IMPLEMENTING FOOD MARKET REFORM PROGRAMS

IN COSTA RICA:

THE CENADA PROJECT

By

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CHAPTER 1

INTRODUCTION

Costa Rica, with two million inhabitants and about 50,000 square kilometers, may be experiencing one of the most challenging economic periods of its history. These challenges are particularly noticeable in the food marketing system.

The population of the capital's metropolitan area is expected to double in 20 years and, if the present trends continue, by the Year 2000 about 75 percent of the Costa Ricans will live in urban areas. The major cities and suburbs located in the Central Plateau will soon turn into a single metropolis which by the next decade may house more than 1.5 million people.

A relatively high urbanization rate, along with an increase in income and living standards, have brought new challenges to the food production and distribution system. There has been a steady increase in the amounts and assortment of products demanded, as well as for the marketing services associated with their procurement. Consumer preferences and shopping habits have changed during the past two decades.

Thus far, however, the pressures emanating from a changing market environment have been buffered by gradual and somewhat isolated adjustments in the organization of the traditional market system. These adjustments are being reflected mainly in the number of merchants involved in food marketing and the complexity of their interactions. Although progress is being made, the rate of change and adaptation needs to be accelerated,
It has become costly for producers, middlemen and consumers to reach inconveniently located "traditional markets." Urban developments which are now located away from San Jose's central market area are now common. Many of them have been accompanied by a different type of distribution system which is slowly evolving into a more modern structure. The food system has been partially adapting to the problems posed by different attitudes and needs. Thus, the number of neighborhood stores and supermarkets is steadily growing. There is even a chain of "limited service-assortment stores" which suggest the existence of defined market segments and the entrepreneurs willing to attend them.

In spite of some positive changes most problems of the food system are deeply rooted in the obsolete market structure and traditional marketing practices. Further high-impact, spontaneous improvements in the overall performance of the distribution processes are unlikely under current circumstances. Individual or isolated efforts will no longer satisfy consumer needs without increasing the social cost associated with a poorer performance of the whole system. Thus, public initiative is needed to assess and develop favorable conditions under which an adequate flow of changes and further improvements in the food system could be fostered.

Specific reforms have been suggested in light of the above arguments and some are now being implemented. PIMA (22) determined that the development of a more effective food-wholesaling link in Costa Rica was critical in the transition toward a modern market system. In the fruit and vegetable market such reforms were centered on the CENALÁ project and the analysis of its implications constitute the main subject of this paper.
Purpose and Scope of the Study

In the early 1970s recognition of the vital role of the food marketing system in the Costa Rican economy led to the creation of a task force devoted to the identification and implementation of improvements in this area. The Integrated Program of Agricultural Marketing (PIMA), with the technical cooperation of the Latin American Market Planning Center (LAMP) at Michigan State University, produced a comprehensive examination of the problems and suggested specific improvement projects. The reference frame for these projects was based on the LAMP's market reform approach (17).

The diagnostic studies carried out by PIMA (22) concluded that the poor market performance is mainly affecting low income consumers and farmers. Specific problems, such as the high cost of marketing services, price fluctuation, waste, handling problems, etc., suggest that careful attention should be given to the physical distribution of food in the metropolitan region, especially to fruits and vegetables. Several programs were recommended, and the creation of CENADA, a modern wholesale market facility, was given top priority.

In 1976, the report to build the "National Center for Food Procurement and Distribution" (CENADA) was published, and the financing for the facility was later approved by the Central American Development Bank. The construction of CENADA's physical facilities are almost completed, and the market is expected to begin operation in 1981.

Both the preliminary studies and the final project clearly acknowledge that improved physical facilities alone cannot provide the benefits of an improved marketing system. Hence, two main complementary projects were also included: the provision of technical assistance and credit to wholesalers and retailers and the creation of a permanent group which would undertake further studies and development activities in this area (21).
The project has created high expectations in public and private sectors. With the construction approaching completion, it is an opportune time to raise questions concerning its potential effects. Could CENADA become the effective backbone needed for the intended market reform? What problems may arise from the transfer of wholesalers to a new market location? How will the participants be affected? What behavioral response can be expected from farmers and retailers? Who will benefit and who will be adversely affected? Can complementary programs be implemented in an prompt and effective way? Will the performance of the food system be significantly improved?

Objectives of the Paper

The purpose of this paper is to assess the potential effects of CENADA on the present market system and to elaborate on the implementation problems that may be encountered.

Because of the author's expected involvement in the implementation of this project and other market reforms, this paper is also intended as a means to provide an adequate working knowledge and familiarity with the field. Bearing this in mind the following specific objectives are addressed in this paper:

- To conceptualize the potential contributions of the CENADA project to the modernization of the fruit and vegetable marketing system in Costa Rica.

- To study the problems encountered in the implementation of similar wholesale market projects in selected Latin American market centers.

- To formulate the basis for a monitoring system of CENADA's operation and policies.
To suggest specific areas where further studies may aid the implementation of CENADA and other complementary programs.

The paper is organized into five chapters elaborating on the above-stated objectives. Chapter II will review the current situation and summarize the main components of the CENADA project. Chapter III provides some insights into the problems that have arisen in the implementation of similar projects in selected cities of Colombia, Brazil and Argentina. Emphasis is placed on the reactions of the farmer, retailer and wholesaler to the changes being introduced. The potential implication that these Latin American experiences may have in Costa Rica is then discussed. The last two chapters emphasize the need to evaluate CENADA's future operation, its impact on the food system and its potential problems and limitations.

Since the project is still in the construction stage, this research paper is based on information gathered from secondary sources and the review of literature related to the problem.

The fresh food marketing system lies within one of the most complex environments of the economy. This paper is far from exhaustive in the consideration of the variables involved. Hopefully the effort would be a positive working tool for the identification of future trends and problems in this area.
CHAPTER II
COSTA RICAN FRUIT AND VEGETABLE MARKETING SYSTEM.
THE CENADA PROJECT

1. DESCRIPTION OF THE CURRENT SITUATION

San Jose is the final destination of more than 60 fruits and vegetables coming from all over the country. Studies performed by PIMA (22) in 1975 showed that the San Jose's markets are serving as major assembly and distribution centers for perishables at the national level.

Since the early 1960s, the conditions under which wholesaling of perishables was performed in the Borbon market areas in downtown San Jose, highlighted the need for improved and better location of market facilities. As a result of the high rate of urban growth, the volume of perishables handled in the Borbon Market was increasing rapidly. Traffic problems were becoming increasingly evident due to market growth. These conditions led the municipality to construct the Avenida 10 Market which was strongly criticized as a poorly planned attempt to solve traffic congestion in the traditional markets. Strong opposition was raised by truckers and wholesalers who commented on the inappropriate design of the market for the handling of perishables. Market transactions were not carried out in Avenida 10 for three years. In 1972, the facilities were merely used for the collection of fees from truckers and assemblers authorizing them to load and unload in the Borbon Market area. During that year the market was
reconditioned and used as a bus terminal for the next several years. The Municipality of San Jose then engaged in a further attempt to relocate perishable wholesalers in Avenida 10.

In spite of the poor functioning of the facilities, additional modifications permitted the relocation of a large number of wholesalers. Currently Avenida 10 functions as the country's major assembly and distribution center for fruits and vegetables. However, the relocation of merchants was only partial and the wholesale transactions being carried out in the Borbon market are still important.

The Borbon Market area includes 16 square blocks and is a combination of public market stalls surrounded by independent retail outlets, storage warehouses, small restaurants, and other commercial establishments. The physical handling and distribution of fruits and vegetables and most grain and processed items in the area creates a heavy traffic congestion as well as undesirable social and hygienic conditions.

When the modified market in Avenida 10 was ready to begin operations, the measures taken by the municipality to ensure a proper relocation of the assembly and wholesale activities performed at Borbon were mainly related to traffic restrictions imposed in the Borbon area. Attempts were made to eliminate on-street transactions; heavy trucks were prohibited and only the smaller vehicles were allowed to unload. Currently, the problems originally identified with the Borbon Market have not been solved in a positive way. The market transactions among middlemen are split between the two markets, and the Avenida 10 Market is far from being the wholesale market which it was intended to be. Congestion of traffic and other problems similar to those encountered in the Borbon area are gradually increasing.
under the pressure of a rapidly expanding metropolitan region.

1.1. Procurement and Assembly of Fruit and Vegetables

According to PIMA (22), about 66 percent of the produce coming into the San Jose market is brought to Avenida 10. Most producers and truckers supplying the Borbon area and other merchants enter the Avenida 10 market first. Avenida 10 is then the most important assembly point of fruits and vegetables in the country. Even though there is a wide assortment of products being brought to the market, the 1973 census indicates that the vegetable production is highly concentrated in terms of both production areas and products harvested. Yuca, potatoes, tomatoes, onion and cabbages account for 92 percent of the volume produced.

A PIMA (22) survey on market suppliers showed that the producers' importance as a direct source of procurement for wholesalers and retailers is greater than expected. By transporting and selling their own products, they can often secure a greater revenue. However, there are very few marketing functions being performed by producers. There are also few commonly used handling techniques and most of them are of a rudimentary nature.

A survey conducted by PIMA in 1975, also showed that 51 percent of loaded vehicles entering the market were driven by farmers transporting their own products, 33 percent were trucker-assemblers and 14 percent were hired transporters. About 60 percent of the vehicles were coming from a distance of less than 40 kilometers. Most of the truckers remain in the Avenida 10 Market until all the products have been sold and about a third of the truckers also unload in the Borbon Market area. They sell to wholesalers, retailers, processing industries, institutional brokers and
consumers, with most transactions based on a verbal agreement on the spot. Mondays and Thursdays are the "dias de plaza," when the largest volumes of transactions are completed. The traffic congestion on those days, and even the days before, is heavy in both markets.

Independent truckers and assemblers, like producers, perform very few marketing functions. Food losses due to physical spoilage and improper handling are sizable. Independent truckers normally buy the produce directly at the farm gate and very few are bound by any kind of prior buying agreement. The geographic concentration of the production of some vegetables allows for better organized assembly and marketing practices. Shwedel (26) noted that contract-like agreements between farmers and assemblers in the handling of potatoes improved vertical coordination and reduced risks, although farmer strategies which provided protection against price risks often limited profitability. The potato sales agreements resulted in deferred payments to farmers after truckers had sold their load in the wholesale market. PIM (22) found that for most other commodities, the assembly-trucker transactions with farmers and wholesalers seldom involved the use of credit.

Most problems identified in the transportation of products to and from San Jose are related to the location of the two wholesale markets. The merchants situated in the Borbon area do not have the facilities necessary for rapid unloading of products. Access is limited by narrow, congested roads and also by poor parking facilities. Avenida 10 is located at one of the busiest entrance points into the city and trucks often need to compete for parking space in and out of the market facility. The time spent by truckers and producers in the market area varies, but for many, the time and cost related in dealing with excessive traffic and limited parking facilities is a serious constraint.
1.2 Wholesaling of Fruits and Vegetables

Basically, the wholesaling of fruits and vegetables in Costa Rica is concentrated in the Avenida 10 and Borbon Markets. Small-scale assembly-wholesale operations are also found in outlying municipal markets. As Weber (29) pointed out, a few retail-wholesale outlets are common in cities and towns outside the metropolitan area of San Jose, and although the volume of fruits and vegetables handled is not large, they are an important wholesale source of non-perishables for rural retail stores.

Even though Avenida 10 was intended to be the center for wholesale transactions, the Borbon area still remains active and important in wholesaling. With a sample of more than 90 percent of the wholesalers in 1975, PIMA (22) determined that 61 of them were located in Avenida 10 and 55 in the Borbon area. However, it was found that only a few were totally devoted to wholesaling. By dealing with smaller volumes, they can profit from the heavy traffic of small retailers and consumers, and the higher margins associated with retailing.

As a result, about 70 percent of the wholesalers are involved in retailing and most of them have expanded the assortment of products they carry. Those merchants dedicated solely to wholesaling are very active during the "dias de plaza" (special shopping days) as opposed to less specialized wholesalers whose activities are more evenly spread during the week. Contracts or selling agreements are uncommon and the offering of marketing services is usually hampered by the inconvenient facilities in which they operate (21).

Storage of products is limited because of the small size and inadequate design of their stalls. In the Borbon area, old buildings have not been adapted for these purposes, and the Avenida 10 Market only a few wholesalers own or rent storage space in the surrounding neighborhood.
Most storage is done in the open and involves a high risk in terms of waste or spoilage. In fact, the present conditions deter handling of larger volumes. Wholesalers, as well as retailers, are forced to buy in smaller quantities with more frequency, directly affecting costs, prices and the overall performance of related activities (17).

Specialized wholesalers handle only about 17 percent of the total volume brought to the market. According to PIMA (22) their main suppliers are the farmers who bring their own products to the market. The relatively low volume of products carried, showed that wholesalers are not as important in the Costa Rican marketing system as has been implicitly suggested in the past. Both markets, Avenida 1C and Borbon, are characterized by a very complex and dynamic mix of marketing activities where distinctions between assemblers, wholesalers and retailers are vague. Most wholesalers have been gradually incorporated into this mixed marketing system; yet, amid this traditional wholesale organization the need for a new type of wholesaler is now being felt.

The changing role of wholesalers in Costa Rica is consistent with Mittendorf's theory of market development (19). Mittendorf maintains that as the economy expands and income increases, the food marketing system changes accordingly. Thus, it is possible to identify common characteristics in the market structure of low income, middle-level income and higher-level income countries. The Costa Rican metropolitan region, like most major Latin American cities, is in the middle stage of market development. There is a growing trend toward the specialization of wholesalers in terms of both products handled and market segments served. The importance of traditional markets in the distribution of total food items has decreased and a more
dynamic type of wholesaling would likely acquire a strategic role in the modernization process. Referring to the experience of industrialized countries, Mittendorf suggests that as the economy develops, the participation and importance of food wholesalers would probably diminish. The operation of a more modern food distribution system is characterized by the increasing importance of large-scale, vertically-integrated food retail-wholesale organizations.

