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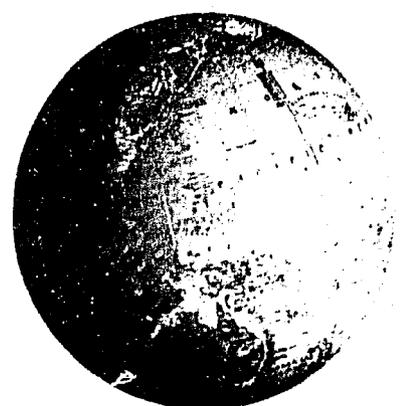
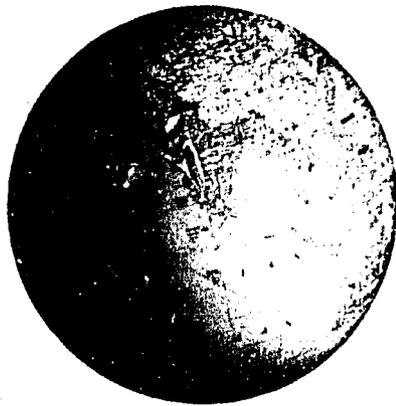
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## ELEMENTS OF A FOOD MARKETING POLICY FOR LOW INCOME COUNTRIES

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**ELEMENTS OF A FOOD MARKETING POLICY  
FOR LOW INCOME COUNTRIES**

John W. Mellor\*

Low income countries already have extensive food marketing systems. Thus, effective public policy with respect to food marketing must be based upon knowledge of the nature and functioning of the existing systems.

We have inherited a great deal of folklore and misinformation concerning these systems. Fortunately, however, in the last few years there has been a substantial body of research on the structure and functioning of indigenous marketing systems. And the pioneering work done at Cornell by Dr. Uma Lele gave us a set of analytical tools to apply in studying how well markets perform in low income countries.

AID has financed much of the rigorous marketing work which we now have available. This includes the more recent work of Lele and Osman Farruk at Cornell, work on marketing in Latin America conducted by Michigan State University, and marketing research in Africa conducted by Stanford University.

In this statement, I will present a brief set of objectives for a marketing system and give an indication of stereotype positions with respect to the way marketing systems work in low income countries. Continuing, I will develop a comparison between the stereotype position and the factual situation derived from our marketing research. I will close with a statement of food marketing policies which can be effective in helping the marketing system meet its objectives.

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The presentation will draw heavily on the research we have been conducting at Cornell with respect to the working of marketing systems. Hence, it will have somewhat of an Asian bias to it. In addition, the presentation will place emphasis on facilitating the operation of the private sector. This emphasis arises because of the negative stereotypes on the part of many observers and because of the tendency for many international agencies to inadvertently work against development and improvement of the private sector.

### OBJECTIVES OF THE MARKETING SYSTEM

Marketing systems, of course, have a wide range and number of objectives. I have singled out, for emphasis, three objectives which I think are particularly important. These are based on the current context of development problems in low income countries and the current role and potentials of the marketing system. The objectives are as follows:

- (1) Expand physical capacity of the marketing system commensurate with increased production. As newly developed technologies (including the high yielding grain varieties) sharply increase production, additional quantities of output travel from producer to consumer. This is important to the continuing of production incentives and to obtaining the benefits for development of other sectors of the economy. Most parts of the marketing process provided in the private sector probably have considerable supply elasticity, allowing them to expand rather quickly and with little additional cost to expanded demands.
- (2) Increase the efficiency of resource use. Processes of economic development are based upon expanding the quantity of resources available for development and increasing the efficiency with which they are used. Thus, this is a standard requirement placed as an objective on any element of the economy. As will be indicated later, the initial degree of efficiency with which resources are used in marketing channels is already moderately high, as measured by standard economic criteria. However, a number of factors reduce efficiency in resource use by slowing the progress of appropriate technological change.

(3) Facilitate mobilization of resources and use those resources to produce services which are in demand. This is an exceedingly important objective. It is perhaps more important in terms of its implications to total production in a society than in terms of its role in increasing the efficiency of the existing stock of resources. The marketing channels offer many opportunities for mobilizing and utilizing resources for productive purposes which would otherwise not enter into the production process. I will comment specifically on labor, entrepreneurial talent, and capital.

The marketing channels, particularly those including processing, offer substantial opportunities for utilizing large quantities of labor in productive processes. Most traditional systems of processing use substantial quantities of labor relative to capital. There is a tendency in dealing with marketing reform to place too much emphasis on modern processes which use large quantities of capital relative to labor and thereby lose opportunities to mobilize labor for productive purposes. Simultaneously, these processes lose the opportunity for spreading the benefits of growth more widely through increasing employment of lower income people.

