



The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

Papers downloaded from AgEcon Search may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

PROCEEDINGS OF THE
THIRTEENTH
INTERNATIONAL CONFERENCE
OF AGRICULTURAL
ECONOMISTS

*held at the University of Sydney
Sydney, New South Wales, Australia*

21-30 AUGUST 1967

The Economist and Farm People
in a Rapidly Changing World

LONDON
OXFORD UNIVERSITY PRESS
NEW YORK TORONTO
1969

GROUP M

Chairman: GLENN JOHNSON
*University of Michigan,
U.S.A.*

Rapporteur: D. G. R. BELSHAW
*Makerere University,
Uganda*

The Improvement of Markets and Marketing within Low-income Economies¹

RUY MILLER PAIVA

I.B.R.E., Fundacao Getulio Vargas Rio, Brazil

Introduction

THE study of markets and marketing recently gained more order and discipline with the structural model developed by Bain and others.² Contrary to the traditional approach which studies separately, and frequently in isolation, each of the multiple activities and institutions of marketing, the structural school studies them together, in their global aspect. The traditional approach describes and evaluates the role of institutions and the operation of the market channels and functions; it determines economic values such as marketing margins, prices, costs, and revenues; it determines the factors responsible for the levels and variations in price. In contrast, the structuralist school studies the manner and form by which the 'market structure' and 'market conduct' are associated with 'market performance'.³ Thus, quantifying and qualifying the 'market structure', measuring the 'conduct' and establishing criteria for 'performance', the structuralist school relates these variables so as to arrive at norms for public policy concerning price competition and market power.

Notwithstanding the general acceptance of this model,⁴ its value for studying marketing in underdeveloped countries must be considered limited, because it does not consider questions related to the introduction

¹ Thanks are due to Mr. John Ginzel and Dr. L. F. Herrmann, for helping in the English translation of this paper.

² Joe. S. Bain, *Industrial Organization*, New York, 1959; R. L. Clodius and W. F. Mueller, 'Marketing Structure Analysis as an Orientation for Research in Agricultural Economics', *Journal of Farm Economics*, vol. xlili, no. 3 (Aug. 1961).

³ These concepts can be roughly defined as: 'market structure' is the form by which the firms are organized that is, number and size of firms, degree of competition, differentiation of the products, etc.; 'market conduct' refers to firms' behaviour in relation to nature of competition and market power, and 'market performance' measures the contribution to the general welfare.

⁴ Nevertheless, its methodology has been criticized: W. F. Williams, 'Toward Performance in Agricultural Marketing Research', *Journal of Farm Economics*, vol. xlivii, no. 3, part ii (Aug. 1966); F. J. Smith and C. D. Dale, 'Market Structure Research—How and for what?', *Journal of Farm Economics*, vol. xlvi, no. 2 (May 1965).

of new technology and new forms of market organization, which are basic and essential in countries in process of economic development. As it was said,¹ 'the market structure model is static in that its chief concern is how existing structure are administered rather than' . . . 'how the structures are created and destroyed through time. Its view on market conduct is limited in that it concentrates on price, product (design changes), and promotion policy, and generally ignores . . . innovations and adoption of new technology and organizations in procurement, processing and distribution'.

In fact the adoption of new technology and organization in the marketing activities has not been adequately studied, considering the existing situation in the underdeveloped countries. It is known that in the developed countries the changes in market activities are brought by entrepreneurs who, in their search for maximum profits, try to use innovations that appear in the fields of technology as well as to adapt to changes that occur in economic conditions affecting relations between factor and product prices.² The final decision of the entrepreneur is based on an analysis of benefit and cost, in which the benefits are measured by an improvement in quality or presentation of the product, by an enlargement in the period or area of consumption, or facilitating the consumer's use of the product. All these benefits result in better prices, or larger sales volume, or in greater consumer preference for the products or 'brands' of the firm making the adoption.

In the underdeveloped countries the adoption of new technology and organization in marketing activities must also be considered, basically, as a question of cost and benefit. It differs, however, from economically developed countries because costs tend to be greater and benefits smaller. This is explained by specific characteristics of production, of consumer markets, and of the economy in general in these countries, characteristics which will be examined later. It also differs because the decision of the entrepreneurs cannot always be taken on the basis of cost and benefits since the reactions of the producers and consumers cannot be easily forecast. It is known that producers, merchants, and consumers are reluctant to modify their long-established habits and traditional practices, and to adapt to the new conditions imposed by modern marketing processes. The problem of modernization of marketing activities is, then, more serious and more difficult to solve, in the underdeveloped countries.

