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POLICIES, PLANNING
AND MANAGEMENT
FOR AGRICULTURAL DEVELOPMENT

PAPERS AND REPORTS

FOURTEENTH
INTERNATIONAL CONFERENCE
OF AGRICULTURAL ECONOMISTS

*Held at the Byelorussian
State University, Minsk, U.S.S.R.*

AUGUST 23rd—SEPTEMBER 2nd 1970

OXFORD
INSTITUTE OF AGRARIAN AFFAIRS
FOR
INTERNATIONAL ASSOCIATION OF AGRICULTURAL
ECONOMISTS
1971

The Agricultural Economist and World Agriculture

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I am very conscious of the honour you have done to me and to FAO in inviting me to give the closing address of this Conference. It is a challenging task. What I shall say is not necessarily the view of FAO.

It seems to me that what I should do is try to exploit my own particular vantage point. I shall, therefore, refrain from re-travelling with you over the ground we have traversed these past ten days. Rather I shall try to look at the vista as a whole, in the hope that such a broad view will heighten our appreciation alike of the main features we have passed and of the route ahead. And what a vista it is that is opened up by the theme 'Economic Policies, Planning, and Management for Agricultural Development—National and International.'

Our discussions have shown the timeliness of this theme. Few topics could have been of greater relevance to the world community in a year which marks the beginning of the United Nations Second Development Decade. Agriculture perhaps as never before is at the centre of the pressures for modernization and development of human life. We seem to be on the verge of a technological revolution in the world's low productivity agricultural systems, which could be one of the greatest blessings for mankind. But it comes at a time when demand for agricultural products may impose the most serious constraint on global output, giving rise to intense conflicts of economic interest between countries and regions. At the same time, in the countries where agricultural productivity is already lowest the rural sectors will have to carry for many decades a burden of population larger than ever before, because of the low rate of labour intake into modern industry. There is the danger in many countries that technological progress may far outstrip social justice, leading to explosive social strains in the rural communities where almost half the world's people live. For world agriculture we are entering a period—perhaps a long one—of unprecedented opportunities and unprecedented contradictions and stresses. At this stage more than ever before, the assessment of a world group of experienced agricultural economists is vitally needed. And as on previous occasions, the International Association of Agricultural Economists has set a topical and significant framework for our deliberations.

The location of this Conference is also of historic significance. The 1958 meeting in Mysore, India, opened a window for the first time for many to see at close range the problems of agricultural change in a developing country. This year we are meeting in a country which has modernized its economy and its agriculture on a different social basis from that of the developed western economies and from that to which most newly developing countries are committed. This Conference is the greatest opportunity so far provided for

the agricultural economists in the rest of the world to compare notes and exchange information with their professional counterparts of the U.S.S.R. and other centrally planned countries. This exchange adds a world dimension to our theme.

In this setting I have taken as the title for my address 'The Agricultural Economist and World Agriculture'. After recalling some of the salient facts about the world's agriculture, I propose to look briefly at the problems of agricultural modernization and international adjustment. These great pressures will strongly interact and the outcome—if change is allowed to proceed as economists would wish—will be a new look for world agriculture and world trade. After this review, in and out of which the subject matter of the Conference moves like a pattern, I should like to consider some research priorities for agricultural economists.

We know that world agriculture embraces a vast heterogeneity of agricultural systems, for the most part nomadic, tribal, pastoral, or peasant agriculture, with a smaller segment of highly-developed, capital-intensive, and mechanized farming, and wide disparities in the levels of income and welfare as between countries and regions. FAO has estimated that in 1965 farming pursuits directly supported about 1,750 million people, or about 52 per cent of the world's population. Of this number, only 8 per cent were in the developed market economy countries and 6 per cent in the U.S.S.R. and eastern Europe. The remaining 86 per cent were in the developing regions, including about 30 per cent in the Asian centrally planned countries. In the developed countries as a group, 18 per cent of their total populations were in agriculture, while in the U.S.S.R. and eastern Europe, the proportion was one third, although I am not sure if the definitions are the same. However, in the developing regions two thirds of the population were in the agricultural sector. These few figures summarize roughly the dramatic differences in the economic status of agriculture in different parts of the world.