The growing dispersion of retail outlets in the metropolitan region demands services which the current wholesale market is not prepared to provide. A few wholesalers have been forced to gradually change their operation. As a LAMP report (17) points out, some of them are providing delivery services and accepting telephone orders. This is not a common practice when dealing with fruits and vegetables, however, and most wholesalers in this area still lack the space, incentives, knowledge and/or financing required to improve their operation.

1.3 Retailing of Fruits and Vegetables

Retailers constitute one of the most important elements of the food distribution system in terms of the volume of sales, services provided to consumers and their effect on prices and products supplied. Retailers of fruits and vegetables have traditionally been located in municipal markets established in the centers of urban developments. With the growth of urban areas, other types of scattered retail outlets soon became very popular in the San Jose area and they currently handled about 70 percent of the produce sales. They include personally-attended small stores (pulperias), specialized fruit and vegetable stores (verdulerias), specialized meat stores (carnicerias) and supermarkets.

Many of these stores, particularly the pulperias, are household enterprises installed in garages or other parts of the house adapted to that
purpose. Also, supermarkets and medium-size grocery stores are becoming increasingly important in terms of their sales volume of perishables. The number and distribution of retail outlets involved in fruit and vegetable marketing suggests a solid trend toward a more decentralized system of food retailing (17). Indeed, in terms of volume handled, the traditional retail stall in public markets represents a declining and relatively unimportant component of the fresh food distribution system in San Jose. Most of the neighborhood stores sell groceries, snacks, dairy products, vegetables and other basic or popular home items. The municipal markets, on the other hand, are more fresh-produce oriented. About 60 percent of the public market stalls are specialized in two or more produce items. Table 1 shows the estimated number of retailers and their geographic distribution in 1975.

The rapid expansion in the number of food stores located in residential areas is partly a response to the inconvenience and location of public markets. However, it has also resulted in a very complex and inefficient distribution system. According to PIMA (22) the lack of wholesale distribution services forces most small retailers to make as many as five trips to the market each week. Their size and lack of organization poses a barrier to any attempt to improve their operation via the handling of larger volumes.

Although the Borrón Market area continues to be an important source of produce for some retailers, Avenida 10 constitutes the main wholesale-retail transaction center. Some retail outlets are supplied directly by producers or trucker-distributors of fruit and vegetables, and this seems to be a source growing in importance, especially for those retailers outside the metropolitan region.
<table>
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<th>Neighborhood Markets</th>
<th>Rest of Country Markets</th>
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<tr>
<td>TOTAL</td>
<td>5034</td>
<td>709</td>
<td>3</td>
<td>3656</td>
<td>9,833</td>
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<tr>
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<td>49</td>
<td>49</td>
<td>1</td>
<td>3</td>
<td>709</td>
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<td>&quot;Pulperias&quot;</td>
<td>7,408</td>
<td>117</td>
<td>3</td>
<td>102</td>
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<tr>
<td>Vegetable Stores</td>
<td>1,662</td>
<td>326</td>
<td>3</td>
<td>84</td>
<td>1041</td>
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<tr>
<td>CMP Stores</td>
<td>141</td>
<td>53</td>
<td>9</td>
<td>23</td>
<td>193</td>
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<td>Consumer Cooperatives</td>
<td>32</td>
<td>3</td>
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<td>59</td>
<td>541</td>
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<tr>
<td>Others</td>
<td>541</td>
<td>263</td>
<td>142</td>
<td>59</td>
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</tbody>
</table>

A survey of the destination of loaded vehicles exiting Avenida 10, showed that 62 percent of the volume was delivered within the metropolitan region. Small freight trucks or ("taxi-carga") are the most popular means of transportation among independent retailers. Only a few own or use their own vehicle when buying produce.

Fresh food retailers located in public market stalls have a higher total procurement cost, although lower per unit cost, than those scattered in the metropolitan region. This is largely due to more frequent trips each week involving larger volumes. Delivery costs are also affected by the time spent parking and unloading in the Borbon Market area. The demand for parking space is so great that some retailers leave their vehicles parked for hours to assure later space. Obviously, this increased the problem of traffic congestion, especially on market days or "días de plaza." On those days the supplies of fruit and vegetables are greater and so are the wholesale-retail transactions performed in both markets.

Food retailers with inadequate facilities operating in a very competitive environment cannot easily increase their sales volume and improve the overall efficiency of their operation. This situation, as well as the need for wholesale marketing services, could partly explain the growing success of retailer-buying organizations. The main purpose of existing retailer's chains and cooperatives is to attain economies of scale in the procurement and distribution of products, mostly groceries. There were nine retail chains in 1975 and PIMA suggests that they were soon to become a major factor influencing the food distribution system of the metropolitan region. Currently, however, most of these chains perform a cash-and-carry-type of operation with few other wholesale services provided to their members.
Fruit and vegetables are still a minor item involved in the retail chain operation. With a better retail organization in the future, it is reasonable to expect a change to include more perishable items. Thus far, however, the limited use and availability of credit, as well as the continued use of traditional management and handling practices are obstructing the expansion of retail chains.

The problems of achieving effective economies of scale directly relates to the need for a better wholesale link, as noted earlier. A LAMP report on food marketing in Costa Rica warns that the present trend toward a decentralized retail system could become very costly, rather than beneficial if not accompanied with more and better wholesale services. In spite of the implicit acknowledgement of this problem among market participants, services such as delivery, telephone orders, credit, technical assistance and handling of a broader assortment of products, are not common in the wholesaling of fruits and vegetables.

1.4 Marketing Functions in the Avenida 10 Market

With the latest modifications the market on Avenida 10 was expected to become a wholesale facility that would alleviate the problems of the congested Borbon Market area. However, the relocation of wholesale transactions was only partial and Avenida 10 has become another center for assembly, wholesale and retail transactions. The relative importance of Avenida 10 in the current fresh food distribution system is graphically represented in Figure 1.

According to an evaluation of Avenida 10 conducted by PIMA (22), the design and construction was inadequate to facilitate the
FIGURE 1.

VOLUME AND DESTINATION OF PERISHABLES ENTERING THE METROPOLITAN REGION
(Distribution Channels in Metric Tons Per Year)

Entry of Fruits and Vegetables 181,000

Avenida 10 Market 120,000

Borbon Market area 96,400

Retailers in metropolitan Region 94,000

1. 1,000
2. 8,500
3. 3,000
4. 1,000
5. 1,000

- 2.1400 → out of the country
- 1.1400 → rest of the country

1. Industry
2. CNP Stores
3. Restaurants and Hotels
4. Warehouses and Municipal Markets
5. Other Private and Institutions (Hospitals)
6. Retailers within Metropolitan Region
7. Other Supermarkets
handling of large volumes. Allowing transactions at all levels resulted in an increased demand for stalls where products could be readily exposed to the buyer traffic. Since selling of small quantities directly to consumers involves higher profits, even truckers or assemblers perform this operation. This results in limited parking space being devoted to "open air" exhibition stalls, thereby, increasing the traffic problem as well as the overall hygienic conditions of the market.

There is a selective entrance fee which varies according to the type of vehicle and its load status. As noted by PIMA the number of loaded vehicles entering the market every day is more than double the number of public stalls available. Merchants established in the market also pay a rental fee for a public stall of 10 square meters. The only services provided by the municipality are the administration, electricity and cleaning of the market facilities.

It was determined that the physical handling of products, including loading and unloading, constitutes one of the most costly activities performed in the fresh food distribution process. Fruit and vegetables are very susceptible to damage derived from their physical handling. Yet, most of the products are subject to as many changes in location as transactions are performed. Before a product reaches its final destination, it could have been involved in three-to-five loading-unloading operations. Vehicles are often overloaded, which along with the poor conditions of secondary roads, account for a significant product loss. Besides the spoilage and loss of quality related to transportation, there are high labor costs and additional product losses involved in the current handling techniques at the Avenida 10 Market. PIMA estimated that an average of
7 M.T. of garbage and waste was picked up daily from this market. Until recently there has been no attempt to process the market's residues which are being dumped or incinerated by the municipality.

Since Avenida 10 constitutes a major assembly and distribution center of the country, the price formation process being performed in the market is particularly important. Currently, there is a lack of organized market information and most merchants rely upon their intuitive perception of market conditions. These perceptions may be very dissimilar and indeed incomplete, resulting in a rather unorganized bargaining process at all levels. The marketing information flow is also restricted by the scattered location of merchants dealing with similar assortment of products.

Price levels fluctuate within the "thin market" conditions of Avenida 10. Indeed, a truckload of a particular product may be enough to drive prices down drastically, especially since the daily volumes handled are relatively small. As may be expected, the perishability of food items also is an important factor in the price formation process. Hence, handling losses in products such as tomatoes are usually reflected in higher marketing margins.

The poor overall performance of the marketing functions being carried out at the Avenida 10 and Borbon Markets spring from a complex set of conditions and interrelated problems as has been suggested in this review. Acknowledgement of the effects of inappropriate market facilities led PIMA to the formulation of the CENADA project. There is also a recognized need to stimulate productivity, to introduce better handling and distribution techniques, to increase the quality and amount of marketing services
provided and to facilitate the transparency of transactions and the flow of market information.

It is believed that CENADA will provide the basic conditions needed to achieve important improvements in the above mentioned areas. A brief description of the project and its implications is discussed in the second part of this chapter.

2. THE CENADA PROJECT

The problems outlined in the first part of this chapter implicitly suggest an urgent need to improve the efficiency of market transactions and the overall performance of the fruit and vegetable distribution system. However, the rigidity of the present market structure may pose a problem of even greater proportions in terms of its implications in the near future.

The country's major market facilities for fruit and vegetables, the Avenida 10 and Barbon Markets, are within congested areas which have almost exhausted any means of further merchant accommodations. The physical boundaries of the markets are delineated by a rigid urban conglomerate. Without expansion possibilities, it is difficult to foresee how the food system could respond to the growing urban pressures on quantities and services provided. Thus, a gradual increase of the present problems could be expected.

The identification of the CENADA project offered an attractive opportunity to improve the market operation while at the same time opening a relief valve to those pressures associated with the expanding urban conglomerate.
2.1 Description of the Project

In general terms, CENADA involves the construction of a modern wholesale market facility, designed to satisfy the food distribution needs of the growing metropolitan region.

CENADA will replace the current assembly, wholesale transactions being performed at Avenida 10 and at the congested Borbon market area. Basically, the new market will include storage facilities, wholesale stalls, parking space, auctioning facilities and administrative buildings in which several services will be provided. Market stalls and storage facilities will be rented to market participants. Market space intended for the provision of ancillary services such as banks, restaurants and farm input stores will also be rented.

It is expected that once in operation, CENADA will provide better conditions to encourage modern market techniques to be adopted. It is hoped that the project can directly affect weight and measure standards, amounts of food losses, and will result in speedier transactions within a more equitable price formation process. Many of the expected improvements in the fresh produce market will stem from self-induced changes once a better market structure and organization of merchants is established. However, public support will be required to promote other desirable changes outlined in the project as complementary programs.

A training and technical assistance program is included to ensure the proper operation of the market in its initial stages. Under this program, market management personnel will be trained, a market information system will be formulated and finally, studies will undertaken to assess management, procurement, product classification and packaging patterns as well as weight and measure controls.
The time span considered in the project's formulation was 20 years. During the first stage of the project covering the first seven years, CENADA will handle fruit, vegetables and a limited line of grains. It is expected that in the second stage the market will expand its operation to include seafood, poultry, eggs and processed food items.

In 1976, PIMA estimated that about 165,000 metric Tons (M.T.) of fruit and vegetables were channeled through both the Avenida 10 and Borbon Markets. During its first year of operation CENADA is expected to handle 181,000 M.T.; additional volume is expected to be generated by the attractive facilities and additional market services provided. As stated in the project, it is likely that supermarket chains and other potential users will establish their own buying stalls within the market.

It is also expected that CENADA will provide space for grain wholesaling activities to be carried out by the National Production Council (CNP).

2.2. **Size and Location of CENADA**

The market would be located on a 46 Ha. property in San Antonio de Belen, about nine kilometers beyond the present limits of the city. The size of the market facility was determined by estimating the volumes to be handled over the next 20 years and by relating these volumes with the size of wholesale markets in selected cities of the world. The 46 Ha. also contemplates a provision for expansion in activities and the products to be handled in the future in addition to fruits and vegetables (Figure II).

The selection of the market site was a result of an evaluation of seven optional sites. A grading scale was used to consider and evaluate the following criteria:
- reduction of transportation cost, time and traffic congestion associated with product assembly (20 points).

- transportation cost of retailers who will supply themselves in the market (30 points).

- compatibility of land use (10 points).

- future expansion allowance (10 points).

- land value (10 points).

- public services available, water, electricity, drains (14 points).

- land topography (5 points).

The chosen site is located across from the industrial park of Heredia on a fairly accessible area. Once the projected road system is completed, the site can be approached easily from all major production areas without serious traffic congestion problems. Implicit in the selection criteria utilized is an attempt to reduce marketing margins via a reduction of the time and costs involved in logistical functions.

The actual market dimensions were estimated, based upon projected volumes of products to be handled in the two different stages of the project. The estimated volume to be handled in the fruit and vegetables selling area was 20 M.T. per year per square meter. Of the total selling area, 60 percent has been allocated to wholesalers, 20 percent to farmers, 15 percent to cooperatives and five percent to auction space. Additional facilities will be used to store grains and agricultural inputs. A summary of the required market space and its intended use is presented in Table II.

The market is designed to be highly efficient in its operation. An ample parking space of 40 meters will run between warehouses. Platforms will be 0.80 meters high to aid the loading and unloading of products. A water well will be drilled to ensure proper flows for cleaning and
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emergency purposes. Phone and electric installations will be placed underground. Illumination and aesthetic details have been carefully considered.

A wide parking area near the entrance will be destined for truck-to-truck transactions, which is a current practice among produce merchants. The warehouses (bodegas), eight of which will be built in the first stage of the project, will cover areas of 2,800 m² each, distributed in parallel rectangles of 158 by 30 meters. The administration building includes not only offices, but also some areas to be used by bank agencies and restaurants. There will also be a service building, a gas station and an entrance booth. Figure III presents a general perspective of the market's design.

