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FOOD INTO CITIES COLLECTION

WHOLESALE MARKETS IN AFRICAN CITIES

DIAGNOSIS, ROLE, ADVANTAGES,
AND ELEMENTS FOR FURTHER STUDY AND DEVELOPMENT

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Executive summary

The paper discusses the importance, potential and limitations of wholesale markets in the supply and distribution of food in African cities. A brief overview of food marketing systems shows that most major African cities lack specialized and efficient wholesale markets, even though their function is a critical factor in the effectiveness of any food marketing system. In general urban food markets in Africa are characterized by inadequate marketing infrastructure leading to congestion and the overflow of traders onto streets and pavements, inefficient storage, handling and packaging of produce resulting in excessive waste (through spoilage), poor produce quality and rather high distribution costs. Another common problem in African food marketing systems is information asymmetry between traders and producers, which weakens the bargaining position of the producers and exposes them to considerable price uncertainty. The underdevelopment of the wholesale sector is in part a consequence of these problems and also accentuates inefficiency in food marketing.

The benefits of efficient wholesale markets include enhancing transparent prices, facilitating transactions in the marketing chain, reducing marketing costs through economies of scale by lowering per unit transport and handling costs. The volume of produce handled by each trader tends to increase, thus reducing the number of times operators in the marketing chain have to restock in a given period. Wholesale markets also promote sorting and grading as well as standard weights and measures, thus facilitating trading by description which minimizes transaction costs. By encouraging efficient off-farm storage, wholesale markets contribute significantly to reduction in post-harvest losses.

The main criticisms raised against the development of wholesale markets include rising transport costs for retailers, increased unemployment resulting from labour-saving efficiency gains in food distribution, and under-utilization of costly market infrastructure. These criticisms are examined in the paper, showing that they are not always justified and that steps can be taken to resolve or circumvent them.

In promoting or modernizing wholesale markets in African cities, the focus should not only be on the technical design of physical infrastructure but also on the specific conditions required in order to distribute particular produce as well as on the location of the markets. Also critical are the skills and knowledge of market operators, particularly women food traders, and the effectiveness of organizational arrangements pertaining to the management of market facilities. Furthermore, it is apparent that any sustainable attempt to promote efficient wholesale markets as part of an overall improvement in FSDSs should involve concerted and coordinated effort by all key

stakeholders. The role of stakeholders, especially government and municipal authorities, in this process should therefore be clearly defined.

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Introduction

Mittendorf (1976) argues that wholesale marketing systems are necessary in cities with a population of at least one million. These systems are crucial for the distribution of both perishables and non-perishables, although handling and packaging of non-perishables is far less demanding because the speed of operations is less critical and produce sorting and grading at the farm-gate is easier (Mittendorf, 1986). This article discusses the role and potential of wholesale markets in the supply and distribution of food to African cities. It aims at informing the municipal and metropolitan authorities in cities on measures to improve the efficiency of urban food supply and distribution systems (FSDS).

This chapter provides a brief description of FSDSs in cities, pointing out the inadequacies of existing wholesale markets. Chapter 2 discusses the role and benefits of wholesale markets, especially economic benefits, and challenges in promoting these markets in Africa. In Chapter 3 constraints facing African wholesale markets and arguments against modernization are examined. The role of the state in the establishment, management and control of wholesale markets is discussed in Chapter 4, while conclusions and areas for further research are set out in Chapter 5.

1

Food marketing systems in African cities

Food marketing systems in African cities can be categorized by the type of food distributed and by the type of functions performed. The types of food categories are markets for local staples and others for imported food products. The categories classified by function are wholesale, retail and modern distribution outlets, such as supermarkets, self-service groceries and shops.

1.1

Categorization by type of food sold

1.1.1

Markets for local staples

Small-scale family farms provide the bulk of food to African cities. Although a few large-scale farmers produce specifically for the market, most small-scale farmers produce staples (cassava, maize, rice, millet, bananas, meat, milk, fruits and vegetables) primarily for subsistence and only the surplus is sold.

The marketing chain begins with trader-collector drivers who buy produce from rural markets or directly from individual farmers. The trader-collector drivers constitute the main link between geographically scattered small farms in rural areas and the distribution network of wholesale and retail markets in cities. They also sell directly to consumers. Produce is usually transported loose or in sacks by trucks that provide little protection against the tropical heat. It is common to find haulage trucks being used for sorting, packing and storage of produce in places where no wholesale markets exist. Standard weights, measures and grading systems are non-existent in the rural-urban trade of local produce, and as a result trading by sampling is predominant. Inefficient handling and high levels of deterioration and wastage, especially in the case of perishables, increase the cost and undermine the spatial marketing function in African FSDSs.