Perhaps it is using economic terms too figuratively to refer to this heterogeneity as the world's agricultural sector. World agriculture is a continuous spectrum of states of change from low-productive subsistence farming to highly-productive industrialized crop and livestock raising, producing a wide range of more or less competing products. Since economic life is subject to national action, the relationships between agricultural systems are largely relationships between national economies. These inter-relationships are extremely significant. Thus some 12–15 per cent of the world's farm output is traded between nations, establishing a high degree of international dependence to mutual advantage. Many countries export a much larger proportion of their total farm output, or import a much larger proportion of their basic food supplies. For these, the degree of inter-dependence is correspondingly greater. Moreover, there is a common body of science and technology for world agriculture, although the degree of its application varies widely from country to country. There are few artificial barriers to the spread of scientific knowledge and high-yielding plant and animal stock among the world's farmers. In fact, through international aid special efforts are being made to promote it. Fortunately, there are some real

complementarities in world agriculture in supplying the wants of man. Many are being exploited successfully. Others are being impeded by government policies designed originally to serve other ends.

Nevertheless, I shall continue to speak about world agriculture. Not because I think world government is just round the corner, but because the term indicates the direction in which we must move—it implies the framework of international co-operation without which the transformation of agriculture in all countries of the world will not take place fast enough and in peace. The modernization and adjustment of world agriculture entail reconciling the interests of the nation with the development of the world, with a strong and conscious interest in helping the least developed countries and peoples to exploit their limited possibilities. There are indications that comparative advantages and opportunity costs would in many cases lead to an expansion of their role in meeting the rising world demand for many agricultural products. The economists have, therefore, a vital role to play. Using all the tools in their bag and perhaps some polemics as well where appropriate, they must analyze current policies and seek to promote the relative enlargement of the area of complementarity among nations to mutual advantage.

As economists what we have to do is to study the evolution in the capacity of world agriculture to fulfil its development role. This is to supply the quantity, quality and variety of agricultural products needed to meet the demand of the population, with steadily rising productivity, so as to raise farmers' incomes and to release resources needed for the expansion of non-agricultural growth sectors. Agriculture has to fulfil its role in both the national and the world setting.

When we consider the global output performance of world agriculture over the last twenty years, we must admit it has set records. Between 1950 and 1969 world agricultural production (excluding mainland China and other Asian centrally planned economies) increased at an average rate of 3 per cent a year. This seems to have been more than double the average increase rate over the fifteen years prior to 1950, and it is hard to think of any earlier period in history when world agriculture performed so well for so long. Since the world's population has been increasing by about 2 per cent a year since 1950, we must give the farmers of the world credit for providing a very considerable increase over the last twenty years in the supply of agricultural products per person.

These global figures hide some of the most serious national and international adjustment problems of world agriculture. Most of the credit for the gain in production over population has to go to the industrialized countries. Since 1962 agricultural output in North America, western Europe, eastern Europe and the U.S.S.R. has been growing much faster than the demand for agricultural products in these regions, unless prices were allowed to fall heavily. This is prevented in the case of wheat and dairy products by costly stockholding in North America and western Europe. In the case of sugar and oilseeds, rising developed country production has been saleable only by capturing or protecting a larger share of the world market from developing

country exporters. The production potential of agriculture in North America and western Europe has never been greater. Yet it appears that the further modernization of the sector in these highly industrialized regions will have to proceed without great expansion in overall output.

In the developing regions there are other maladjustments. Farm output, though keeping pace with population growth, has been lagging behind domestic demand, and the deficit has been met mainly from North America. Production of basic foods in the developing regions is still growing much more slowly than demand, although things have been looking better in the Far East recently. However, developing country agriculture faces problems in some other respects also. The long-run trend of coffee and rice output exceeds world demand, and its exportable supplies of other tropical products such as tea, bananas and industrial fibres have been saleable only at falling prices because of pressure on market outlets in developed countries. For all the agricultural raw materials competition from synthetics is intensifying, leading to actual reduction in world demand (as in the case of sisal) or imposing an ever lower price ceiling at which increasing supplies of the natural products can be absorbed. It appears that modernization of agriculture in the developing regions may safely aim at certain output goals, namely increasing the capacity to produce basic foods for domestic consumption, which is growing rapidly, and at progressive cost reduction in fibres and rubber production. However, the capacity to produce tropical products for export will have to be limited overall to the slow growth of import demand in the high income markets.

In world agriculture we can see a geographical sequence in the application of science and technology akin to the geographical spread of industrialization. Those countries who lead the way in the industrial revolution at any time are faced subsequently with the problem of adjusting to the growth of domestic industries in formerly agricultural countries. The cotton textile industry is a case in point, where adjustment policies have been accepted in some older countries, though with extreme reluctance. Similarly the agricultural systems and economies of the scientifically advanced nations will no doubt have to adjust to the progressive modernization of agriculture in other parts of the world, though with equal if not greater reluctance.