In order to focus the importance of this problem, we shall first describe some of the characteristics of the producers, consumers, and the economy in general of the under-developed countries which seem to conflict with

¹ John R. Moore, 'The Causes and Consequences of Major Changes in the Organization of Agricultural Marketing Activities', *Journal of Farm Economics*, vol. xlviii, no. 3, part ii, pp. 148-9 (Aug. 1966).

² 'In the past several decades, we have had a flow of farm marketing changes that challenges the imagination' . . . said K. Bird and others in 'Marketing Innovations', *Agricultural Markets in Change*, edited by Marketing Economic Division—U.S.D.A., 1966, pp. 28-35. The article presents a detailed description of the main innovations adopted by the marketing of the agricultural products in the United States.

the modernization of marketing; and we shall give a few examples and comments on the difficulties encountered in the adoption of some new techniques and processes.

Characteristics of agricultural production. The capital stock and the technical knowledge available to agricultural producers are very limited. Farmers do not use selected seeds and improved livestock, they do not combat efficiently insects and diseases and, consequently, the products carried into the market are very irregular in respect of quality, form, size, degree of maturity, sanitary condition, and so on. This high heterogeneity makes the use of modern processes of marketing extremely difficult. Farmers are also very conservative in their way of life and very resistant to accepting innovations. They do not react easily to the 'market orientation' and therefore farm production does not become 'an appendage of marketing' as in the more-developed countries.¹

Characteristics of the consumer market. A very large percentage of the consumers have little purchasing power and seldom have material facilities in their residences (refrigerators, freezers, blenders, etc.) to store and to use perishable, or semi-processed, or frozen products. They are not used to being very careful about examining the quality and uniformity of the product that they buy, and so they do not act as a very strict 'inspector' of the products entering into the market.² A small fraction of the population has high income and is interested in quality and uniformity of the product. Yet this sector of the population is not interested in partially prepared food, which saves the housewife time and labour, since domestic servants are widely used in this sector and are not expensive.

Characteristics of the economy. Limiting ourselves to the most important facts, we can cite the following: (a) lack of price and market information and precarious communications services (telephones, mail, and radio) that affect marketing efficiency, especially of the large firms that most need these services—transportation systems leave much to be desired, especially in the rainy season when many roads are impassable, isolating part of the producing regions from the consuming centres, increasing the cost of services, price fluctuations, and opportunities for speculation; (b) shortage of capital and uncertainty of banking credit, which makes the adoption and operation of adequate marketing services more difficult and costly; (c) high prices for machines, equipment, utensils, and other industrial products (generally due to high protection given to

¹ Side by side with traditional and backward agriculture one may encounter small groups of farmers employing modern techniques of production. They are usually connected with exported products or products that cannot be cultivated by traditional techniques because of insects and diseases which can only be effectively controlled by improved methods. In Brazil this occurs especially with fruits of temperate climates, poultry, eggs, and a few other products.

² A housewife asked why she was not more strict on selecting merchants said that it did not pay to do so because next week their product could be better or worse. And this is true, since—under the marketing conditions that prevail in the underdeveloped countries—the merchants could hardly have any control on the sources delivering the food products.

the infant industries of these countries) which increases the cost of installation and operation of these facilities. This is especially so if they are not used to full capacity when the fixed cost per unit of production rises and becomes a larger part of the total cost; (d) high tax level, complex systems of regulations, and the bureaucracy that usually accompanies the marketing process, both licences and permits increasing operating costs, especially for the larger and more complex firms which find it more difficult to evade taxes and other regulations; (e) and, lastly, the constant price fluctuations which are due to innumerable causes and which reduce the incentive to modernize the marketing process. This reduction of incentive is due not only to the financial risk involved but also to the fact that the merchant's preoccupation on improving the efficiency and decreasing the operating cost tends to be subordinate to another preoccupation which is to become well informed on all market informations and rumours, so they can decide on the best time to enter (buying) into the market and the best time to leave it; they must seek also to give the firm an organization that allows rapid advances and retreats in the markets. Under a situation of constant price fluctuation these policies may become more lucrative to the firm than the one related to normal operating efficiency.

Introduction of new technology and new organization in marketing

In face of these characteristics, the introduction of new organization and new techniques in farm marketing is not always easy nor always profitable in underdeveloped countries.