2.3. Complementary Services

Aside from the improved market facilities, CENADA will provide several convenient services to its users, satisfying some of their basic needs while at the same time yielding part of the market's revenues.

As a means to provide farmers with a rapid procurement option of their basic farm inputs, CENADA will rent the facilities for the operation of a supermarket-type store with adequate storage capacity. Besides farm inputs the store will carry hardware, groceries, cloth and other popular home items.

The supermarket may draw considerable sales volumes from nearby residential areas. In such a case, provisions were made to expand the store in the second stage of the project.

It is expected that the establishment of banking agencies would bring substantial benefits to market users. Banking services such as the handling of special accounts, cashing and depositing of checks, and
credit may have a positive impact on the way transactions are performed.

Another important service will be the provision of a good communication system. Telephones are treated with the special attention they deserve in modern transactions. Each tenant will have an independent line and public telephones will be distributed along key circulation areas. A post office is included as well as a small telegraph station. A set of loudspeakers will be installed throughout the market as an efficient means to distribute price and market information and messages of interest.

Other services included are police security, cafeterias, restaurants and the market's own cleaning and garbage collection facilities. There will be a weigh station, a package materials store (the idea being to gradually standardize the package used in certain products) and a gas station with general automotive services. Cold storage space will be available for rent in a limited number of warehouses in order to enhance the life span of some perishables.

2.4. Implementation and Complementary Programs

As indicated earlier, an implementation program prior to the initial operation of CENADA is considered crucial to ensure success in the transition process. This program will include three components: (1) promotion, (2) training and (3) market operation.

The promotion component calls for a detailed study of the market's participants, their number, organization and needs. A promotion strategy aimed at potential users of other market facilities such as supermarkets, input stores, etc., would be formulated and carried out. Training market users and personnel through lectures and short courses is also considered indispensable to attain improvements in market practices.
and managerial capabilities. Yet, further studies are needed to determine the specific orientation of these programs. Finally, the operation plan focuses on problems such as market regulations, fees and procedures, products to be included, retail market improvements, alternative use of current markets and technical aspects of marketing practices.

Once the market starts its operation, other important programs to improve market performance will be implemented. A "market information" program will gather and diffuse market data through bulletins, radio and loudspeakers. A "product handling, classification and packaging" program will search for and introduce better techniques. The "credit" program will facilitate financing to wholesalers and retailers. In order to prepare and implement these programs, a group of technical experts will be needed to assist PIMA during CENADA's initial stage of operation. A specialized consultant firm or market officials from Colombia, and Brazil have been suggested.

A national "Enterprise of Public Service" will be created to take charge of the market and its complementary programs. CENADA's management will report directly to the executive director of IFAM, with PIMA acting as a supervision unit. According to the project compulsive measures will be taken to ensure a proper relocation of market users. Such measures would prohibit wholesale transactions of agricultural products outside the market.

2.5. **Financial and Economic Analysis**

CENADA is expected to be self-sufficient in terms of its operation and investment costs. Revenues stemming from the rental of stalls,
entrance fees, parking and other services will finance direct and indirect costs of the market, according to project plans. Once payments for the debt service and principal are taken into account, there is a positive benefit stream throughout the project life, including the first year of the operation. The land acquisition is being financed by the Costa Rican government, while the construction of the market facilities and the technical assistance components are being financed with a loan from the Central American Bank.

The economic analysis of the project was based on three types of benefits: (1) reduction in transportation costs, (2) reduction in handling costs and (3) less product spoilage. Considering the investment and operation costs of both stages of the project, the resulting benefit-cost ratio was 2.0 at a 12 percent discount rate. The project's internal rate of return was 28.6 percent (2).

Other benefits discussed, though not included in the economic data were: (1) improvements in the price formation process, (2) market competition and marketing services provided, (3) data collection useful in market analysis, (4) reduction in traffic congestion in the metropolitan area, (5) improved working conditions for all market users, (6) alternative uses of current markets, (7) quality and hygiene of products and (8) elimination of undesirable social problems in traditional market areas. Both the financial and economic analysis assumed a complete occupation of facilities as well as prompt implementation of complementary programs.
CHAPTER III

WHOLESALE MARKET PROJECTS IN LATIN AMERICA

Selected Cases in Colombia, Brazil and Argentina

The common cultural backgrounds of most Latin American countries is evident in the similarities found in the development of distribution systems for food products. During the last 10 to 15 years there has been a substantial interest in modernizing these systems in major cities, that are plagued with the inefficiencies and social problems associated with traditional markets. The problems to be emphasized vary slightly from one city to another; however, benefit expectations emanating from the introduction of market reform programs has been fairly similar.

In all cases studied, the weight of the market modernization efforts was placed on the creation of modern wholesale market facilities. Also, the set of problems leading to the creation of wholesale markets in the selected cities were reminiscent of those currently faced in the Costa Rican case. Thus, the study of the following experiences was deemed very important in assessing potential problems of CENADA, as well as more realistic expectations of the benefits associated with its implementation. The social and economic costs of the abrupt modernization drive should not be underestimated, and in this regard a review of past experiences offer a solid and useful reference frame.
1. THE COLOMBIAN EXPERIENCE

The three larger Colombian cities, Bogota, Cali and Medellin, have all followed a trend toward modernization of the food distribution systems via the implementation of programs to improve wholesale markets. The development of these markets, however, was independent and different in each of the cases, largely due to differences in the institutional settings and the characteristics of location sites. While the central market of Bogota has been in full operation since 1972, the one at Medellin has experienced a more gradual expansion of its activities, and the new central market in Cali has been forced to close operations four times since 1974. The three markets showed somewhat similar designs and operational schemes, although the market at Medellin was intended to handle fruits and vegetables, while the markets at Cali and Bogota involved a much broader range of commodities.

1.1. CORABASTOS - CABSA, Bogota

The new wholesale market in Bogota started its operation in 1972, replacing most of the wholesale activities being performed in the old market area at Plaza Espana. The planning and organization of the new market was carried out by CORABASTOS which later created a subsidiary, CABSA, to be in charge of its operation. The location of the market was chosen, giving careful consideration to avoid conflicts between the market and future urban developments (10). CORABASTOS also established two other subsidiaries in 1973: Coratiendas, a retailer-owned cooperative, and the Commodity Exchange Authority in charge of promoting cash and future markets. According to Silva (27) the creation of the three subsidiaries by CORABASTOS was consistent with the overall market reform program that was centered in the operation of the new market.
On the other hand, the participation of COROBASTOS in direct commodity trading programs of high risk and not directly related to its market reform strategy, brought huge financial losses to the institution. This financial chaos, not only jeopardized the existence of the firm, but also its commitment to the subsidiaries and reform programs already in operation. This situation prompted a merger of COROBASTOS with CABSA after which its financial situation was improved and representatives of banks began to dominate the board of directors.

COROBASTOS' budget depended on CABSA's revenues, primarily the rent of the market facilities. According to Colasesores (6) these revenues were barely enough to cover COROBASTOS' operating expenses. Colasesores attributed the financial losses to the direct intervention program alone, while Silva added that the central market facility was also producing losses. The low revenues of COROBASTOS and the negative working capital of CABSA can both be related to the subsidized rental rates paid by wholesalers. These subsidized rental rates also explain the 120 percent occupation rate of the market facilities (6).

**Impact on Wholesalers**

The food distribution system of Bogota is characterized by powerful, well-organized wholesalers. Many of the conflicts encountered by COROBASTOS were related to a constant power struggle between wholesalers and the market's management.

Even though the new market was fairly well located (27), it raised opposition from wholesalers. A major promotional effort was launched in 1971 attempting to attain the support of leaders. Since voluntary relocation of some wholesalers and retailers did not occur, the government blocked the old market, thus, forcing them to move. Once solutions were proposed to solve these problems, relocation objectives were met (27).
The effect of wholesaler power was also reflected in the occupation of the new market. All of the market rental space is occupied by wholesalers, despite CABSA's intentions to provide rental space to other participants in the market. Wholesalers also have three representatives on the seven-member board of directors and own 16 percent of the stock. Wholesale power was evident in the subsidized rental rates and the problems encountered to raise them.

With the operation of the new market, independent wholesalers improved their organization and increased their influence on market operations. According to Silva (27) the wholesale market structure evolved toward a higher degree of market concentration. However, the large number of wholesalers involved and the centralization of market transactions in one location may have improved competition. Barriers to entry though may have been accentuated by the procedures for allocating available rental space.

It is interesting to note that not all independent wholesalers operate in the Central Market. There are a large number (about 30 percent) of independent wholesalers scattered throughout Bogota. Retail chains also operate wholesale warehouses outside the Central Market. However, Central Market wholesalers are handling larger volumes and have become more efficient in their operation. The operation of wholesale activities out of the Market also follows a trend toward the specialization of wholesalers. Silva identified four types of wholesalers in terms of their sales volumes and target markets. Outside-of-the-Market wholesalers are becoming especially strong in serving small-scale retail outlets which benefit from their location and scale of operation. These wholesalers, as well as many of the small wholesalers located in
the central market, buy a large part of their purchases from larger wholesalers also located in the central market. Volume wholesalers and broad-line wholesalers are becoming increasingly important in the distribution of perishables. They have been, according to Silva, the groups who have benefitted the most from the operation of the new market, and many have taken on assembly functions.

Impact on Farmers and Assemblers

Perhaps one of the most evident effects of CORABASTOS has been the increased participation of farmers in the movement of products directly to the Central Market, by-passing the service of traditional assemblers. Silva (27) noted that farmers taking advantage of the new structure are mostly commercial farmers. This trend, along with wholesalers acting more frequently in farm and assembly points, suggests a gain in efficiency resulting from the simplification of market channels.

Competition may be eliminating inefficient merchants. Some rules in the new market also foster vertical integration and restrict the participation of assemblers. Truck-to-truck selling is forbidden and warehouses are either unavailable or unaffordable by assemblers. Silva also mentions that small farmers have lost their opportunity to sell directly to consumers and are having problems selling their small cargos of assorted products to specialized wholesalers. Overall, channel simplification has been a positive change. Trucking costs as well as damage and spoilage has been reduced. The transparency of market transactions and the bargaining position of commercial farmers has improved.
Impact on Retailers and Consumers

Independent retailer's gains from the new structure have been limited, especially for the small-scale businesses. The frequency of purchases has been reduced and volumes per shopping trip increased. However, benefits are questionable since most stores lack adequate storage space and shopping time per trip has doubled. In contrast, the large retailers decreased their shopping time by half. Silva (27) indicates that small-scale retailers also emphasize the loss of market information which has accompanied the reduction in personal contacts in the market.

The inability of traditional small-scale retailers to adopt newer methods of operation has also limited potential benefits to the low income consumers. On the other hand, Silva pointed out that large retailers were better able to pass some of their savings along to consumers.

Impact on Market Performance

Most of the market reform programs "...were oriented toward inducing innovations in the traditional channels."(27) Yet with the new market, participants in these traditional channels have become less able to compete with those participating in commercial channels. Those participants who are in a better economic position in the sectors involved are more likely to benefit from the advantages of the new market situation.

Aside from the consequences and distribution of economic opportunities, the new market has been effective in improving the overall efficiency of market transactions. Most of the objectives associated with the operation of the central market are being gradually attained. Regarding the distribution of benefits, Silva concluded that if equity
objectives are to be met, market reform programs should be selective. Attempting to improve the conditions of all participants may be costly to society. Instead he suggests attention to three target groups: (1) progressive neighborhood stores in low income areas, (2) volume and broadline wholesalers and (3) small farmers with potentialities to become commercial farmers. He recommends a strategy involving the organization of these groups, providing them with training and credit, construction of new market facilities, assessing equitable rental charges and improvement of the market information systems.

1.2 CAVASA, Cali

The "Central de Abastecimientos del Valle del Canca" (CAVASA) was established by the Municipal Council in 1964. In 1968 the PIMUR task force was established and with the technical assistance of Michigan State University consultants, they conducted an extensive diagnostic study of Cali's food marketing system. The study provided specific recommendations to deal with the urban development problems generated by wholesaling activities in the center of the city and modernization of the rapidly expanding urban population.

Before the PIMUR (24) diagnostic studies were completed, the central market facility was demolished as part of the preparations for the hosting of the Pan American games in 1970. Wholesalers were dispersed and the distribution patterns were changed, making the creation of the new market more urgent than ever.

The site which was recommended by the PIMUR study was later disregarded when the former Cali airport was chosen as the new market location. This placed the market about 17 kilometers from the center of Cali. Abbreviated feasibility studies were undertaken to assess the advantages of the airport site.
The new wholesale market in Calipuerto was completed in 1974 and since that time, its operation has been fraught with many problems which has forced its closure on four occasions. A detailed discussion of these problems emphasizes the important effects of locational and managerial deficiencies on the market's operation.

As indicated in Colosesores' evaluation (6) the first closure of the market occurred immediately following its inauguration. A heavy promotion campaign as well as traffic restrictions resulted in a high percentage of inscriptions. However, few wholesalers actually moved in and many soon vacated, arguing about the high transportation costs due to the distant location of the market, which, in turn, resulted in low sales volumes. Other wholesalers started a drive to lower rental rates.

Lower rents and parking fees were offered by the market administrators in an effort to attract the merchants. These incentives failed and police forces were then used to close the traditional markets. The army was also used to force truckers to use the new facilities. The relocation was reluctantly accepted. Two months later, the administration raised rental rates. The new rental charges, water contamination and poor transportation services resulted in complete abandonment of the market for the second time.

A third attempt was made to re-open the market. This time public force was accompanied by a promotional campaign aimed at housewives stressing low prices and the conveniences of the new market. Strong opposition was then raised by retailers complaining of the high transportation costs and the inconvenient operating hours. A strike was organized denouncing the prices of basic food items. This captured national public attention, and the government then created a committee
to mediate discussions between merchants and local authorities. The
mediation resulted in an agreement to avoid use of public force and
to study the conditions under which the market could operate. CAVASA
later agreed to voluntary occupation of the new market to be accom-
panied by a 30 percent subsidy on transportation costs. That incentive
was not good enough, and as soon as the army withdrew, the exodus
of wholesalers to their former locations in the city resumed again.