1.1.2

Distribution network for imported foods

Wholesale houses play a leading role in the distribution of imported foodstuffs, which reach consumers through sub-wholesalers and retailers and sometimes directly. Government intervention has been much more pronounced in the case of imported foods, particularly through state control over import licensing and allocation of foreign exchange.

1.2

Categorization by function

1.2.1

Wholesale markets

Wholesale distribution can be defined as the activity that bridges collection from producers and retailers to end users or consumers. Although the wholesale sector is critical to efficiency in food marketing, most African cities do not have wholesale markets. It is often difficult to distinguish between wholesale and retail operations. Some activities that are considered retail are in fact sub-wholesale, for example, when large-scale wholesalers supply relatively small-scale wholesalers who are unable to purchase bulk quantities or to directly import. Small quantities are often sold to micro-retailers who resell to consumers.

Food wholesalers usually trade in a wide range of items, only rarely specializing, and often combine wholesale and retail functions. Their facilities tend to be widely spread throughout the cities. Trader-collector drivers are the main suppliers of local produce, either as independent operators or quite commonly as direct fixed commission agents.

Apart from coffee (in Kenya and Burundi) and tobacco (in Zimbabwe) agricultural produce in Africa is seldom sold by auction.

It is apparent that restrictive market regulations constitute a major obstacle to the improvement of the wholesale food marketing system in Africa for both imports and locally produced processed items.

1.2.2

Supermarkets, self-service groceries and shops

Most cities have a fairly large number of supermarkets and self-service groceries that stock mainly imported foods and locally produced or imported fresh fruit and vegetables. These “modern” outlets play a relatively minor role in the distribution of local staples (flour, cassava leaf, maize flour, millet, sorghum and rice) and are patronized mainly by relatively high income-earners (both expatriates and nationals). Small shops play a relatively more important role in the distribution of local and imported non-perishable foodstuffs as well as manufactured consumer goods to low-income households.

1.2.3

Retail markets

Food retailing takes place mainly in large central markets located in well-constructed structures and is controlled by the municipal authorities. Other retail markets are located in open spaces and lack basic infrastructure (concrete floors, drainage and facilities for sorting, storing, weighing and handling of produce). The municipal authorities depend on levies and tolls from these markets as a major source of revenue.

Box 1

Case study: Fruit and vegetable wholesale markets in Morocco

The Rabat-Salé Company has two wholesale markets in Rabat and Salé. The Rabat market has a monopoly over supplies to the city, sanctioned by the 1962 law which specified that all goods retailed in the city must pass through the wholesale market (basically for tax reasons). The local administration levies an *ad valorem* tax of 7% on all wholesale transactions.

The wholesale market was built in 1974 on a five-hectare plot in the outskirts of Rabat. It consists of three large structures, each with an open-air extension. As a result of over-subscription, which led to congestion, additional structures are to be developed. The market has no cold-storage facilities and handling is entirely manual.

According to the market administration, the Rabat wholesale market handled 104 000 tonnes in 1994, although the total consumption of the city was estimated at 200 000 tonnes. This suggests either underestimation of the tonnage handled or significant evasion of the market monopoly. The latter would in fact seem to be the case, especially for vegetables. The quality and condition of produce vary considerably.

The market is managed by a director and six representatives (one for each square), who act mainly as cashiers/tax collectors. Between 300 and 400 wholesaler-sellers renew their stocks on average every three days and sell an average of 1.5 tonnes per day. There are also broker-sellers, who work particularly for large-scale fruit-growers. There are between 1 000 and 15 000 professional buyers but it is difficult to estimate the number of direct consumers who buy from the market. Nearly all the professional buyers are retailers from Rabat or Salé, who purchase an average quantity of 350 kg of supplies three or four times a week.

After a price is agreed upon, the seller issues a weighing ticket to the buyer who then pays the *receipt officer* employed by the representative in charge of a particular square. The representative issues a receipted invoice, which is checked at the market exit, and pays the amount received to the seller, less any tax due. Apart from the representatives, the market employs 60 agents.

The wholesale market administration records the quantities and prices on the basis of receipted invoices issued. These figures, which are sent to the Interior and Agriculture Ministries, are never made public, therefore, producers and traders do not have access to them. The Casablanca wholesale market is the only market of national importance.

Average marketing costs at the wholesale stage (from the producer to the Rabat wholesale market) vary between 27% and 64% of the gross margin, depending on the item and the season (being relatively low during the harvest season). Net margins tend to be high during the lean season.

Analysis of the supply system reveals that wholesale markets operate under an outmoded regulatory system, which hampers their development and undermines their performance in the FSDS. Their role in the collection of taxes has been emphasized at the expense of basic wholesale functions. Facilities are clearly inadequate and there is no uniformity or consistency in produce quality. Consequently, prices lose any significance in terms of quality. This undermines transparent dealings in the market. Free circulation of market information is also hampered resulting in producers being poorly informed about market trends. This contributes to sharp inter- and intra-seasonal price fluctuations.

