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## AGRICULTURE AND ITS TERMS OF TRADE

### A Review Article

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### PART I

In 1935 Keynes wrote: "It is astonishing what foolish things one can temporarily believe if one thinks too long alone, particularly in economics . . ." and confessed that he was extremely dependent on criticism and conversation" if he were to avoid making an undue proportion of mistakes.<sup>1</sup> This need for communication of ideas and critical discussion of problems which Keynes found so pressing 25 years ago is just as urgent today in the more specific discipline of agricultural economics. For this reason the International Conference of Agricultural Economists is unique, in providing once every three years a forum in which members of universities, government organizations and agricultural research, extension and administrative institutions may meet their fellows from all parts of the world. The aims of the ICAE, as stated at the first Conference in 1929 by one of its founders, C. E. Ladd, have been "to bring together agricultural economists from many countries to discuss research results and research methods that were of common interest; to discuss national and international problems in the field of agricultural economics and to promote a more effective and more rapid exchange of agricultural economics information".<sup>2</sup> In the succeeding 30 years the ICAE has grown into a very potent force in promoting international discussion in agricultural economics and, via its published *Proceedings*, the *International Journal of Agrarian Affairs*, and the recent innovation, *World Rural Sociology and Agricultural Economics Abstracts*, in disseminating the results of such research and discussion to a world-wide audience.

The Tenth Conference, whose *Proceedings* have just been published<sup>3</sup> was held at Mysore, India, during August-September, 1958, and was attended by about 300 members from 56 countries, including seven Australians. The theme of the Conference was "Agriculture and its Terms of Trade, a consideration of the problems of balance between agriculture and other activities in the process of the economic growth of States and in the development of a sound world economy." This is an ambitious title and the number of topics which it covers is large indeed. The series of papers under this heading deals not only with such obvious facets as the

<sup>1</sup> J. M. Keynes, *General Theory of Employment, Interest and Money* (London: Macmillan, 1936), p. vii.

<sup>2</sup> *Proceedings of the First International Conference of Agricultural Economists* (Wisconsin: Collegiate Press, 1929), p. v. An account of the development of the ICAE is given by J. R. Currie in the book at present under review (see footnote <sup>3</sup>) in his paper "International Co-operation in Agricultural Economics", pp. 456-9.

<sup>3</sup> *Proceedings of the Tenth International Conference of Agricultural Economists* (London: Oxford University Press, 1960). Those desiring information concerning membership of the International Conference of Agricultural Economists should contact the Australian correspondent, Professor K. O. Campbell, Department of Agricultural Economics, Faculty of Agriculture, University of Sydney.

state of present knowledge of the causes and effects of economic growth, the interactions between sectors of the economy and the status of the agricultural sector in advanced and underdeveloped countries, but also with more fundamental issues, such as the direction of research in agricultural policy, and whether administrators act on the advice of agricultural economists. It is pleasing that those who drew up the programme for the Tenth Conference did not neglect to invite discussion on these fundamental aspects, for surely problems of defining and achieving an optimum rate of balanced economic development consistent with maximum net social welfare must directly or indirectly provide the basic motivation for all research in agricultural economics.

However, at such a Conference, when papers are written under the same general heading by a number of people who are unable to confer during the process of preparation, two shortcomings must be inevitable in the publication of proceedings. These are, firstly, that the coverage of such an all-embracing field will be unbalanced, with thorough treatment of some areas but inadequate emphasis on others; secondly, that there will be a lack of unity in the result considered as a whole, a failure to collate the many problems, discussions and conclusions put forward into some unified representative form. Without more stringent editing—a difficult and lengthy task—these drawbacks are unavoidable. Nevertheless, although these factors diminish the value of the *Proceedings* as a complete reference work, individual papers contain a large amount of valuable information and some attempt has been made in the following paragraphs to interpret and draw together the papers and discussions into a more coherent whole.

## PART II

In view of the fact that the papers in the *Proceedings* are not arranged according to subject into any order, the reader will benefit by exercising some discrimination in his choice of sequence. Although they frequently overlap, the papers may be divided into three groups; those dealing with the broad conceptual issues of agriculture's terms of trade in relation to economic development; those dealing with markets, prices, supply and demand; and those which treat the agricultural economist's role as research worker and adviser in policy matters.