Since 1976 further stimuli and guarantees to wholesalers and
retailers have resulted in a partial occupation of the market
facilities. Wholesale transactions of perishables and grains per-
formed in the traditional markets are still important even though
most of the large-volume wholesalers have relocated in Calipuerto.

Many of the problems discussed above result from the inadequate
and inconvenient location of the new market. Colasesores (6) concluded
that the feasibility studies recommending Calipuerto were merely the
justification of a decision previously made. The validity of the
criteria sustained in these studies was heavily criticized by the
evaluation report.

The major effects of the location decision were twofold:
increased transportation costs, drastically affecting small-scale
merchants, and the continuation of most of the social and economic
problems associated with the operation of the traditional marketing
channels.

The low occupation of the new market is directly reflected in
financial problems for CAVASA. If volunteer relocation of a larger
number of merchants is to occur, CAVASA will have to openly subsidize
the market's participants which could result in a possible detriment
to the market's operation and services.
It is not clear how the additional transportation costs are distributed among market participants. However, under the present market conditions few of the retailers could absorb these costs without seriously affecting their financial operation. Thus, it would be reasonable to expect these higher costs to be passed along to the consumer. The ability of small retailers to compete with supermarkets and other larger-scale retailers would also be seriously undermined if they were solely dependent on the CAVASA market. However, the impact of the market on wholesalers depends on the extent to which retailer traffic is affected. Studies by Colosesores (6) indicate that small wholesalers would be adversely affected by the new market conditions. These wholesalers could not effectively adjust to the reduction of sales volume that occurred in the new market. In contrast, large-scale wholesalers could better afford favorable sale conditions to encourage buyers.

Expected improvement in the Cali food system were largely based on the simple relocation of merchants in the CAVASA market. The location recommendations of PIMUR (24) were ignored and the urgent need for an alternative market resulted in a hastily made decision concerning the actual location of the wholesale market. At that point, the main goal of CAVASA was to solve urban problems related to the operation of the traditional wholesale operation. No efforts were committed to the implementation of complementary programs after the market started its operation. Meanwhile, the lack of alternative uses of old facilities has severely limited the potential impact of operating the CAVASA market as a single wholesaling center for fruits and vegetables.
1.3 Central de Abastecimientos, Medellín

The Central Market of Medellín, unlike the markets of Cali and Bogota, was the result of a lengthy planning procedure which began with a mid-1960's study recommending the location of the new market. The construction of the market began in 1969, and by 1976, the first stage of the project was in full operation. Steps were taken to build additional market facilities and warehouses to complete the project (6).

The site selected for the new market was generally considered to be good by most participants. Relocation of most wholesalers of perishable products was effected without major difficulty. The evaluation study of Colasesores (6), however, criticizes the criteria of locating the market away from the urban area. It was suggested that a more effective impact could have been attained had a location more accessible to low income groups been chosen. However, the Bogota market which was located in the lower income area of the city, seemed to encourage the development of a slum settlement surrounding the market. Silva (26) expressed the thought that the possibility of job opportunities related to the central market was the reason for settlement near the market. He also commented that the small retailer's ability to acquire operational efficiencies and pass gains along to consumers is extremely limited.
Due to only a partial relocation of wholesalers (most grain and processed food wholesalers still remain in the old market area) some of the social problems associated with the old market structure have been prolonged after the inauguration of the new "Central." When full operation of the central market is in effect, many of the previously mentioned problems may be resolved. Colasesores (6), however, warns that the lack of a defined strategy to restore and use the old facilities may make the simple relocation of merchants insufficient. Also, a policy to provide alternative employment opportunities to those affected by the relocation of the wholesalers was necessary.

Aside from the remaining problems in the old market areas, the new central market is performing according to expectations. A trend toward a reduction in the number of wholesalers and retailers has been identified. However, this trend is not as evident as in Cali or Bogota, partly because the Medellin market was intended only for fruits and vegetables. In general, the impact of the central market has not been as visible, being overshadowed by the simultaneous operation of wholesalers in grain and perishable items in the traditional market. According to Colasesores (6) the change in methods of operation of wholesalers has been minimum, except for the procedure of payments. A more general use of checks, receipts and order forms has been observed. The new facilities have resulted in many improvements in the working conditions of the merchants handling fruits and vegetables. Spoilage was reduced and improved competition may have been attained through the concentration of wholesale transactions.
2. THE BRAZILIAN EXPERIENCE

The Brazilian Food Company (COBAL) was established by the government in 1962 to implement a modernization of the food marketing system. Two additional institutions, CEMAB and FINEP, were established to assist in the planning and financing of COBAL's projects. The construction of modern fruit and vegetable wholesale markets was the pivotal point in the modernization strategy, and in 1968, the first 15 cities were selected as recipients of the program (10). Currently, there are about 25 wholesale markets for perishable items in operation; one is located in each of the major Brazilian cities.

The markets (CEASAs) all follow the same design and operational scheme. They are planned to be operated by a mixed public-private shareholder company and given autonomy in financial administrative matters. The purpose is "...to facilitate efficient handling to channel fruits and vegetables to urban areas and to permit the introduction of improvements such as grading and packaging." (10). The following review of four experiences in Northeast Brazil is based on an evaluation study made for COBAL in 1976 by a team of selected technical consultants (5).

2.1 CEASA, Pernambuco

The Central Market of Recife started its operation in 1968, serving an area of more than two million inhabitants (4). In 1972 the facilities were expanded and the market was incorporated into the CEASA system. Favorable conditions of operation, design and location fostered the gradual relocation of most wholesalers of perishable products. Currently, however, food procurement for the city is dependent upon not only CEASA wholesalers, but also on those located at traditional wholesale market areas where grain and processed items are still sold.
With the exception of minor operational problems, such as the need for additional telephones and improved sanitary facilities, the central market is considered to be in good working condition. Two points can be highlighted as resulting from the changing market structure induced by the new facility: excessive specialization of wholesalers and the creation of one additional step in marketing channels operating through CEASA.

The excessive specialization of some wholesalers in terms of the products handled is attributed to the rigid allocation of space for various products. The evaluation study (5) suggests that fewer, but more diversified merchants, with different selling methods could handle the same volume. On the other hand, there has been an increase in the number of small wholesalers. The additional step in market channels that resulted is related to the large number of small-scale, diversified retailers. Thus, many of the small wholesalers have specialized to serve this particular market segment. As a consequence, the number of transactions among wholesalers operating in the market have also increased, encouraging the growth and specialization of larger wholesalers even further. Gains in economies of scale are evident in the operation of these latter types of wholesalers.

A more flexible selection of participants, not found in the Colombian cases, is part of an interesting strategy on the part of CEASA-Pernambuco. By allowing new merchants to participate in the market in addition to the relocated wholesalers, some innovative techniques may have been introduced, and the traffic of buyers was probably increased. Vegetable warehouses for major supermarket chains and broad-line wholesalers are considered promising additions to the market.
2.2. CEASA, Ceará

As stated in the evaluation study (5), this CEASA located in the City of Fortaleza is a good example of the importance of administration and location of a market in determining the outcome of the project. Most of the problems found in CEASA-CEARA were related in some manner to administrative barriers which imposed restrictions on the flow of marketing transactions and also on the location of the market facility.

At one period in the operation of this market, wholesalers were not allowed to deliver products outside the market. Telephone order transactions were banned and personal in-the-market transfer of products to retailers was required. Limits on the volumes each retailer was allowed to buy were established which was intended to deter the creation of a parallel market. Barriers imposed to the entrance of small retailers and inappropriate scheduling resulted in inconveniences to retailers, shortages of transportation means and selective treatment to large retailers, (the CEASA had only a six-hour working day). Excessive tariffs, which included fees for entry, parking, unloading and even for exiting with products, was an additional and heavy burden to most merchants.

Also mentioned was the poor relationship between market officials and the users of facilities and the limited supply of some products which was due to the location of the market. The procurement of some vegetables from more accessible assembly points offered a less costly distribution alternative. The above interrelated problems indicated that management's pre-conceived standards on the firm's efficiency, had in this case, conflicting interests with performance improvements.

It should be noted, however, that most of those problems resulted from the inappropriate location of the market facility. Market regula-
tions were intended to force trade into the CEASA and to discourage wholesale transactions in the other locations. At the same time the need to train CEASA's officials in technical aspects of market operation and to foster a cooperative, rather than an authoritative, relationship with merchants was made evident.

In short, misconceived management concepts, the location of the market and the troubled situation that resulted, have limited the potential gains that could have been obtained with the modern facility. Wholesalers are unable to take full advantage of economies of scale and adopt more efficient procedures. Retailers also face limits on their participation which may discourage growth and result in an increased number of shopping trips. The excessive tariff scheme, devised to cope with the market's financial requirements is also deterring a more active participation of merchants and could prove to be very damaging in the long run.

2.3. CEASA, Bahia

This CEASA started its operation in 1973 serving 1.5 million inhabitants of the City of Salvador. As in several other cases already discussed, the characteristics of the location site selected account for most of the difficulties the market encountered since its inception. The market was built 15 kilometers from Salvador and as in the Ceara situation, the site was some distance from the area in which most vegetables were produced. CEASA-Bahia is currently operating simultaneously with two other traditional markets that have better locations and which handle a significant volume of total wholesale transactions.

Even though CEASA-Bahia registered an excellent occupation rate of
facilities in the "permanent sector" of the market, the efficiency of space utilization is poor. Several wholesalers have expanded their operation to more than one stall or warehouse. The non-permanent section is losing its market share to competitors in other markets who are in a better location to handle vegetables. The unorganized assignment of facilities resulted in a "market disequilibrium" where some market areas are substantially better selling locations than others (hot and cold spots). Cold spots are increasingly being utilized as storage space with little traffic exposure, especially by those wholesalers handling grains and cereals. This situation has contributed to the abandonment of these areas by wholesalers seeking a better location in traditional markets.

Because of the relatively poor participation of merchants early in its operation, the CEASA's management decided to implement a more flexible strategy involving the participation of other groups. The activities of the diversified market which resulted attracted business from the nearby industrial and urban areas and increased market traffic. The CEASA is also responsible for the organization of more than 20 "mobil fairs" weekly. The firm has broadened its activities and now manages a "hortomercado" which offers modern retail facilities directly to consumers.

The evaluation study of the market (5) concluded that under the present circumstances, CEASA-Bahia is operating more like a storage and assembly facility rather than as a center for wholesale transactions. Further development of parallel markets and the establishment of farm markets could seriously undermine the already weakened financial situation of the firm. The search for an alternative use of the facilities was recommended.
2.4. CEASA, Sergipe

The operation of this central market, serving a relatively small population of Aracaju (220,000) was started in 1973 (10). In contrast to most markets of this type, this CEASA was located in an urban area and designed to service both wholesaling and retailing of fruits and vegetables, being called a hybrid unit. It succeed in incorporating most of the wholesalers. However, the traditional retail structure of the city remains basically unchanged. The new retail stalls only increased the market choices available to consumers of Aracaju, although hygienic and working conditions of the participating merchants were greatly improved.

Occupation rates and productivity of facilities were found to be above-average levels. The administration uses a diversified tariff structure, charging not only for space occupied but also for volume handled. This latter form of rent is discouraging efficiency in handling of larger volumes. Some potential improvement of the operation of CEASA was identified, but, in general, the market is working up to acceptable standards.

2.5 Overview of the Brazilian Experience

A report (8) which elaborates on major recommendations identified in the evaluation study, focused on four points: (1) the need to increase revenues and solve CEASA's financial problems, (2) the need for increased technical assistance to market participants, (3) a change of management strategy to emphasize service to users rather than control and regulation and (4) the need to reduce food prices paid by lower income consumers. The recommendations are mainly based on the urge
to increase productivity of small retailers and farmers, to change the current tariff structure and to improve management-user relations, as well as the operating regulations conflicting with a more efficient use of facilities.

Stanley F. Krause (16) also studied the impact of the CEASAs on the Northeastern Region. He warns that the improvements in the food system are the result of many interrelated actions and should not be evaluated as the effects of single events, in this instance, the operation of CEASAs. Krause stated that marketing channels are now shorter due to the growth and specialization of wholesalers along with a greater participation of farmers. He noted a considerable expansion of supermarkets and retail sections of the CEASAs. Despite important improvements on pricing performance, the rate of adoption of new practices has been slow. He also found little change in marketing margins. His recommendations were based on the need to improve product handling, introduce official gradings, provide technical assistance and improve credit and market information programs.

Regarding the effects of locations on retailers, Krause (16) noted that small retailers are more vulnerable to cost distortions. These retailers have continued buying in traditional markets which are located in more convenient areas when they have had a choice. For those buying at the wholesale market, the number of shopping trips has been reduced, which is largely due to the added transportation costs. This trend is "... poorly suited to selling quality perishables in hot weather without using refrigeration." Krause also suggests a trade-off between the pricing benefits of the concentration and specialization of wholesalers,
and the resulting extra efforts of small retailers and farmers to buy or sell assorted small market baskets.

In general, the new markets have resulted in substantial improvements in the physical facilities used by wholesalers. Efficiency in market transactions is gradually improving and some undesirable social problems have been reduced. Yet, focusing on the wholesale structure may have resulted in an underestimation of the problems involved in the retail sector. In all of the four cases discussed, persistent marketing practices at the traditional retail level have not shown significant improvements. As a result, the expected distribution of benefits stemming from the improved market facilities has been limited. The COBAL evaluation study (5) anticipates that a dual marketing system will persist in the future which could lead to undesirable social and economic problems.