The nature of the problem is best illustrated by the world cereals situation. In any scientifically advanced economy which will be by definition a high income country, the agricultural sector is technically capable of very rapid increases in cereals output. But the rate of growth in its domestic demand for cereals is slowed down by a typically low population increase and by the negative income effect on direct use of cereals for food at high personal incomes, although in such a country there is usually a dynamic element in cereals demand for livestock feeding. The technological revolution in cereals production that occurred in North America during and after the war gathered momentum in western Europe in the sixties. The United States introduced restrictions on production, with a considerable degree of success. The present situation is one of confrontation between North America and the EEC in the cereals market. Through the sixties, North America, western Europe, eastern

Europe and the U.S.S.R. have been increasing cereals output at an average annual rate of well over 3 per cent, while according to FAO the projected demand in these regions for cereals in all uses up to 1975 will not be much above 2 per cent a year.

The 'green-revolution' in some developing countries is a further stage in the rising productive capacity of world agriculture. In the Far East, total food production (mainly cereals) over the ten years up to 1966-68 increased by an average of 2.6 per cent a year. For the last three seasons the rate of increase has doubled. Part of this apparent gain is a recovery from the setbacks in 1965 and 1966 but the impact of new technology in a number of countries has also been effective, reducing significantly the cereal import requirements of the region. Within a few years large former deficit countries may be offering cereals for export in competition with the traditional suppliers.

This should be just the beginning of the agricultural revolution in the sub-tropical and tropical zones. Over the last thirty years wheat and rice yields per hectare doubled in the United States. In Mexico where the new tropical high yield varieties were first applied, national wheat yields have almost trebled in fifteen years. But in the great wheat and rice growing countries of South-East Asia, average yields per hectare were still in the mid-sixties about the same as they were in the first decade of this century. But change is afoot and the potential is enormous. The implications are vast, not only for national agriculture in the countries concerned, but for world agriculture—and not only for the grain economy but also livestock. Even if there were no 'green revolution', adjustment would be inevitable. The main question is: where will the adjustments take place? And will they be unilateral or multilateral? Already Canada and Australia have joined the United States in restricting wheat acreage. But some of the highest cost producers are still waiting.

Adjustment is as old as agriculture, and is a necessary feature of economic growth. Generally it means the continuous process by which supply and demand adjust to each other through changes in market prices, which clear the market at any time and allocate or re-allocate resources in further production. However, neither farmers nor governments in high income or low-income countries, are today prepared to accept the price and income results of adjustment between supply and demand achieved only through the operation of the market. Therefore, we live in an era of national adjustment policies for agriculture, including the adaptation of structure to better exploit available science and technology, at least in the industrialized countries. Their national policies have aimed at raising productivity and thus the level of farm output and income, at expanding exports and limiting imports to enlarge the markets for the farmers of the country concerned, and at stabilizing or, in western industrialized countries, raising, producer prices and incomes. The context of such measures is provided by legitimate national development issues such as rural prosperity or stagnation, the contribution of agriculture to balance of payments, the transfer of labour from agriculture to other sectors and the relative levels of farm and non-farm incomes.

The problem for world agriculture arises from the fact that the impact of national adjustment policies is not necessarily confined within the borders of the country concerned. Indeed, the export markets of other countries may be affected to such an extent as to influence their prospects for economic growth. When a large number of countries, wealthy enough to protect and subsidize their own agriculture both at home and in export markets, all pursue similar types of national adjustment policies, the external impact can become the dominant factor in world markets for a large number of agricultural products. This is the current situation for most of the agricultural products grown in the temperate zones of the world where the richest countries are to be found. The products include many of those which I just mentioned—all the cereals—wheat, rice and coarse grains—sugar, dairy products, citrus fruit, oils and fats to some extent, plus meat. When such policies result in imbalances in any commodity market at world level, the rigidities of agricultural protectionism force the adjustment largely upon the exporting countries, regardless of where comparative advantages lie as between exporters and importers. The prevalence of subsidies and other aids to exports thrusts the burden of adjustment on the poorer or more vulnerable exporters who cannot afford such subsidies or aids. Thus, competitiveness in agricultural exports is now coming to mean for many of these products the ability to compete in the provision of export aids, or for those countries who cannot do this, the ability to accept low farm prices and farm incomes in order to maintain their export supplies on world markets. The location of production adjustments as imposed by these forces is bound to lead to economic losses for the world as a whole, because agricultural resource utilization becomes less productive than it need be, and consumers have to pay more than they need. It is widely believed that the national adjustments that have been made in the last one or two decades have reduced rather than improved the efficiency of world agriculture as regards resource allocation.