Much has been written in past years about the factors which influence the internal and international relationships existing between agriculture and other sectors, and the basic issues are generally agreed upon. In the opening paper of the Conference, W. A. Lewis surveys the general setting of these issues by considering two of the likely ways in which an open economy can begin to grow, and demonstrates that balanced growth is unlikely in either case. Firstly, he considers where development begins in a non-agricultural sector, e.g., by the discovery of minerals, or by the exploitation of a fortunate industrial comparative advantage. If the non-agricultural output is largely exported, providing finance for the import of food, agriculture may stagnate; if on the other hand industrial production is aimed primarily at the home market (e.g., as in modern England), then balance of payments crises will be encountered. The second possibility, i.e., where development begins with agricultural exports, is unlikely to lead to such setbacks in the balance of payments, but has, nevertheless, some disadvantages, for example, it tends to discourage the

development of manufacturing industries. It is well known that by the time the "advanced" stage has been attained, countries tend to develop agricultural surplus problems caused by (i) the low income elasticity of demand for food products in general, and (ii) by the increase in productivity of labour due to technological progress. Imperfections in the mobility of the rural population hinder the adjustment of relative incomes and usually lead to lower average *per caput* returns in the agricultural sector than elsewhere in the economy. In his treatment of these questions Lewis does not put forward anything new; and concludes by doubting whether the problem is capable of solution. "There will always be occupations which attract too many people . . . and the economy will always retaliate by paying people in these occupations less than they could earn in others."<sup>4</sup>

D. Gale Johnson makes four main points in his discussion of the more highly developed countries. Firstly, he contends that economists often overlook the fact that in the long run the farm population has fully shared in the growth of a country's *per caput* real income. The data quoted for rural-urban income ratios bear this out, although it is likely that more recent figures would show the farmer in a less favourable position. Secondly, returns to labour in agriculture are usually lower than elsewhere in the economy; he observes that the huge sums of money spent on price supports in the past would have achieved far more if they had been applied to assisting the movement of labour out of farming. Thirdly, he notes the persistent tendency to regional inequalities in incomes, and finally restates the fundamental concomitant for economic progress, a relative decline in the importance of agriculture. The latter cannot be achieved, however, merely by channelling a greater proportion of investment funds into industrialization.

A resourceful treatment of the experience of underdeveloped countries is given by D. R. Gadgil, who quotes a considerable volume of pertinent regional data for production, prices and trade. Unlike Johnson's, Gadgil's analysis places considerable emphasis on the open economy. He concludes that:

"In spite of diversity of conditions certain important features of the situation are common to a large number of the less well developed countries. These are a somewhat slow expansion of agricultural production and of trade in agricultural products, a lowered level of exportable surplus of food grains and greater dependence on imports of food grains, some correction of the price disadvantage of the 'thirties accompanied by great unevenness in the distribution of the gains and continued instability in relation to the volume and value of world trade in agricultural products."<sup>5</sup>

It is now fully appreciated that in most underdeveloped countries it is necessary for Governments to be very active in fostering economic development, and Gadgil continues by discussing some of the measures which may be used to promote the growth of agriculture, such as expenditure on public works, credit and marketing facilities, research, education, price schemes and trade agreements. He concludes by noting that low relative farm incomes are not confined solely to advanced countries and that if any real progress is to be made in developing backward economies, agriculturists' returns must be made to increase faster than the national income.

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<sup>4</sup> *Ibid.*, p. 34.

<sup>5</sup> *Ibid.*, p. 46.

After reading these and subsequent papers presented at the Conference dealing with the general questions of the balanced development of sectors and whole economies, one is left with the uneasy realization that much of this has been said before ; that our qualitative knowledge of the micro-economic processes involved in balanced and imbalanced growth reached a workably mature state some time ago. If this is so, has our policy research been retarded by our failing to press further with attempts to quantify these processes in a more rigorously analytical frame of mind? Econometric techniques can provide penetrating research tools which, if applied to such problems as those at present under consideration can yield policy advice of greater depth and accuracy than is possible otherwise. An example of an excellent opportunity for extending qualitative thinking on to mathematical grounds springs to mind in connection with Professor Lewis' paper. On an earlier occasion<sup>6</sup> he has laid the foundations of an attractive model relating optimum growth rates for different sectors to the income elasticity of demand for their products. The possibilities for analytical exploration of such a model by introduction of the exogenous variables population and technology in closed and open economies appear extensive. Another example is the question of optimum distribution of factors, raised at the Conference by J. B. Bhattacharjee (p. 190). The evolution of a body of theory dealing with these macro-economic processes has been vitally necessary and it will doubtless undergo many further changes in the future. But, as Koopmans has said, "Mathematical tools . . . permit us to perceive with greater clarity and express in simpler terms the logical structure of important parts of economic theory . . . (and) allow us to shed new light on older and perhaps also more fundamental problems."<sup>7</sup> Much progress has already been made in this field and it is to be hoped that at its future Conferences the ICAE will do more to support and encourage the dissemination of the results of such research than it has done in the past.