The following actions are needed to overcome these constraints in order to enhance the role of wholesale markets in the efficient distribution of food, especially of fruits and vegetables:

- markets should be provided with greater statutory autonomy and more dynamic management so that they can develop into real service centres for the marketing sector (providing market information, technical services, etc.);
- operating rules and regulations should be reformed to reflect current trends in trading; it is particularly important to reform the role of the “representatives”;

- monopoly regulations should be relaxed since they hinder the development of a modern, coordinated marketing network; and
- the system of assessing and collecting market taxes should be thoroughly revised since the existing structure cannot be reconciled with liberal wholesale marketing regulations.

Source: Gergely, 1996

1.3

Food marketing problems in African cities

1.3.1

Marketing infrastructure

Retail markets in fast-growing African towns and cities are generally congested and inefficient, which leads to an increase in the cost of food distribution. These markets usually lack loading bays, sorting areas, cleaning and storage facilities as well as parking space. In many instances such markets do not have concrete floors or roofs and the standard of hygiene is rather dismal. These conditions encourage the mushrooming of unplanned kiosks and a growing number of itinerant hawkers in many cities. Hence, retailing in cities is characterized by an inordinately large number of micro-retailers competing for sales to low-income consumers.

The wholesale sector is underdeveloped and poorly coordinated. This is particularly the case in the distribution of local produce (especially perishables). Re-stocking by retailers is therefore time consuming since it involves buying from different, spatially dispersed sources. Consequently, FSDSs in most African cities are usually unable to cope with the demands of urban growth, particularly as transport costs increase. As a result, food procurement by urban households is time consuming and the quality of produce supplied is rather poor.

1.3.2

Flow of market information

The flow of market information, including prices, between urban FSDSs and producers lags significantly behind changes in consumer demand in terms of quantity and quality. The uncertainty producers face as a result of this weakens their bargaining position in dealing with collectors, whose trading margins remain stable despite fluctuating farm-gate prices.

In an attempt to reduce these problems, the state intervened in FSDSs in many African countries by establishing marketing boards that engaged in the collection and distribution of farm produce and by imposing a number of marketing regulations

including price and quality control. The interventions focused little or no attention on promoting modern, competitive and efficient private-sector food marketing systems. State interventions generally failed to enhance effective coordination of markets and hampered efficiency in FSDSs, resulting in erratic supplies and lack of competition in importation, bulk handling and distribution of staples such as rice and maize.

Information asymmetry characterizes the relationship between trader-driver collectors and producers, giving the former relative bargaining power. This is further strengthened by the fact that, in most food-growing regions, there are comparatively few collectors in relation to the large number of small growers selling small quantities of produce after meeting household subsistence needs. Lack of competition depresses farm-gate prices, distorting producer incentives and undermining growth and productivity in agriculture. The only way farmers can counter this situation is by forming associations or cooperatives that market produce on their behalf, which is taking place in some parts of Africa.

1.4

Impact of inefficient urban FSDSs

The lack of dynamic and well-organized FSDSs not only hampers growth and productivity in agriculture but also adds to distribution costs, thus raising household spending on food. Budgetary constraints faced by urban households as a result of this situation are particularly acute for low-income families. The inability of FSDSs to ensure the stable supply of good quality produce at affordable prices also has health and nutrition-related implications for urban households.

Box 2

Case study: Fruit and vegetable wholesale markets in Kenya

There has been far less state intervention and control of markets for fresh fruits and vegetables than for cereals and other non-perishable produce. There are several public fruit and vegetable wholesale markets in Nairobi, the oldest and best known being the Wakulima market located east of the city's business district. Built by the Nairobi City Council in the 1960s, it was too small to keep pace with rapid population growth, leading to the development of other wholesale markets close to the more densely populated parts of the city. The largest of the newly established wholesale markets are Kawangware and Ngong supplying the western part of the city and Korogocho and Githurai, supplying the east. The most recent is the City Park market, which serves the newly developed suburbs, Parklands and Westlands, and neighbouring districts. In most of these wholesale markets, which are located next to retail markets, it is difficult to distinguish between wholesale and retail functions.

There are only a few official regulations governing fruit and vegetable wholesale markets. Traders are usually charged fees to cover cleaning, water, electricity and road maintenance but the standard of these facilities and services is highly unsatisfactory.

