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**Guidelines for the
Diagnosis of Urban
Wholesale
Marketplaces
for Fresh Fruits
and Vegetables in
South and Southeast
Asia**

Technical Report No. 6



**Regional Agribusiness Project
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Guidelines for the Diagnosis of Urban Wholesale Marketplaces for Fresh Fruits and Vegetables in South and Southeast Asia

by

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April 1995

**Prepared for the Regional Agribusiness Project, contract number AEP-0009-C-00-3057-00, with
funding from the Asia and Near East Bureau of the U.S. Agency for International Development**

PREFACE

This case study is a publication of the Asia Regional Agribusiness Project (RAP), which is financed by the U.S. Agency for International Development. RAP, a \$5 million, four-year project, provides technical assistance to USAID Missions and their agribusiness projects and clients in South and Southeast Asia. RAP's objectives are to promote market transparency, marketing efficiency, environmentally sustainable trade, and cooperative venture development to raise employment and income in South and Southeast Asia. The project provides technical expertise in market information, environmental and food safety, trade and investment development, and economic analysis.

Horticulture has become an increasingly important source of food, employment, and export earnings in Asia. Unfortunately, the fanfare over the expansion of horticultural exports has contributed to the neglect of the performance of local marketing systems, especially urban wholesale marketplaces.

The Market Information component of RAP has been charged with developing a dynamic and effective research and development (R&D) program responsive to the problems facing wholesale marketplaces for fresh fruits and vegetables in capital cities throughout South and Southeast Asia. An important step in this R&D effort is the development of analytical guidelines on the way to describe and diagnose the current situation in the urban wholesale marketplaces in the region's capital cities. Previous case studies of the urban wholesale markets for fresh produce in Taipei, Hong Kong, and Singapore provided insights and lessons learned about what has worked and not worked, and the reasons why. Our experience in analyzing successful markets will be useful for future studies of problematic markets.

After reading this report, the reader will be better able to appreciate the fundamental role and problems of urban wholesale markets for fresh produce in Asia today. Urban officials, agricultural officers, infrastructure planners, marketing specialists, and others interested in knowing more about this R&D effort should inquire about materials and technical services available through RAP.

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SECTION ONE

BACKGROUND

ROLES AND PROBLEMS OF URBAN WHOLESALE MARKETPLACES

Over the past few decades, several development projects have been implemented to redesign, relocate, renovate, or upgrade old wholesale market facilities for fresh vegetables and fruits in major urban centers. During the 1960s and 1970s, for example, the Latin American Bureau of the U.S. Agency for International Development established the Latin American Market Planning Center (LAMP). Michigan State University was hired to conduct diagnostic studies and formulate regional market reform programs. The improvement of wholesale marketplaces, especially in the national capitals, was a key component of the recommendations, which were based on a series of studies and planning exercises.

Asia, conversely, has lacked any similar agricultural marketing systems research and development efforts or hands-on training of local professionals carried out by academic institutions. Consequently, in several Asian countries today, there is a clear need for improved performance of agricultural marketing systems. Such improvements include the systematic updating of urban wholesale marketplaces for fresh fruits and vegetables. Several Asian governments are just now realizing the implications of fast-paced changes in economic prosperity; major changes in consumer tastes and preferences; large-scale urban expansion; and the introduction of alternative forms of retailing, particularly supermarkets and convenience stores.

Another important factor to consider in Asia today is the globalization of Asian markets as a result of the implementation of the General Agreement on Tariffs and Trade (GATT). One of the significant consequences of the agreement will be the changing role of the urban wholesale marketplace for fresh fruits and vegetables in the national capitals. For instance, in most South and Southeast Asian nations, the dominant urban wholesale marketplace, usually located in the center of the capital city, supplies urban consumers with mainly domestically grown and marketed fresh produce. In the near future, however, the inflows and outflows of commodities will substantially change the role of these markets as trade barriers are removed and foreign supply and demand join the competition.