The chapters in the tenth *Proceedings* which seem most logically to follow the papers of Lewis, Johnson and Gadgil are those by Aziz, Biéanić and Campbell. U. A. Aziz treats the interdependant development of agriculture and other industries with primary emphasis on the roles of land, labour and capital in underdeveloped countries. He also discusses the three main causes of rural poverty, viz., low productivity, exploitation and neglect. In connection with the latter, it is interesting to note his comment that:

"Western trained economists, especially those who are schooled in the highly refined and complex analytical apparatus of social accounting, econometrics and even Keynesianistic margins, are apt to miss the wood for the trees in the jungles of backward countries. The fact is that in the backward countries government budgets are largely spent on urban development. The farm population . . . are invariably neglected."<sup>8</sup>

This question of the applicability of Western experience to underdeveloped countries arises several times through the book, and a variety of opinions is expressed, some of which are noted here ; Aziz states in his conclusion that:

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<sup>6</sup> See W. A. Lewis, *Theory of Economic Growth* (London: Allen and Unwin, 1955) Ch. V., *passim*, but esp. pp. 277-8.

<sup>7</sup> T. C. Koopmans, *Three Essays on the State of Economic Science* (New York, McGraw Hill, 1957), pp. 5-6.

<sup>8</sup> *Op. cit.*, p. 340.

“structural defects and perversions in the economic organization of most backward countries render it dangerous for economists (of all shades of political philosophy) to apply theories worked out within the historical context of the other countries for the solutions of the problems of the backward countries.”<sup>9</sup>

K. S. Rao replies that:

“this may be true to some extent but it may lead to a kind of stagnation; underdeveloped countries may have to tackle their problems with underdeveloped techniques unless they are quick enough to develop the needed new techniques.”<sup>10</sup>

In another context K. O. Campbell suggests that:

“it is difficult to be at all certain of the extent to which the essentially Western experience (of population movements) . . . can serve to guide the present underdeveloped countries along the path of economic progress. Some observers are confident that it can, usually pointing to recent Japanese experience in support. I count myself among the more sceptical.”<sup>11</sup>

Of this Japanese experience, Kazushi Ohkawa says that it would be useful to analyse it more carefully :

“because it seems to combine the Western type of industrialization with the Asian type of agriculture, and may well provide some useful pointers for underdeveloped countries in Asia with similar problems.”<sup>12</sup>

It is difficult to draw concrete conclusions from Rudolf Bićanić’s paper “Lack of Institutional Flexibility in Agriculture”, although a large amount of factual material is presented. J. O. Jones in his discussion of the paper summarizes the issue by saying that inflexibility is manifested in advanced countries by a surplus of agricultural production, and in underdeveloped countries by a deficiency. Stated thus, the problem may be explained merely on the basis of technology and population. Bićanić prefers to approach the question via market imperfections; i.e., institutionally engendered monopolies in capitalistic economies, obviously imperfect competition at village markets in underdeveloped countries and Government-induced inflexibilities in Soviet-type systems.

Issues involved in rural population adjustments are treated exhaustively by K. O. Campbell, who discusses the factors necessitating and hindering rural-urban migration. He suggests that the “pull” from urban attractions is more forceful than the “push” factors in influencing this movement. This agrees with Bićanić (p. 161) and G. Beltran (p. 327), but E. F. Nash (p. 322), in regard to British experience, is less ready to pass judgment. Campbell continues that experience suggests that the ease of adjustment of the rural work force is largely determined by the relationship between the rate of overall population growth and the rates of growth of the various industrial sectors. In the case of underdeveloped countries, however, a reorganization of labour within agriculture might be a more productive solution than attempting to move people *en masse* into other occupations. In all phases of a backward economy’s activities efforts should be made to improve productivity in line with a country’s particular needs.

