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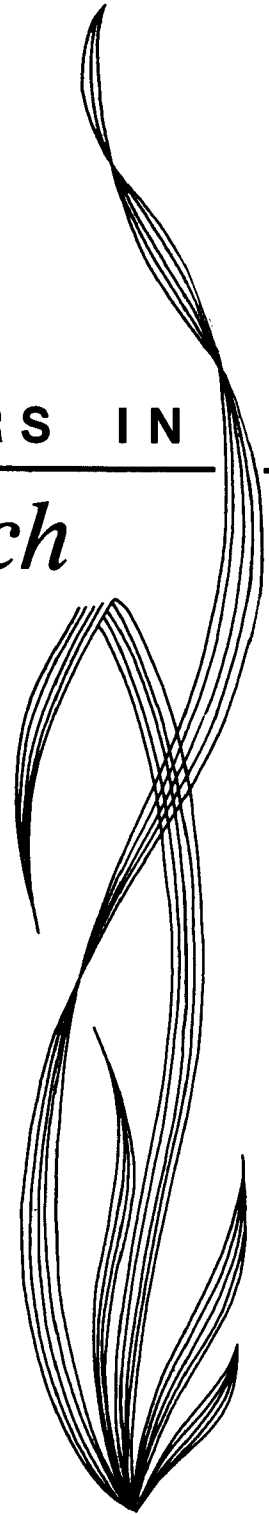
Marketing Research

EDITED BY

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P R E F A C E

THIS BOOK was prepared to help meet the agricultural marketing research challenge of the 1980s and beyond. New marketing problems are emerging, and several persistent issues of the past are continuing to appear in new ways. How well forthcoming marketing problems are solved will have an important bearing on the productivity and performance of agriculture and the general economy. Success in solving future marketing problems will also affect public attitudes toward various forms of market organization and exchange processes that will be relied upon to allocate resources and distribute income.

The volume is the result of an initiative by R. J. Aldrich, Administrator of the Cooperative State Research Service (CSRS), U.S. Department of Agriculture, who appointed a steering committee to plan the work. Members were Richard G. Garner, CSRS; Howard W. Ottoson, University of Nebraska, Chairman of the Marketing Subcommittee of ESCOP (Experiment Station Committee on Organization and Policy); and Paul L. Farris, Purdue University, who served as chairman. R. J. Hildreth, Farm Foundation, served with the committee. CSRS provided funds to help support the work.

The steering committee launched the venture by meeting with a few persons with considerable knowledge of agricultural marketing research. These were Ben C. French; John E. Lee, Jr.; William T. Manley; Willard F. Mueller; Don Paarlberg; and James D. Shaffer. The group prepared an outline for the volume, with a suggested title, focus, and author for each chapter. The authors met several times to review and critique outlines, manuscript drafts, and revised chapters.

The book is the individual and collaborative work of a group of professional agricultural economists who see major challenges in agricultural marketing research. Their ideas, perspectives, and suggestions are expected to be of interest to persons who seek ways to strengthen and improve research related to important issues involving marketing, agriculture, and the general economy in the years ahead.

Paul L. Farris

**HAROLD M. RILEY
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MARKETING IN DEVELOPING COUNTRIES

SINCE THE 1960s there has been a significant and growing involvement of U.S. agricultural economists in foreign assistance programs directed toward the less developed countries (LDCs). Through programs financed by the U.S. Agency for International Development (USAID), foundations, foreign governments, and multilateral international agencies, agricultural marketing economists have had opportunities to conduct research and provide advisory inputs into the development of programs to improve marketing systems. Concurrently, there has been an expanding flow of students from the LDCs through the graduate programs of U.S. universities (Stevenson 1979). To be effective in their roles as teachers, researchers, and advisors, economists have found it necessary to adapt their conceptual and analytical tools for use in different institutional, political, and social environments. In some instances marketing problems confronted in the LDCs appear to be similar to those experienced in the United States some 50-75 years ago when agricultural and industrial changes began to transform the economy in a relatively rapid and irreversible manner. However, the economic, political, and social conditions in the LDCs pose problems of market organization that require solutions carefully tailored to the needs of particular country situations. The paucity of basic information and data about existing LDC market systems and the lack of trained professionals in those countries have been major constraints to research and development activities.

This chapter is directed toward a primary audience composed of U.S. university faculty and students concerned with agricultural marketing problems in the LDCs. Marketing specialists with international agencies and LDC institutions are another audience group. We begin with a brief conceptual point of

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view regarding the role of marketing in the development process. This is followed by an assessment of past research activities. A major part of the chapter is devoted to the organization and conduct of future research.