Source: Ngagi, 1995

2

Role and benefits of wholesale markets

2.1

Wholesale markets, price discovery and market integration

Wholesale markets improve efficiency in food distribution by encouraging competition through creating conditions for transparent price discovery at relatively low costs and by enhancing access to market information for various actors. Where multiple equilibrium prices occur for a single commodity because there are no wholesale markets, price transparency is undermined and transaction costs rise (the cost incurred by market participants in obtaining market information). Under such conditions, retailers have to deal directly with a large number of farmers, thus losing any gains from scale economies (Tracey-White, 1994). Wholesale markets therefore play a crucial role in the vertical coordination of food markets, equilibrating supply with demand and facilitating price formation. Their role reduces per unit marketing costs, promotes stable markets for local produce and encourages increased output and productivity.

Wholesale markets basically have to perform the following five functions cost-effectively:

- physical exchange of produce;
- sorting of produce on the basis of standard criteria, thus facilitating sales (they work much more efficiently with standardization of weights, measures and quality);
- formation of an equilibrium price for produce;
- exchange of information between suppliers and buyers; and
- risk management and hedging (price fluctuation risks).

The fundamental objective of wholesale markets is to improve efficiency in the food distribution pipeline. By centralizing transactions at a single location, reducing the period for transactions, and separating wholesale and retail functions in the distribution system, wholesale markets promote greater transparency and better price formation through a clearer interplay of supply and demand. Storage and handling conditions are

also enhanced, leading to significant reductions in post-harvest losses (by about 30 percent in European experience), especially in the case of perishable produce.

Box 3

Case study: Need for information systems in wholesale markets

Competitive market systems require sellers and buyers to be well informed about supply, demand and prices. Large, well-organized wholesale markets facilitate the attainment of this ideal situation by providing information on market trends, prices and quantities marketed. The information system providing this service not only enhances the efficient management of wholesale markets, but also acts as the basis for the sale of similar produce outside the market. The importance of information on market trends and prices is recognized in all countries with well-developed marketing systems.

Establishment of new wholesale markets offers special opportunities for setting up market information systems, with emphasis being placed on full, fast and reliable information. Full information in this context covers the quantities of produce marketed, stored and transported; the range of products, stocks, sources, destinations, varieties, quality and packaging; and market and price trends. The market can be described as truly “transparent” when such information is available. Reliability of information depends on the training, personal abilities, honesty and experience of reporters. Unqualified personnel with other responsibilities should not be entrusted with collecting and disseminating the information. Frequent cross checking of information should be undertaken, even when collected by qualified and trained staff since inaccurate or distorted information can harm the interests of producers and consumers. Speed in collecting, recording and disseminating data is vital in a competitive economy.

Competitive markets involve a large number of buyers and sellers transacting on the basis of available information. Large-scale operators, however, tend to have comparative advantage over small-scale operators in terms of investing in private networks and systems (formal and informal) that enhance access and capacity to process and store market-sensitive information. Small-scale operators often base their decisions on incomplete or even inaccurate information. The state has a key role in promoting efficient and reliable market information systems because competitive, effectively coordinated markets require that all market participants be perfectly and equally informed since basic information is a public good. This facilitating role of the state should be perceived as an ongoing process and not as a single act. It must also be seen in logical sequence to the fundamental decision to expand the economic role of the private sector and to the commitment to maintain competitive markets.

Source: Goossens, Minten and Tollens, 1994.

2.2

Benefits derived from the physical functions of wholesale markets

The physical infrastructure and facilities at wholesale markets facilitate the reduction of post-harvest losses and promote increased productivity by farmers through:

- *produce protection*: goods are protected from the elements (rain, wind and sun) and stored under more hygienic conditions, thus reducing spoilage;
- *improved handling operations*: the market considerably reduces loading and unloading times as well as repeated handling of goods between unloading and display; vehicles are also parked and unutilized for shorter periods; and
- *easier introduction of innovation and new technology*: the physical concentration of a large group of operators at the same place makes it easier to introduce innovation and to develop improved storage, handling and management technology and methods.

2.3

Economic benefits of wholesale markets

Wholesale markets also encourage:

- *greater stability of supply and sale of produce*: the existence of centralized physical locations, known and easily accessible to operators, reduces the number of intermediaries in the distribution pipeline and improves the flow of information between operators, both upstream (growers and collectors) and downstream (wholesalers and retailers), thus reducing uncertainty concerning supplies and completion of sales transactions;
- *improved market information (especially on prices)*: the centralization of transactions that occur in modern wholesale markets enhances the collection, processing and wide dissemination of accurate market information, hence improving the quality of enterprise investment decisions as well as promoting efficient resource allocation in the economy in general and food production and distribution in particular;
- *specialization of traders*: the separation of wholesale and retail functions in FSDSs encourages specialization by traders leading to efficiency and lower distribution costs;
- *enhanced competition* leading to improved efficiency in the exchange process (efficiency in resource allocation and price) and facilitating price discovery;

- *improved inspection, quality control, sorting and grading according to quality* encourage the use of standard weights and measures and improved standards of hygiene in the sale of produce (especially of perishables); and
- *increased volume of produce marketed and quality differentiation:* the reduction in the number of intermediaries in the food marketing chain and consequent increase in the tonnage handled by individual traders or the scale of their operations tend to lower distribution costs (especially the cost of transporting produce) and also encourage efficient sorting and grading which facilitates trade in produce of different quality.