Marketing channels already include considerable quantities of entrepreneurial talent. Some marketing programs, particularly those which emphasize large-scale capital-using processes, have a tendency to replace many small-scale indigenous entrepreneurs with entrepreneurs in large-scale foreign firms or with formally trained government bureaucrats. In both cases there is a tendency for entrepreneurial talent to be lost.

Small entrepreneurs in marketing systems in low income countries can often tap substantial savings resources of their own and of members of their extended families. Much of this savings potential would not be realized were it not for high rates of return to the petty entrepreneurs in their own businesses. Thus, if public policy pushes towards large-scale firms or towards public sector operation, these savings potentials are likely to be lost.

It is clear that tapping the labor entrepreneurial, and capital resources through expansion and development of indigenous marketing systems depends largely on the use of private sector firms. Whether this makes overall economic sense depends on the degree of competitiveness and efficiency with which those firms operate.

## THE STEREOTYPE OF EXISTING MARKETING SYSTEMS IN LOW INCOME COUNTRIES

It is generally believed that indigenous marketing systems, particularly in Asia, are exploitive, collusive, economically inefficient, and operating with high profit margins. There is undoubtedly an element of truth in each aspect of these stereotypes.

It is probably correct that some factors in the marketing system do exploit some small sellers whose small volume of business is relatively costly to handle and relatively unimportant to the marketer. The economic problem involved is probably small because of the minute quantities involved. However, the human and social problem is large and provides an argument for regulatory measures to prevent it.

With respect to collusive behavior, there are undoubtedly substantial efforts by elements of the marketing system to do so in order to increase profit margins. Whether such collusion works or not depends in part on the number of participants in the marketing system and the extent to which markets are integrated.

As to profit margins, even with great competition there will, of course, be some participants in the marketing system who have high profit margins. The question is whether in the competitive system, those earning very high profit margins through superior entrepreneurial talent are balanced by those with more ordinary talents who are making very small margins or even losing.

The question which arises with marketing inefficiencies is whether or not the aspects of marketing systems which are operating inefficiently are inherent in the system. If not, judicious governmental investment in transportation or other aspects of the system can improve the environment for efficient operation and thereby increase the efficiency of operation.

My position is that, in general, the stereotype position regarding the indigenous marketing systems is incorrect and misleading in its policy implications. There is a close analogy with the stereotypes which were held a few years ago about the production side of agriculture. Not very long ago, it was widely believed that the typical cultivator in a low income country was not very intelligent

and operated in a traditional manner which stood in the way of improving technology and increasing the efficiency of production. This view led to an emphasis on changing attitudes and education of cultivators at the expense of programs for input supply and research for generating applicable technological change. Now that we have a clearer view of the actual situation with respect to cultivators, we have more complex, but more relevant, policies for bringing about technological change and increased agricultural production.

The same situation prevails with respect to marketing. Incorrect stereotypes concerning the way marketing channels operate have led to incorrect policies designed to deal with a wrongly diagnosed situation. Now that we have a clearer understanding of where the imperfections and problems in the system lie, we can come up with policies which have a better probability of bringing about genuine improvement in the system.

#### THE WORKING OF INDIGENOUS MARKETING SYSTEMS

In this section, I will first comment on the structure of indigenous marketing systems and indicate the extent to which that structure provides an environment favorable to competitive behavior. I will then comment on the performance of the marketing systems with respect to the three marketing functions of providing space, time, and form utilities. These comments on performance will essentially deal with the efficiency of operation in a static technological situation. Following that, I will comment briefly on the question of technological change within marketing systems and the extent to which existing systems operate well in that respect. The evidence will be drawn largely from the work done at Cornell by Uma J. Lele, Osman M. Farruk, and Ray W. Nightingale. The detailed work is reported in the Cornell University USAID Prices Research Contract Occasional Papers Nos. 12, 17, 31, and 37.

#### The Structure of Food Marketing Systems

Our studies of food grain marketing systems in Asian countries show that, in general, they have a competitive structure. There are, generally speaking, a substantial number of participants in

each market. More importantly, various markets seem to be well integrated with each other. This means that collusive behavior must involve collusion of large numbers of participants across a large number of market areas.