<sup>9</sup> *Ibid.*, p. 347.

<sup>10</sup> *Ibid.*, p. 352.

<sup>11</sup> *Ibid.*, p. 318.

<sup>12</sup> *Ibid.*, p. 326. Some further comments related to this question are made by R. Bićanić, p. 161, J. O. Jones, p. 180, M. Shafi Niaz, p. 181, E. de Vries, p. 289, A. T. Mosher, p. 195, and D. G. Karve, p. 212.

Our second major group of papers contains those dealing with productive factors, including finance, supply, demand, prices and price supports, and marketing; it includes the papers of Westermarck, de Vries, Johnson and Bachman, Cépède, Hanau, Anderson and Kirk.

In his paper on "Changes in Composition of Farm Inputs and Farm Outputs", N. Westermarck considers the trend in the proportion of total factors and products made up by those which are dependant on the terms of trade (i.e., the cash proportion of total farm expenditure and receipts) for a sample of large and small farms in Denmark, Finland and Sweden over the years 1920 to 1955. Short-term fluctuations in the ratios are explainable in terms of the trade cycle, whilst the secular upward trend for both inputs and outputs is taken to suggest that contact with the market by farmers has become livelier. His analysis of the input side is discussed by H. B. Low, who notes that purchased resources are not all of equal significance since some can be postponed if the terms of trade are temporarily adverse, e.g., fertilizer. He refers, like Campbell above, to the great potential for increasing the productivity of cheap farm labour in less advanced countries. Westermarck's arguments are stronger on the output side where he notes the development from backward conditions through to advanced forms of vertical integration.

Capital as an input for increasing production is treated by E. de Vries, who shows that farms which are highly commercialized in their supply of resources and marketing of products are characterized by a high level of private institutional financing, whereas with less commercial farms the use of short-term non-institutional private finance is more likely. He suggests four approaches to the stimulation of development by the injection of capital into the agricultural sector. These are the provision of transport and marketing facilities, the building of improvements such as irrigation works, etc., the distribution of Governmental or co-operative credit and the organization of people's self-development schemes. The last two may be less successful due to peasant apathy, and all four call for increased Governmental activity. In the discussion, C. Evelpidis advocates the setting up of an international agricultural credit bank to provide on-the-farm finance on a world-wide scale. It would appear in the case of underdeveloped countries, however, that putting money directly into the hands of farmers, even if it is used under supervision, is not always the best method of employing capital to raise productivity.

Sherman E. Johnson and K. L. Bachman reiterate familiar arguments in their account of the technical peculiarities of agricultural supply. Considering first commercial farms, they observe the ratchet effect in the movement of farm output—it increases much more easily than it declines. On subsistence farms, however, the characteristics of supply lead to shortage; in order to increase production on such farms, fundamental changes are necessary, for example in the frame of mind of the farmer who is not attuned to buying more off-farm inputs. In the discussion, O. Aresvik and U. Aziz stress the need for market reform as a prerequisite for technological progress in underdeveloped countries.

No specific conclusions can be drawn from the first section of M. Cépède's analysis of demand, because of the too-broad definition he adopts for non-food agricultural products. With the demand for food, however,

he is on firmer ground and presents an unusual approach, via "initial" calories of plant production necessary for a given final consumption of plant and animal products. Finally he extends his analysis into the elasticity of demand with respect to nutrition level, for the three food types, luxuries, staples, and those with negative elasticity. In the discussion G. L. Mehren presents one of the most penetrating and constructive critiques to be found in the whole volume. He treats the methodology of demand analysis in general and in Cépède's paper in particular. In reply to him and to D. R. Bergmann, Professor Cépède suggests that policy proposals could be drawn from his work and, if acted upon, could have some beneficial influence.

The final three papers in the second group of our classification deal with prices and markets. A. F. Hanau compares the characteristics of industrial with rural production and shows how they cause the typical contrasting supply patterns to emerge. He proceeds by outlining the differences in the structure of demand for both groups of products and hence by the conventional means explains the observable difference in short and long-term price fluctuations. He demonstrates that agricultural prices have fluctuated over the past 150 years in sympathy with non-agricultural prices, but also that on some occasions (e.g., post 1951) independent movements of agricultural prices are observable. Hanau concludes that it is useless to attempt to separate the historical influences of monetary and non-monetary factors on the agricultural price level. During the discussion, J. R. Bellerby suggests that a ratio of indices of prices received to prices paid by farmers would be an excellent indicator of the farmers' terms of trade. From this we could derive an approximation to his well-known incentive income ratio.<sup>13</sup> L. W. Witt points out that the accepted notion that farmers benefit from a general upswing in the business cycle may no longer be true, because since 1945 prices paid by farmers have risen at least as fast as prices received by them.

