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MARKET STRUCTURE FOR AGRICULTURAL DEVELOPMENT

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THE invitation for this paper specified that it would be desirable to give special emphasis to steps which should be taken to develop up-to-date marketing systems within countries which had to start from a primitive, almost wholly local, market structure. This means that I must resort to a primarily *a priori* approach. My own experience is limited wholly to the United States of America, supplemented only by some acquaintance with the difficulties which the Food and Agriculture Organization has had in developing technical assistance work in the marketing field.

You may argue that this lack of personal experience in improving marketing systems could or should have been offset by more extensive reading on my part. Perhaps so; but I am not aware of any large body of especially helpful literature dealing with the subject. Fortunately, however, I understand that a paper for the Conference is merely the starting-point for a discussion so that there is always the pleasing possibility, especially for the discussants, that the more mistakes and difficulties I run into, the more rough edges there will be to challenge the abilities of and evoke comment from the rest of the group. This, then, brings me to the disadvantages under which not only I, but perhaps all of us, labour with respect to this particular subject.

These include:

1. *Agricultural marketing* is a broad field. In the United States we use the term to cover all the events which take place in moving products from the initial producer to the final consumer, embracing the activities of all the firms and institutions which make the necessary decisions and carry out the actual economic and physical operations involved. All too often our discussions centre on some portion of this total process or structure rather than on the whole.

2. The general theory of economic development is still relatively new and some of those who talk most about it seem to feel that there are only slight or secondary connexions between agriculture and

[1] In the absence of Dr. Wells his paper was read by Dr. H. C. Trelogan.

economic development as such.[1] Yet many of the under-developed countries are almost wholly agricultural and there is in fact no other point from which to start.[2]

3. There are more obvious economic conflicts in the agricultural marketing field than almost anywhere else. The farmer wants as much for his produce as possible; the trade wants to maximize profits; the consumer wants food and clothing at the least possible cost; while in many cases the Government itself wants price and marketing arrangements so worked out as to contribute best to general economic development. The relative bargaining power of these various interests, including the political and institutional strengths, is always a real, often the controlling, factor in retarding or speeding up marketing improvement.

4. The short-run demand especially for food, as well as for agricultural products generally, in the international markets of the world is often relatively inelastic. This should be true also within the domestic market areas of most under-developed countries unless there is enough economic progress to provide increasing *per caput* incomes (in which case the demand for food and also, I think, clothing should shift to the elastic side). In short, it is always easier to change market structure or increase efficiency of marketing processes as the volume of product handled is increased.

5. The market structure in many countries, including many so-called under-developed countries, is often mixed—that is, for a few commodities or in certain limited areas marketing conditions may be

[1] This observation does not of course apply to W. W. Rostow who assigns a strong role to agricultural development as a necessary pre-condition for what he calls the *take-off* stage. As he indicates, '. . . revolutionary changes in agricultural productivity are an essential condition for successful take-off; for modernization of a society increases radically its bill for agricultural products. . . . There are, in fact, three distinct major roles agriculture must play in the transitional process between a traditional society and a successful take-off. . . . First, agriculture must supply more food. . . . But this is not all. Agriculture may enter the picture in a related but quite distinctive way, from the side of demand as well as supply . . . the modern sector can—and often should—be built in part on items of capital for agriculture: farm machinery, chemical fertilizers, diesel pumps, &c. . . . And there is a third distinctive role for agriculture in the transitional period which goes beyond its functions in supplying resources, effective demand or tax revenues: agriculture must yield up a substantial part of its surplus income to the modern sector. . . . [That is,] Agriculture must supply expanded food, expanded markets, and an expanded supply of loanable funds to the modern sector.' (W. W. Rostow, *The Stages of Economic Growth.* Fourth printing, January 1961. Cambridge University Press. Pp. 8–24.)

[2] I am aware, of course, that outside aid or foreign investment, either in the terms of food supplies or actual financial aid, can be and often is used as means for speeding up economic development in under-developed countries. But it still seems to me, considering the kind of countries with which we are here concerned, that indigenous agricultural improvement is imperative, both in terms of production and marketing, if the target is sustained economic development over any extended period.

anywhere from fair to excellent; while for others, perhaps for most commodities and in most areas, conditions may be quite primitive. These better organized, more efficient sectors of the marketing system, however, are often associated with a specialized, plantation-type agriculture which is not the pattern toward which most under-developed countries want to work.

6. Many of the conditions prerequisite to market improvement lie outside the marketing field itself. In short, we are dealing with a circular, or more precisely we hope, an *ascending spiral* process which involves not only the producing and market structure for agriculture but also the entire process of economic development.

Having outlined some of the difficulties that lie in the way of changing market structure in such a way as to maximize contributions to agriculture and economic development generally, we may now turn to the simple standard prescription for market improvement.

The first essential *for the development of an adequate or satisfactory agricultural market structure* is that the farmers of an area or a nation produce substantially more than they can themselves consume. This simply restates the second and sixth points above—that is, marketing is only a part of the process of agricultural development. The second essential has to do with transport. Even though an area may produce in excess of its needs, this excess cannot be marketed to advantage unless roads or other means of transport are available so that the product can be moved where it is needed. The third essential is storage. This generally involves facilities at the producer level, facilities for the storage of the produce in transit from deficit to surplus areas, and facilities within the surplus-consuming areas themselves. In fact, the storage system parallels the transport system. Transport distributes supplies over space, storage over time. The fourth essential is efficient handling practices. These are affected of course not only by technical possibilities but also by irregularity of movement, the volume handled, and the extent to which political and institutional factors force the acceptance of certain non-economic considerations within the system.