The simultaneous attempts of many industrialized countries in recent years to export their problem of agricultural adjustment have led to a growing realization of the need for international adjustment policies. The aim must surely be, not only to harmonize national policies in the short run, but to encourage the continuing gradual transformation of world agriculture, towards a pattern of more economically rational utilization of the agricultural resources of all countries for more balanced national and world development. In this area, the world community has so far had few successes, and the political drive in this direction has so far been weak, partly because of the important economic, social and political role of the agricultural sector even in countries where it is relatively very small, and partly no doubt because export opportunities of some kind always seem to have turned up, at least temporarily.

What are the possible approaches to better international adjustment? Individual commodity agreements have played a useful role in establishing a negotiated international framework of agreed prices and/or export/import quotas for trade in their respective products. However, few such commodity agreements have been negotiated, and only in one case, the Coffee Agree-

ment, have the interested governments agreed on national production goals designed to bring supply into line with demand at the agreed price levels, and provided financial and technical arrangements for the national diversification programmes needed. The Coffee Agreement seems to be the first viable international adjustment agreement in the agricultural sector. The historic attempt in the GATT Kennedy Round to negotiate agreed adjustments of national policies for some major temperate zone products failed at the last minute. There is scope for more individual commodity agreements, and this approach must be continued and improved. Even the regular exchange of information on national policies in commodity study groups is helpful. It would seem, however, that the individual commodity approach, though indispensable, may not be sufficient on its own because of its narrow impact, to bring about the required international adjustments of world agriculture.

Can we therefore envisage the simultaneous or co-ordinated negotiation of commodity agreements on the major agricultural products traded between nations? Periodic re-negotiations would provide the opportunity for changing the international pattern of supplies to take account of changes in comparative advantage. It appears, however, that the complexity of the negotiation and re-negotiation of a network of inter-dependent commodity agreements would be sufficient to rule out such an approach. This does not mean that the negotiation of balanced moves of trade liberalization for agricultural products under the GATT would not be an extremely valuable step forward. The GATT seems to be moving towards another comprehensive round of trade negotiations giving much more priority to agricultural products, and we must wish it well.

An alternative might be to focus international action on the national agricultural or commodity policies themselves, rather than on the operation of a large number of commodity markets. This approach could begin only with the negotiation among the governments mainly concerned of an agreed set of long-term principles or guidelines for national agricultural policies, with a view, say, to setting limits on national self-sufficiency ratios, as Sweden has done unilaterally, or on the amount of protection permissible in the long run. Acceptance would entail a national undertaking to limit production expansion or to reduce protection gradually over a period of years until the agreed limit was reached. Attempts to limit protection would mean measuring according to some agreed conventions the extent of protection currently afforded to agriculture in various forms, and establishing agreed definitions of forms of support to be limited. It would also mean establishing an inter-governmental forum to review regularly the implementation of the agreed norms and to allow discussion of complaints from countries which considered some policy measures or changes in a particular country to be not in accordance with the agreed principles. This type of approach is not new. It shows promise of success in controlling competition among donor countries in the more limited area of food aid transactions, through observance of the FAO Principles of Surplus Disposal negotiated in 1954 and updated in 1969, and with the aid of a 'watch-dog' committee of governments which meets regularly in Washington. The negotiation and observance of a similar inter-

national code of behaviour in the field of national agricultural policies would gradually improve the international pattern of resource use in world agriculture, and smooth the development path for many nations, but the difficulties in the way are very great indeed. This is because of the rigidity of the national agricultural structures which impose that change must be gradual. Governments, moreover, tend to take a short-term view and are naturally reluctant to make commitments for the long term, especially if the changes needed may directly affect the future of the existing rural population.

It is bound to be a slow process. Nevertheless, we believe in FAO that we can see small but hopeful signs of a political will to talk about international agricultural adjustment. In fact, our governing body has put the subject on the agenda of the next session of our Committee on Commodity Problems, and we have prepared a short analysis pointing toward the possible role of FAO. Now may be a favourable time for economists to go more thoroughly into this whole question, to illuminate the issues and choices. Some quite new thinking is needed.