CONCEPTUALIZING AGRICULTURAL MARKETING IN A DEVELOPMENT CONTEXT

Economic development should be viewed as a long-term process that occurs over decades and generations. Through technological innovation and economic organization, output per person increases and the material well-being of the population is raised to higher levels. Increased specialization of productive effort, industrialization, and urbanization are important elements in the growth and development process. These forces contribute to a growing demand for marketing services. In agriculture there is a transformation process, as relatively small-scale, predominantly self-sufficient family farming units become larger, more specialized, and increasingly dependent on marketing arrangements for the sale of their agricultural products and for purchased inputs. Rural markets emerge as local trading centers hierarchically interconnected within a larger regional and national market network.

In most developing countries there is a steady and sometimes relatively rapid migration of people from the rural areas to urban centers, with many of the capital cities growing at rates in excess of 5 percent per year. The buildup of urban population and rising levels of consumer income place great pressures on the marketing system to expand and undertake an increasingly complex set of activities that link the rural and urban sectors of the economy (Mittendorf 1978). Marketing services become a larger portion of the consumer food bill and the composition of the market basket shifts from low-cost, starchy foods toward higher cost livestock products, fruits, and vegetables. Major investments are required for transportation equipment, highways, and other physical facilities. Government agencies usually assume leadership in planning and financing much of the market infrastructure and frequently perform major roles in facilitating and regulating development of marketing institutions and in some instances actually organizing and managing marketing enterprises.

There is a wide range of viewpoints on the role of agricultural marketing institutions in economic development and the appropriate function of the public sector in bringing about desired changes. There are those who hold the view that marketing is an adaptive set of activities to be given secondary consideration in development planning strategies, with primary consideration being directed toward expansion of agricultural and industrial production. This view has been challenged by marketing economists who argue that marketing is a critical and dynamic component of development. Abbott (1967) and others in the Food and Agriculture Organization (FAO) marketing group (1970) have stressed the incentive role of effective product marketing systems that can reduce risks and lower costs for farmers and other market participants. The local availability of reasonably priced agricultural inputs and consumer goods is also seen as having a stimulating impact on economic activity in both rural and urban areas.

Collins and Holton (1964) have also challenged the view that marketing firms and institutions will automatically spring up in response to price incentives to provide the services most appropriate for new production situations. They argue that effective planning for economic development should give a great deal of attention to facilitating development of marketing institutions to complement programs for expanding physical production.

There seems to be a growing consensus among agricultural economists that aligns with the broader, more dynamic view of marketing as a major element in development of the agricultural sector and in coordinating agriculture with growth and development in other sectors. Hence food production, processing, and distribution activities are seen as a closely interrelated set of activities that operate in a "systems" context. The system includes the familiar components of farm production, rural assembly, processing, distribution (both rural and urban), and flow of industrially produced agricultural inputs and consumer goods to rural markets. In the more rurally based economies these activities take place within rural towns and their hinterlands; but as development progresses, the influence of larger urban centers becomes more important.

A simplified conceptual model was developed by a Michigan State University research team to illustrate a particular application of a "food system" approach to a marketing development program in Northeast Brazil (Table 16.1). The left-hand column lists five system components that are potential points of public sector intervention into a regional or national food system where the program objective is to stimulate economic growth and development. The vertical ordering of the system components gives emphasis to a demand-driven system, but there are important supply and demand interactions that link the various components into a semiclosed system. It is semiclosed because it does not include an export market component or an explicit linkage to the other sectors of the domestic economy. These components could be added to the model, but for the purposes of this chapter they have been set aside. The middle column lists a series of actions that might be taken by the public sector to bring about desired changes in the food system, giving emphasis to actions that will affect market organization and performance. An interrelated set of impacts on costs, demand, and output are summarized in the right-hand column. The model illustrates a particular sequence of actions that work back from the urban food market toward farm producers. However, there are many alternative sequences that could begin with any of the system components as long as there is adequate consideration of the pattern of repercussions that will be likely to occur. For example, demand from the rural purchased food and other basic consumer goods component has a direct pull effect on rural production and assembly components. And to the extent that there is regional specialization of agricultural production in a country, there is a direct linkage between rural demand and urban food distribution components that serve as concentration and redistribution mechanisms for the more specialized rural regions.