What is in fact a part of the problem of handling products, though generally regarded as a separate factor which we may consider the fifth essential, are adequate weight and grade standards. Obviously, any systematic and efficient handling system needs standardized methods when determining units in which the commodity is traded and in even the most primitive marketing system grades or differences in quality must be recognized. The sixth essential has to do with information. That is, it is essential that both buyers and sellers have about equal access to relatively reliable market information if the pricing and trading system is to work well. The seventh essential is a readily available, relatively low-cost supply of credit. Rarely, if ever, can an efficient market structure be developed on a wholly cash basis. The availability of and terms on which credit can be obtained become quite important.

One more block might be added to the above set of essentials, which I have in fact abstracted from J. C. Abbott's very excellent 'FAO Marketing Guide No. 1'.[1] The market problem in most under-developed countries starts with a large number of smallholders, not too well organized. Further, farmers the world over usually spend so much time in actual labour on the production side that they have relatively little time to spend on the market side, while the amount which each individual has to sell, even in the commercial farming areas of the more developed countries, is so small that the offering or withholding of it has little appreciable price effect. This means that agricultural producers generally have less bargaining power than most of those with whom they must deal. On the other hand, if farm returns are to offer the appropriate incentive for increased production as well as to allow farm families rising standards of living, ways and means must usually be found for strengthening the farmers' bargaining position, either through co-operative action or through programmes (regulatory, price support, &c.) administered by government.

If the elements of an adequate marketing system are so simple, with also a substantial amount of abstract agreement as to how they should be combined, why, then, do so many countries find the marketing problem so difficult?

This brings us to the question of motivation—of how a job actually gets done amid a welter of conflicting interests. And at this point let me say that I doubt if the problem of altering the marketing structure or introducing new efficiencies is any more difficult in under-developed countries than in the stronger or more fully developed countries. Perhaps I should also add that I use the term 'efficient' to mean the moving of products from producers to consumers at minimum cost, with due allowance for the various services which the marketing system adds to the original commodity, assum-

[1] J. C. Abbott, *Marketing Problems and Improvement Programs, FAO Marketing Guide No. 1*. Rome, Italy: Food and Agriculture Organization of the United Nations, 1958.

ing that the real essence of economic development lies in raising the standard of living of consumers generally rather than in maximizing gains to any one particular group.

Consider the classic situation: an area characterized by a subsistence, village-type agriculture, with the several villages connected only by crude roads or in many cases nothing more than foot trails; with all credit coming from moneylenders at high rates of interest; with production methods largely determined by custom, and the amount produced by any smallholder, assuming normal yields, hardly more than sufficient for himself and his family; and with storage facilities almost wholly limited to what the producer can keep in his own house or shed.

It is not too difficult for the average market expert to write a series of recommendations for such an area. Obviously, there need to be roads; storage facilities, probably brought about through co-operative action; lower-cost credit; any product which is to be sold should be cleaned and handled in such a way as to allow at least some degree of grading and standardization; and the farmers in the area or their community and co-operative leaders need to be informed as to supplies, prices, and marketing conditions in the area to which their product is to be moved. Simply writing such a report does not get the job done. As someone has said, in putting such a plan into operation 'there will be need for clear, forthright policy decisions, followed by vigorous administration and programme action which will unite the village people and the servants of the government in a common cause'.

There is a current, carefully designed project in this field which illustrates what I have been trying to say and which I think all of us will want to watch. This is the Intensive Agricultural Development Programme which is being jointly launched in a number of pilot districts in India through the co-operative action of the Central Government, the State Governments, and the Ford Foundation. As I understand it, this programme will simultaneously provide:

1. Adequate and timely supplies of production requisites such as seed, fertilizers, implements, pesticides, &c., through the co-operatives.
2. Adequate and timely supply of credit to enable the farmers to purchase the full supplies available. This will be based on the production plans formulated for the participating farmers, and will be made available through strengthened co-operative societies and with the co-operation of the Reserve Bank of India.

3. Marketing arrangements and other services through co-operatives so that the farmers can get a fuller value for all their surplus produce, enabling them to repay the production loans taken through the co-operatives.
4. Intensive education of farmers in better farming techniques through such media as scientific demonstrations. Specially trained staff will assist in this work as in preparing production plans.
5. The strengthening of transport arrangements to ensure the mobility of staff and supplies.
6. Increasing the number of godowns [small storage facilities] from one to ten per block, on an average, to provide supplies and marketing facilities within bullock-cart distance.

I call your attention to the fact that this programme starts with an effort to increase production substantially through adequate and timely supplies of requisites, coupled with an intensive educational effort directed towards better farming techniques. Credit will be provided through co-operative societies, but in co-operation with the Government's Reserve Bank. Special attention is to be directed towards transport arrangements and there is to be a tenfold increase in storage facilities per block. We are dealing here with a country which is far enough along in the development process to believe that the need, or market, for additional food is sufficient to underwrite an autonomous effort to see that production is increased. The programme quite obviously expects to lean heavily on co-operative effort at the local or village level. I further understand that some support or guaranteed commodity price arrangements will accompany this district programme so as to assure farmers of at least minimum returns for their increased effort.