3. **The Argentinian Experience**

The study of the Buenos Aires case shows the important impact of new markets over the food distribution system. During the early 1970s the population of the Buenos Aires Metropolitan Region was almost nine million. The area was served by a complex food distribution system involving the participation of 23,000 retailers and more than 4,000 wholesalers scattered in 23 major wholesale markets. In order to improve the performance of the system, the government established the "Corporacion del Mercado Central," which was to plan, construct and operate a single wholesale market facility as a substitute for the other 23 markets in operation. Enforcement of a 1971 law would make any wholesale transactions outside the new market illegal (7).

Frigsico's study in 1973 (12) questions the rationale behind the establishment of a single facility. He compared the cost impacts of the
single market with alternative decentralized arrangements in which either four or five wholesale markets would supply the city. It was found that retailers' transportation costs (expenses and time) account for the larger proportion of direct distribution costs in any wholesale market arrangement that drastically reduces the number of wholesale facilities currently in operation. Thus, he suggests using retailers procurement costs as perhaps the most important criteria for selecting alternative arrangements and sites.

From the evaluation of several traditional wholesale markets, Frigerio (12) concluded that with modest additional investments, some of these existing markets could be substantially improved. Through case studies on particular commodities Frigerio concluded that it is possible to have "... pricing efficiency in a decentralized wholesale facility arrangement..."

In the case of Buenos Aires, a single market facility would introduce distortions on the retail distribution cost structure that offset the potential benefits of the project. According to Link (18), a single market would affect 71 percent of retailers now buying in the existing nearby markets. In contrast, it would benefit transactions among wholesalers with large retailers. Among other external diseconomies associated with a single facility in Buenos Aires, Frigerio (12) also mentioned the following: the expansion of truck-jobbers, substantial increases in retailers' transportation costs and time spent, and a decrease in purchasing frequency which also relates to additional needs of storage facilities and working capital.

In short, Frigerio stated that the social objectives attached to the project (i.e., lower prices, transparency of transactions, reduced traffic and sanitary problems) are not likely to be achieved solely by
the construction of a single new facility. The cost of implementing the complementary programs required may be very high and the assumed spontaneous adjustment of the retail sector may take several years, while introducing new problems. He concludes that "... the project either will be a higher cost wholesale facility arrangement or at best will not offer a clear operational cost advantage over the existing system."

Both Link (18) and Frigerio (12) recommend a decentralized scheme which includes three to four wholesale markets with appropriate modern facilities. They also agreed on the need for a large wholesale-assembly market required to concentrate larger-scale merchants, namely, wholesale-to-wholesale transactions and large-volume transactions with some retailers.
RELEVANCY OF THE LATIN AMERICAN EXPERIENCE FOR COSTA RICA

The commercial structure of many rapidly growing Latin American cities has not developed enough to efficiently cope with current and expected needs for food procurement (11). In most instances, the introduction of reforms intended to change the traditional market organization has been considered a public responsibility, implicitly admitting the limited possibilities of self-induced modernization. In this process, the creation of new wholesale facilities has become a major common component in a strategy designed to improve the performance of the food system. Complementary programs such as technical assistance, credit and market information have been included in all the cases analysed in this study and some attention was also given to the reorganization of the retail and assembly sectors in several of the projects.

Commenting on this common strategy, Fregerio (13) noted that in most cases, a similar economic feasibility study has been done to analyse the expected economic benefits and the self-financed characteristics of the new markets. However, he warns that the commonly used procedures to not allow for an in-depth economic analysis and could lead to serious unexpected problems.

Thus, the wholesale marketing problems discussed in the previous chapter could be primarily related to one of the most basic steps of the market reform: The formulation of marketing programs. Weaknesses in project formulation were particularly noticeable in Cali, justifying the location of Mercalipuerto, and in Buenos Aires, disregarding the
important effects of the new facility on urban food distribution costs. Even when a sound market reform policy was involved, political issues as well as the lack of well qualified, technical personnel were reflected in the implementation of problems encountered. In the case of CENADA, a careful re-examination of all the underlying assumptions and basic components of the project may prove rewarding, especially since the market is still in its construction stage.

The significance of the wholesale facilities studied ranged from being considered part of a simple urban reorganization program to their consideration as instruments of a broader and longer term market reform policy. The operative experience of all of these markets suggests that common problems were generally determined by a similar set of conditions. Keeping in mind the interdependence of these conditions, most of the problems discussed could be grouped in terms of their relation to the:

a) Location of facilities
b) Operation and management of facilities
c) Changing competitive position of participants

The degree to which these problems are reflected in the performance of the food system vary according to the specifics of each case. However, there was a common pattern that can be helpful in analyzing their relevancy in future projects. In fact the consequences of the problems listed above in terms of their effect on both the market operation and the food marketing system as a whole, could be generalized in three major areas:

a) Financial imbalances
b) Limited distribution of benefits
c) Modest effects on traditional marketing channels

The following discussion of the problems and their consequences will be centered on their implications for the Costa Rica case. The
formulation of the CENADA project and the description of the structural problems it will face are very similar to the other Latin American cases studied. It follows then, that similar trends and problems in Costa Rica are not only likely, but also consistent with the outcome of the attempts to concentrate wholesale activities in the Avenida 10 Market.

1. **THE PROBLEMS**

   **Location** -- Abrupt and erroneous decisions when locating the site for a new market are behind the most serious distortions introduced in the food system by reform programs. The markets of Cali, Ceara, Fortaleza and Salvador have all faced these problems. Forceful intervention may be required to relocate the merchants. Poor efficiency in the use of facilities may result. Shortages of some products are likely. The creation of an additional step in the marketing channels may be encouraged. Higher distribution costs may have a discriminatory effect among participants.

   The location of CENADA was widely justified among several other alternatives. The market site finally selected is less than ten kilometers from the center of the city. It will offer relatively easy access from most production areas. However, vegetable producers in the Cartago area will be worse off if traffic conditions across the city are not improved. Aside from the short freeway leading toward the market, traffic conditions in the metropolitan region are still poor. In addition, low income areas are expanding into the southern part of San Jose which is a considerable distance from the market. The effects of this situation on the transportation costs of retailers (in terms of both time and expenses) are likely to be considerable; especially since most small retailers depend
on "taxi carga" (small pick-up taxi's) to perform their shopping trips to the market (gasoline in Costa Rica is priced near $4.00 per gallon).

Higher procurement costs could likely result in some resistance of retailers to use the new market. This in turn determines the attitude of wholesalers since they depend on retail traffic. Forceful intervention of public authorities, such as has occurred in Cali, could only worsen the situation. In Cali these kinds of measures left behind negative impressions which still persist in the minds of all merchants. If similar relocation problems are to be avoided, CENADA officials should concern themselves with actions that could facilitate the adjustment process of all participants. A heavy promotional campaign may not be enough.

Attempts to organize small retailers to help them change buying practices before the market is open, as well as ensuring the availability of an efficient transport system, are crucial.

If the market efficient gains are not enough to offset the additional distribution costs and if those gains are not passed on through the market channel, then the question of who would pay for these additional costs become relevant. The group of progressively organized, generally medium to large-scale retailers, will probably benefit from the changing market conditions. The voluntary chain organization movement among these retailers, already strong, may be fostered. As has been the case in other markets, higher procurement costs results in fewer weekly shopping trips, especially by small-scale retailers. Such change in their cost structure may be reflected in higher retail prices of perishables, decreasing quantities and qualities offered, fewer services and in general, a blow to their competitive position. On the other hand the situation may stimulate the creation of an additional step
in the marketing channel. Small, scattered assembly points and a more
dynamic role of trucker-jobbers could be encouraged by retailers perceiving
the need and being willing to pay for the extra service.

Regarding the effect of additional costs on the small, traditional
neighborhood stores, an attempt should be made to offset those costs
through improvements in their operation. Technical assistance and better
coordination with suppliers may provide the required incentives to achieve
economies of scale. Thus, they may not only compensate for increases in
distribution costs due to the new market location but also pass on
substantial benefits to low income consumers. Greater convenience and
assortment, improved quality, better service, and even lower prices are
among such benefits.

In short, CENADA officials should be prepared to have adjustment
problems in the retail sector. Improving buying practices of retailers
is crucial for the successful operation of the market. The administration
should also be prepared to provide a wider set of incentives than
those contemplated in the project. In order to reduce the effect of
location-related problems achieving a smooth transaction of small
retailers, their modes of transportation should have top priority in
the implementation stage of the project. Yet, the retail sector cannot
be isolated from other sectors. The closely related variables interacting
along vertical channels calls for attention to the response
capabilities of farmers, assemblers and wholesalers as well. Their
adjustment will determine many of the productivity gains potentially
available at the retail level.

Operation and Management -- The main operational and management
lessons from other Latin American marketing experiences relate to the
design of marketing policies, the misconception of performance standards
and the effect of regulations and controls over the market's operation. The potential of policy-related problems presents a particularly vulnerable flank of the CENADA project and its importance should not be underestimated.

The COROBASTOS case in Bogota stresses the need for a well-defined and stable operational scheme. In Silva's words (27), "The main lesson learned from the COROBASTOS experience is that organizations in charge of market reform need careful planning and organization." Engaging in programs beyond the scope of the market reform policy can only result in a dilution of attention and resources, lowering the impact of component activities.

CENADA should be provided with flexibility of action, given the nature of the market activities. Yet, its responsibilities in the modernization of the food system should not exceed its managerial and resource capabilities. Market reform strategies such as the one suggested by a LAMP study in Costa Rica (17), have not been explicitly outlined in government policies. However, well-defined policies are crucial if the impact of the CENADA project is to avoid being a mere urban relocation of market facilities. By the same token, any future evaluator of CENADA should bear in mind the limitation and attributes of such policies.

In terms of the effect of market rules and controls, the administration of the market in Ceara furnishes a good example. As was discussed in this case (page 44), the manager's misconception of performance standards and his attempts to overcome locational problems, resulted in barriers that hindered a more efficient operation of merchants. This experience calls for the adequate training of market officials and stresses the need for good administrator-user relations, impartial treatment of merchants and reasonable fees.
The rigid zoning and assignment of the market facility space in terms of the products to be handled as it is planned in Costa Rica, can bring about some counterproductive effects, as has been the case in some Latin American markets. Such arrangements have resulted in excessive product specialization of wholesalers in Recife, encouraged the selective use and differential profitabilities of market stalls in Salvador, determined lengthier in-market shopping times for retailers in Bogota and constrained the participation of small, diversified farmers who have difficulties selling assorted and small volumes. A careful analysis of retailers' shopping habits in Costa Rica, along with a more flexible assignment of market facilities, may be worth considering.

Benefits normally associated with a wide participation and interaction of different groups (farmers, assemblers, wholesalers and retailers), were verified by the Brazilian experience. However, the planned participation is not easily attained as was the case in Bogota. Allowing strong, organized wholesalers to exert excessive influence in the market administration resulted in a complete wholesale occupation of facilities, barriers to the entry of new merchants and in a low tariff structure. CENADA should deter the formation of such power groups and carefully stimulate a well-balanced competition among market participants.

In Costa Rica, well-trained market officials should be able to emphasize service to users rather than enforcement of regulations. Satisfying such conditions, as well as promoting merchants' involvement in operating and managerial decisions, may greatly improve their attitude toward the market reform. A positive attitude, especially of wholesalers, is one of the key elements shaping their predisposition to innovate and fulfill an active role as change agents in the modernization process.
Market Competition -- In most of the cases studied there has been a clear trend toward specialization in the products carried and growth of larger wholesalers. At the same time, the large number of small retailers induced the proliferation of small-scale, diversified wholesalers suited to attend this particular segment of the market. The number of wholesale-to-wholesale transactions has increased, and in some cases, the role of the outside-the-market wholesalers and truck-jobbers has been significantly expanded. Thus, specialization in terms of the target market served has also occurred. The establishment of two, and even three types of wholesalers serving different market segments, is also likely in Costa Rica. The problem is that there are only about 100 wholesalers of fruit and vegetables in San Jose in contrast with the hundreds and even thousands found in larger Latin American cities. Any increase in the degree of market concentration and growth of wholesalers can bring about serious oligopolistic conditions in some areas. As in Bogota, this could obstruct the entrance of new market participants and result in unfair competition.

Fostering effective competition among wholesalers may offset harmful trends toward the formation of oligopolistic relationships. Normal growth and specialization should be stimulated. CENADA officials, with the participation of wholesalers should establish appropriate regulations and operating conditions in this regard. The "rules of conduct" determining acceptable "competitive and ethical behavior" should be designed to assure a certain degree of openness to the entrance of new wholesalers. They should be flexible enough to provide opportunities for growth, change and exit as well. On the other hand, encouraging participation of organized retailers and supermarkets may provide an adequate countervailing power. Participation of farmer cooperatives and other forms of joint ventures are important for the same reason. Hence, a healthy degree of
competition can be achieved while at the same time providing opportunities and economic incentives to profit from economies of scale.

Physical concentration of market transactions may eventually induce buying and selling patterns and schedules that might provide wholesalers with substantial time savings. Such conditions may encourage large wholesalers to perform assembly functions and engage in farm-gate transactions, especially since the country is small. Greater participation of farmers in assembly operations could also favor the elimination of assemblers. If this situation contributes to strengthen the farmers' bargaining position and the efficiency gains of wholesalers are distributed along the channel, the trend toward the elimination of assemblers might be desirable.

In the retail sector, given the locational problems already discussed, the creation of one more transaction providing intermediary services to retailers is likely if the current retail structure and conduct remains unchanged. The proliferation of small, parallel traditional markets or the continuing operation of old facilities at the Bórbon area and Avenida 11, could become a problem if not publicly regulated. Large, voluntary retail chains and supermarketers should be stimulated to operate in the market to discourage small assembly operations performed in urban areas. By the same token, planning in advance alternative uses of old facilities could be advisable and also helpful in the relocation process.

In most cases, wholesaling of grains and processed items has often continued in traditional markets or else has been difficult to locate in the new facilities. CENADA is intended to absorb fruit and vegetable wholesalers and the grain operations of the "Consejo Nacional de Producción" (CNP), Costa Rican price stabilizing organization. Yet the relocation of
broader line independent wholesalers has not been considered in the project. A careful study of this particular wholesaling activity may prove very valuable. Their participation in the new market may significantly enhance the scope and impact of the project as was the case in Bogota.