J. H. Kirk gives a thorough coverage of the field of agricultural support measures, including direct and indirect tariffs, quotas, subsidies, price fixing and stabilization, etc. Support, he says, is desirable in underdeveloped countries to raise productivity, production and incomes; in advanced economies, however, it is often inspired by agricultural protectionism. In countries which export a large volume of rural products, the adoption of support measures is rendered difficult by the fact that the cost of such measures cannot easily be passed forward to consumers abroad. In backward countries, the consumer benefits directly from the increased production induced by price supports (i.e., his nutritional level is raised); in advanced countries, however, he is often made to bear the cost burden of support measures, through taxes and higher retail prices. Although it is often argued that support tends to decrease farm efficiency, Kirk points out that British farmers often reinvest the increases in their earnings due to price supports. His cautious optimism about the general advisability of support measures is not always shared by speakers in the discussion of this paper, nor on the other occasions throughout the book when this issue is raised.<sup>14</sup>

<sup>13</sup> See J. R. Bellerby, *Agriculture and Industry: Relative Income*, (London: Macmillan, 1956).

<sup>14</sup> See for example, D. G. Johnson, p. 38, K. Brandt, p. 59, P. K. Ray, p. 86, R. Bićanić, p. 172.



In a paper entitled "Marketing, Communications and Transport", W. J. Anderson treats the first of these topics extensively, with negligible reference to the other two. He points out firstly the services which an efficient marketing system must seek to provide. These include specification and grading of products, transportation, provision of market information, etc. In other words the market should act as an effective mechanism for true price determination on the basis of supply and demand. However, there are obstacles which hinder the attainment of optimum conditions. Examples of such obstacles are price instability, which may be lessened by government intervention or by vertical integration, and imperfect competition, which can be controlled to some extent by more restrictive legislation or by the combination of producers into boards or co-operatives. The already cited need for market reform in underdeveloped countries to reduce the exploitative behaviour of village traders, is advocated again in the discussion by M. L. Dantwala, who mentions tribal areas in India where marketing margins are unconscionably large.

The third and final group of papers covers the fundamental issues referred to earlier. A. T. Mosher discusses "Education, Research and Extension in Agricultural Economics in Asia and Latin America Today." He observes that undergraduate education in agricultural economics should teach economic principles in relation to a free society, but should also help the student to consider the immediate problems of his own country. He suggests a curriculum (see page 200) to train the undergraduate specifically for work in underdeveloped countries. In connection with research, he points out that most trained agricultural economists in Asia and Latin America are absorbed into advisory or administrative posts, so that vital research is neglected. Universities have a special role to play in fostering research, and offer the added incentive of higher degrees. Finally, he notes that agricultural economists have not yet made significant contributions to extension programmes in Asia or Latin America. This is dangerous from two viewpoints, firstly because without economic guidance extension advice may become unsound, secondly because a research worker may lose touch with reality if he is not involved in any extension activities. This last point is underlined by D. G. Karve during the discussion. Mosher concludes that there is a need in these countries for maintenance of close connections between education, research and extension.

T. H. Strong's opening remarks in his paper on "Using Economic Research in Policy Making" are worthy of quotation:

"It is one thing to do economic research, it is another to have it used in policy making. How are the two to be brought together in the common interest? There are two equal and opposite dangers, the one that economic research should be neglected in policy making, the other that it should have an influence on policy unwarranted by the soundness of the analysis."<sup>15</sup>

Strong proceeds to ask whether it is the economist or the policymaker who is to blame for the current deterioration in agriculture's terms of trade. Although not answering this question directly, he presents a sound summary of the issues involved. He cites first recent changes in the assessment of the outlook for world agricultural commodities. Whereas the attitude in the pre-fifties was one in favour of increased production at all costs, nowadays the accumulation of surpluses, the contraction in world markets and the fall in prices are causing the authorities considerable concern. This situation may have been brought about on the research side by the emphasis on

<sup>15</sup> *Op. cit.*, p. 220.

partial analysis as a technique for deducing policy advice, or on the administrative side by the tendency to act on short rather than long-term policies, a difficulty re-emphasized by L. E. Samuel in the discussion. Strong considers that demand research has provided the most useful information in the past, both in an *ex post* and *ex ante* framework. He proceeds to give an interesting account of Australian experience in policy problems and concludes with a plea for greater clarity in the presentation of policy-orientated research results.