2.4

The challenge in promoting wholesale markets in Africa

In sub-Saharan Africa wholesale traders usually belong to relatively closed communities, united by strong social and ethnic bonds, with little competition among themselves (Wilhelm, 1994). Wholesale markets quite often are simply unplanned urban spaces with virtually no special facilities. It is common to find several such spaces in the same city and often located near retail markets. As a result there is usually no single distribution centre for major staple foods.

In the absence of efficient wholesale markets, price discovery upstream is influenced markedly by the interplay of relative bargaining power and relationships forged in terms of interlocked credit provision and trust between producers and traders. In addition to these factors, the purchasing power of urban consumers also contributes to price discovery downstream between retailers and buyers. The consequence of this situation is that there is no single equilibrium price, and price collusion and other predatory and exploitative practices occur as markets lack transparency.

Another compelling reason for promoting efficient food wholesale marketing systems would be to encourage greater involvement of supermarkets in the distribution of major staples purchased mainly by the poor (cassava, maize, sorghum, millet, rice, plantain, palm oil, dried fish, etc.). Supermarkets generally lack the organizational capacity to engage in collecting good quality staples from rural producers on a regular basis. Consequently, in the absence of efficient wholesale markets, they concentrate on serving the relatively more profitable niche, the rich whose food needs can be met from urban importers and peri-urban fruit and vegetable producers. Wholesale markets for staple foods would encourage large supermarkets to extend their operations into low-income areas. The involvement of supermarkets in food distribution would potentially not only lead to significant cost reduction but also contribute to relieving congestion in retail markets located in city centres.

2.5

Economic development and the role of wholesale markets

The type of produce distributed and the level of economic development influence the role of wholesale markets. The greater the extent to which farmers aim at producing surplus, the more crucial the role wholesale markets play in vertical coordination of food marketing. In promoting the commercialization of agricultural production, economic development also tends to encourage farmers (especially large-scale farmers) to enter into contractual relations with traders, thereby being increasingly integrated into the marketing chain. This process begins with farmers adapting produce and sometimes husbandry practices to specifications of customers (supermarket chains) and develops into long-term direct contractual links which bypass wholesale markets. Producer prices are usually agreed or contracted in advance (either fixed or determined on the basis of an agreed formula). In such circumstances, even though the market may account for only a fraction of the total volume of trade of a given product, wholesale market prices usually constitute the reference prices.

The coordinating functions of markets may not be very relevant in two extreme cases. At one extreme is the subsistence farm household where the producer-consumer packages his harvest for household consumption and stores it over a period depending on the shelf-life of the particular produce. At the other extreme is the producer with a production and sale contract specifying terms and conditions for delivery to a specific customer with details including quantity, quality and price. In both cases, the market mechanism has no significant place in coordinating production and consumption, since coordination is already fully assured. A coordinating role of the market, however, is really crucial in situations that lie between these two extremes. Wholesale markets often evolve from general into more specialized markets before gradually declining in significance. In many industrialized countries wholesale markets play a significant role only in the marketing of horticultural produce.

Box 4

Case study: The need for cassava wholesale markets in Kinshasa, Zaire

Most wholesale markets have been built for perishable produce, especially for fruits and vegetables, since such items have to be marketed quickly and efficiently. Cassava chips, the main source of food in Kinshasa, cannot be stored beyond one month and is therefore considered a semi-perishable commodity. Kinshasa is unique in the scale of its cassava trade and in the clear need for wholesale markets for cassava. The total annual consumption between 1987 and 1989 has been estimated at 1 132 000 tonnes of fresh cassava tubers or 275 000 tonnes of flour (equivalent to 7.1 kg of flour per person per month).

Currently, there are 55 open spaces used as sub-wholesale markets and more than 100 retail markets in Kinshasa but there are no wholesale markets. Sub-wholesalers, whose activities invariably include retail trading, often use sections of some retail markets. While such arrangements pose no major problems on a modest scale, they have become highly inefficient and expensive in light of the rapid growth in the population of Kinshasa from 400 000 to 4 million. The existing system cannot cope with the demands of the growing city.