In a few situations, the market structure is oligopolistic with a small number of participants and, hence, there is opportunity for collusive behavior. One of the better examples of this is the case of the large commission agents in Dacca market in East Pakistan where a very small number of agents control the total commission business. However, in these types of situations, the margins charged by the commission agents are set and represent only a very small proportion of the price on the food grain. Because of the large volume involved despite the small number of participants, the profits of these commission agents are quite large. Still, with the small actual margin they charge, they do not represent a major inefficiency in market performance.

#### Market Performance

Food grain markets in Asia generally operate quite efficiently by standard economic criteria. Prices in different markets are roughly comparable, indicating that supplies flow freely from low price markets to high price markets, thereby equalizing the prices. Price differentials between markets customarily stay within a band defined by the cost of transportation from one market to another. If prices move outside of such a band, it is usually because of a breakdown or deficiency in the transportation system. We find, for example, somewhat lower correlation of prices in different markets in West Bengal than in most other parts of India, and in East Pakistan than in West Bengal. East Pakistan has somewhat poorer transportation facilities than the parts of West Bengal studied, and the parts of West Bengal studied have somewhat poorer facilities than the other parts of India which were studied.

Similarly, we find a tendency for intermarket price differentials to become larger than normal transport cost during harvest season when the very heavy burden on transportation systems becomes too much to handle and goods cannot be moved quickly in response to normal price differentials. These transportation efficiencies at harvest will continue to be a major problem as long as agricultural

commodities make up a major part of the goods transported in a low income country. This alone represents a good reason for placing additional storage facilities in the producing regions rather than the consuming regions.

Averaged over a period of years, seasonal price rises of food grains appear roughly commensurate with the costs of storage. Our studies suggest two contradictions of standard stereotypes. First, we find that average seasonal price rises are not nearly as large as the stereotype position and, second, we find that storage losses under traditional systems are much lower than is generally expected.

The stereotype position of very large seasonal price rises probably derives from the highly erratic nature of seasonal price rises. In some years, the seasonal price rise is considerably greater than storage costs. In other years, however, the seasonal price rise is very little, even in absolute terms, and much less than storage cost. The average is commensurate with storage costs. The stereotype is probably built from the years in which the seasonal rise is much greater than storage costs.

In general, storage losses for food grains run between 4 and 8 percent during the period of storage. Traditional storage under private ownership requires considerable management, care, and labor to hold down storage losses; deteriorating grain is removed, bags are stored so good ventilation takes place, and so on. The observations of very large storage losses probably come from public sector storage under poor management and from observations of inadequate facilities and improper handling practices in many parts of the marketing system.

The highly erratic seasonal patterns arise mainly from lack of knowledge concerning storage stocks. Also of importance is the lack of knowledge concerning crop prospects, particularly when the crop is grown over a very large area.

The highly erratic nature of seasonal price patterns poses a number of economic problems. Most importantly, it represents a major cost to processors who must operate under considerable uncertainty concerning the supplies which are available to them and the cost of those supplies. This discourages major investment

in the technological improvement of processing methods, which has particularly strong implications in rice mills.

The erratic seasonal price pattern also contributes to making prices at harvest season fluctuate more from year to year than would otherwise be the case. This creates a number of problems of uncertainty for farmers and probably serves to somewhat reduce use of purchased inputs and to slow technological change.

With respect to processing, rice receives more attention than most other food grains. In general, margins appear to be somewhat higher, relative to cost for rice milling, than for other marketing operations for food grains. This may be due to the large costs of highly unstable seasonal price patterns. This may be further reinforced in a number of countries by government policies which increase uncertainty with respect to supplies. These same problems reduce the rate of technological change in rice milling as well.

#### The Rate of Technological Change in Marketing

Although market performance by narrow economic criteria seems to be quite good among the marketing agencies in most Asian countries, these same agencies perform rather badly in terms of achieving the rapid technological change which increases efficiency and reduces costs. This is most noticeable in rice milling, which is still carried on in a quite antiquated way with slow progress toward incorporating modern rice milling methods. Modern milling methods could reduce costs of operation and increase rates of output.

There are probably three major reasons for the slow pace of technological change. First is the small-scale operation of most food grain processors in low income countries. This is not a disadvantage in itself if the public sector provides those services which are best provided on a large-scale. A well developed public system of research and extension with respect to food processing methods could play a very useful role in increasing the rate of technological change and the efficiency of small-scale marketing firms. Since these firms can marshal considerable entrepreneurial talent, capital, and labor which might otherwise not be used

in production processes, it would be very useful for governments to render those services which can make these elements in the marketing system more competitive, more efficient, and more technologically dynamic.

