop a whole network of power-consuming industries. The mountain regions of central Europe may, in the coming decades, be required for recreational purposes on a scale which will make present-day tourism seem insignificant. It would be wasteful to chase the people away and later take them back again. The covering of Europe with new motorways and the trebling of the number of automobiles may well bring wealth and mobility to regions now regarded as economically hopeless.

Indeed, many of the current trends in the acquisition of affluence are of a kind which will help rural amenities to catch up with urban ones: the washing machine, the automobile, the transistor radio, the television replacing the cinema, the city-dwellers' week-end exodus spreading money in rural restaurants, garages and places of amusement. Here Europe holds a clear advantage over the other high-income countries by reason of the comparatively short distances between centres of activity.

An optimistic long-term outlook for the rural population seems therefore justified. While the rate of growth of agricultural output must undoubtedly be slowed down to match available outlets, the labour productivity of those remaining in agriculture can still be vastly increased, especially in Europe, with consequentially increased earnings for the farm population. Since social justice requires that relative to incomes in other sectors farm incomes should rise, not fall, the speed at which state support to farming can be diminished will largely depend upon the speed at which the physical reorganization and modernization of European farming can be accomplished.

There remains the question of food aid. Can the agricultural capacity, in many instances excess capacity, of the high-income countries be harnessed to serve the obvious needs of the low-income countries? Many developing countries cannot yet expand their own food production fast enough and do not have sufficient foreign exchange to finance food imports in addition to the imports of industrial equipment; their peoples are malnourished and hungry. It seems wrong artificially to apply the brake to food production in one region while people are starving in another. Financial aid has become an accepted part of international life; perhaps food aid is in process of becoming likewise an approved policy?

Food aid began with the mass disposal of United States grain surpluses, chiefly to two countries, India and Pakistan, both palpably short of food; but it broadened out into a wider distribution of a variety of foods for several different purposes. Then came the study entitled 'Development through Food' prepared by Mr. Sen, Director General of FAO, as one aspect of his Freedom from Hunger Campaign. This study examined the positive role which might be played by food transfers for such purposes as disaster relief, building of national reserves, school feeding and direct development projects. In 1962 the U.N. and FAO jointly launched the World Food Program to try out experimentally the recommendation of this study—a $100 million programme spread over three years, which became operational in January 1963. It has concentrated especially on providing the food component of specific development projects, this being the type of transfer whose feasibility most needs testing.

Whether the food aid takes the form of mass transfers as in the U.S. bilateral programme or of *ad hoc* assistance in limited amounts as under the World Food Program, two basic requirements have to be met: (1) existing commercial exports of food to the receiving countries should not be jeopardized and (2) farm product prices in receiving countries' domestic markets should not be depressed. The experience under the U.S. programme suggests that the physical presence of these supplies has on frequent occasions restrained food prices from rising excessively and has in some instances actually averted famine. As for the World Food Program's development projects, even if only a proportion of these prove viable, there is ground for supposing that a great increase in number of projects of the successful types would be forthcoming, if the Program were to be established on a continuing basis and with larger funds.

Of course in the long run the most desirable solution is for the domestic food producers to provide all the victuals which their country needs or for the country to reach the position of being able to pay for food imports. It is impossible now to predict how long it will be before that situation develops. Meanwhile a lot of hungry people exist; perhaps a whole new generation of people will be born, live and die without having known anything but malnourishment unless something is done. At the other side of the world stand producers willing and eager to assist. *Bis dat qui cito dat.*

One reservation should be made concerning the impact of food aid on farm production in high-income countries, since in some quarters the view has been put forward that food aid could banish the danger of over-production. Compared with the total volume of food production in the advanced countries, the most liberal food aid programmes conceivable would be but marginal. They would be composed mainly of commodities such as cereals and milk products, i.e. those tending most to over-production anyway; and, although experience shows that the removal even of marginal supplies can be a wonderful tonic to market prices, it should not be expected that food aid would really diminish the arguments in favour of pursuing the broad agricultural policies outlined in previous paragraphs.

The third and final question relates to the role of agriculture in the economic development of low-income countries. Is its primary task to increase food output? Or to provide employment on farms? Or to send labour to the cities? Or to expand output per acre? Or to mechanize? Or to increase earnings per man? Or to provide a market for the products of the emerging industries? Farming contributes nearly half the gross national product and occupies 70 per cent or more of the population in these countries, so that from both the economic and the human viewpoints what is done or left undone about agriculture matters a good deal.

Gone today are the cruder notions of economic progress through helter-skelter industrialization with a concentration on the most fancy and difficult branches of manufacturing. It is increasingly recognised that there must be balanced development of industry, commerce, infra-structure, human skills and agriculture. One of the primary objectives of FAO's Freedom from Hunger Campaign is to persuade the governments and peoples of low-income countries that agricultural development needs to be a central feature of all economic planning, that the best-conceived programmes for building up new industries will be put in jeopardy if food production fails to keep pace with the demand for food, and that the widely applauded objective of raising the living standards of the farm people themselves, who for many years will remain the largest occupational group, can be attained only through the modernization and development of farming.

What, however, does modernization and development mean? Does it mean mechanization, American-style, with tractors and all their tools, with combine-harvesters and spraying by aeroplane? Does it mean increasing production by means that employ the maximum possible amount of labour as, for instance, in Italy in the inter-war colonization schemes? Should the emphasis be on quick results by concentrating investment and know-how on a few selected zones (the so-called 'Mexican technique')? Should the whole farm population in all districts be given as far as possible equal treatment, preference being given to the eradication of illiteracy and to rudimentary training in agricultural practices?