In the past there has been a strong tendency for agricultural planners to emphasize farm production expansion without sufficient consideration of market incentives and constraints, whether these come from rural or urban de-

TABLE 16.1. A conceptual model showing a series of interrelated food system reforms and expected effects on economic growth and development

Potential points of public sector intervention in regional or national food system processes	Possible actions to bring about desired changes	Postulated effects on economic growth and development
Urban food distribution components	Capital and technical assistance to stimulate improvements in efficiency of traditional urban marketers	Reduced marketing costs in urban areas for locally produced food products
	Timely introduction of infrastructures as a tool to stimulate improvement in market channel performance	Lowered food prices, increased effective income
	More effective public facilitative and regulatory programs	Increased effective urban demand for food and consumer goods and related marketing services
Rural food production components	Appropriate agricultural production extension efforts	Increased food production and agricultural production specialization
	Development of appropriate packages of inputs	Increased rural incomes and market participation on the supply and demand sides
	Effective market information and price stabilization programs	
Rural assembly market components	Supervised credit programs	
	Promotion of backward vertical coordination of food marketing	Increased rural and urban demand for organization and coordination services of commodity subsystems
	Capital and technical assistance to rural assemblers and transporters	Increased rural demand for improved physical distribution services, i.e., assembly activities
	Improvement of public storage, roads, exchange rules, grades	
Rural distribution components	Improvement of rural distribution services and lower costs for farm inputs, purchased food, consumer goods	Increased rural demand for farm inputs, purchased food, rural- and urban-produced consumer goods, marketing services related to the above three
Rural and urban industrial and services components	Use of appropriate technologies in production processes	Increased demand and employment in industry and related services sectors
	Development of more appropriate products for local market demand characteristics	Increased income leading to increased demand for food and consumer goods
	Lower costs of mass distribution to rural and urban areas	

Source: Adapted from Figure 1.1 in Slater et al. (1969).

mand sources. Thus Table 16.1 illustrates a more comprehensive, market-oriented approach to agricultural development, emphasizing the dynamic interactions between agriculture and industry and between rural- and urban-based activities.

PAST RESEARCH

Research by U.S. scholars on agricultural marketing problems in developing countries can be categorized into three broad groupings: descriptive studies, feasibility studies, and broader diagnostic assessments.

Descriptive Studies. Descriptive studies have been conducted by individuals from various social science disciplines on existing arrangements for marketing specific commodities or carrying out selected marketing functions. Most have been carried out by professionals in academic institutions and their students. The studies have provided useful factual information about existing marketing arrangements, but limited accessibility has been a major factor restricting their use by government agencies and the private sector. In addition, many of the studies done by economists and agricultural economists are based upon conceptual perspectives of market organization dominated by the perfectly competitive theoretical model of economics. Much of the research has been concerned with issues involving the testing for conditions of structure, conduct, and performance predicted by the perfectly competitive model. A major problem with this relatively static framework is that it underplays the potential dynamic impacts of marketing institutions in achieving development goals regarding efficiency, equity, growth, and employment.

There have also been useful and insightful descriptive studies carried out by researchers who represent other social science perspectives. Geographers, with their interest in the location of economic activities, have undertaken a large number of descriptive studies of marketplaces, periodic markets, and itinerant traders in rural areas of developing countries. This research is important for the development process because it provides knowledge of how these traditional trading institutions function. Unfortunately, by the geographers' own assessments, much of this research suffers from the inability to offer normative solutions to questions concerning policy and planning of marketing systems (Ghosh and McNulty 1978; Smith 1978).

Anthropologists and sociologists have observed and described rural household behavior relative to combinations of production, consumption, storage, and sales decisions. Anthropologists also have a tradition of conducting individual village studies. Although these provide valuable descriptive information about rural populations and economic processes, they rarely contain analyses that lead directly to policy recommendations. A group of economic anthropologists are seeking to use concepts from regional science and geographical models to put their village studies into a more useful framework for understanding and promoting development. In a review article, C. Smith (1976) concludes that without the regional system context that geographical models can provide, anthropological marketing studies will not tell

us a great deal more than we already know about the economic determinants of peasant behavior.