In short, large, commercial enterprises at all stages of the marketing channel will probably profit from the new opportunities created. The gap between the competitive position of large and small-scale firms will widen unless effective measures are taken to incorporate the participants of traditional channels. CENAIDA should be able to identify and promote acceptable degrees of specialization and growth among large merchants. Assemblers would decrease in number and importance, while at the other end of the market channel, a new type of small wholesaler could evolve, serving those traditional retailers who may not be significantly affected by the operation of the new market.

2. THE CONSEQUENCES

Financial Imbalances -- The new wholesale facilities are projected to be self-supporting in assessing charges that will cover operation and investment costs. Yet, in actual operation, many of these markets have failed to maintain their financial equilibrium. It should be stressed that without a sound financial basis the deterioration of operating conditions is likely to be reflected on all market participants.

The case studied in Brazil and Colombia showed a common vicious circle particularly linked with the location of the new markets. Poor location has resulted in poor occupation rates and low rental rates are then required to stimulate space utilization. Low revenues, in turn, are not enough to cover operational costs but rising rental rates may seriously disrupt the occupation of facilities.
The CENADA project includes a wide set of ambitious complementary programs. Yet, the financial resources of the new wholesale market alone may not be sufficient to warrant their adequate implementation. Public support will probably be needed if a broader distribution of benefits is to be realized from such complementary program. The availability and potential allocation of resources should be carefully assessed by the CENADA administration and should be consistent with realistic project expectation. Any effort to conceptualize objectives and programs in more realistic terms would aid in the project's implementation. As inferred from the case of Ceara, financial objectives could seriously undermine the provision and quality of market services. CENADA should not be intended to be profitable but it should be self-financed. Services and programs to be implemented by the CENADA administration should be fostered only if they are consistent with both CENADA's revenues and broader market reform objectives. The ability of CENADA to perform as an efficient change agent in this reform should be an important criteria in the allocation of charges and revenues.

**Distribution of Benefits** -- In almost all of the cases, the operation of a new wholesale market has resulted in reduction in the number of participants. As was already discussed, attaining operating efficiencies eventually lead to the elimination of less-efficient merchants. The concentration of marketing services was more accentuated in larger markets, although the effect of changes in the market's competitive environment was more evident in small facilities.

The studies of Silva in Bogota (27) and Colasesores in Medellin (6) both questioned the extent to which benefits were passed on to consumers.
There was little evidence of benefits in the form of better services and lower prices reaching low income areas. Indeed, such findings are consistent with the modest effects of the new wholesale market on traditional neighborhood stores serving these areas. Benefits reaching middle income consumers were more visible, although part of the gains from the improved market efficiency may have been translated into larger marketing margins.

The above experiences call for some revisions in the highly optimistic objectives of CENADA. The expected effect of the new market on the agricultural sector, on prices at the consumer level and on the extent to which different elements will benefit, may not be consistent with the actual experiences of Latin America. The social costs of the modernization process should be faced openly. It would be reasonable to expect that some market participants will be adversely affected. As illustrated by Mittendorf (19), progressive firms with larger scales of operation and better coordination along vertical channels are prominent in the development of Latin American food systems. It can be argued that smaller, less competitive firms should be assisted to ensure their relocation in a more modern marketing system. Yet such a task is beyond the capabilities of CENADA alone. Naively conceived expected benefits of the new wholesale market can obscure the need for different complementary programs better suited to deal with the poorest sectors.

**Dualism in the Food System** — The term "duality" was borrowed from the Brazilian study (5) since it can be readily applied to all of the cases discussed. It refers to the simultaneous operation of two different marketing channels: one that is progressive and modern and the
other that is stagnated in the old traditional frame. None of the
markets resulted in a complete concentration of wholesale activities,
and in some cases the operation of parallel traditional markets remain
the core of the food distribution system.

As was discussed above, the operation of a new wholesale facility
has had a limited effect on merchants participating in traditional channels,
particularly retailers. In some cases, the role of these traditional channels
was enhanced, thus, consolidating inefficient marketing practices. The
lack of economic incentives, managerial capabilities, knowledge and/or
capital may partly explain the static and rather stagnated nature of this
subsystem. The incomplete relocation of perishable wholesalers in the
new wholesale facility can in turn be related to the continued operation
of these traditional channels. The new markets have been designed to handle
mostly perishables, with few of them including other basic food items. Yet,
fruits and vegetables account for a relatively small proportion of the
neighborhood stores' assortment. It follows then that wholesalers, perhaps
offering a broader assortment of products and better located in traditional
markets, still serve an important target market operating through
traditional channels.

In the case of Costa Rica a more successful attempt to concentrate
all fruit and vegetable wholesalers may be expected. The relatively small
size of the market and the partial concentration already achieved at
Avenida 10 may constitute advantages in this regard. However, the need
to incorporate broader line wholesalers as recipients of market reform
programs and even as CENADA participants is crucial if the impact of
CENADA is to reach small traditional stores.
The expectations that CBADA will have a major impact on the Costa Rican wholesale structure suggest that more intensive efforts be made to modernize its operation. Hopefully, planning and resources poured into food system reforms may result in a shorter transition towards a modern marketing system and a wider distribution of benefits. In this sense, the implementation of complementary programs such as those proposed in the project, might be more important than originally assumed. Specifically, careful attention to the retail sector and its organization may have an impact unprecedented in any of the Latin American cases described in this paper.

The risk of discontinuing the implementation in market reform programs once the establishment of the new facility is completed is very high, as is evident from the cases studied. In fact, an important part of their original political appeal lies in the construction of a highly visible physical facility. Costa Rican officials should be aware of the realistic potential improvements in other areas of the distribution system of which the physical facilities of CBADA will be a part. The characteristics of the Costa Rican market situation offer great possibilities for a successful modernization process of the whole system. The implementation of intensive complementary programs should be recognized as a crucial requirement in that process.

3. **CONCLUDING REMARKS**

In most cases, through the creation of modern wholesale facilities and the implementation of complementary programs, substantial benefits have been achieved. Emphasizing the problems encountered in each of the cases was not intended to underestimate noticeable improvements in the distribution of perishables and other basic food items, but rather to better comprehend the different factors shaping the outcome of such
projects. Two major points are implicitly highlighted throughout this chapter: the limited scope of the wholesale facility as a tool of a broader market reform program and the crucial role of government in promoting and facilitating the long-run adjustment of firms and institutions.

In the first case it should be noted that most of these markets are highly specialized to handle fruits and vegetables. Of all the markets studied, only the ones at Bogota and Cali were designed to incorporate a broader assortment of food products. Thus, the influence area of these markets on different segments of the wholesaling sector is limited. Improving vertical coordination and innovative practices within marketing channels, major objective for all markets, depends upon the ability of wholesalers to satisfy the needs of several types of decentralized retail outlets. In this regard, the gains are limited by the degree of product and market segment specialization of both wholesalers and retailers. Obviously, broader-line markets such as the ones at Bogota and Cali may be in a better position to incorporate and influence the operation of widely assorted neighborhood stores. Hence, benefits ought to be assessed in terms of what is realistically possible, given the scope of the project as it has been formulated. Broader market reform objectives should not be attributed to the operation of the wholesale market alone.

Regarding government involvement in the reform, it should be noted that the modernization process depends not only on the active participation of all channel members (from producers to consumers), but also on the close interaction between the food system and other sectors of the economy. Hence, the attitudes of policymakers towards the market reform program becomes extremely important. Attempting to reach the benefits of a modern food system through active participation of the private
sector rather than through direct market intervention programs, demands full awareness of the long-term effects of those regulations and policies conditioning market behavior.

Encouraging and facilitating market coordination should be an explicit commitment of all market-related institutions. The private sector should be openly stimulated to innovate and attain efficiencies all along marketing channels. Costa Rican officials should carefully evaluate policies hindering a smooth flow of products and the reallocation of resources. At the same time they should foster effective competition so that benefits are passed along to consumers and undue profits of middlemen are prevented. In short, government regulations, incentives and sanctions should induce market participants' reactions consistent with broader societal market performance and development goals.
CHAPTER V

MONITORING MARKET REFORM PROGRAMS IN COSTA RICA

INTRODUCTION

The results of marketing development programs, in particular, the modernization of wholesale facilities, implemented in selected Latin American countries, have been discussed in previous chapters. Some of the important variables determining the outcome of such programs were discussed in detail in terms of their relevance for the Costa Rica case. In this chapter, an attempt is made to conceptualize the relationships that exist among these variables, assess the potential contributions of the CENADA project within a broader market reform perspective, and finally, to develop an evaluation framework for generating the information required at different levels of market policy design.

1. CONCEPTUAL BASIS FOR MARKET REFORM

The economic development process involves changing conditions in three major areas: economic growth, employment of resources and income distribution. Accordingly, development goals are often designed to promote the transition from traditional farm-based economies to more modern industrially-based economies in both rural and urban areas.

However, the traditional use of high growth rates as primary objectives and its ability to generate economic welfare is now being questioned. Serious structural problems in Latin America and most other developing countries restrain growth and limit economic opportunities. As Harrison (14) states, "The pervasive strategy of development has been
that of increasing agricultural and industrial production without
great concern for the market." Expanding supply, particularly of
export products, has been the backbone of many development plans.

During the last two decades, there has been an active search for
alternative, more systematic approaches. Riley (25) noted the grow-
ing consensus on a "...broader, more dynamic view of marketing as
a major element" in the development process. It is being realized
that market-related problems such as ineffective demand, high market-
ing costs and poor information flow can seriously stagnate the develop-
ment process. Harrison (14) discusses the broad implications that
marketing problems have on unemployment in Latin America, and, as Riley
(24), he also explains how market development programs can harmonize
with other socio-economic goals.

The LAMP experiences in Latin America have shown that there is
room for substantial improvements in marketing systems. LAMP's technical
assistance efforts have been fairly successful in changing public
attitudes toward market development in countries such as Colombia and
Costa Rica. The approach used focused on the "pull-effect" of develop-
ing an effective internal demand as the means to help stimulate growth,
equity and employment. This approach maintains that promoting a more
efficient economic exchange system and the specialization of resource
use is crucial in the development process.

The "market" is not only the coordination mechanism of economic
exchange, but also the vehicle for the distribution of benefits. As
stated by Harrison (14), "Poorly coordinated markets discourages
specialization and innovation, eliminates the incentives toward changing
work roles and increases the inequalities in the distribution of wealth and income." The LAMP approach emphasizes the importance of changing attitudes in the private sector. Reducing risk and encouraging innovation leads to more productive, progressive and competitive firms (17). Education and adequate economic incentives provide a stimulus for the extensive adjustments in attitudes and behavior required in a more progressive economy.

But economic incentives are hampered by the limited internal and external demand for products. The legal and institutional environment often pose an additional obstacle to progress. As a result, expansion in the production sector is slow and employment opportunities are far from sufficient. Low productivity levels reflect themselves in higher costs and market prices which restrict demand and employment even further.

Under such conditions, if greater efficiency in the marketing system is achieved, low income consumers would benefit from lower costs and prices. Increases in real income would then be reflected in greater demand for products, adding economic incentives for growth and, hence, inducing a multiplier effect with far-reaching implications. Thus, it becomes a problem of identifying and attaining the potential productivity gains associated with unexploited economic opportunities. Within this context, achieving improvements in the food marketing system would provide one of the most important and effective stimulators of development.

1.1 Source of Economic Gains

Improvements in the food marketing system are stimulated by social and economic incentives inducing desirable changes and innovative
attitudes by market participants. Under the LAMP suggested approach, identification of change agents and the development of a market reform program adapted to internal conditions serves as the basis for planning and promoting innovations. Thus, productivity gains can be achieved from the interaction of increased efficiency in the use of physical facilities with a facilitating institutional environment and the promotion of progressive management practices (17). As a result, the coordination of different elements operating within the market is improved. According to Harrison (14), "... coordinative efficiency" accounts for significant gains in market performance. Coordination among channel members not only involves smoother product and information flows, but also determines their role as change agents inducing adoption of modern managerial practices (15). Improved channel coordination would also result in lower distribution and marketing costs, more stable markets and greater economic incentives to producers.

Promoting innovative management is essential in attaining the specialization and growth associated with economies of scale in the use of resources. Market participants could reach higher productivity levels in the procurement of knowledge, capital and technological resources. Economies of scale in handling, storage, distribution, promotion and services provided would be reflected in lower food prices and greater conveniences at the consumer level.

The improvement of physical facilities, along with facilitative policies, are key elements in the market reform put forward by LAMP in Costa Rica. Not only can they provide a fertile ground to initiate changes in managerial attitudes of merchants, but also provide the basis for further reform programs. Emphasizing this close relationship among system components, LAMP (17) warns that dynamic reform at one level (i.e. retail) is only possible if reform programs are also managed at other
levels (i.e., wholesale). Riley (24) illustrates how facilitating "... backward vertical coordination" for instance, could stimulate farmers to produce the kinds, qualities and volumes of products actually demanded.

It is implicit in the above discussion and explicit in actual experiences in Latin America that improvement of market facilities alone will not deliver the expected potential productivity gains. A strong government commitment to the implementation of complementary programs involving credit, technical assistance and market information, are essential in eliminating the barriers to business expansion and the adoption of improved marketing.

1.2 Measuring Market Performance

This paper suggests the use of a modified structure-conduct-performance framework for the evaluation of market reform programs in Costa Rica. By uncovering reliable links between elements of market organization (structure and conduct) with the system's performance, this framework provides a rather useful tool for policy evaluation and design.

System performance, as interpreted by IAMP authors (15) is "... the flow of consequences from a particular organization of the system, including both the structure of the system and the rules of behavior regulating the participants of the system. Performance is improved when a change in organization produces a more desirable flow of consequences." Based on this framework, LAMP has developed a "food system" approach that emphasizes the need to identify managerial, technological and institutional innovations that could lead to substantial channel-wide improvements (24). A brief discussion of the main concepts
behind this approach will best illustrate its implications in evaluating marketing changes.