It is common knowledge that every agricultural commodity system consists of a wide variety and large number of traders who buy and sell fresh fruits and vegetables, transporting produce from farmers to consumers. Less is known, however, on how traders who import and export fresh produce operate within these commodity systems. In general, in major urban centers, suppliers meet distributors in the wholesale marketplaces to buy and sell produce. Subsequently, prices are discovered that will then signal the next round of trade. This transaction is different for importers, who have much less influence on the prices of the goods they import. Also, the sales transaction process for importers is less clear. For example, where in the national capitals do importers meet with wholesalers from other cities who procure fresh fruits and vegetables back to the smaller cities. Although urban wholesale marketplaces are the key transaction point from domestic supply areas to urban consumers, this may not be the case for importers and exporters.

In urban marketplaces the price discovery process plays a special role in coordinating the national network of commodity trading, which in turn affects the income of many small producers. It is important that commodity arrivals, trading transactions, and distribution throughout the city are timely, efficient,

and effectively meet consumer demands with minimal waste. Also, for the city to grow and prosper, minimal disruption to urban traffic patterns, limited garbage to haul to costly urban landfills, and a hygienic environment for handling huge volumes of fresh food are needed. Today, domestic traders may also need to be linked with traders expanding exports or directly supplying imported fruits and vegetables to city's retail outlets. Otherwise, unexpected shortages of domestic produce or import gluts will affect prices and also affect the performance of the national marketing network.

To assist Asian countries in the smooth transition from today's dependence on domestic production distribution to a more integrated international or regional marketing system, the lead role of key wholesalers within the urban wholesale marketplaces must be strengthened. Given this possibility, a research and development effort that includes both a research dimension and an action orientation has been initiated.

RATIONALE AND OBJECTIVES FOR GUIDELINES

The Regional Agribusiness Project (RAP) is a project in the Global Bureau of USAID, supported by the Asia Bureau, to improve the effectiveness of USAID's agribusiness projects in Asia. This goal will be attained by promoting market efficiencies, improving market transparency, and expanding trade and investment in an environmentally sustainable manner.

Since its inception, one of RAP's main objectives has been to provide support services to the horticultural sector in the South and Southeast Asian countries of the Philippines, Indonesia, Sri Lanka, Bangladesh, Nepal, and India. One approach to devising effective ways to facilitate agribusiness development for horticultural commodities in these countries is for RAP to gain a clear understanding of the demand conditions and agricultural market development programs successfully implemented by key Asian demand centers, such as Singapore, Hong Kong, Taiwan, Korea, and Japan. From some of these, there are lessons to be learned and insights into how to achieve progressive, market-led improvements in the performance of agricultural marketing systems, especially in regard to their major urban wholesale marketplaces for fresh fruits and vegetables.

The overall goal for this effort is to develop through a systematic step-wise process the information, mechanisms, and expertise necessary to assist countries reform their ailing or ill-equipped agricultural marketing systems to meet the challenges of tomorrow. To improve the understanding of Asian market development and trade situation for fresh produce, RAP is implementing a three-phased Research and Development (R&D) effort. The phases outlined below for the proposed R&D effort include steps already taken or to be taken, from the identification and compilation of reference materials to the development and application of diagnostic assessments in problematic marketplaces in specific countries.

In Phase I, reference materials were developed and a literature review initiated in early 1994 to gain insights on lessons learned from past experiences and studies of wholesale marketplace assessments in Asia and other regions of the world. This information, together with an overview paper on urban wholesale markets, was published by RAP as *Fresh Fruit and Vegetable Marketing: Updating the Urban Wholesale Marketplace in Asia*, Technical Report #3. A second paper entitled *Guidelines for the Collection of Case Study Information on Wholesale Marketplaces for Fresh Fruits and Vegetables, Cases of Singapore, Hong Kong, and Taiwan* was also prepared to coordinate the wholesale marketplace case studies programmed for the second phase of the project.

In Phase II, case studies of major urban wholesale marketplaces in Singapore, Hong Kong, and Taiwan were completed in the latter half of 1994 to gain practical insights into the historical context and current situation of more successful wholesale marketplaces within progressive Asian countries. These studies provide tangible evidence to illustrate the dynamics of this complex marketing problem area that continues to plague several other countries, especially with the emergence of increased exports/imports following the GATT negotiations. A cross-country comparison and synthesis of lessons learned from these cases and from the literature review was subsequently commissioned to determine essential advocacy, policy, planning, and implementation issues for future improvements.