It seems to me that the initial shock or disturbance which leads to a desire for market improvement can originate in either of two areas. That is, it can originate in the need for additional food on the part of consumers—this appears to be the case in India—or, as was the case in the United States, it can originate from the fact that farmers themselves for one reason or another increase production to where they must search for an outside market. In either case, however, the essential marketing mechanism is much the same, with the lines of action divided between those that can most appropriately be carried out by farmers and the private trade, by co-operatives (usually farmer co-operatives), or with the assistance of government.

Farmers and business men, once they find themselves part of a developing economy, can do much of what must be done. But government action is also imperative. Even in the United States of America, we developed our transport arrangements through government encouragement or, in many cases, direct government action; our grades and standards, as well as the regulatory rules of one kind or another which assure fair market practices, are administered by the Government; our statistical information, as well as an extensive research and educational system, is government-sponsored; and credit supplies were never freely available to most farmers on favourable terms until the Government underwrote the organization of our co-operative farm credit system.

In conclusion, I have said that the essentials of a good market structure are easy to understand. We want to improve transport, storage, communication, and information, while at the same time supplying credit and standardizing quality so that what, under simpler conditions, was a series of loosely connected local markets, becomes a true national market. I have also endeavoured to suggest some of the difficulties. Producers and producer co-operatives, the processing and handling trade, and the Government must find specific places to take hold, specific ways to motivate change. Above all, there has to be something to market. Simply organizing a co-operative, for example, in an area where there is not enough surplus above local subsistence needs to justify the necessary marketing facilities and some specialization on the part of the marketing personnel will not do the job. Announcing government grades and standards which are not used or regulations which are not enforced will not do the job. I have tried to indicate that market improvement is only a part of the process by which agriculture contributes to the end process in which we are all so much interested, economic development.

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The first of a few random comments I should like to make relates to Dr. Wells's statement that there needs to be a supply of a commodity before you can successfully establish a market. It is also true that production may be forthcoming if and when market opportunities are provided, but advanced surveys indicating that this potential is available are certainly necessary before you can afford to invest in the market facilities. Specific plans may need to be supported in some instances with earnest money or with enforceable contracts to assure co-operation when an enterprise is initiated on this basis.

I should like to re-emphasize Dr. Wells's point that agricultural marketing is a broad field. On the basis of the United States' experience, one might be tempted to say it is of almost unlimited dimensions. Although it may be true that there is some limit to the size of the human stomach which puts some upper limits on the food market, there appears to be no limit to the demand for services that go along with the food. While this sector of the economy may be regarded as relatively small, it has enormous possibilities for growth, both absolutely and as a part of the agricultural economy, in primitive conditions or in less fully developed countries. Folks often assume that in less advanced circumstances markets can be found for all production so long as people are hungry. This cannot be taken for granted, however, as no such assumption is valid without due consideration of the time, the place, and the form associated with the food. Good fortune in production, i.e. bountiful crops, without adequate planning for its disposal, leads to waste and disappointment. These are luxuries that can be ill afforded if economic growth is the objective.

In many instances market places and facilities are changed very infrequently. In many urban centres they have lasted for centuries, even though technologies and methods have changed very radically. For example, we find markets in the same locations, with the same narrow streets, using the same decrepit buildings (often original buildings), despite the fact that we have shifted from ox-carts to horse-drawn wagons, to railroads, to trucks, and now to huge trailer trucks. Markets deserve good planning to guard against early obsolescence. Similarly, the economic structures of agricultural markets have a durability of form and organization. They too require tremendous unified effort and investment to obtain changes which will enable them to make their contribution to progress. The marketing phases of agriculture certainly merit attention in any plans for economic growth.

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Dr. Wells's paper is comprehensive. He points to the major marketing problems in most less developed countries with which I am familiar. I share his opinion concerning the difficulties of adjusting market structures to maximize their contribution to agriculture and general economic development, and I fully agree on the essentials which he mentions for the development of an adequate or satisfactory agricultural market structure. It is also certain that to achieve a sound and progressive market structure needs integrated programmes through the joint efforts of producers, trade agencies, processers, agricultural economists, and government. I wish to point out two controversial problems in the field of marketing which need more deliberation by marketing experts and agricultural economists.

The first raises the question 'Is it desirable to eliminate the traditional middlemen from part or all of the marketing activities?' Many but not all countries seem to find it desirable to do so as they intend to maximize the returns to the producer and to minimize the retail price to the consumer. Greater government participation is one approach while increased vertical integration of marketing co-operatives is another. When properly operated, these agencies can reduce marketing costs and demand a reasonable charge for their services. But, if they are to replace all or most of the traditional middlemen, they will tend to be monopolistic because of inadequate competition. They also may become bureaucratic owing to a lack of the spirit of private enterprise. On the other hand, many middlemen market farm products at reasonable charges. They are not as bad as a number of farmers and consumers think them to be. Therefore, it seems more desirable to maintain sufficient competition between private traders and state-sponsored co-operatives and enterprises rather than to do away with them. Whether the middleman should be eliminated or not is better answered perhaps by evaluating his services against his share of the consumer's dollar as profit than by the mere fact of his being private. However, such traditional intermediaries as the notorious money-lender merchants who are prevalent in less well developed countries should be eliminated because they obviously take an undue share of the consumer's dollar. Some alternative credit facilities such as co-operatives or state credit institutions have to be strengthened to replace them, lest the farmers' credit problem become even more serious than before. It is usually considered by many economists that the existence of a large number of middlemen in a marketing channel is an indication of over-all inefficiency. But more recently, as pointed out by Dr. J. C. Abbott, the criticism has taken a new turn with the reiteration of the classical dictum that a large number of middlemen in a marketing channel indicates that their role is suited to the conditions of that particular market. The optimum size of such a group can be determined only in relation to the functions they are required to perform and the techniques they use.