Since 1984 the real sub-wholesale price of cassava has remained stable or even declined, while the retail price has risen markedly in real terms, primarily as a result of increased distribution margins in Kinshasa. This situation in turn can be attributed to the growing number of retailers and also to increased transport costs owing to rising fuel prices. Many women have entered retail trading to supplement family income leading to lower volume of sales per retailer. At the same time, the demand for such marketing services has fallen because of a fall in real incomes (many consumers form groups which buy from sub-wholesalers, thus excluding retailers). The poorest consumers, however, buy in very small quantities from micro-retailers in their suburbs.

In 1991 the average daily sales of cassava chips per retailer was 1.07 bags. On average, the retailer bought 2.9 bags at a time from a sub-wholesaler, taking 2.7 days to sell. Overheads, such as table rental, taxes and credit charges, increase the cost of each unit sold. An improvement in the economy and increased employment opportunities can lead to a decline in the number of retailers and an increase in the demand for marketing services. The consequent rise in the volume of sales per retailer can contribute to an overall fall in per unit distribution costs. There is no obvious solution to the problem of reducing distribution costs in Kinshasa since it is not easy to improve efficiency in food retail activities. Cost savings by sub-wholesalers can only lower costs when distribution margins, especially at the retail level, remain constant.

Wholesale markets can contribute to lower distribution margins if there is an efficient transport system linking wholesale and various retail markets. State intervention in this regard has to be limited to maintenance of roads and infrastructure since the provision of transport services is clearly the responsibility of the private sector. If the wholesale market handles large volumes of produce, there will be considerable economies of scale, encouraging the involvement of more transporters in the movement of goods between wholesale and retail markets. Competition is expected to improve the efficiency of transport services and lower costs.

Since promoting a cassava wholesale marketing system in Kinshasa would be a novelty in Zaire and sub-Saharan Africa, the process would naturally involve some risks. The biggest question is whether traders would patronize the new wholesale markets or continue to operate within the existing system only. Related to this are issues concerning perceived benefits for both buyers and sellers. Furthermore, would increased turnover and better market services be sufficient to induce transporter-traders and other traders to participate in wholesale markets? Would marketing costs fall sufficiently to encourage lower food prices? Experience from other countries suggests that it takes a good deal of time and effort to convince traders to use new facilities.

Special incentives and support, particularly from the state and metropolitan authorities may therefore be required to encourage traders to use new wholesale markets, however, these can be withdrawn as the markets become established. As the gains from economies of scale and higher turnover become more visible to operators, it will become unthinkable for buyers and sellers to do their business outside the wholesale market.

Wholesale markets offer transporter-traders and retail traders the following advantages:

- reduced operating costs, savings in time, lower produce losses, fewer controls and illicit taxes;
- access to a stable market with many customers and a fair, impersonal (equilibrium) market price which will constitute the reference price for cassava);
- improved standards of hygiene at the market and the availability of ancillary services (banking, repairs, fuel, etc.);
- increased use of standard weights and measures;
- greater price transparency and better vertical coordination of the marketing system; and
- reduced marketing risks.

Source: Goosens, Minten and Tollens, 1994

3

Problems in African wholesale markets and arguments against modernization

A number of factors account for major deficiencies in wholesale marketing systems in Africa. These problems, which need to be addressed in any sustainable attempts to modernize food distributions systems, fall into four main categories, namely those related to the:

- location of the wholesale market;
- technical features of the market;
- market operators; and
- organization of distribution.

3.1

Poor locations of wholesale markets

This situation arises mainly because many wholesale markets are located along traditional trading routes for particular produce that are unconnected to new road and rail networks, which developed with the demands of the growing city in mind. In some cases the markets are located some distance from river, sea or airport facilities that play a crucial role in the supply and distribution of food to the city. The consequence of this is that infrastructures linking the market to its main supply or distribution routes are not sufficient to cope with growth in demand, particularly in terms of increased traffic.

The location of wholesale markets in city centres also places limitations on the physical expansion of the markets because of inadequate space for developing additional facilities to take account of growth in the volume of produce handled as well as an increase in the complexity of required services.

3.2

Technical and infrastructure problems

The poor state of roads, drainage and potable water supply facilities constitute major problems that affect the operations of wholesale markets in many African cities. Communications systems are often very rudimentary and power supply systems are inadequate to meet the needs of packaging, handling and storage facilities as well as the security requirements of markets. Sanitation and waste disposal systems are either insufficient or poorly organized leading to acute problems with hygiene.

In addition to these constraints, poor technical design often makes market buildings unsuitable for handling particular produce and compounds problems with maintaining minimum standards of hygiene. Furthermore, the available space may be unduly limited because of poor design, thus impeding movement and compromising safety requirements for people and goods.

3.3

Competence and financial capacity of operators

Most wholesale traders are without professional skill and training, a situation which is further compounded by the total lack of specialization in the provision of food supply and distribution services (particularly the need for a clear distinction between wholesale and retail functions). Many wholesale traders also lack sufficient operating capital and have major difficulties in accessing bank credit.