Feasibility Studies. Feasibility studies have been done to provide information needed by government agencies, international financial institutions, and private sector investors regarding capital investments in marketing infrastructure (e.g., processing plants, wholesale markets, grain storages, transportation facilities). These studies have varied widely in scope and quality of analysis. Most have been carried out by private consulting firms or professionals associated with university-based research institutes. The analyses are typically focused on the economic feasibility of a proposed project involving a large capital investment. Because of severe time constraints, heavy reliance is usually placed on the use of available secondary data, engineering estimation procedures, and qualitative information that can be obtained through interviews with informed local business leaders and professionals. Looking back at some of these studies and the recommendations that were subsequently carried out, several concerns can be identified. First, there has been a tendency toward unrealistic optimism regarding the transferability of technologies from the more highly developed countries to the LDCs. The analyses have tended to endorse capital-intensive technologies in situations where labor-capital costs are such that more labor-intensive technologies would be more appropriate (Timmer 1972). Second, the feasibility studies have sometimes misjudged the compatibility of new capital-intensive infrastructure with existing patterns of production, distribution, and consumption. As a result, there have been examples of serious underutilization of the new facilities (e.g., grain storage) (Lele 1975). Third, the lack of a trained labor force and a local capacity for the continued development of both skilled labor and management ability is either underplayed in the reports or not taken seriously by those responsible for local project implementation. Because of the problems mentioned above, there is a growing demand for better preparation of professionals who conduct feasibility studies. This is reflected in the increased interest in short-term training programs on project development and evaluation such as those offered by the World Bank and similar offerings by USAID, universities, and private consulting firms.

Broader Diagnostic Assessments. Broader diagnostic assessments of food system organization in developing countries have provided inputs to policy and program development and to an evolving conceptual and analytical framework for future research and development efforts. Several groups of U.S. university researchers have carried out these broader based studies of agricultural marketing processes in LDCs (Mellor 1966; Mellor et al. 1968; Jones 1970; King 1973; Lele 1976; CRED 1977). Mellor et al. (1968) have studied marketing in India. On the basis of extensive field surveys they have challenged the validity of several widely held views regarding the exploitive and unproductive activities of rural traders (Mellor 1966). Lele (1976) could find little evidence in her field studies to support the view that the monopolistic nature of private trade leads to excessively high marketing margins or that wide seasonal

price variations were caused by speculative hoarding and profiteering practices of traders (Mellor et al. 1968). Price differentials among major wholesale centers were found to be closely related to expected price patterns based upon transportation cost differences. Indications are that entry into traditional trade is generally open and that there is overcrowding and significant competition at each level of marketing. Even in instances where a few traders are handling a large share of the market volume it was observed that they are unable to influence prices appreciably through collusive action as long as there is effective market intelligence and transportation among markets. Lele (1976) observes that public sector efforts to facilitate efficiency in traditional trade is necessary, since rural traders perform a number of important functions that cannot be replaced by government or cooperative agencies without incurring substantially greater costs in administrative manpower and finances than is implicit in allowing the private sector to operate. A broad-based and positive role for public sector involvement in marketing has been outlined by Lele.

Jones (1970) and his colleagues at Stanford University have conducted extensive studies of agricultural marketing in several African countries. The characteristics of existing marketing systems were compared with the requirements of a purely competitive model, and actual pricing relationships were checked against what would be expected in a perfect market. Their conclusions were "that average seasonal price movements correspond rather well with the cost of storage; that intermarket price correlations were somewhat less than might be hoped for; that year-to-year price movements were generally in accord with supply and marketing conditions; but that week-to-week price changes showed signs of serious random disturbances consistent with the hypothesis that traders were poorly informed about episodic changes in the conditions of supply and transport. . . . In terms of the tasks that marketing systems are asked to perform, the African ones that we studied are not performing badly." Despite this assessment of the existing marketing system, Jones points out the critical need for attention to marketing in economic development planning where major technological and institutional changes are being contemplated. Jones closes his article with the observation that "the invisible hand cannot be trusted completely to guide economies in socially acceptable directions, nor can the state rely on the marketing system to perform the tasks assigned to it without appropriate facilitating services best provided by government."

A major problem with the research framework developed in most of these diagnostic assessments is the lack of concern for the dynamic impacts that marketing services can have on production and consumption. The static focus of the research has been on whether prices and cost relationships over space and time behave as predicted by the perfectly competitive model. Relatively little effort has been made to better understand how the effectiveness of marketing services influences supply and demand functions, especially for small-scale farmers and low-income consumers.

Harriss (1979) has reviewed the methodology used in the Stanford-Cornell type approach to the analysis of market performance and makes a similar observation:

In dealing with easily available, even if qualitatively poor, data on agricultural commodity prices the analysis of market performance has been diverted away from the consideration of interrelationships—between the control of commodities and money; between exchange and production essential for the identification of the role of the marketing system in economic development. In this sense not only is the methodology itself usually statistically and interpretatively spurious but also the fetishism of competition in agricultural commodity markets (as revealed by price and commodity analysis here) has led agricultural marketing economists to overnarrow at least a decade of a substantial part of our research.