My second problem is, 'What is the proper and desirable way to reduce marketing costs and margins and to what extent?' Marketing margins are generally regarded by both producers and consumers as costs. But some elements of cost are usually someone else's income; therefore, the marketing margin includes the cost of performing various necessary functions plus the income to the intermediaries concerned. Theoretically the income, better termed the residual profit, to each intermediary is not larger than that needed to keep him in his line of business. However, pure competition is not general in marketing, and lack of competition may have an important bearing on marketing efficiency and costs. For the benefit of producers and consumers as well as intermediaries there is no doubt that marketing costs should be reduced as much as possible. The question is, what is the proper and desirable way to achieve it? Of course, providing adequate marketing facilities, developing technological improvements in the physical handling of commodities, and adopting more efficient management techniques, are all essential. In addition, we have to look into existing systems to find out whether there is some overlapping in marketing functions or unnecessary services rendered by trade agencies at different levels. If there are, then ways should be devised to prevent them. In determining what services are unnecessary, the desire of consumers for certain services should be carefully considered. Generally, the marketing margin in farm products in highly advanced countries is much larger than in less fully developed countries because of the additional costs involved in packing and processing. This cannot be regarded as unnecessary since consumers want them. The proper way to reduce the profits of marketing agencies includes the reduction of possible risks in marketing, the modification of imperfect competition, and the maintenance of optimum size and volume of business per marketing agency. Furthermore, specialization may be adopted in those countries where there are considerable marketable surpluses. But wherever subsistence farming prevails, it seems advisable to encourage the trade agencies to undertake more or even all marketing functions in order to upgrade the quality of the marketed commodities, to enlarge the size of business, and to reduce the number of unnecessary transactions.

Finally, I should like to say a few words about price support and stabilization in relation to market structure. Dr. Wells did mention this in his paper when he referred to the Intensified Agricultural Development Programme of India. Price fluctuations are common to all commodities, but are more apparent in the case of farm products. This is attributed to the fact that while the demand for most farm products is relatively inelastic, their production is greatly affected by weather conditions which are still beyond control. If these price fluctuations are unreasonably excessive, they are harmful to producer, consumer, and trader, and they also jeopardize the progress of the over-all development. Price fluctuations are particularly severe in less well developed countries because most producers are forced to sell immediately after or even before the harvest to meet living expenses or to repay debts. Prevention of extensive fluctuations necessitates effective price support and stabilization measures. In most advanced countries these measures are adequate. But in less developed countries, as mentioned in the Report of the F.A.O./E.C.A.F.E. Centre, *Policies to Support and Stabilize Agricultural Prices and Incomes in Asia and Far East*, these measures are inevitably limited because the large sustained transfer payments from other sectors of the economy to agriculture, such as occurs in industrialized countries, are ruled out both by the general low level of income and the larger size of the agricultural sector. In the last few years, however, there have been some signs in these countries of placing greater emphasis on providing producers with price incentives or at least worthwhile guarantees. Such emphasis is usually centred on the prevention of post-harvest falls and pre-harvest rises by building buffer stocks, carrying out market operations, and undertaking imports and exports. Price support and stabilization not only reduce the risks of trade agencies in marketing operation but also provide a favourable economic and social climate for the expansion of agricultural production. This is highly desirable and is being undertaken in most of the developing countries.

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Dr. Wells has surveyed many important economic aspects of marketing. Yet, in the end he has fallen into the mistake of confusing technical and economic criteria. For example, when he refers to the need to minimize costs it appears that he is referring to accounting costs and not opportunity costs. There may be very many cases where, in the interest of an economic allocation of resources throughout the economy, you do not minimize accounting costs in agricultural marketing. And, in this context, I think he has accepted somewhat uncritically the detailed institutional arrangements which are to be used in the intensive agricultural district programmes in India. He has left untouched some of the myths and some of the exaggerations of agricultural marketing-policy doctrine now current in under-developed countries.

First there is the myth that the free market can do no wrong or not very much wrong. We have talked about that and I propose to say no more about it except implicitly. In opposition there is the other view, that the competitive private enterprise system can do no right or almost no right. And this is what I wish to talk about in three contexts. First, in relation to the merchant money-lender, secondly, in relation to the foreign merchant firms that often operate in under-developed countries (these may be Chinese, Indian, Levantine, British, American, or French; or they may be Africans trading in countries outside their own in Africa), thirdly, the role of co-operatives.