Starting from the situation in which products entering from the farmers are often of low quality and not well presented and in which the majority of consumers have low income and are not very 'demanding' in regard to market services, one can readily understand that merchants have little economic incentive to adopt an adequate system of grades and standards and that distributors have no incentive for establishing their own brands. On the contrary, under such conditions the entrepreneur's interest tends rather to oppose a classification system so that he may more easily dispose of the inferior product, mixing it in with the better one. Since it is difficult (and expensive) to obtain from the farmers standardized products and since consumers are not demanding critics of the quality of the products they buy, the possible prejudice against firms which follow such practices may be negligible.¹

The adoption of frozen storage produces a similar situation. Few

¹ On the same line, it is interesting to recall that in these countries the situation is better with the export products which are usually more uniform and better classified. Since the foreign markets are very strict on quality, the marketing firms have to be firm with the farmers and to obtain from them a better-classified product or there would be no transaction and no export. In Brazil a better situation is also found among the modern farmers that produce fruits of temperate climate, poultry, and few other products. Since they had to employ a more-developed technology in planting, spraying, cultivating, harvesting, etc., in order to guarantee the harvest, it was not difficult for the large majority of these producers to adopt a good classification system too.

consumers are interested in enlarging the consumption period for perishable products or have the income to pay the additional cost. And these additional expenses are usually larger than those of the developed countries because the installation of refrigerated storage is more expensive (due to high protection to the national industry) and the cost per unit of product stored is usually higher. This is because part of the agricultural produce received from the farm may already have injuries from disease and insect attacks, which only show after removal from refrigeration, obliging the merchant to redistribute the total expenses over the remaining products, increasing the cost per unit to the consumer.¹

The assembling of agricultural products also cannot be easily modernized. Without a proper classification service it is difficult to buy without direct inspection. And the lack of an adequate infra-structure (such as an all-weather road and a rapid communication service: mail, telephone, and telegraph), make long-distance transactions difficult without more personal contacts and inspection, which complicates the efficient functioning of large market firms that mostly depend upon such transaction. Due to these difficulties, diseconomy of scale will enter into much smaller-size firms than in the developed countries. For the same reasons it is more difficult and possibly more expensive to consolidate small firms into larger and more efficient ones² as it would be difficult successfully to adopt more complex marketing organization (especially through vertical integration). Even common marketing practices in the developed countries such as 'direct buying', 'forward contracts', and others that reduce commission and handling fees may not be advantageously used.

The tendency with respect to the processing of agricultural products in the more-developed countries is to expand and to become more complex, enlarging the array of products and the differentiation of forms and presentations, in order better to attend to the consumer's preferences. That is why many varieties and forms of food have developed such as 'frozen-food', 'pre-cooked', 'dehydrated' and always using a variety of packing and containers such as metal, cardboard, cellophane, etc.³ However, in the underdeveloped countries such modern processing methods are being adopted slowly and not always successfully due principally to the heavy capital investment required and the complex technology involved which makes it relatively more expensive. Moreover, the benefits of such processes are not always important to the majority of

¹ Sometimes conditions in these countries favour the economy of cold storage, as is the case of beef production for which the consumer demand is fairly constant during the year and the supply very seasonal due to the abundance of forage in the rain season and shortages in the dry season.

² In the economically more-developed countries there is a tendency to decrease the number of marketing firms and enlarge the volume of products handled in order to become more efficient. With references to change occurred in this line in the United States see P. P. Blaich and L. R. Herrmann in 'Perspective of Farm Product Marketing', pp. 1-25, in *Agricultural Markets in Change*, edited by Marketing Economic Division, U.S.D.A., 1966.

³ See K. Bird and others, op. cit.

consumers, who, having low incomes, cannot let themselves be influenced by the better appearance or by offerings out of season, if this represents an increase of services and, consequently, of prices.

The same is observed with the modernization of the distribution phase of the marketing. Great progress has been attained by the more-developed countries with the establishment, for instance, of the supermarkets. In these stores consumers can acquire their food necessities with a minimum waste of time and at a relatively low price, since the merchandise is sold largely pre-packed which permits easy movement and handling and a minimum of sales personnel. It is not easy to organize a successful supermarket in the underdeveloped countries. Besides the lack of standardized and uniform raw and processed products, which has been discussed previously, one must always consider the behaviour of the consumer. They are always suspicious about the grades established by the merchant for the perishable products and feel it necessary personally to handle the products, which results in a quick deterioration of the product. It is also necessary to consider the competition that the supermarket suffers from the small grocers and 'street-sellers'. In the underdeveloped countries where salaries are low and taxes high it is easy for an individual to become a successful grocery man or small street seller, because these can evade paying high taxes (which the large firm usually cannot) and can cheat customers more frequently without serious consequence (due to the producers and consumers characteristics already mentioned). And the 'street-seller' can be content with much smaller profit margins since the opportunity cost of their labour is very low.