Another problem with much of the broader diagnostic research is the tendency to use secondary and usually macrolevel data in testing for conditions of structure, conduct, and performance predicted by the perfectly competitive model. Commodity studies of market flows, margins, elasticities, concentration, competition, and policies are generally based on industry or regional data that do not permit focusing on the microlevel behavior of marketing agents, including farmers' marketing decisions in the rural areas. These studies frequently include assumptions of homogeneous behavior on the part of farmers and marketing agents and use data that are averages of many observations (e.g., monthly price data) and thus obscure important variations in market behavior. Results are often inadequate for making specific recommendations for improvements in rural and/or urban markets, especially if the objective is to extend improved services to specific target groups such as small-scale farmers, other low-income rural residents or low-income urban consumers.

Still another problem of much of the broader diagnostic research for guiding overall marketing policy stems from its focus on few if any of the levels of interaction in the vertical marketing channels between farmers and ultimate consumers, whether they are located within rural areas themselves or in large urban areas. Even in semisubsistence economies there are interdependencies in the various stages of the farm production-assembly-processing, distribution, and consumption process. And even the "equity with growth" type of rural development being advocated in much of the literature involves constant structural transformation of the rural and urban economy, which leads to greater interdependencies among agricultural production, distribution, and consumption processes. The most important marketing problems related to achieving the desired structural transformation are in the design and promotion of new technologies and new institutional arrangements, which may be unprofitable or unavailable to individual market participants but if adopted by all participants could yield substantial system improvements.

Pritchard (1969) has stressed the importance of developing a broad analytical framework for studying and solving agricultural marketing problems in developing countries. He has cautioned against using a narrowly defined market structure framework that limits analysis to characteristics of the organization of a market that seem to influence strategically the nature of competition and pricing within the market. Pritchard has outlined an eclectic

set of analytical procedures, bound together into a useful framework by the concept of agricultural marketing as an organized, operating behavioral system within the national economy. He has emphasized the need to use the framework to search for basic economic, technological, and social constraints in the environment in which marketing systems function and change.

A number of U.S. university researchers have approached broader diagnostic assessments from such a perspective. Researchers at Harvard University have extended their "agribusiness commodity systems" approach to problems of export market development in Central America and other areas (Goldberg et al. 1974). Phillips (1973) and his colleagues in the Food and Feed Grain Institute at Kansas State University have conducted a number of diagnostic assessments of grain marketing systems in LDCs, using a broad food chain conceptual approach. Physical handling at all stages in the farm-to-consumer chain has been examined and recommendations for improvement programs have been presented to government agencies. Pricing, storage, and regulatory policies have also been an important part of the country studies.

A group of Michigan State University researchers have developed a food system approach to conducting diagnostic studies of agriculture and food marketing systems linking large urban centers in selected Latin American countries with their rural supply areas. Field studies in northeast Brazil, Bolivia, Colombia, and Costa Rica were carried out collaboratively with local professionals representing universities and government agencies (Harrison et al. 1974). The diagnostic studies were the basis for the development of broad-based market improvement programs with specific project recommendations. A modified market structure-conduct-performance framework of analysis generally guided the organization of these diagnostic investigations. Such a framework is oriented toward the evaluation of system performance when judged against broad economic and social goals.

The basic thrust of the Michigan research was toward use of a descriptive-diagnostic procedure for identifying constraints and unexploited opportunities as perceived by marketing system participants and local political leaders and as identified through use of a wide array of standard economic analysis tools. The approach is pragmatic and eclectic and emphasizes the need to identify managerial, technological, and institutional innovations, which are unprofitable or unavailable to individuals within existing marketing channels but, if adopted across all stages of these interrelated production-marketing processes, could lead to substantial, channelwide improvements.

ORGANIZING AND CONDUCTING FUTURE RESEARCH

General Considerations. The nature of marketing problems varies widely with the degree to which a particular economy has been transformed from an agriculture-based rural economy toward a more urban-based, market-oriented economy. In countries that are still predominantly rural, marketing problems center around improvements in the functioning of local markets as providers of simple farm inputs and household necessities and as trading centers for basic food commodities produced and consumed within the local area or re-

gion. As an economy becomes more urbanized, food production and distribution takes on a higher priority in development plans with greater attention to improving physical infrastructure (transportation, processing, storage) and to policies and programs designed to stimulate production and facilitate system coordination. As the industrialization process continues, new technologies for processing and distributing food, more complex logistic and institutional arrangements, and increased participation of government agencies in planning and carrying out marketing programs usually occur.