3.4

Arguments against promoting wholesale markets in Africa

Three main arguments are often advanced against the promotion of wholesale marketing systems in Africa.

i. Higher operating costs for retailers

It is sometimes argued that wholesale marketing systems entail higher transport costs for retailers. It can, however, be argued that a wholesale market can in fact reduce overall transport costs incurred in the distribution of food if its location is carefully selected to reduce the need for retailers to buy stocks from several wholesalers scattered throughout the city. The system can further be supported by an intra-city transport system that ensures a regular flow of suitable haulage vehicles between wholesale and retail markets. This has been done in Abidjan where the municipal authorities have set up a system with several vans (marked “market supplies”) that specialize in transporting goods between markets.

ii. Increased unemployment resulting from creation or expansion of wholesale markets

From a static viewpoint efficient wholesale markets that reduce transaction costs and increase labour productivity can lead to a decrease in the size of the workforce engaged in food supply and distribution. Any associated job losses, however, can be fully or partially offset as a result of increased volume of trade and lower transaction costs due to enhanced competition that encourages rising farm-gate prices and reduced retail prices. Any increase in productivity in an economy creates unemployment if demand for goods remains constant. The essential feature of economic development lies precisely in gains in productivity leading to higher earnings and an increase in demand for goods and services. It is in this context that it is argued that wholesale markets can indeed contribute to economic growth and job creation.

iii. Under-utilization of wholesale markets by traders

The success of new wholesale markets depends on patronage by both wholesalers and retailers. New or improved market infrastructure and available facilities may not be sufficient to attract well-established wholesalers and further inducements in the form of tax and credit concessions may be required. When major wholesalers have been persuaded to invest in the new market (for example in building warehouses, offices, etc.), their participation and that of others will be ensured. It is vital, however, that local government authorities do not use wholesale marketing systems as channels for levying taxes on produce traders. To encourage patronage it may be preferable to simply reorganize wholesale activities at existing sites, but if relocation does prove necessary the potential new sites should be as near to the existing location of wholesalers as possible.

4

State role in establishment, management and control of wholesale markets

The private sector plays a leading role in the development of wholesale markets in developed economies, with the role of the state being limited mainly to regulation. In developing countries, however, with rather weak private sectors, government plays a more decisive role in the planning and implementation of market projects as well as in funding and managing the infrastructure.

4.1

Public good characteristics of wholesale markets

A wholesale market can in fact be considered as an infrastructure and a public good. This is partly because it can be argued that private operators might take advantage of their control over major marketing infrastructure to extract monopoly rent by restricting access to the market, thus eroding the benefits of the system. The wholesale marketing system therefore cannot operate without a certain degree of public control in order to preserve its character as a public good. Even where some of the main facilities are financed by the private sector, government regulation of the management and operations of wholesale markets will be necessary as happens in the case of other natural monopolies such as public utilities.

4.2

Management of wholesale markets

Wholesale markets can be managed by public or quasi-public corporations, private companies, cooperatives or traders' associations or combinations of all these. The choice of the precise type of ownership and management is usually determined by local political and socio-economic factors (Tracey-White, 1994) but the quasi-public corporation approach tends to be the best. Local or metropolitan authorities are usually involved in the management or at least control of wholesale markets since they derive substantial rent income from the operators. To ensure more effective coordination of public and private participation in management, wholesale markets must be given special status (independent market authority) that promotes flexibility and enhances their capacity to meet particular local requirements.

Box 5

Case study: Building the wholesale market at Bouaké, Côte d'Ivoire

A new wholesale market is currently under construction at Bouaké in central Côte d'Ivoire (the country's second largest city). Total investment in the project is about \$US 23.5 million, with about \$US 10.5 million projected to be spent on building physical infrastructures. The project is being funded by the European Union under the 7th European Development Fund. Bouaké is the hub of the country's yam trade and supplies are assembled here and distributed throughout the rest of the country and also to Mali and Burkina Faso. The new wholesale market will provide a site not only for the yam trade but also for trade in other foodstuffs. Yam is semi-perishable, with an average shelf life ranging from a few weeks to two or three months. Currently, the trade is carried on in the city centre, with rudimentary facilities and in unhealthy and congested premises. Trading virtually stops when it rains, and the market is overcrowded with little scope for expansion to accommodate new wholesalers.

The project feasibility study indicates an internal rate of return of 28 percent and forecasts that the new wholesale market would reduce marketing costs by about 30 percent. This rather high return on the investment in this project reflects the significant reduction in costs due to a substantial fall in post-harvest losses.

New retail markets are also planned for a number of coastal towns in Côte d'Ivoire under another European Development Fund project.