This whole question, which might well be labelled "Agricultural Economists and Their Terms of Trade", seems to this reviewer to be one of the most critical facing contemporary agricultural economics.<sup>16</sup> There are several points of view. The majority of agricultural economists might be inclined to agree when Campbell says:

"That administrators should continue to consider themselves adequately qualified to resolve policy problems involving increasingly complex economic issues without specialist advice is amazing, to say the least."<sup>17</sup>

On the other hand it can be argued that "where two or three economists are gathered together, there are always three or four varieties of economics present,"<sup>18</sup> that economists never agree and that they are incapable of giving specific answers. These criticisms may be carried further to the point of doubting whether economic and econometric techniques are suitable as means of deriving policy formulae.<sup>19</sup> At a time in world development when agricultural economists could make significant contributions to the direction of future agricultural policy, three necessities should be borne in mind, viz., a realistic methodological approach, sound interpretation of basic data, and lucid presentation of results.<sup>20</sup>

Finally we consider two group papers, one on International Organizations by D. Paarlberg, W. E. Haviland and A. G. Baptist, the other on Planning Procedures by J. J. Anjaria, K. Ohkawa, L. E. Samuel and I. S. Kuvshinov. Don Paarlberg considers international agencies in the light of modern attitudes and conditions, particularly in regard to the "explosion" in agricultural technology, the transition from subsistence to commercial farming and the improvement in communications between countries. He surveys the development of international organizations, such as FAO and concludes that it is impossible to prevent them from overlapping into ideological considerations; they cannot be kept entirely on a purely technical basis. One cannot help but observe the truth of this conclusion with respect to the ICAE. After some introductory remarks on commodity

<sup>16</sup> This review is concerned primarily with policy issues and it is not within its scope to discuss in detail the field of farm management. It need hardly be pointed out, however, that similar problems exist in this department too; for example an equally strong case can be made for the presentation of research results in production economics in a form more understandable to extension workers and even, where necessary, directly to farmers.

<sup>17</sup> K. O. Campbell, "Agricultural Science in Australia, 1935-1960: Agricultural Economics", *Journal of Australian Institute of Agricultural Science*, 26, 2 (July, 1960), p. 214.

<sup>18</sup> Kenneth E. Boulding, *The Skills of the Economist* (London: Hamish Hamilton, 1958), p. 4.

<sup>19</sup> See, for example, Sidney Schoeffler, *The Failures of Economics, a Diagnostic Study* (Cambridge: Harvard University Press, 1955), pp. 134-5.

<sup>20</sup> Discussions on the relationships between agricultural economics and policy-making are to be found at several points in the *Proceedings*, for example, G. L. Mehren, p. 101, M. Cépède, p. 107, speakers on Strong's paper, pp. 230-7, C. von Dietze, p. 274, and J. H. Kirk, p. 283.

agreements, W. E. Haviland treats specifically the International Wheat and Sugar Agreements. He then considers some influences of commodity agreements on the behaviour of world markets. One of his concluding observations is of interest:

"The long-run future of international commodity agreements surely depends on the progress made towards relaxing world tensions. Until then, (they) cannot be popular with powerful nations because these nations, faced with surpluses, will insist on reserving control over their trade as a tool of diplomacy and an armament of economic warfare . . . The distant prospect of peace to this economic rivalry lies in international cooperation."<sup>21</sup>

A. G. Baptist, under the heading "Interregional Groupings" considers regional agreements in Europe since 1945. He discusses briefly the integration of Belgium, the Netherlands and Luxembourg, the Organization for European Economic Cooperation and the European Coal and Steel Community. To some extent the remainder of his paper is already out of date, since it was written before the European Economic Community and the European Free Trade Association commenced operation. Nevertheless it makes interesting reading, especially in view of the present trend towards the formation of Common Markets in Africa, South America and elsewhere.