In many developing countries there are dual agricultural production-marketing subsystems, one oriented toward export markets and the other toward domestic food needs. The export-oriented subsystem is typically better organized in terms of pricing and handling procedures and often involves large-scale parastatal agencies or multinational corporations with vertically coordinated production-marketing programs. The export subsystems play an important role in bringing new technologies and management innovations into LDC agricultural sectors.

Whatever the level of industrialization and urbanization, there is a need to approach marketing research in LDCs from a food systems perspective where the interdependencies of the various stages in the farm production-assembly-processing and distribution process can be taken into consideration. The food systems perspective that has evolved in U.S. agricultural marketing research provides a useful background, especially when viewed in a long-term (50-75 years) context.

National Goals and Development Planning. Nearly all the LDCs are continually preparing general development planning statements and project documentation for consideration by external funding agencies and their own domestic government agencies. The planning documents usually reflect basic underlying goals of increasing gross national product per capita, maintaining full employment of the labor force, and achieving an acceptable degree of equality in distribution of income and economic opportunities. National planning goals have given increased emphasis to improving the relative well-being of rural people and to measures that will slow the migration from overpopulated rural areas to the cities. This shift toward greater concern for the rural poor has been reinforced by the policies and programs of international development agencies (McNamara 1977). As indicated later in this chapter, there is serious need for research to give direction to marketing programs that will benefit small farmers and rural communities. But in a broader context, agricultural marketing research should support the design and promotion of new technologies and new institutional arrangements that will contribute to achievement of a broad set of economic development goals.

Planning and Conducting Research. Lack of basic information about organization and functioning of the food system and a general distrust of "middlemen" are common characteristics among the LDCs. However, social and political pressures dictate that development programs and public policies be made on the basis of available but usually very inadequate information and

analyses of alternative courses of action. Policymakers and the small contingent of professionals who staff the planning units and ministries of agriculture desperately need applied research to identify the most urgent marketing problems and the actions that might be taken to improve existing conditions. But there is also need for a more comprehensive understanding of marketing processes and a long-term view of the desired role of market organization and institutions in national economic development.

Probably the most fundamental issue to capture the attention of the international development community is one that centers around the observed ineffectiveness of past development programs to improve the relative or, in some cases, actual well-being of the poor majority in the LDCs (McNamara 1977; Seers 1977; Thiesenhusen 1977). In the poorest countries there is high concentration of the poor in rural areas, and rapid migration of the rural poor toward urban centers creates serious employment and related social and political difficulties. As a result, there has been a significant policy reorientation in international development assistance agencies and in many of the LDCs. While there is continuing debate over the appropriate strategy for promoting the desired rural development, there is general agreement that the fundamental issue is how to promote both growth and equity.

In this context the question arises as to how changes in marketing institutions might make greater contributions toward improvements in economic and social conditions in rural areas, while also contributing to broader goals of holding down food prices for families in rural and urban areas. To support such an objective, additional field research is needed to identify alternative opportunities for improving effectiveness of rural marketing systems within more comprehensive rural development programs designed for particular country situations.

The emergence and development of an applied marketing research program will follow different patterns, depending upon the circumstances within individual countries. The experience of the Michigan State University group in Latin America suggests that a small task force unit created to carry out applied research and assist in the formulation of programs and policies can contribute substantially to development of a progressive and efficient agricultural marketing system (Harrison et al. 1974). Such a task-oriented group can develop a data base on food marketing and an approach to market system analysis that not only will help to identify opportunities for marketing improvements but will also examine alternatives and make recommendations to appropriate action agencies.

To develop the broad analytical framework needed in a task force approach to understanding equity and growth concerns of development, it is necessary to focus on operation of the marketing system in terms of distribution of wealth and income, access to government services and political power, social status and organization, geographic considerations, and technical performance.

There is growing interest among other social science researchers (geography, anthropology, sociology, political science) in exploring various aspects of the rural community, which might be relevant to more realistic and effective

development efforts. This suggests an opportunity for increased collaboration or at least a greater degree of communication and coordination between marketing economists and other social science researchers as they attempt to deal with very complex rural development issues, including marketing institutions.