The second reason for the slow pace of technological change is lack of well-defined government policies. In a number of low income countries, government regulation policies add considerable uncertainty for good grain processors as to the availability of supplies and the stability of prices. Lack of well-defined, well-administered policies represents a major disadvantage.

#### PROPOSALS FOR PUBLIC POLICY

The proposals for public policy which are made here are based on the conclusion that existing traditional marketing systems can be made to work efficiently and to become technologically dynamic. It is assumed that improved operation of the private system will provide a well-operating marketing system which marshals substantial quantities of labor, entrepreneurial talent, and capital which would otherwise not be available to the development process.

The role of government is seen, then, as that of facilitating the operation of this sector. This is still a substantial role which requires considerable resources. Policy measures will be discussed under three major headings: first, removing existing governmental restraints on operation of the private marketing sector; second, positive measures for facilitating increased competition; and third, measures for facilitating technological change and increased private investment in the marketing sector.

#### Removing Existing Public Restraints on Marketing

There is so much talk about anti-social behavior by the marketing agents and of public control and take-over that much uncertainty is introduced into private marketing business. Consequently, there is considerable reluctance to invest capital in those businesses.

This uncertainty with respect to the future is often increased by the activities of foreign aid agencies when they espouse approaches to marketing which are uneconomical, and which are

recognized as such by the private sector. In these circumstances, the foreign aid agencies very often recommend large-scale activities by the public or cooperative sectors which tend to displace the private sector. Such action frequently arises with respect to recommendations of technologies and modes of operation which involve much larger scale operations than are traditional in the private marketing system. Engineering efficiency at the expense of labor, entrepreneurial talent, and other forms of capital very often appears to be the most efficient way of operating by very restrictive criteria when, in fact, it is less efficient.

A number of foreign agencies have in recent years recommended such policies with respect to rice milling. These recommendations increase the apprehensions of the private sector and make it even less likely that they will become technologically dynamic.

One can see the same mode of operation with respect to milk marketing. Highly capital-using technologies often displace a reasonably efficient private sector which is operating on a smaller scale with quite different, but still more efficient, technologies.

In addition, in a number of low income countries, there are restraints placed by the government on availability of credit to private marketing agencies. There are also restrictions on the availability of transportation, storage facilities, and the use of existing transportation and storage facilities. Such regulations, which may appear quite rational on the surface, normally inhibit the private trade from operating in an efficient way. Such rules generally neglect the complexity of shipping patterns and storage requirements and, therefore, lead to more inefficient operation.

#### Facilitating Increased Competition

Governments can play a very important role in facilitating entry into marketing businesses and increasing competition. First, governments can encourage marketing to take place in regulated market yards where weights and measures and modes of transactions are regulated. Experience in parts of India with regulated markets indicates that they soon grow very rapidly, displacing small village markets and encouraging cultivators to market at

larger market centers. This increases the efficiency of market operation as well as competition which enhances both consumer and producer prices.

Provision of credit to smaller marketing operators can facilitate their expansion and also provide increased competition within the marketing channels.

Major investment in improved transportation can greatly facilitate competition by bringing about fuller market integration and greater competition among a larger number of market functionaries.

Gradual expansion and improvement of market information provided by government agencies can improve the competitive position of farmers and small marketing agencies also. For such market information to be useful, however, it must relate to grades, thereby encouraging a shift to well-defined systems of grades and standards.

#### Facilitating Technological Change and Investment

Governments can play an important role in facilitating technological change and investment by the private marketing agencies. First and most important, in recognition of the small-scale of marketing agencies in low income countries, governments should undertake major programs of research and extension of research results to the various marketing intermediaries.

Second, governments can be sure that the equipment and other inputs necessary for technological change are readily available to the private sector, thereby again increasing competition.

Third, governments must recognize that, when marketing intermediaries make major capital investments in technological improvement, it becomes increasingly important that they operate those facilities at a relatively high level of capacity. This means that an assured supply of commodities for processing will be necessary at reasonably known, and stable, prices. Governments can facilitate this by increasing the availability of storage facilities, by operating a modest buffer stock program, and by ensuring that government price policies stabilize prices and not unstabilize them.

Fourth, credit programs can facilitate rapid technological change in marketing channels and increase competition.

Thus government's role can be very substantial, even in a system basically dominated by relatively small-scale private firms. A well-chosen government policy towards marketing can facilitate increased competition, increased efficiency of operation, and more rapid technological change. It can do these things with a relatively modest use of the scarce governmental resources, and in a manner which encourages the private sector to make fuller use of labor, entrepreneurial talent, and capital which would not otherwise be available for the development process.