Market structure is defined by Bain (1) as "...those characteristics of the organization of a market that seem to influence strategically the nature of competition and pricing within the market." Some structural variables often affected by market improvements are: degree of concentration of buyers and sellers, conditions for entry and exit, formal and informal binding agreements, access to market services and information, managerial ability and those closely related to the socio-economic environment within which the market operates.

Improved marketing facilities and other reform programs, usually involve changes in market structure that prompt behavioral reactions of market participants. Attitudes and values toward their role in the food system, proneness to change, competitive practices and policies about products and market relations are all key elements of conduct. As summarized by Caves (3), market conduct consists of firm policies toward target markets and toward the moves made by other market participants.

Silva (27) observed that market reform programs are expected to affect structure and conduct at different channel levels "...by providing infrastructure and new organizations and by giving incentives and sanctions in such a way that the private system will produce socially desirable results."

In general, those "results" in the food system should be ultimately evaluated in terms of their contribution to national development goals regarding resource use, employment, progressiveness and equity(3).

Such parameters may be broken down to suit the evaluation of market improvements at more disaggregated levels. LAMP identified, for in-
stance, specific market development objectives as well as three levels within the system as which performance improvements must take place: the firm level, the distribution channel level, and the food distribution system level (15).

Changes at each level are closely interrelated. Market performance is then a dynamic concept. Changing conditions in one component of the system is constantly inducing adjustments and further changes in other components. Such dynamics call for the inclusion of time as an important variable in the evaluation of changes. Hence, short-term and long-term considerations of market performance become relevant, especially since a long life span is usually associated with reform programs. Finally, the validity of performance measurements depends on the comparative standards defining what the actual outcome would be. In this regard, Riley (24) suggests both a normative and relative approach: using development and economic theory to observe deviations from desirable results, while at the same time being pragmatic enough to assess what is realistically possible.

Three basic performance dimensions are suggested in monitoring the Costa Rican market reform: Market Efficiency relating market performance to desirable cost and price relationships, Market Progressiveness referring to the ability of firms and institutions to perform meaningful adjustments within the market development context and Market Equity regarding the distribution of benefits and productivity gains derived from a more efficient operation of the market and a more progressive attitude of its participants, evaluated in terms of their contribution to national development goals regarding resource use, employment, progressiveness and equity(3). Discussion of such components should be viewed as an attempt to organize measurable or indicative standards of the market reform's results.
Encompassing a broad array of market results in the above performance dimensions is warranted by the fact that given the current state of market development in most Latin American cities, several structural and behavioral parameters may be as important as those traditionally used to characterize performance in industrial economies. The framework borrows ideas from the LAMP's food system approach and from the experiences of Silva (27) in Colombia and COBAL (5) in Brazil.

2. **MONITORING THE CENADA PROJECT**

The CENADA wholesale market facility should be viewed as a goal-seeking organization. It would have to function within and adjust to complex environmental constraints demanding dynamic entrepreneurial responses. The challenge for the market reform programs is to develop "new ways" of satisfying short and long-term marketing requirements; it is not simply attempting to perform "old ways" more efficiently. Such a condition calls for a constant evaluation of marketing programs within a broad market development perspective. Achieving an efficient food marketing system responsive to consumer needs requires commitment, imagination and a keen vision from those directing the economy and more specifically, the market reform. But, if adjustments have to be made in the long run, reliable feedback information and a sound monitoring system may be the most important requirement.

**Evaluation Criteria**

The proposed monitoring framework, based on efficiency, progressiveness and equity as defined above, is intended to identify the data base needed to evaluate the following:
1) general objectives of market reform
2) specific objectives of the market's operation
3) expected impact of facilitative complementary services
4) the implementation schedule of market reform components

In each case, normative standards consistent with such objectives would have to be set up.

In general, market development objectives leading the evaluation of reform programs could be related to either of three major issues:

1) how well the system performs in providing the price, product assortment and convenience needs of consumers
2) how efficiently managerial, labor and capital resources are being utilized by market participants
3) how effectively the various elements of the systems are linked together (15)

In a more specific manner, LAMP (17) identified the following objectives for the Costa Rican food marketing system:

- To assure an abundant and reliable supply of food at economical prices . . .
- To promote the production and distribution of products and services which best reflects preferences and needs of consumers . . .
- To create incentives for increased productivity, providing farmers with reliable markets, reducing uncertainty and stimulating production of those items demanded by consumers . . .
- To achieve a fair and equitable exchange system . . .
- To stimulate development of opportunities for productive and rewarding employment, and a productive labor force.
- To discourage uneconomic use and spoilation of resources...
- To encourage socially desirable population settlement patterns.
- To encourage a sense of belonging and personal effectiveness among participants in the system.

At the CENADA operation level, PIMA (22) has established several specific objectives which emphasize the role of CENADA in:

1) Being the focal point of agricultural-product marketing in Costa Rica and the vehicle of the market development process
2) Reducing marketing and distribution costs of perishables
3) Eliminating the hygienic and urban problems of traditional market areas
4) Introducing improvements at all levels of the system and improving product quality and services, facilitating supply and demand clearings
5) Dealing with fruit, vegetables and basic grains in the first stage
6) Satisfying market requirements until the year 2000

To attain such objectives the market reform program is based on the improved physical facilities of the new market, the provision of ancillary services and the implementation of selected complementary programs.

The above stated objectives and other specific market results, directly or indirectly related to the CENADA project, could be evaluated in terms of the three major performance dimensions proposed below. In all cases, an attempt should be made to operationalize objectives with
reasonable performance standards. Table 3 suggests a general logical frame that could be followed in such an attempt.

Reliable "indicators" should be identified and used when possible, in order to assess different performance attributes. Developing hypothetical relationships among market variables leads rather well to the identification of indicators. Such hypothetical relations may be based upon economic theory or empirical knowledge. In either case, they should reflect what is realistically possible. The definition of norms or standards may in turn refer to what is desirable or expected and may also provide the comparative parameters needed to evaluate indicators. For instance, if modern facilities resulting in greater buying efficiency of retailers is hypothesized, then expected improvements in buying efficiency could be specifically stated. The time spent in buying transactions may serve as one of the possible indicators relevant in this case.

The norms should represent a realistic goal rather than an optimum effort. The clear formulation of measuring techniques, sources of information and assumptions related to the selected norms is also very important. Only by applying measuring techniques consistently over time and by developing realistic standards can meaningful feedback information be obtained. The usefulness of being consistent in measurement techniques and "indicators" utilized is also highlighted by the above example. Using secondary data sources, particularly previous evaluation studies, provides valuable comparative parameters. Following a "with/without" or even a "before/after" type of project analysis is indeed particularly important in measuring trends and attitudes.
TABLE III
MARKET EVALUATION LOGIC MATRIX

<table>
<thead>
<tr>
<th>Performance Dimensions</th>
<th>Hypothetical Relations of Market Variables</th>
<th>Norms or Standard</th>
<th>Verifiable Indicators</th>
<th>Information Source</th>
<th>Assumptions and Conditions</th>
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</thead>
<tbody>
<tr>
<td>1 - Market Efficiency</td>
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<td>2 - Market Progressiveness</td>
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<td>3 - Equity of Market</td>
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2.1 Market Efficiency

Market efficiency accounts for a large part of expected performance improvements stemming from the market reforms. The productivity of the food system in terms of adequate input-output relationships is what in this paper will be called Operational Efficiency. The appropriate allocation of resources in optimum cost and price arrangements will be called in turn, Pricing Efficiency. Several performance dimensions could be grouped within each general category.

2.1.1 Operational Efficiency

For analytical purposes this dimension has been divided into: administrative efficiency of the market facility, efficiency in the use of physical facilities by market participants, logistical efficiency and locational efficiency.

Administrative Efficiency -- The CENADA wholesale market should be financially self-sufficient. The financial and economic analysis of internal operations may provide useful information on how the market is
using its own resources. Internal coordination of the activities performed by market officials could determine the quality of the services provided to market users. In fact, one of the primary objectives of market management should be to develop well-coordinated operations. Diffuse or unclear responsibility increases the possibilities of waste and duplication in the use of resources.

CENADÁ's relationship with other institutions and with other market participant groups could also determine important performance gains in some areas. Policies involving grains, for instance, should hopefully be consistent with those followed by other institutions such as the CNP (grain handling organization). Management should also maintain a close relationship with merchant organizations such as retail chains, supermarkets and cooperatives.

Measurable indicators of administrative efficiency may be attained through techniques commonly used in accounting procedures. Comparing ratios such as "operational revenues/volume marketed" over time and with the ones found in other Latin American cities may prove useful. Perceptions of market users, explicit policies and institutional agreements could be used to assess the degree of institutional coordination.

Efficiency in the Use of Facilities -- High occupation rates of available market facilities are desirable. Yet, the efficiency with which selling and storage space is being utilized may differ greatly among individual participants. CENADÁ should also be able to identify underutilization of market facilities and services. Some questions regarding the use of these services may prove useful, i.e., are the telephones
appropriately distributed? . . . are they being used in market transactions? etc. Evaluation of actual use of facilities should be oriented toward the identification of potential improvement, either in design or in operational arrangements.

Chronic excess capacity in the long run is closely associated with the size and the location of market facilities. The CENADA project not only assumes a complete and orderly relocation of all fruit and vegetable wholesalers, but also active participation of other institutions such as the CNP and supermarket chains. Attaining such high occupation rates may require careful planning and a more active promotional effort than has yet been considered in the project.

Indicators of efficiency in the use of facilities could be based on use-rates and other comparisons with those now being attained in existing markets. Occupation rates, volumes carried per square meter, use of storage space, inventory turnover, waste and spoilage and use of market services (telephone, water, banks, etc.) are a few examples of such indicators.

**Logistical Efficiency** -- Logistical efficiency refers to the productivity levels achieved in the flow of both physical products and information along marketing channels (2). A smoother logistical operation depends on the existing means of transportation and handling, the attitudes and practices of carriers, the standardization of products and packages and the degree of channel coordination. CENADA officials should be aware of the fact that significant logistical problems could have an organizational and institutional base, rather than a technical base. They should also understand those channel organizational patterns
affecting the source and destination of products (i.e., adjustments
to production, seasonalities and prices).

A well-organized transportation fleet is crucial for the normal
operation of the market, particularly to foster a quick adjustment at
the retail level. The study of alternatives to organize an efficient
fleet could be useful. Opening credit lines to finance improvements
in that fleet might be worth considering. Facilitative market regula-
tions can add substantial improvements in logistical efficiency. At the
same time achieving quick and organized traffic control may account
for significant savings in costs and time.

Protective packaging should be emphasized in training and cap-
citación programs of CENADA, and further studies in this regard
are indispensable. Standardized packaging should protect products
from physical damage and serve as an efficient handling unit. A large
part of logistical costs are spent on shuffling between vehicles, move-
ments across docks and platforms and within warehouse handling of
products. Identification of potential improvements in all of these
areas may have significant effects on logistical efficiency and should
be a constant concern of CENADA officials.

Logistical performance could be measured in terms of: the ability
of the system to satisfy the amounts, types and qualities demanded and its
capability to deliver fast, inexpensive and consistently over time, es-
pecially highly perishable products. Indicators for both performance
attributes are not difficult to find. Spoilage due to transportation,
handling or delivery delays, truck flow in terms of time spent and costs,
reliability of product procurement, contractual arrangements, firms
running out of products due to inconsistent delivery, traffic congestion,
etc.
Locational Efficiency -- Both the internal arrangement of the market facilities (i.e., distribution of merchants) and the location of CENADA within the metropolitan region will affect productivity gains in the market's operation. A well-balanced distribution of merchants according to their size and the products they handle should provide fair conditions of buyer traffic exposure and access to market services. Excessive product specialization of market areas should be avoided if possible.

Locational objectives stated in the feasibility project to help in determining the site of CENADA may provide useful measurable standards of evaluation. Impact of CENADA over distribution costs and the social and traffic conditions existing in the traditional market areas were emphasized among such objectives (22).

2.1.2. Pricing Efficiency

As a performance dimension, pricing or allocative efficiency refers to the appropriate allocation of resources and the resulting price and cost arrangements. The system should allow a flexible and relatively free movement of products, information and resources. Implicit is the concept of market transparency concerning the ability of the system to reflect consumers' demand at the producer level through channel coordination mechanisms. Basically, it refers to the degree to which the marketing system is responsive to consumer needs and wants. Responsiveness could be measured through the stability of supplies, the assortment and quality of products available to consumers, and the market services provided by market participants.

This market dimension also relates to the nature of exchange arrangements conducive to market coordination, economies of scale, spatial organization and price formation processes. It is characterized
by the way channels are organized and transactions performed. Exchange arrangements resulting in decreasing number and speedier transactions, as well as in larger transactional units, are desirable from cost viewpoint. Some important indicators of performance could then be related to costs of transactions; time spent in buying, selling, bill collecting, supervising, loading/unloading and searching for information; economies of scale attained in the above mentioned areas; use of time saved; effect of competition and bargaining power in the exchange process; effectiveness of information flows and the magnitude of price fluctuation.

2.2 Market Progressiveness

The food system should be progressive if it is to achieve performance improvement through more efficient operations and a desirable distribution of related gains. Market participants and institutions should have the capacity to adjust or adapt themselves "... innovately and economically to changing economic, political, social and environmental conditions" (17). Progressiveness could be characterized by three performance dimensions: private innovative performance, public innovative performance and organizational trends.

2.2.1 Private Innovative Performance

Innovative attitudes of market participants is both a condition and a result in the transition toward a modern marketing system. Adopting innovations depends on the operator's knowledge or awareness of potential gains and improvements, the risk and economic incentives associated with innovative practices and the merchant's propensity to change. The market reform program is intended to positively affect all of these conditions, and CENADA should direct its efforts in this direction. Indicators of
innovative attitudes can be grouped in the following areas:

- **Managerial innovations** -- Refers to what has been done to achieve better market coordination, better methods and policies. Using banking services, training their personnel, looking for a rapid working capital, having a policy of low prices but high volumes, and using mixed margin pricing techniques are a few examples of this type of indicator.