It would be dangerous to select any one or any combination of these policies and propose it as *the* prescription for developing countries. For in truth one must not generalize. The very phrase 'developing countries' taken alone is a monstrous generalization; and to expound a single policy recommendation for all developing countries would be as inappropriate as recommending a single one for all developed countries—for the U.S.A. and Belgium for example. Some developing countries have a very large population in relation to their known physical resources and can justifiably adopt labour-intensive development plans; others have more resources than their population can exploit and must already begin to economize in the use of labour. Some have fertile land easily farmed; others have lands that may be fertile when new techniques have been learned; yet others have mainly deserts or swamps. Some have outmoded systems of land tenure calling for change; others have intractable transport problems caused by mountain and other natural barriers. Caution must be exercised in drawing conclusions from the outstanding success stories. What works well in one country will succeed in another only if the general conditions and problems are broadly similar. Programmes that succeeded in Japan may fail in Nigeria and the recipe of progress in Mexico may be irrelevant in Iraq.

Nevertheless, certain common features can be discerned. (1) It will be a long time in most of these countries before farming comes to occupy less than half the working population. (2) Illiteracy constitutes the major barrier to the acceptance of new ideas, which is not to discount the value of community development projects but rather to stress the high priority that should be given to schools and teachers. (3) In few low-income countries is labour a scarcer commodity than capital, and as long as this situation persists labour-intensive ways of doing things should be preferred to capital-intensive ones—no matter the higher prestige attached to the latter. In farming this means, other things being equal, giving greater priority to fertilizers than to machinery. (4) Except in very small countries, the know-how and capital available for agricultural investment will at best be so ludicrously small relative to the needs, that one faces the choice of spreading the resources thinly over the entire country or concentrating them on selected areas. The latter generally pays better partly because the concentration of inputs is large enough to produce tangible results and partly because the demonstration value of one thumping success is worth a host of near-misses.

Having devoted a paragraph to dogmatic assertion, it is only fitting to add a plea for more case studies, more *ad hoc* planning tailored to the needs of individual countries and regions within countries, more humility on the part of experts, scientists and economists alike, until they have come to understand not merely their own local problem but also as of equal importance the political and social environment in which their problem is itself embedded. The art and science of development programming are still in their infancy; we must learn as we hurry forward, for the impatience of the peoples brooks no delay.

The immediate goal is to increase the living standards of all the people, rural and urban alike. A more distant goal should probably be added, namely to narrow the income gap between the developing and the developed. Assuredly agriculture can play a part in attaining these goals; indeed, the role of agriculture is crucial in the sense that without appropriate agricultural progress the whole development plan would collapse. Without the solid foundation of a forward-looking, modernizing farm sector, industrial development would fail.

There remains the question whether in the low-income countries pronounced disparities between urban and rural living standards will develop as they did elsewhere. It is too soon to judge. In the earliest stages of industrialization history shows that the greatest poverty of all is likely to be found in the cities; it is rather in the subsequent stages, before general affluence is attained, that the urban outstrip the rural folk in wages and amenities. Only a few developing countries have yet reached this stage, and although some degree of disparity must be reckoned inevitable inasmuch as governments never have sufficient resources to bring every improvement to every citizen at the same time, the lesson of the past and society's distaste for inequalities may enable much of the penalization of rural communities to be avoided.

It is curious to reflect that for several thousand years human society regarded economic and social inequality as both natural and useful.

Civilizations rose and civilizations fell but at any particular moment there were the rich and the poor, the ruling class and the serving class, the powerful and the weak. All that has now changed. As a consequence of the astonishing influence of certain academic scribblers of the eighteenth and nineteenth centuries we are now committed —all of us irrespective of race, colour or creed—to the proposition that all men should be as equal as possible in knowledge, in wealth and in power. It is true that we do not practice what we preach; that would be another matter. But the doctrine is established; indeed, no one who aspired to high office in any party in any country would dare to preach inequality. We are all pledged to try to eliminate it as rapidly and as completely as possible. That explains the constant concern of the politicians with the under-privileged, the propaganda of farm organizations in favour of income parity, the subsidy programmes for remote (mountain) districts and above all the aid and development assistance to the low-income countries. That is why we have been asked to discuss disparities at the next meeting of the International Association of Agricultural Economists.

This sudden switch in one of the basic value-judgements of human beings is certainly a notable event in history. Moreover, having once occurred, it is extraordinarily difficult to imagine a reverse switch. How could the re-creation of inequality be made into a popular, vote-catching appeal? The world will doubtless see many more dictators in all sorts of countries but every one of them will justify his dictatorship as necessary to preserve or increase the equalities among his people. How rapidly we shall progress in implementing equality is hard to say. Some countries are making progress toward economic equality; a few have tried to atomize power; it is more difficult to insist on equality of learning, though this is advocated in numerous quarters.

Because man's mind needs more toys than his stomach and because, therefore, agriculture has to grow less rapidly than other sectors, farmers are fated to be wrestling always with some or other aspects of inequality. The apparent escapes, as when European settlers rejoiced in opening up the prairies, were short-lived. In the developing countries farmers have never yet known anything but grim toil, ill-remunerated. Yet it is fair to believe that already in the advanced countries the situation is changing before our very eyes, that the historians of the future will identify the second half of the twentieth century as the beginning of a new era. The affluent societies appear to be reaching toward patterns of living which more and more blur the distinction between urban and rural, between town and country: the new homes, the motorization, the recreation, the travel. If one is justified in expecting this trend to persist and perhaps intensify, then the farm population of the future could find itself swept into the orbit of a new undifferentiated national community, integrated into affluence. The wheel would have come full circle. As in the olden days town and country were united in poverty, so in the emerging affluent societies they would find union in prosperity; violent disparities would be seen to have been a passing phenomenon that characterized the few centuries of struggling forward from the old to the new.