Final considerations

This brief description has shown that, in the under-developed countries, the successful introduction of new marketing process and organization depends upon certain characteristics of the agricultural producers, of the consumers market and of the general economy of the countries; and, that, due to this inter-dependence, it is necessary to have the marketing improvements in harmony with improvements in these sectors. It may be a loss indiscriminately to introduce processes and methods that have been economically successful in more-developed countries.

In order successfully to introduce modern processes and methods of marketing in the underdeveloped countries, the entrepreneurs must examine the possibilities of each in the face of the features of the country. And the public agencies must work to improve the basic conditions (transport, communication, credit, marketing information, simplification of bureaucracy, etc.) and, together with the more progressive marketing firms, to promote education programmes directed to producers and consumers on the acceptance of the new and different market process and methods.

GROUP M. REPORT

THE Chairman suggested that Dr. Paiva's paper indicated the need for discussion of at least the following aspects of agricultural marketing economics:

1. *A priori* and empirical evidence concerning the utility and adequacy of both traditional marketing theory and the newer market-structure analysis in less-developed countries.
2. The adequacy of empirical knowledge concerning the impact of alternative marketing policies on marketing efficiency in low-income countries.
3. The extent to which the development of agricultural marketing systems was determined by the level of final (effective) demand for the utilities of form, space, and time which the marketing system itself could create.
4. The nature of the demands made upon the internal marketing system in response to opportunities for profitable specialization in inter-regional and inter-national trade.

In the event, discussion focused almost entirely upon the Chairman's second point; like the paper, discussion was also confined to a consideration of product markets, although the importance of factor market efficiency was pointed out and generally recognized.

On the descriptive level there was some feeling that Dr. Paiva's paper was too gloomy and had given insufficient attention to the wide variation in both the structure and the efficiency of agricultural marketing which could be found in under-developed countries. In particular, the rate of emergence of commercial farmers from a traditional or semi-subsistence pattern of agricultural production varied widely, but this rate was an important indicator of the effectiveness of the marketing system in contributing to over-all development.

Considerable discussion ensued on the existence of imperfections in the marketing structure, especially the incidence of 'cheating', monopolistic exploitation, and speculation; the extent to which these actually reduced marketing efficiency, and the effectiveness of government policies designed to deal with these phenomena. General allegations or detailed examples of 'cheating' by middlemen were made for some countries whilst it was stated that there was no evidence from recent research for this view in another. Perhaps the most widely applicable statement was made by a speaker from Thailand who said that in his country there was insufficient market research to indicate who was 'cheating' whom and to what extent. In any case, if there is freedom of entry into marketing activity, competitive pressure would tend to drive any widespread gains from 'cheating' down to the level of 'normal' profits, and costs of 'cheating' should then be viewed in terms of a social irritant and an additional source of uncertainty in the market, rather than as an income transfer from producers to middlemen under conditions of monopsony or oligopsony, as is usually alleged.

It was pointed out that, in addition, there was an ethical problem in distinguishing 'cheating' from 'shrewd business practice', the dividing line varying according to the moral values of a particular society at a certain time.

The appropriate policy measures in this area consist mainly in the introduction and enforcement of specific standards, grades, and measures and contractual forms of buying and selling. Inefficiencies may arise here due to inadequately framed legislation or ineffective (or inconsistent) application by civil servants, but in general the costs of administration and of a certain loss in middlemen's freedom of action would be more than offset by the reduction in uncertainty and the removal of a major cause of social friction between producers and/or consumers, on the one hand, and middlemen, on the other. A uniform set of 'ground rules', therefore, would act to protect the middleman from suspicion and would foster a spirit of co-operation, rather than conflict, between different sectors of the economic system. Nevertheless, there is always a danger in low-income countries, it was pointed out, that official enthusiasm for higher grades of produce or 'modern' techniques of marketing will ignore consumers' income-gearred preferences and thus actually reduce the net utility created by the marketing systems.