Whether or not a task force unit is created and institutionalized on a more permanent basis, there is usually a need for broad descriptive-diagnostic research. Depending upon the size of the country and the available resources, these studies can be organized on a regional or national basis. It is important that the geographic region to be studied includes both urban and rural areas so that the rural-urban marketing linkages can be considered in a longer term development context.

During the actual conduct of the studies, preliminary reports and selected pieces of information should be transmitted to key individuals in government and the private sector. When sufficient research output is available to support major recommendations for an interrelated set of marketing improvement programs, a high-level seminar can contribute to further development and eventual adoption of programs and policies consistent with long-term national goals.

If resources make it impractical to carry out such a comprehensive study as a concentrated effort, an alternative is to establish a research agenda and arrange for contributing studies that might be carried out by local university students under faculty supervision, graduate students preparing theses for foreign universities, or private consulting firms.

TOWARD A RESEARCH AGENDA

A research agenda can be developed around a set of interrelated questions that address the basic information needs for diagnosing marketing problems and assessing program needs to achieve desired development goals. Suggested questions and interspersed comments follow.

What is the organizational structure at the farmer, assembly, and processor levels? What services are provided at these different stages, and what are the prevailing price spreads, costs, and investments at each stage? What are the procedures for arranging transactions and coordinating product flow in these stages of the marketing channels for the major food products? Is there evidence that market instability and poor market coordination have resulted in high and costly levels of risk and uncertainty for farmers as well as other market participants? What are the major causes of market-related risks and uncertainties?

Primary emphasis in the above question areas is needed on understanding the microlevel relations of agricultural production and marketing in rural areas and exploring the equity and efficiency implications of alternative marketing arrangements. It is essential to understand how the effectiveness of marketing services influences supply response of different types of farmers. For example, what effect does market information have on market risk and uncertainty associated with both small and large farmers' adoption of new ag-

gricultural production technology and farm-level enterprise selection? There is the critical question of understanding the role of local input marketing services in reducing costs, risk, and uncertainty associated with obtaining and correctly using new agricultural production inputs. There is also the question of learning how to coordinate planned output expansion with market demand potential, even though there is generally very inadequate information regarding characteristics of demand. This is particularly important for many of the rural development schemes that seek to raise small farmer income via high-value crop production such as fruits, vegetables, and meats. High marketing costs, risky market transaction channels, and underspecified quality characteristics for these products can quickly dampen price and other demand incentives for farmers, especially for smaller ones who tend to have less individual control over marketing methods and higher marketing costs as a result of smaller unit sales.

What will be the trends in population growth, level and distribution of incomes, and urbanization patterns in rural towns and large cities over the next 10-20 years? What effects will these changes have on demand for food products and food marketing services? What are the existing characteristics and problems of the rural as well as urban consumer market for food with respect to quantities purchased by different income groups, shopping habits, and attitudes toward existing retailing services?

An area of relative neglect in marketing is the backflow (or within rural area flow) of food, other consumer goods, and agricultural inputs through a hierarchical set of trading arrangements that link individual farmers and small villages to larger villages and ultimately to major urban centers. The effectiveness of this portion of the agricultural marketing system can have a major impact on the well-being of rural people and on the growth and development of economic activity in rural areas. For example, there is need to understand how the type and effectiveness of marketing-distribution services influence the mix and quality of foods marketed in rural areas and how these services influence farmers' ability to specialize in fewer crop and livestock enterprises. Researchers have begun to focus on understanding rural demand and consumption linkages for nonfood inputs and consumer goods (King and Byerlee 1977). These are an important source of demand for industrialized products that are well matched to local, effective demand characteristics. However, more research is needed to understand how to promote the organization of lower cost mass distribution of these products to rural consumers.

Another related area for future research is exploration of the relationship between nutrition and marketing services and their combined effect on the welfare of different consumer and producer groups. Nutrition studies are increasingly being redefined to include a broader set of variables instead of the isolated factors of health or total food supply. When subsistence rural households are encouraged to increase their cash incomes by producing food and/or cash crops for sale, improved nutrition may be achieved only if necessary foods are available at reasonable cost and in nutritious and consumable forms for purchase by these households. If rural food distribution services are ineffective and of high cost, this will reduce the quantity and quali-

ty of products available locally as well as the real purchasing power of rural consumers.

What is the organizational structure at the retailing and wholesaling levels? What services are provided at these stages and what are the prevailing price spreads, costs, and investments at each stage? What are the procedures for arranging transactions and coordinating product flow among the wholesale and retail stages of the marketing channels for the major foods consumed? What are the major problems confronting the more progressive food marketing entrepreneurs in finance, government regulation, competition from other entrepreneurs (public or private), and market infrastructure?