Planning techniques and procedures are discussed in four treatments of specific countries. J. J. Anjaria outlines some achievements and limitations of the two Five-year Plans in India. He gives statistics for the First Plan, with its primary emphasis on increased agricultural production, and an assessment of the Second Plan, where the focus is switched to industrialization. He sums up in general that

"agricultural planning in India is primarily an attempt to raise production all round—first, through provision of economic overheads by way of public investment and, secondly, through promotion of effort by the farmers themselves, aided so far as possible by institutional finance and other similar facilities."<sup>22</sup>

Kazushi Ohkawa describes the failure of Japan's first Five Year Plan, begun in 1955, and the hopes for the New Long-range Economic Plan adopted in 1957. It is aimed to increase substantially by 1962 not only the level of nutrition of the population but also the composition of the national diet. The new plan also stresses the importance of increasing both agricultural productivity and farmers' incomes. Data are presented showing progress in the early stages and projections to 1962. Next, agricultural planning in Israel is discussed by L. E. Samuel, who outlines the nature of agricultural production in that country and describes the work of the Division of Economic Planning in Agriculture. Israel has made some progress in solving her agricultural problems, although these problems are not as great as those facing India or Japan. Finally an account of the situation in the U.S.S.R. is given by I. S. Kuvshinov. Agricultural planning in the Soviet Union is of course rooted deeply in the totalitarian structure. The manipulation of the direction of economic forces by the State is demonstrated by the author. He cites some of the factors which the authorities take into account in the formulation of long-range programmes, for example, the need to exploit the agricultural advantage of particular districts, the introduction of mechanical and scientific innovation, and the need to utilize resources "to the utmost advantage". Most speakers during the discussion of the four papers support the need for planning measures.

<sup>21</sup> *Ibid.*, p. 374.

<sup>22</sup> *Ibid.*, p. 410.

However, L. K. Elmhirst sounds a note of caution. He contends that the number of failures in economic planning may be greater than one is led to believe, and that there is as much to be learnt from a failure as from a success.

### PART III

The following conclusions are drawn:

(i) The tenth *Proceedings*, like its predecessors cannot be read as a complete textbook on the field that it covers. There is inadequate emphasis on some topics—for example to have only one paper on marketing is insufficient—and too much repetition of other facets, such as the causes of the farm surplus problem in advanced countries. In addition, the papers presented are assembled without any editorial connection or summary, leading to a disunity in the work considered as a whole. Discussions of papers are apparently reported almost *verbatim* because no attempt has been made even to standardize the titles of the speakers (for example Dr. T. H. Strong is referred to variously as “Mr.,” “Dr.,” and “Professor” during the discussion of his paper). In the *Proceedings* of future Conferences it would be pleasing to see these drawbacks reduced by more critical editing.

(ii) Counterbalancing these shortcomings is the fact that much useful information can be derived from individual papers, as pointed out further below. In addition, there are reports of addresses to the Conference by the Indian Prime Minister, Mr. Nehru, other Indian officials and the immediate past-President, L. K. Elmhirst. With regard to Dr. Elmhirst, no reader could fail to be impressed by the long and active service he has rendered the ICAE, nor hesitate to endorse the honour accorded him by the Conference in conferring on him the title of Founder-President. The book also gives brief reports of an innovation at this Conference, i.e., workshop discussions in various departments of agricultural economies. Finally, and very importantly, there is an exhaustive index.

(iii) The international flavour of the volume is enticing from more than one point of view. Firstly it is instructive to read the comments of delegates from Soviet-bloc countries; Western knowledge of the state of agricultural economic thinking in countries behind the Iron Curtain is all too sparse. But, more significantly, this book presents a very wide sample of the opinions of workers in underdeveloped countries. Their contributions in the form of papers and discussions which often quote specific experience for their own areas, are enlightening and, it is hoped, may correct some misconceptions in the minds of readers from advanced countries. Papers which may be read for their specific references to underdeveloped countries are those of Lewis, Gadgil, Biéanié, Mosher, de Vries, Campbell, Aziz, Anjaria, Ohkawa and Samuel. The tenth Conference was the first to be held in Asia; this is perhaps indicative of a trend towards greater awareness of the problems of the progress of underdeveloped economies.

(iv) The *raison d' être* for agricultural policy economics is to give advice. If this advice is inaccurate, ill-founded, or incoherent then policy economists are failing in their job. At many points in the tenth *Proceedings* these problems are discussed and all agricultural economists would benefit by reading and considering deeply the issues raised.