Phase III will include the development of policy, design, and implementation guidelines for future market reform efforts. This report, "Guidelines for the Diagnosis of Urban Wholesale Marketplaces for Fresh Fruits and Vegetables in South and Southeast Asia," was developed to assist researchers to describe situations, diagnose problems, and prescribe improvements in the advocacy, design, establishment, and expansion of urban wholesale marketplaces for fresh fruits and vegetables in South and Southeast Asian countries.

Also in Phase III, follow-up sponsorship of country-specific workshops and observation trips for key decision makers to more successful marketplaces will provide opportunities for more interactive and participatory involvement in the process of updating markets. Once the Asian researchers have completed their own marketplace assessments, a cross-country comparative study of urban wholesale marketplaces of the RAP-related countries will be drafted, a series of "how to" documents on updating and improving wholesale marketplaces will be completed, and conferences arranged.

SECTION TWO

THE RAP DIAGNOSTIC APPROACH

RAP's diagnostic approach to wholesale marketplace assessments was developed for two main purposes: to serve as a catalyst for moving assessment teams toward a consensus for change; and to obtain, organize, and present information on wholesale marketplaces that accurately describes the current situation, identifies constraints, and prescribes alternative directions for change.

To accomplish these goals, a local advisory committee or task force is formed in each RAP-assisted country, comprising donor organizations or government ministries. For change to occur, those intimately involved and responsible for wholesale marketplace decisions and management should participate from the very beginning of the assessment, including the information gathering, interpretation, and prescription process.

The types of information collected during the assessment includes the following:

- Background information on the country setting;
- A depiction of the terminal marketplaces relative to produce supply, commodity marketing systems, and the urban setting;
- An historical description of the original, main urban wholesale marketplace;
- A diagnosis of the current situation in that urban wholesale marketplace and the performance of its marketers;
- An assessment of opportunities and constraints to future progress and changes in the marketplaces;
- Determination of lessons learned in the processes of designing, constructing, and modifying the wholesale marketplace as demand and supply conditions change; and
- Proposed monitoring and planning methods for the ongoing improvements of the marketplaces.

The detailed types of information necessary for each of these topics are explained in detail in Section Three of this guideline.

PROCEDURE

The diagnostic assessment begins by locating key background information on the country setting and history on the principal wholesale marketplaces in each capital city. This information is collected and compiled later in the assessment. The team then moves to the major produce assembly markets that ship substantial produce to the targeted urban wholesale marketplace. There, the team interviews wholesaler/distributors, assemblers, the market manager, transporters, and other marketing participants

to gain an understanding of the major fresh fruits and vegetables produced and marketed in that area throughout the year. These assembly markets are smaller and less complex than urban wholesale markets, so they serve as a good starting point for understanding the national marketing network.

After interviewing marketing participants within those markets, the team traces domestic supply back to a couple of the main highland and lowland production areas for selected fresh fruits and vegetables. In the supply areas, the team will conduct similar interviews with agricultural producers, farmer organizations, and local traders to gain a clear perspective of the marketing practices and commodity flows from the supply areas to urban consumption centers. Information of selected commodity marketing channels will provide reference information and illustrative materials for the diagnosis of the urban markets, especially when comparing the quality of produce entering the channel with the quality that reaches retailers and consumers.

Once the supply area assessments have been completed, the team returns to the capital city to collect the statistical and descriptive information requested at the beginning of the assessment. Once this is accomplished, the team conducts informal interviews with a sample of key informants per respondent type. The basic types of respondents interviewed will be:

- Government and city officials responsible for the main decisions in design, construction, or expansion of the facility;
- Original and current market staff in charge of the marketplace operations;
- A cross-section of suppliers and transporters who deliver commodities to the market but have no stall or shop there;
- A cross section of the resident wholesalers, retailers, and other types of traders and transporters using the facilities, such as suppliers of fresh domestic fruits versus importers of fresh fruits, suppliers of fresh domestic vegetables versus importers of fresh vegetables, and their corresponding set of resident buyers-retailers; and
- A cross section of buyers who do not reside in or sell in the wholesale market facility, such as retailer/wholesalers, retailers, procurement staff of the supermarkets and large hotels, institutional buyers, and the like.