Past research has shown that the large and rapidly growing group of low-income consumers in major urban centers of LDCs allocate high portions of their cash income to purchased food, which they tend to procure from small-scale urban retailers located in marketplace stalls and neighborhood shops (Harrison et al. 1974; Mellor 1978; Mittendorf 1978). Among all urban food retailers, however, these smaller scale merchants tend to have higher costs of operation and more difficulty coordinating with urban and rural wholesale suppliers for the provision of the mix of foods demanded by their customers. Unfortunately, this group of small urban retailers has not received adequate research and development program assistance, while the urban marketing reforms undertaken have tended to benefit larger scale retailers and wholesalers who serve middle- and high-income consumers (Silva 1976; Bucklin 1977; Weber 1977; Stevenson 1979). Therefore, there is special need for research to determine how small-scale food retailing in both rural and urban areas can be improved through managerial and technological innovations that reflect each country's labor and capital endowments and contribute to more effective vertical market channel coordination linking small-scale merchants and farmers.

In terms of overall evaluation of marketing channels: What evidence can be cited to indicate poor market performance with respect to costs of providing existing services; effectiveness of vertical coordination mechanisms in communicating consumer demands to marketing firms and ultimately to farmers; adequacy of the variety, quality, and condition of products reaching consumers; effectiveness of product distribution over space and time; progressiveness of public and private enterprises in adopting new marketing practices; and equitability of the system in distributing benefits of marketing improvements? Is it possible to identify potential innovators (i.e., individuals who have adopted improved management practices that could be transferred to others)? What are the problems and opportunities for encouraging improved distribution channel coordination through sequential introduction of new management practices and coordination arrangements? What are the alternative roles the public sector can play in taking leadership to promote improved performance of marketing practices? What are the costs and benefits of pursuing these alternative roles?

Public and semipublic enterprises play an important role in the agricultural marketing systems of many LDCs. Their functions often involve purchase, storage, and distribution of large volumes of domestically produced

staple food commodities and importation of additional food supplies. In several instances, parastatal enterprises have a central role in development of export-oriented agricultural commodity systems. Because of the size and nature of these public enterprises, it is difficult to achieve and maintain high levels of economic performance. There are the usual internal organization and management problems that should be attended with a continuing applied research and educational program. But there are larger, more troublesome problems regarding the appropriate role of the public agency in relation to the private sector, the distortion of real price-cost relationships through the use of taxing and subsidy powers, and the ever present possibility of political manipulation and corruption where large amounts of money and commodities are being handled. This area needs careful evaluation through a series of case studies from which a set of guidelines might be derived for organization and operation of public sector agencies and enterprises within a more global food system development strategy.

SUMMARY

This chapter has outlined a conceptual view of the development process within which the economic organization of market relationships in the food system can play a dynamic and critical role in achieving national development goals. A general approach to the development of a marketing research program within LDCs has been proposed. Priority has been directed toward applied research carried out within a descriptive-diagnostic-prescriptive framework that is relevant to policy and program development needs in the developing countries. These procedures seem appropriate for use in a wide range of political economic systems, although the specific forms of public sector participation in the food system will vary among countries.

U.S. agricultural economists and those from other developed countries will have continuing opportunities to assist in development of agricultural marketing research programs in the LDCs. Past experience indicates that their most important contributions will be in development of young professionals who become the indigenous professional cadre that actually carries out research, teaching, administrative, and entrepreneurial roles within their own countries. But effective professional development requires a combination of formal training and long-term involvement in applied problem solving research and related activities. This pattern of professional development can be facilitated by developed country Ph.D. level training programs with supervised thesis research back in the student's own country or region and by assistance in development of M.S. level training programs in LDC institutions, with emphasis on relevant field research experience dealing with marketing problems. Collaborative task force marketing research projects involving professionals from local institutions in LDCs and the more developed countries can contribute to professional development goals while making timely and important inputs to current planning and program needs. Over the longer run, gradual involvement of professional networks reinforced by linkages among and between LDC institutions and similar institutions in more developed coun-

tries can greatly strengthen the overall effectiveness of marketing research programs in the LDCs. These kinds of professional development-applied research efforts are being reinforced and promoted by international agencies such as the FAO and the Inter-American Institute of Agricultural Sciences and by bilateral foreign assistance agencies and private foundations.

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