I would not deny that on many occasions the money-lender merchants and expatriate marketing firms can do considerable harm. For example, money-lender merchants using strong bargaining positions can reduce competition in marketing and perpetuate un-economic technical inefficiency. Or again, so far as foreign firms are concerned, periodic collusion before the Second World War in the African palm-oil, ground-nut, and cocoa trades was not entirely creditable, to say the least. And as for co-operatives, I would not deny the advantage of the selective subsidization of marketing co-operatives in order to provide countervailing power where it is needed. On occasions I have advocated such selective short-term subsidization. But I do not believe that all the charges against the merchant money-lender or the expatriate marketing firm can be substantiated, nor that the strong faith in co-operatives can be supported by experience. To begin with, there is a great deal of literature, often political in origin, about the merchant money-lender, especially if he is a foreign merchant money-lender. (This is not only a problem of the modern world but a problem of the fourteenth and fifteenth centuries in Britain. The foreign merchants there were very un-popular although they were doing a good economic job.) Scientific inquiries into the activities of these money-lender merchants often paint pictures which are more favourable to them as, for example, the recent study by Miss Barbara Ward and, to some extent, that of Mr. John Bevan in Malaya. Then, consider expatriate marketing firms, whether they be such as the big and hated United Fruit Company or the Ghanean marketing women operating in the Ivory Coast. First, they frequently commit the political sin of being most efficient. Again you can see this in the medieval economic history of, say, Britain. Or, to give a more up-to-date and therefore more relevant example, in 1958 the Ghanean marketing women engaged in the dried-fish trade in the Ivory Coast were forced out of the country—they were expelled. They were certainly more efficient than the indigenous market women. This, I think, was the basic cause of their expulsion from the Ivory Coast. Secondly, temporary monopoly positions are often prerequisites of economic efficiency in trades in which there is great economic uncertainty. I stress the word temporary. Anyone prepared to damn that proposition should consult that famous work of Joseph Schumpeter, *Capitalism, Socialism, and Democracy*. Thirdly, there is often guilt by association. Many of these expatriate firms are seen as the core of instability in under-developed countries when, in fact, they were merely the means of transferring it. They were as much the victims of the old trade cycle, before the Keynesian revolution had taken over, than they were the cause of harm to the countries in which they were trading. I would stress that I am not trying to white-wash, but I do not like tar and feathers. Nowhere do I find a satisfactory system of analysis to replace the existing unsatisfactory bodies of conflicting doctrine. I suggest we have to go back to the welfare economics of Pigou, one of the most neglected books in modern economics. There would be some important modifications to the system of analysis which he provides. We shall recognize the importance of countervailing power as a prescriptive concept and the various ways in which it can be created, often by private initiative, sometimes by government initiative. We shall recognize, in addition, that the policies which promote the best allocation of resources are often in conflict with those which promote the growth of resources. In this context, therefore, I would vigorously defend the Nigerian and Ghanean marketing boards, even though they may lead to some inefficiency on occasion in the short run. This efficient system, by which a State trading organization taxes for growth, should be compared with the cumbrous and apparently inefficient scheme in the Ivory Coast designed to make taxing of producers consistent with maintaining a completely private-enterprise marketing system. But we should be eclectic on this issue. We should remember, for example, the failures of Peron when he tried to use this marketing board technique to finance general economic growth. The value of a modified Pigovian welfare economics is, first, that it applies the important check of deductive logic to inductive inference. Secondly, it permits us to use the new quantitative techniques which are being developed. They can all be integrated into the framework. At the same time, it will not let us forget the qualitative considerations which must always be reckoned with in economic analysis. This form of welfare economics is not in itself a body of doctrine, it is a method of thinking. It yields different policy recommendations in different situations. The recommendations will not harden into stereotypes; more likely they will be adjusted to particular situations. We should be careful, therefore, about drawing parallels too easily between, say, the development of marketing in the United Kingdom or in the United States and what is required in under-developed countries today.

I welcome Dr. Wells's emphasis on the political factors in marketing. By studying these political factors, we can more clearly understand where the inefficiencies are and why they exist. In addition, we shall more clearly see where are the weak points in the political forces opposing change, and where, therefore, we can more easily and effectively make recommendations which will be accepted and not just remain on paper. What I am asking in general is that we should develop both a welfare economics of agricultural marketing and a political economy of agricultural marketing. We have to steer a middle course between the exaggerations of the Chicago school of economics and those of the, shall we say, Moscow school of economics.

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Dr. Wells did not mention vertical integration as a means of furthering agricultural development. In many under-developed areas, the expansion of contract farming, of production under conditions of vertical integration, has been a factor of progress. One could mention the case of broiler production in Georgia, U.S.A., an area which was certainly not prosperous, or refer to central and southern Brittany in France, a very poor area where vertical integration in poultry production has brought *know-how* and capital, two fundamental factors needed for development. In the five minutes I am allowed I cannot engage in a discussion of the many and often disquieting problems arising out of vertical integration.

A second point concerns the perfect competition type of market which was used as a model by Dr. Wells. Looking at it particularly with regard to its achievements in the field of price formation, it seems that there is little doubt about its advantages over the type of disorderly markets which are found in many less developed countries. One can wonder, however, whether this perfect market is a satisfactory goal and whether, in advanced countries, we are not moving away from it. One of its main weaknesses concerns price stabilization. The rather perfect 'dutch auction' type of market may lead to wider price fluctuations and poorer transmittal of information between marketing firms than markets involving contracts. Is it not reasonable to expect that, in the future, we shall be talking more and more of vertical integration, contracts, 'marketing orders', and less of perfect markets?

M. POHORILLE, *Warsaw, Poland*

Dr. Wells's paper gives me the opportunity to offer some considerations on the organization of agricultural markets in Poland. Intermediaries are eliminated there, and producers sell to consumers on local markets, or to the State, directly or through commercial co-operatives. The fundamental form of purchase is now by contract, i.e. by bi-partite contracts freely negotiated by producers and purchasing enterprises. This method is also one of the principal ways by which the State influences the structure and methods of production as well as the volume of deliveries of agricultural products.