The team selects more experienced respondents to interview since they usually are the most knowledgeable, especially in cases where the marketplaces were constructed long ago. However, a few new entrants to the trading business will also be contacted for issues regarding market entry opportunities. The general approach for selecting respondents is to first stratify the types of respondents into locally meaningful categories and continue informal interviews per type until a clear picture or pattern materializes. Usually fewer and fewer respondents per type are needed as one becomes more knowledgeable over time.

The assessments of urban wholesale marketplaces will involve the following four types of analytics:

- Descriptive analysis of the setting as well as the problematic situation warranting the improvements for each marketplace;

- Diagnostic insights into market efficiency (cost/returns) and effectiveness (matching demand/supply conditions) issues of the present versus what improvements are needed in the short run;
- Comparative analysis of the past relative to the current decisions and decision-making mechanisms regarding design considerations, funding arrangements, management organization and practices, implementation of rules and regulations, and follow-up monitoring;
- Prescriptive points about how to accomplish the changes agreed upon relative to the current agricultural marketing situation and national development goals.

The team must first approach marketplace interviews with a neutral, unbiased, and diplomatic attitude. Initially, they may encounter antagonism or apprehension from both private traders and public officials. Since the team will have limited knowledge of the existing marketing system, they may not understand at first who the key figures are behind the decision-making structure. It is therefore wise to remain sensitive and aware of the underlying dynamics and problems in the marketplace in order to acquire substantive and accurate information. Many complaints and criticisms can be expected from both traders and managers as well as considerable misinformation in the effort for each to appear victims of poor conditions rather than causes of problems.

As they learn more about the internal structure of the marketplace, the diagnostic team members should balance their neutral, unbiased attitude with an image of a group with the authority and expertise to recommend future improvements or changes. The team must insure that the respondents understand that their cooperation will be useful to deciding the nature of those changes. Identifying key constraints to change and causes of major versus minor problems rather than their symptoms, will be the challenge for this assessment team. The next section will describe how this can be accomplished.

PERSONNEL

The assessment of selected urban wholesale marketplaces will be conducted by a 3-to-4-person team consisting of one international agricultural marketing specialist and 2-to-3 host-national consultants in each of the selected Asian countries. Data collection and analysis will not be based on formal questionnaires, but rather will be acquired during informal interviews applying rapid appraisal techniques with reference to the guide questions found in Annex A.

The qualifications of the local diagnostic team members will vary substantially while complementing each other in several ways. The team leader, the agricultural marketing specialist, should have strong academic credentials in agricultural marketing, extensive field experience in leading local teams in all aspects of field research, and a commitment to assume the role of catalyst rather than dictating what and how changes should occur. Likewise, a training orientation would be useful so that the knowledge, understanding, and skills of the other team members are enhanced as a result of working in this team.

One person should have many contacts and connections with the key private sector marketing participants, both in the capital city and, through his or her connections, in major horticultural production areas. Although not necessarily a university graduate, this person should have graduated from the school with "produce trading" experience. This person's responsibilities will entail identifying key informants,

setting up the interviews in consultation with the team leader, participating in interviews, and helping to interpret the information from the private sector perspective. Excellent communications skills will be essential.

Another team member should have solid academic training such as a Masters of Science or equivalent in agricultural economics. He/she should also have exposure to agricultural marketing concepts and extensive experience in field research with the skills and attitude appropriate for effective interviewing. Also, this person must possess technical writing, summarization, and graphic presentation skills. He/she should have the ability to make clear, professional oral presentations.

The remaining team member will be a trained, active public sector professional. This person could be delegated from a midlevel position in a public sector institution or agency with responsibility for agricultural marketing. Academic training in agribusiness, business management, or agricultural economics, preferably with marketing courses, would be appropriate. This person's personality should be more on the assertive side with a field-based perspective rather than that of a reticent, desk-bound bureaucrat. The key responsibility will be to interpret much of the information from the public sector's perspective, both in national policy directions, visions for change, and current regulatory environment. Consultations with public sector figures and "insiders" will probably be required over the course of this activity.

Because there is little likelihood of finding team members with training or experience in diagnosing wholesale marketplaces, the friendly attitude, investigative frame of mind, and real sensitivities to the multiple interests at stake in such proposed changes will be the more important criteria for choosing candidates. Given the intensity of the learning process, experience expected, and mobility required, male or female persons 25-40 years of age would most likely have the balance of skill and stamina suitable for this work.