- **Technological innovations** -- Includes the introduction of new office equipment, the use of different packaging materials and techniques, the use of product-moving machinery (carts, rails, etc.) and installation and use of communications equipment.

- **Provision of new services** -- This indicator may reflect a positive reaction to competition and to productivity gains along the channel. Wholesalers and retailers may increase their product assortment, offer better packing, selling and buying practices. Wholesalers may increase orders by telephone and store delivery services. New credit arrangements may be introduced, etc.

- **Use of market information services** -- The CENADA project includes provisions to improve market information and communication such as telephone installations, mail and telegraph offices, loudspeakers and bulletins, as well as an office in charge of collecting and organizing data. An efficient market information flow is very important in achieving channel coordination and merchants should be encouraged to effectively use such facilities.
- **Attitudes toward change** — Identification of those who are producing innovations and those who are adopting them could help CENADA facilitate a spontaneous extension process prompted by channel leaders. Attitudes are very important in that process, and CENADA should help make merchants perceive themselves as socially acceptable and economically needed.

- **Specialization** — Excessive product specialization of wholesalers should be discouraged. Yet a certain degree of specialization in terms of products or market segments is required to attain the productivity gains associated with economies of scale. Thus, the degree of specialization can serve as an indicator of private innovation and as a condition of market efficiency as well.

2.2.2 **Public Innovative Performance**

The public sector has the ability and the responsibility of securing a facilitative environment in which private initiative could develop the conditions that can improve the marketing system. The role of constructive market intervention has been evidenced by the Latin American experiences discussed. However, coordinating public programs beyond the establishment of CENADA is not an easy task. It requires explicit policy commitments with a long-run perspective carried out in very different but complementary economic areas. The goals of the market reform program should be consistent with other development programs from road construction and education, to marketing credit and facility improvements directly affecting the food system. By the same token, enforcement of facilitative laws conducive to private innovation and economic growth may be as important as the regulations and market operation rules at the CENADA level.
As indicators of public innovation, surveying public and private attitudes and perceptions is suggested. Checking for consistency in the type and variety of public programs as well as in the legal environment at work may also prove helpful. Measures taken to promote or restrain competition and price and market distortions introduced through direct intervention programs should be carefully evaluated in the context of broad market development objectives. Reduction of risks and fostered economic incentives associated with innovative practices should be viewed as desirable commitments of the public sector.

2.2.3. Organizational Trends

This performance dimension refers to the ability (or inability) of the food system to produce desirable adjustments over time. The expected long-run characteristics of an efficient, more modern food system and the economic basis of market development should provide a good reference frame for evaluation purposes. The identification of such adjustment trends is essential if opportune corrective measures are to be promptly implemented. Periodic evaluations should check for changes in vertical coordination and integration along the channels, and for horizontal organization of market groups as well. The formation and strengthening of retail chains, farmer cooperatives and vertical integrated operations, for instance, is desirable. The trend toward the eventual elimination of "traditional" wholesalers should be viewed as part of the modernization process and such wholesalers ought to be helped in overcoming transitional barriers.

2.3. Equity

Equity as a performance dimension of the market reform refers to the distribution of economic benefits and costs of reform programs among
market participants. Any evaluation attempt should be concerned with the identification of the program's direct beneficiaries and losers. Determining how physical improvements, services, rules and regulations affect different market participants may greatly improve future policy design and its implementation. Achieving positive externalities is another important dimension emphasizing the dynamics of market evolution. It could be defined as those socially and economically desirable effects of reform programs in other sectors indirectly related to the food system. Improvements in traffic, hygienic and aesthetic conditions or urban areas and the impact of the reform on the food processing industry may be cited as examples of externalities.

An acceptable degree of market openness to the entry and exit of merchants operating within the system should be institutionalized. At the same time entrance of new firms with innovative institutional or operational arrangements ought to be stimulated. Finally, the food system should perform under conditions of effective competition, which needs to be promoted and facilitated at all levels. If the reform succeeds in achieving greater market efficiency, the more successful firms would probably expand up to the point where oligopolistic conditions might appear, given the current characteristics of the Costa Rican perishables market. Hence, monitoring competitive behavior may be extremely important as was suggested in the preceding chapter.

Any attempt to evaluate the impact of market reform programs should consider the dynamic relationships existing among market variables. Many
of the changes introduced into the system may not be fully realized in the short run. Thus, short and long-term considerations are important in assessing actual and potential distribution of benefits. The social costs associated with changes in the food system should also be realistically assessed. Some market participants such as low income consumers and small traditional farmers may be positively affected in the long run. Yet a static evaluation of the market reform impact in the short run may find them as temporary losers from the changes induced.

Among equity indicators, those related to the degree of market concentration and the distribution of economic opportunities are particularly relevant. High degrees of concentration might be associated with abnormal profits. Thus, studying marketing margins and pricing mechanisms could provide good insights as to whom is benefiting from the program. Profits should be enough to reward investment, efficiency and innovation. Identification of barriers to entry of new merchants, either those related to traditional structural conditions (i.e., education or limited access to information), or those induced by newly adopted competitive practices (i.e., collusion or excessive growth), would be useful in assessing competitive performance.

Other useful indicators of equity may include: changes in procurement costs, if any; prices and services provided to different consumer groups, changes in bargaining power of participants, if occurred, changes in employment and impact of the program over income levels of market participants.
CHAPTER VI
IMPLEMENTING THE MARKET REFORM

FINAL COMMENTS

The success of failure of the reform program, particularly of the CENADA project, will depend on the extent to which attitudes of the private sector can be stimulated to change in the proper direction. Careful attention should be given to the scope of different program components in terms of their effectiveness and the size of the target group involved. It is from this perspective that some additional comments are offered on the way the project is planned to operate. Such comments are intended to stimulate further discussion, suggest areas where studies are needed and also to complement what has been discussed in preceding chapters.

The Scope of the Project -- In spite of the ambitious objectives of the CENADA project concerning changes in the food system, its implementation will probably have a narrower influence area. Given the nature of the wholesale facility, the emphasis on wholesalers as direct beneficiaries of most programs is understandable. Yet, neglecting due attention to other market participants may seriously hamper the modernization drive in general and the operation of the CENADA market itself.

At the wholesale level, the project seems to be well formulated. It includes needed provisions prior to the opening of the market, such as promotion, development of operational plans and training of market
officials. It also suggests the implementation of important ancillary programs and services among which market information and credit are stressed. Technical assistance in financial, managerial and handling methods has been given the importance it deserves. However, as was stated above, the scope of these programs may be too heavily oriented toward wholesaling of fruits and vegetables.

The need for a more systematic approach to market reform has been highlighted throughout this paper. The CENADA project may be an extremely good starting point and promoting better wholesale practices is indeed required. But what is also indispensable is to perceive other market participants, particularly retailers, as important recipients and subjects of reform programs. By focusing narrowly on what CENADA can do for wholesalers many potential gains might be missed. Rather, the focus should be on what the new wholesale structure can do for the other market sectors and ultimately, consumers. The potential impact of CENADA as a change vehicle can be substantially enhanced by expanding the scope with which programs and operational concepts are conceived and implemented.

**Market Participants** -- One of the first questions that should be asked is: Who shall operate in the new central market? PIMA (22) has planned a complete relocation of fruit and vegetable wholesalers as well as the incorporation of all of CNP's grain operations during the first stage of the project. The rationale behind concentrating all wholesale activities might be questionable. Arguing more competition and better market transparency as a result of the physical concentration of wholesalers could be misleading as Mittenforf (20) warns, since
complete physical concentration is not essential to obtain an efficient pricing system.

Banning any type of perishable wholesale operation performed outside the market might hinder potential efficiency gains in well-developed distribution channels, such as those that may evolve in potatoes. Some market participants may attain substantial savings in distribution costs by bypassing the market, if allowed. Wholesaling within CENADA would probably have a more positive overall impact if it is made competitive and attractive rather than forced in the long run. The development of efficient distribution channels may be desirable as long as compliances with urban planning, hygiene and traffic conditions are met.

Regarding the products to be sold in the market, PIMA made it clear that no transactions other than those involving perishables and grain (handled by the CNP) would be permitted at least during the first stage of the project. At the same time, the zoning by product suggested for the use of facilities may be too strongly subdivided. As was seen in other markets, both conditions prompted excessive product specialization which in turn resulted in inconvenient purchasing by retailers and in selling difficulties for small diversified farmers. By the same token, limiting the products that wholesalers can handle discourages growth and the provision of broader-line services to retailers.

CENADA is expected to allocate about 30 percent of its facilities for grain storage and other CNP operations (100,000 MT). However, the complete participation of CNP is highly unlikely given the large storage capacity in which the institution has already invested. Using such
facilities to house some of the large broad-line grain and processed item wholesalers currently located in the Bocban market area might be a more meaningful alternative. This could help to foster vertical coordination and large volume operations, involving a more dynamic participation of retailers. Such alternatives should not be left as a remote possibility in the long run. Incorporating these broad-line wholesalers may have other beneficial side effects. They are generally more progressive and may introduce innovative practices into the perishables market. Retail traffic and volume turnover might be significantly increased as happened in Bogota (27). Economies of scale in some distribution practices may then become potentially available for both wholesalers and retailers. Allowing a broader product mix, CENADA might even become the assembly, storage and distribution center for supermarket chains, retail organizations and processing firms.

Finally, it is planned that retail selling within CENADA would be strictly prohibited. In this case, only properly identified merchants (registered) would be allowed to perform market transactions. The desirability of tough measures such as this one deserves careful consideration by future CENADA officials. CENADA should search for better, strongly justified alternatives to such measures. It might be that limiting retail activities to acceptable levels or relegate it to special areas of the market could be beneficial for CENADA. Middle income Costa Ricans are traditionally fond of shopping in perishable markets. Taking advantage of this potential, not limiting it, may result in addi-
tional revenues for CENADA and reduce the risks of parallel market developments nearby.

**Market Fees and Regulations** -- As the project is now formulated, there is a visible trend toward excessive regulation and control of market activities. Some of the regulations, such as those mentioned above, could have negative, channel-wide implications. The Latin American experience has shown that a cooperative attitude of market participants is crucial. Such attitude may be seriously undermined with excessive and sometimes badly conceived regulations. The operation of the new market should emphasize service rather than controls. Market rules and management participation should have a facilitative role, consistent with broad market reform objectives.

Enforcement of some regulations may be needed to consolidate modern practices and to provide a stable market environment. Standard use of weights and measures and ethical behavior are examples of such regulations. In any case, implementing any type of rule should be carefully validated in terms of both its contributions and distortions.

The rental rates of CENADA will be the same as now being charged for storage space in the Borbon area (22). Such rates, somehow inflated by urban pressures, might be a little too high if CENADA is to be made competitive and attractive as a low-cost convenient alternative. Market charges are important in determining marketing margins and eventually prices at the consumer level. They also condition the self-financing objective of the market. Mittendorf (20) suggests that such charges should be calculated on the basis of expected turnovers and not fixed arbitrarily. Alternative tariff schemes should be carefully studied before establishing rigid rates that might result in unduly high prices and hamper the competitive advantages of CENADA over other wholesale and storing alternatives.
Active involvement of wholesalers and other groups in the formulation of rules and regulations has not been considered in the project. Instead, the task would be the responsibility of the manager and the Board of Directors. The experience of Bogota has shown that a limited involvement of market participants in rule-setting exercises and even in managerial decisions could be very rewarding, especially if done before the market is opened.

Complementary Programs -- Most of the programs proposed by PIIMA will apparently be financed with CENADA's market revenues, the credit program being an exception. The question of who will actually pay for ancillary programs becomes relevant. Achieving a reasonable degree of promptness, effectiveness and completeness in the implementation of market information and training programs is likely to be quite demanding in terms of resources. Higher operational costs may in turn result in either higher charges or in lower quality programs.

As was already stressed in this paper, CENADA's financial capabilities should be carefully assessed before long-term commitments are made regarding the implementation of ancillary programs. Market information and technical assistance are not only needed at the wholesale level; their importance as tools of a broader market reform call for strong public support and may warrant subsidized financing or the active participation of public institutions. The wholesale market alone should not be expected to fund complementary programs.

Gathering and Using Information -- The collection of market information would be assigned to the statistical department of CENADA. They would have to develop methods of periodically gathering, storing and analysing such
information. Most of the data will refer to products, prices, volumes and sources collected at the weigh station. Since this program is crucial for the market reform, an attempt should be made to reinforce it so a broader coverage in terms of market participants and data collected is reached. Ultimately, the data gathered should be relevant and consistent with the financial capabilities of the program, i.e., what is feasible and economic for management to collect.

The program should be designed so that the information required for short-term verification of operational plans is provided. In addition, it should provide the basic input for a more comprehensive evaluation study such as the one suggested in this paper. It should also provide reliable feedback information for other institutions like banks and extension agencies. Most importantly, it should furnish data to be used by market participants. Mittendorf (20) stressed that the emphasis of data gathering systems should be on completeness, accuracy, reliability and speed in the dissemination of market information. Distribution of "raw data" may not be meaningful for some purposes. Thus, careful attention should be given to questions regarding potential users and how the data would be analyzed and presented. If CENADA is to perform this service, then adequate resources should be ensured, with government funds if necessary. It is very important to maintain a consistent good quality service.
In short, this paper calls for a more flexible operation of the market and a broader scope in the conception of complementary programs. To the extent possible, market authorities should limit themselves to a supervision task. Fair trade, order and discipline in market transactions need to be ensured. However, excessive and restraining regulations should be avoided. Market participants ought to be free to change and adjust to the new market conditions as long as undesirable social or economic effects are not introduced. Service and promotion should be emphasized rather than regulations and controls.

The project by itself may very likely succeed in two important aspects: inducing a sense of belonging among middlemen and providing the initial tools required to promote progressive attitudes. With a chance to develop and reward private sector initiatives, the outcome of the CENADA experience might be very positive. Throughout this paper the need for a consistent and periodic evaluation of reform programs and their impact over market participation has been emphasized. Indeed, closely monitoring CENADA's operation might be one of the most important conditions for success.
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