The contracts are not confined to the delivery of certain quantities of agricultural products at prearranged times and prices; they are also the medium by which the whole process of production—crops and stock—with which they are concerned is organized. The authorities are compelled to provide the farms with approved seeds and protective products, and they must see that proper cultural methods are used. In a word, they undertake the greater part of the organization. Contracting in its most developed form therefore means a system of commands which connect agricultural production with socialist industry and subject it to the needs of a planned economy. Contracting of agricultural products is conducted on a basis of yearly or pluri-annual contracts, within the framework of general plans. These plans are worked out every year, up to 1 March for winter crops and 15 May for spring crops. In order to encourage pluri-annual contracts which help to establish regions of stable farming, the contracting authorities guarantee priority of credits for agriculture.

Thus, contracting, characteristically, is as follows: (1) it is an element in the planning of national production; (2) it links the material interests of agricultural concerns with the general interest of society; (3) it determines the conditions of purchase (inclusive of prices) on a centralized basis, not by the different economic organisms (price policy takes into account not only the present condition of markets, but the immediate and distant effects of altering prices and of their influence on markets and production); (4) it has a truly general character (it is enough to mention that individual farming is still the rule and the number of contracts exceeds ten million a year); (5) it has social as well as economic aims, being connected with productive aid for economically weaker concerns, and constituting a spring-board towards productive association of small farms.

JOSÉ VICENTE PINTO, *Bogotá, Colombia*

On reading Dr. Wells's paper I observe a note saying that, so far as he knows, there is no important group of written works specifically on the function of agricultural trade in economic development. This is very important. So far as I can see, this lack of attention prevails both in the more advanced countries and even more in the backward countries. I think—and this has been preoccupying me for several years—that agricultural trade has a fundamental function in the economic development of backward countries, not only the agricultural development, but the development of the economy as a whole. It is clear that Latin America's preoccupations with agricultural development have been centred on the factors involved directly in production, such as credit, agrarian reform, production technology, and so on, the function of which is to increase production. The vital importance of trade in increasing production and productivity has certainly not been sufficiently noticed. The conditions of agricultural trade in Latin America, both in the private and public spheres, are very different from those of the highly developed countries. In backward countries agricultural prices show drastic fluctuations between periods of production and non-production during the year. There are many ways of trying to stabilize prices, just as there are of maintaining them. However, in backward countries, especially Latin America and more particularly Colombia, stability cannot be achieved without resorting to seasonal reserves by means of storage. This is where the role of trade comes in in development. The overall structure of trade in Latin America is very backward, and until it becomes efficient, conditions favourable to development will not be obtainable. In view of this, Colombia has been preoccupied since 1957 with the problem of training technical personnel for trade, as for research and other services. This is why it was proposed through F.A.O. to create a Latin American institute for agricultural trade. This was set up in May this year in the Bogotá Technical Union for Agricultural Trade. It will provide services for research, and for personnel training at three levels. Besides this, the Institute will provide services in technical aid for both public and private interests and will organize information campaigns. The whole purpose of the Institute is to provide a service for co-ordination and study in connexion with the Latin American Common Market.

The first problem consists of training staff, since Latin American economists are a recent innovation, and are only now starting to worry about these trade questions. It is important that the Universities of Europe and the United States, in their specialized agricultural studies, should stress the importance of agricultural trade to their Latin American students.

C. M. HARDIN, *The Rockefeller Foundation, U.S.A.*

As a former professor of political sciences, I should like to say a word about the paper of Dr. Wells and the comments on it by Mr. G. R. Allen. Both advocated the study of politics as part of research on agricultural markets. Clearly, study of the economics of marketing becomes involved in politics. I appreciate Mr. Allen's reference to countervailing power, a relatively new term in economics for an old conception in politics. Old conceptions are turned into jokes and, in English, we have the definition of a statesman as a politician held erect by equal pressures from all sides. I said this jokingly but also with some deliberation because I think that this is the concept of politics that economists are likely to use when they turn to political analysis to facilitate economic change or to understand the limitations of economic policy. This is all right so far as it goes, but economists who extend their analysis to politics should remember that they are dealing with the most powerful force known to the secular world. They are dealing, indeed, with tremendous potentialities for good or evil. They are moving into areas which are outside economics, though powerfully influenced by economic developments. In political analysis, therefore, economists must realize that economic criteria are not enough. Rather, they must now be prepared to concern themselves with the great and eternal questions of the organization of political power, with its distribution, with its purposes, and finally with the essence of the problem of constitutional government—the limitations of power.

R. KRISHNA, *Institute of Economic Growth, New Delhi, India*

I wish to make a few remarks on the economic merits of different types of marketing organizations. I have in my mind the background of present official and non-official thinking and the facts of agricultural marketing in India, but I am sure that the situation in India has its counterparts in many poor countries of the world. The current thinking proceeds in terms of the antithesis private marketing versus co-operative or government-cum-co-operative marketing. It is believed that government-cum-co-operative marketing can and should shorten the long chain of middlemen between the producer and the consumer. The middlemen, it is thought, charge very high profit margins, so that the cost of marketing is excessive. It is claimed that if marketing is made co-operative, its cost can be substantially reduced. Thus, the promise is made that the state-cum-co-operative marketing agencies will be able to pay higher prices to the producer. It is also believed that they will charge a lower price to the consumer and accumulate more profits for economic development than with the private agencies.

I suggest that the empirical basis for these beliefs may be very weak. We do not have enough evidence based on systematic research into alternative forms of marketing to be able to support or reject these *a priori* beliefs. There is, however, some prima facie evidence to suggest that at least some of these propositions may be plainly untrue in many places.