The harmful effects of speculation in the West African cocoa trade before the Second World War were referred to by one discussant, but a majority of speakers wished to see a clearer analysis of the relative costs and benefits of speculative activity *before* government policies were actually implemented. A speaker from a South American country described a situation where maximum retail price legislation intended to reduce inflationary pressures and in particular to combat speculative activities by traders, coupled with the general use of traders as scapegoats for any such price increases as did occur, has inhibited investment in storage and refrigeration in the marketing sector. Such investment actually would have reduced the unit costs of foodstuffs marketing, but the uncertainty created by official policy led to a final result which was the opposite of what was intended.

With reference to the existence of a monopsonistic element in the market, a second-best approach was advocated, i.e. to create a statutory monopoly, such as a Marketing Board, which would, it was claimed, redistribute income more equitably than a private monopoly. However, other speakers from both Africa and South-East Asia recognized that in practice this may replace a form of minor exploitation with a situation of major misallocation of resources with, possibly, a serious decline in the equitableness of income distribution. (In any case, the argument for replacing a private monopoly with a statutory one needs to be viewed alongside alternative government strategies, such as the use of progressive taxation to improve income equity or assisting organizations such as co-operatives to create competitive 'market conduct').

In connection with Dr. Paiva's main concern—the rate of technological innovation in the marketing system—evidence was quoted from India

where larger farms were replacing ox-transport with lorries to take produce to urban centres, that quite major changes of technique can occur in the marketing sector. However, five major *economic* reasons were advanced, to be considered alongside those suggested by Dr. Paiva, to account for the characteristic marketing structure of small-scale firms operating at low levels of technical efficiency which is found in many less developed countries.

1. Absence of significant economies of scale at currently profitable levels of operation, often due to:
2. Constraints on profitable investment in modern utility-increasing techniques arising from low levels of domestic consumer demand.
3. Low labour opportunity costs limiting profitable investment in modern labour-saving techniques.
4. The semi-subsistence nature and small scale of agricultural production organization. This may dictate an atomistic structure as the least-cost system for at least the primary buying stage and often for the complete marketing chain through to the consumer, in the case of staple food supplies for urban populations.
5. Inadequate investment in the relevant parts of the economic infrastructure, especially in roads, postal and telephonic communications, and banking services. This situation may present a set of limiting constraints preventing further improvements by investment or reorganization within the agricultural marketing system alone.

In these circumstances an unimpressive level of organization and technical modernity may be perfectly consistent with a high level of economic efficiency. Indeed, in agreeing with a speaker that the marketing structure of Brazil, which had been described in the paper, was a near-exemplary case of perfect competition, with low opportunity costs, freedom of entry, etc., Dr. Paiva appeared to admit that his central interest was with questions of technical efficiency, a priority not usually shared by marketing economists.

Regarding the question of institutional innovation, it was agreed that there was often scope for government initiative; price-stabilization schemes and co-operative development were mentioned particularly. In some instances reform of present official policies was a higher priority than further institutional innovation. Again, a concerted rural development strategy, covering the infrastructure, agricultural production, and the non-agricultural sectors in addition to policies for agricultural marketing was thought to be necessary in some cases for development to occur.

A general concensus emerged concerning the need for intensified agricultural marketing research in the less-developed countries, particularly in order to better understand the working of present structures before designing policies to deal with an *imagined* cause of inefficiency. A plea was made for care in the use of criteria for appraising the operation of marketing systems. In the discussion, various criteria had been used by speakers, including economic efficiency, technical efficiency, inter-personal

and inter-firm equity, public revenue collection, and development-planning criteria. There was a need for care by economists to avoid using a heterogeneous set of partial measures of performance, which would only serve to confuse understanding of an already fairly complex area.

Finally, on the theoretical level, an objection was raised against Dr. Paiva's assumption that orthodox marketing theory could not handle the question of the rate of technical innovation. Theories of both competition and monopoly (e.g. Schumpeter's discussion of the case for monopolies) provided a framework for empirical testing and verification in this area.

Among those taking part in the discussion in addition to the opening speaker were: Harry Trelogan *U.S.A.*, Delane Welch *Thailand*, K. Opoku Owusu *Ghana*, L. J. Paz *Peru*, D. Atere-Roberts *Sierra Leone*, A. Harvey *Bolivia*, P. von Blanckenburg *Germany*, Ronald Aines *U.S.A.*, T. H. Koh *Malaysia*, Richard Wheeler *U.S.A.*, Arb Nakajud *Thailand*, J. H. Park *Korea*, V. Y. Rao *Australia*.