5

Conclusions and areas for further research

5.1

Conclusions

Ahmed and Rustagi (1987) estimate that more than one-half of the difference in higher marketing costs between Africa and Asia is attributable to poor infrastructures – roads, transport services and wholesale and retail markets. Wholesale markets can play a major role in improving food supply and distribution to cities, especially for perishable produce but also for non-perishables. Their advantages can be seen in terms of:

- enhancing transparent price discovery and facilitating transactions in the marketing chain; and
- reducing marketing costs through economies of scale, lowering per unit transport and handling costs, facilitating sorting and grading, reducing post-harvest losses and promoting increased use of standard weights and measures. With a wholesale market, the volume of produce handled by each trader tends to increase, thus reducing the number of times operators in the marketing chain have to re-stock in a given period.

Wholesale markets can be justified in town or cities with a minimum volume of trade in food produce and where farm households in the main supply zones basically aim at producing for the market rather than for subsistence. Economic growth and development contributes to this latter process but it also facilitates increased vertical integration of production and marketing, especially through supply contracts between farmers and large supermarket chains, thus reducing the relevance of wholesale markets in FSDSs.

Existing network of markets in most African cities are characterized by a number of constraints that contribute to relatively high marketing/distribution costs and deterioration in the quality of produce, and hamper both food production and consumption. These constraints need to be addressed as existing structures are adapted and improved to enhance their efficiency. Wholesale markets should not be construed as mere physical infrastructures or in isolation but rather seen as part of the marketing system as whole. Efficiency of the marketing system is affected by a number of factors including organizational and operating methods and procedures, the regulatory framework, support services and behaviour of various stakeholders. Any sustainable improvement in the efficiency of FSDSs therefore requires concerted effort on the part of all stakeholders, including, in particular, public agencies such as municipal, regional and national authorities. New wholesale markets will not automatically improve efficiency in food marketing, but they can play a major role in an overall strategy to improve the performance of urban FSDSs.

Improving the performance of urban FSDSs requires that food traders be offered technical training especially in accounting, business management and trading strategies in a competitive environment. Women in particular need to be targeted in the training programmes since they dominate food retail activities. Training could be incorporated in credit schemes that target traders. There is considerable scope for popularizing the use of standardized weights and measures in food retailing rather than the more traditional (informal) system involving the use of bags, cups and packets. Dissemination of market information also needs to be improved. The fact that wholesale and retail activities commonly occur in the same markets can severely compromise the value of market information intended for both producers and distributors and would have to be addressed.

5.2

Areas for further research

Further policy research aimed at evolving plans and strategies to promote wholesale markets as an integral part of an overall programme to improve efficiency in FSDSs in Africa need to focus on three main areas, namely economic, technical and legal/organizational issues.

5.2.1

Macro/micro-economic studies

The main object of macro/micro economic studies should be to identify possible ways of improving the performance of FSDSs in terms of quantity and quality of produce marketed. The focus of such studies should include food production trends and socio-economic conditions in major production areas; demographic trends in the city; existing distribution networks and the specific features of distributors (wholesalers, retailers and transporters). For effective planning purposes, the studies should also provide a profile of urban consumers covering, among other things, income, household expenditure and food consumption patterns. The process of price discovery and existing formal and informal market information systems also need to be studied.

5.2.2

Technical issues

Technical studies should be concerned with issues pertaining to determination of the optimum size and location for wholesale markets, taking into account overall development plans for cities as well as the expected flow of produce to and from the market. This will, for instance, ensure that the location of wholesale markets

minimizes access difficulties for both suppliers and retail market traders. Such studies can also feed into the planning process for cities and ensure the availability of required market facilities including adequate parking space, handling, storage, communication and banking facilities. The studies will also ensure that urban development plans provide for future development and expansion of markets and related infrastructure. Furthermore, the outcome of such studies will be essential inputs in the consultation process among various stakeholders to ensure a programmed development of marketing infrastructure that keeps pace with urban population growth.

5.2.3

Organizational/legal issues

The choice of the precise structure of ownership and form of management for wholesale markets is of vital importance and, as earlier stated, depends very much on prevailing political, socio-cultural and economic factors in any particular city. Studies on organizational/legal issues can provide the precise choice of ownership and management structure most conducive to the prevailing institutional environment. It would, for instance, be important in this context to clearly delineate the functional roles of various organizations (public and private) with regard to ownership, management control and regulation of wholesale markets.

To ensure that the outcome of such studies feeds into the policy and planning process, an effective interface needs to be developed between researchers and other stakeholders, including in particular political leaders and bureaucrats. It is important to ensure that reports on the studies are as comprehensive as possible so as to facilitate decision-making on design and implementation of market development projects.

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