I was associated with some empirical studies of the marketing of agricultural and handicraft products in some north Indian towns. I found that in the small towns where these products are sold, there was very intense cut-throat competition amongst the private traders. In poor and populous countries, small-scale trading is always an extremely overcrowded profession. While there may be a few big dealers making substantial profits, the large majority of small traders carry on their trade on anything from 1 pice to 1 anna per rupee (i.e. on a margin of $1\frac{1}{2}$ to $6\frac{1}{4}$ per cent.). They bear their own losses, work in inexpensive establishments, often on pavements and staircases, and provide a number of services to the peasants and artisans. On the other hand, the state-cum-co-operative agencies charge officially fixed margins—$6\frac{1}{4}$ to $12\frac{1}{2}$ per cent.—which are mechanically added to the purchase price without regard to their effect on their sales or the circumstances of the trade. They often receive subsidies to meet their losses and their establishment costs. The cost of marketing per unit turnover is not really lower in these institutions than in the private shops if government subsidies are put in their balance-sheets, where they ought to be.

As for the shortening of the chains of middlemen, we find very often that the new agencies purchase and sell their merchandise through the very middlemen whom they are supposed to replace.

Thus they themselves become additional links in the existing chains of middlemen instead of shortening them.

Regarding the benefits promised, it is obvious that marketing agencies cannot at the same time give higher returns to the producer, supply goods cheaper to the consumer and accumulate more profits for development. The promises are inconsistent and unrealistic, and there is no evidence that they have been realized anywhere.

The burden of my remarks is simply that in this field our thinking ought to be very much more functional and empirical than it has been. Wishful and moralistic thinking only brings more frustration. More and more of our researchers should study the actual operation of different types of agencies in specific markets and estimate their costs and returns. We should investigate what is and what is not replaceable in given circumstances, where new institutions really do better and where they do not. Such inquiries would render more service to the cultivator or the consumer in the long run than a simple ideological belief that co-operative or state marketing is necessarily good and what exists is inherently bad. I am not against either co-operative agencies or organized state agencies. But I want their respective roles to be determined on the basis of their comparative economic advantages as indicated by objective research. They may have a very important role to play in poor countries. They may, for instance, provide educative, quality competition, rather than volume competition which is very unhealthy. And a great deal of state action may be necessary to improve the traders' knowledge of better techniques of operation and better sources of supply and demand.

G. H. Ward, *Faculty of Agricultural Sciences, American University of Beirut, Lebanon*

It is stated in Dr. Wells's paper that the first essential for the development of an adequate or satisfactory agricultural market structure is that the farmers of an area or nation produce substantially more than they can themselves consume. Dr. Trelogan, in presenting the paper, modified this assertion by stating that a supply of a product is necessary for developing a market structure so that surveys to determine the prospective volume of product to be marketed are essential for market development. I should like to point out that in developing countries it is often necessary to develop a market structure for marketing products the production of which it is desired to increase for both domestic consumption and export. Otherwise, farmers will not receive a high enough price to encourage them to plant more. In Ethiopia, for example, extension agents find it difficult to persuade farmers to grow more wheat because the price is very low in areas distant from the capital which is the main market centre. Here we need some kind of market structure that will offer the farmers a price which will encourage them to adopt the new practices and plant the higher yielding varieties recommended by the extension service. Without a dependable market at profitable prices, farmers in developing countries do not expand output to provide the base for economic development.

During the initial period of developing a marketing structure for a new product, either in a country undergoing economic development or in an area in an advanced country where it has not been produced before, it is inevitable that losses will be incurred by the marketing agency until the volume becomes substantial. In advanced countries there are usually companies well financed which can carry on until the operation becomes profitable. But in countries where capital is scarce, entrepreneurs who are willing to undertake operations involving an initial loss period generally are lacking. Developing a market structure, therefore, requires finding some agency to carry on the marketing development activity. Anjar village in Lebanon now supplies a truckload of milk daily to Beirut because the Karagheusian Foundation financed the marketing operation during the period when the quantity of milk hauled did not cover the expenses. Nearby villages do not yet produce milk for market because there is no agency that will undertake a similar market development.

Dr. Wells doubts if it is any more difficult to alter the marketing structure in developing countries than in more fully developed countries. I would disagree with this statement from the standpoint that in the economically advanced countries you usually have some kind of an extension service with marketing specialists and a higher educational level of farmers. Thus, the farmers are more aware of their problems and can call on specialists for help in overcoming these difficulties. However, you do not have this in a developing country. The ministries of agriculture are much more production-conscious and they go ahead with their plans to expand production without recognizing that these very often will be nullified because of there being no marketing system to dispose of the products which are being fostered. It is important that they should have marketing specialists to develop a marketing programme integrated with the production plans.

I should like to offer one more comment in relation to Mr. Allen's discussion about the different marketing agencies, money-lender merchants, foreign merchants, and co-operatives. Many of the merchants tend to become more or less monopolistic in various areas. In villages in the producing areas in many of the developing countries there is a small ring of merchants who perform necessary services but who have established wide profit margins. If you try through a co-operative programme to break into the marketing system, the merchants often pay uneconomically high prices to get products from the members and thus put the co-operative out of business. Merchants have various ways of maintaining their dominance in the market. For example, in Thailand, the Ministry of Co-operatives tried to develop a co-operative marketing programme for coco-nuts to increase returns to producers. The big merchants who dominated the markets were giving credit to the retail sellers. Unless the co-operative could do the same, the big combine would continue to control the market and make it impossible for the producers to obtain higher returns.