The adjustment problems which affect developing countries exporting tropical products mainly to industrialized countries, are no less difficult. For some time to come these problems might be adequately handled if it were possible to negotiate international commodity arrangements on more of these products embodying production quota and diversification features akin to those of the Coffee Agreement. There are problems of distributing quotas among countries at different stages of development, revising them periodically in the light of productivity developments, and maintaining discipline. The failure to negotiate an agreement on cocoa after some fifteen years of effort shows that the difficulties should not be under-estimated.

As I mentioned earlier, the requirements of national and international adjustment complicate the process of modernization of agriculture. For modernization is an imperative, in all regions of the world. It would appear that a modern agricultural sector, excluding all agri-business elements, does not need to be larger than five to ten per cent of the national labour force. In a food importing country the ratio may be even smaller, e.g. 3.7 per cent in the United Kingdom, and somewhat higher in an agricultural exporting country e.g. 13 per cent in New Zealand. With 52 per cent of world population still in agriculture, the world agricultural sector as a whole has reached a level of productivity perhaps comparable with that of continental Europe around 1880–1890. The developing countries have very far to go, with 60–80 per cent of their people still on the land. But in many countries of western and eastern Europe, too, which have 20–40 per cent of their workers in farming, further modernization of the sector is currently being planned and implemented.

It is not hard to see the shape of things to come in the industrialized western countries. The application of advances in all branches of agricultural science and technology will speed up in these countries. Family farms will continue to become larger and fewer, more farm units will become virtually integrated with processing and distributing firms, and the sheer size of farms

in eastern Europe and the U.S.S.R. may become the envy of some other European countries, as a favourable framework for faster productivity developments. Agriculture in the West will become organized more and more like industry. But the requirement of better adjustment to both national and world development could well determine that this far-reaching modernization process in western industrialized countries must go on without significant increase in total farm output as I mentioned earlier. More emphasis will therefore be placed on policies for reducing costs per unit of output, for speeding the exit of agricultural workers to other sectors and for promoting non-farming uses of land. The major possible exception could be greatly increased farm production in Great Britain and Ireland if these areas were to be admitted to the Common Market with their farmers enjoying producer prices at levels now current in the Community. If the tremendous momentum of agricultural productivity in the industrialized countries generally could not be restrained—and the experience of the United States shows how difficult it is—the trade tensions among these countries would rise, and all countries producing temperate zone products would be even more strongly under pressure to adjust their agricultural systems to their national markets. This, it seems to me, is one of the greatest dangers facing world agriculture during the seventies. Such a trend gathers momentum affects more and more countries, and would become increasingly difficult to reverse.

In most newly developing countries, as I also mentioned above, the domestic markets for basic farm products are unlikely to impose constraints on the agricultural modernization process for some time to come. The immediate constraint will be imposed by the need to maximize employment in the rural sector, forcing a compromise with productivity and income growth per head in countries with a high man-land ratio. The social implications could be immense. These pressures could result in the adoption of national policies to control many possible applications of mechanical power in agriculture for several decades, except under special circumstances. It seems that the policy emphasis in such countries will have to be on labour intensive forms of production and capital formation, not in agriculture only, but in the whole economy. Can agriculture be expected to carry the burden of rapid population increase for the whole nation? It is hard to see much alternative in countries with relatively small industrial sectors, unless completely new policies and measures are devised. Social policies may have to be given priority over economic policies in many instances.

If employment promoting forms of production and capital formation in rural and urban development lag behind the rise in numbers not otherwise employed, and if social and agrarian reforms are too slow the inequality of incomes in developing countries could come to impose a serious constraint from the demand side on agricultural growth. In some countries this constraint may already be limiting the expansion of farming.

If to the constraints of unemployment and in some cases restricted domestic demand must be added the constraint of stagnant or reduced overseas demand for the products which compete with temperate zone agriculture, the prospects for agricultural modernization in the developing

regions are grim indeed. The danger here is not just to world agriculture but to society as it exists in a large segment of the world.

This analysis brings out what a great boon it will be to many developing countries when it is possible for the U.S.S.R. and eastern Europe to open up their great reserve of demand for some tropical products—cocoa, coffee, bananas, citrus—more rapidly than they are able to do at present.

It is time to return to the role of the agricultural economist, whether policy-maker, administrator, teacher, journalist, analyst or researcher. With special reference to the viewpoint which I have taken, I want to identify areas and issues which in my judgement qualify for the urgent attention of agricultural economists, whatever their bent.

- (1) The role of agriculture in economic development at different stages of economic growth. There have been some good general studies in recent years. We need now to throw into the analysis of this subject the vast amount of national data broken down by sector being accumulated by the United Nations, FAO and ILO on national accounts, population, labour force, sectoral employment, incomes and income distribution, and food consumption, to clarify the relationships between agriculture and other sectors empirically in national economies of all types, and come up with comparative studies, which will help the policy makers in developed, centrally planned and developing countries alike, to identify the types of agricultural sector programmes which should have priority at different stages of economic development in today's world. Human and social viewpoints need to be much more strongly brought to bear in this type of analysis than has been the case so far.
- (2) Approaches to international agricultural adjustment. This, as we have seen, is a very difficult area where more economic analysis is needed—not just the application of trade theory but the economic analysis of national adjustment policies of the last twenty years in a global development context, and the discussion of alternatives. Part of this subject would be the measurement and analysis of agricultural protection as a first step towards the critical appraisal of economic and social criteria for the international location of marginal increases in production of some major commodities, with a few case studies. For expanding trade among developing nations interesting initiatives for more integrated development among neighbouring countries are being taken in all continents. This type of framework for regional and sub-regional agricultural adjustment should have more attention from economists.
- (3) Agricultural adjustment policies in the high income countries. It seems that reliance on indiscriminate price supports and a closed border is now outmoded. Policies favouring higher productivity need to be supplemented with policies designed to integrate agriculture with the major objectives of national economic growth, as well as taking account of world economic factors. What are the economic implications of present policies? What are the detailed, concrete

obstacles to alternative agricultural policies, from the viewpoints of national and world development?

- (4) More facts about the agricultural sector in low income countries, its functioning and its problems. More micro-studies and national evaluations are still needed. Patterns of input and output in different farming systems; incomes and income distribution; distribution of food consumption; production and marketing systems and bottlenecks; sociological incentives and inhibitors of change; farm and village surveys on a regular observation basis, geared to planning and development and the formulation of policies. Here again, human and social as well as economic viewpoints should be more strongly brought to bear. As regards development policies, I believe more planning for regions within countries will be necessary, and relevant studies presented to this Conference need to be followed up.
- (5) Employment policies for developing countries. This is clearly a top priority area for factual research in the field, and for national assessments and projections by sub-regions or main farming systems of each country, and formulation and analysis of alternative policies, on a national scale commensurate with the problem. In countries where the green revolution gives a rapid increase in cereal supplies, can we not envisage in national development plans a major expansion in labour intensive public works projects, to be financed largely by foodgrains purchased commercially from local farmers?
- (6) Livestock raising in developing countries. In most developing countries the effective demand for livestock products is unsatisfied and imports are regulated. Since livestock raising could be labour-intensive under suitable policy measures, would utilize cereals which could become available at favourable price ratios, and the world market is short of meat, more analysis of the obstacles to a faster expansion of this industry in developing regions is merited.

In many of the above subject areas I am hoping to see FAO develop some new research soon, following up the Indicative World Plan for Agricultural Development published by FAO last year. I also hope that we can establish closer co-operation with agricultural economists in universities and institutes in all regions who are interested in research in these fields.

In all these areas of research we must look as economists at present policies, planning and management for agricultural development, national and international, as this Conference has urged us to do. If my review is correct, the plans of individual farmers for private gain and of nations for national goals may have to be tempered respectively by national and international adjustment considerations. This means policy interventions and the formulation of measures and instruments. Matched against the severity of some of the national and international problems of agricultural development that can now be foreseen, existing policies and existing instruments of policy often appear inadequate. We have a responsibility to apply our analysis.

It is fitting that we should think of these things here in the U.S.S.R. which, by hosting this Conference, has opened for us a door to experience

and knowledge in a vast segment of world agriculture, about which most of us have hitherto known so little. Our thought has been tremendously stimulated, and we are grateful. But the dialogue has just begun. On all sides we have brought with us our philosophies of development, our concepts of production and distribution and our definitions. They are not the same. During this Conference we have made great progress in communication. All are willing and anxious to go on from here, to absorb fully into the body of world agricultural economic knowledge the special experience we can all put together to make it fully available for agricultural development policy formulation in all regions of the world. I very much hope that our Association and our generous hosts can keep working together to this end.

So now let us go back to our homes and to our work. It is true that we as economists cannot take the decisions which will change the world. But can we not, through research, analysis and better communication with the public, illuminate the choices which are made daily and educate and inform the opinion to which policy makers must respond? I believe we can attempt no less.