We have to analyse each marketing situation and then determine the programme that can utilize the services of the agencies that can perform the functions most efficiently and economically. A marketing structure that will narrow the margins and give the farmers higher returns generally needs to include co-operatives which will operate in the interest of their members and, through competition, induce other marketing agencies to pay higher prices to farmers generally. It has been demonstrated in various countries that the provision of guidance, technical assistance, and financing by government agencies to farmer co-operatives is an effective way to improve the marketing of farm products.

CHANG YEN-TIEN, *College of Agriculture, Taiwan University, Taipei, Taiwan*

I have only one point to add. Towards the conclusion of his paper, Dr. Wells seems to have put too much emphasis on government intervention. He said government action was imperative. For example, transportation arrangements, grades, and standards, as well as regulations concerning market practices, information, &c., are all to be administered by Government. This may be good in the United States of America, but in less fully developed countries where government is not so effective and does not always function so very well, too much government intervention may result in damaging the natural functioning of the market. This is sometimes harmful both to the producers and to the consumers.

SING-MIN YEH, *Joint Commission on Rural Reconstruction, Taiwan*

The Government's agricultural marketing programme in Taiwan is executed through various food control measures, export control regulations, and agricultural price policies. Its principal end is to keep agricultural prices stable and within the reach of most consumers, and to implement agricultural programmes which boost the production of various farm products. So far as major commodities such as rice are concerned, merchants are allowed a free hand provided they observe the food regulations worked out by Government.

The processing and export of white sugar is handled, principally, by the Taiwan Sugar Corporation, a state enterprise, and the production, marketing, processing, and manufacturing of tobacco are all placed under the control of the Monopoly Bureau of Tobacco and Wine and are a source of government revenues, while the marketing of other farm products is almost entirely free. For the benefit of Taiwan's economy, due attention has been paid in recent years to the registration, direction, and supervision of the dealers in various kinds of farm products, the reorganization of wholesale markets, the improvement of storage and transportation, the promotion of co-operative marketing, stabilization of market prices, reduction of marketing costs, research on marketing problems, provision of adequate credit to farmers and marketing co-operatives, and so on.

HARRY C. TRELOGAN (*in reply*)

In response to Dr. Sing-Min Yeh I question whether it is possible really to eliminate the middleman in the broad context he suggested. Certainly, the intermediary services and specializations are necessary, and they become more important as the economy grows. What we are really talking about are the organizations, the institutions, and the market structure as they affect the bargaining power of the different conflicting interests that come into play in the market place. Moreover, I think he has to recognize that we cannot eliminate overlapping, as he suggested, and still have competition. If we regard competition as the best protection of both producers and consumers who are dependent upon the market, overlapping is one of the costs we pay for that protection.

Dr. Bergmann's criticism of the use of the competitive model is relevant to this particular point. Dr. Wells chose to use the perfect competition model knowing full well its limitations and I am sure Dr. Bergmann understands that. The other pricing methods that he suggested raise the question who makes the decisions, for what purposes, and who wants to abide by them. Mr. Pohorille demonstrated this point very well. Not all of us would concede that his proposals for decision-making would be more acceptable than prices determined by free interplay in the market-place, even though greater efficiency might be demonstrable. I think we have to recognize that human beings like to have some discretion to choose between alternatives. They exhibit a desire not to place in the hands of others the right to make decisions for them. Charles Hardin's remarks were appropriate from this standpoint. Perhaps I should add that Raj Krishna's observations with respect to Evangelism in co-operative marketing also have a degree of relevancy, because the promises and the objectives may not be consistent with each other; and neither of them may be consistent with the ends achieved.

Mr. Allen's comments should be regarded as a sound supplement to the paper. He indicated that in some instances it was best not to minimize accounting costs but rather opportunity costs. This point might have been made more clearly with some examples of when this would be true. I do not think I caught the full implication of the observation. With respect to the point he made about the myth of the free market, we agree on the fallacy of the proposition that competition can do no right. I can see the position of the money-lenders, the co-operatives, and also the expatriate firms as he portrays them. I suspect that there is a fairly close connexion between the points he was making and some problems that we are confronted with not only in under-developed countries but currently in the United States of America. They pertain to vertical integration extending from the market place into agricultural production. Integration certainly affects some real efficiencies and offers opportunities for further efficiency that are both real and potential. One of the big advantages is a reduction in the number of exchanges between middlemen who intervene between farmers and consumers and the associated costs and frictions of those exchanges. Certainly, bargaining for prices, and changing ownerships, are costly in time, effort, and expense, and the more these operations proliferate in the marketing system the more costly it becomes. When you turn to integration, to achieve the efficiencies that come with economies of scale, and with elimination of some of these exchange costs, you encounter problems of power and control and associated sociological problems which cause apprehension among producers in advanced and developing countries alike.

One aspect of this is that vertical integration concentrates or centralizes decision-making in fewer hands regardless of whether the control is exercised through ownership or by contractual arrangements. This permits business management to be better co-ordinated but it also opens up a possibility for larger mistakes to be made by the decision makers, especially if competition is eliminated. Consequently more adequate and reliable data and analyses are needed to guide intelligent business judgement. Mr. Allen wound up with comments pertaining to welfare economics and political economics. The relationships they have to this decision-making are appropriate in the light of these circumstances.