TIME FRAME

The team will be given a minimum of 24 working days (four weeks) to collect background information, conduct the interviews in the supply areas and urban centers, present the findings, and draft a diagnostic report. Below, in Exhibit 1, is an estimated time line of activities.

Before beginning the field work, the team should arrange to collect secondary data, background information, and other relevant materials. Meanwhile, the advisory committee will meet with the team. Together they will make key decisions, such as the selection of commodities to study, identification of priority supply areas with major assembly markets, referrals to potential contact persons per site, and suggestions regarding useful written reports. During this period, the team should also make at least one visit to observe the urban wholesale market to gain first-hand exposure to the situation.

Once this work is completed, the team will proceed to the assembly markets to interview traders, shippers, and farmers. Supply areas will be selected based not only on the quantity of fruits and vegetables produced, but also on the diversity of commodities produced and shipped to the urban market. The team will then spend 2-3 days in each of the two supply areas interviewing farmers and local traders to determine the flow of commodities from production areas to consumption centers and the constraints to agricultural marketing in the area.

EXHIBIT 1

DIAGNOSTIC ASSESSMENT TIME LINE

STAGES	Week 1 (days)	Week 2 (days)	Week 3 (days)	Week 4 (days)
1. Collect Background Information	2	1	1	
2. Supply Area #1 Market Visits	2	1		
3. Supply Area #2 Market Visits	2	1		
4. Urban Center Interviews (Wholesale Markets, Supermarket, & Others)		3	4	
5. Follow-up Interviews in Urban Center			1	1
6. Analyze Data/Draft Report				4
7. Present Findings (Workshop)				1
TOTAL DAYS PER WEEK	6	6	6	6

After the selected supply areas have been visited, the diagnostic team members will return to the urban center to review their findings and to prepare for the assessment of the urban wholesale marketplace. At this time, the team will contact government agencies and schedule visits to the main urban wholesale marketplace to conduct interviews. They will set up their own appointments and make transportation arrangements to government agencies, traders' stalls, and the marketplace. Additionally, the team should visit major transshipment points for fruits and vegetables, such as seaports, airports, and cargo truck assembly areas. The procurement of produce by supermarkets, large hotels, and institutions will also be visited in the urban centers.

The diagnostic team must carefully schedule marketplace interviews since peak market days and times vary among marketplaces. Ideally, interviews should be conducted during two different time periods — first to coincide with least busy periods when the team can ask in-depth questions and, second, during the busiest time when trading is being conducted by distributors, retailers, and transporters. This latter visit is for observation and cross-checking purposes. In many cases, this will occur in the early morning hours and/or on weekends when produce is being delivered in large quantities to the markets.

The number of marketplaces assessed will vary depending on the country. In general, the main wholesale marketplaces for fruits and vegetables within the national capital should be covered in each report. Diagrams of markets, including the locations where each type of commodity is traded and its entry and exit points should be included in the report.

After visiting the wholesale markets, the team will interview produce procurement staff for supermarkets and large hotels in the urban center to gain a better understanding of the magnitude, assortment, and quality specifications for the fruit and vegetable shipments and sales to supermarkets. These interviews should be scheduled around other activities and will take approximately one day to complete.

During the fourth and final week of the assessment, the team will complete any follow-up interviews as needed in the wholesale marketplaces or supermarkets for clarification on key points. Four days are devoted to drafting the presentation materials and the report. All team members will work with the team leader to complete these materials.

The final stage of the assessment will be to present the findings of the assessment to the advisory committee and other interested government officials and marketing participants in the private sector. All of the diagnostic team members are expected to assist in the presentation.

OUTPUTS — PRESENTATION AND REPORT

This section identifies the basic information to cover in both the presentation and the draft report. Exhibit 2 illustrates a proposed format for the presentation to the advisory committee and other interested public and private sector participants. This presentation will last approximately two hours and will conclude with a question and answer period. The report, both in hard copy form and on computer diskette, will be submitted to the RAP representative and should follow the format outlined in Exhibit 3. If possible, the report should be entered in WordPerfect 5.1 software.

EXHIBIT 2

PROPOSED OUTLINE OF THE PRESENTATION

1) **Explanation of the Benefits From a Properly Performing Commodity System:** orchestrated from the major urban wholesale marketplace; basic lessons learned.

2) **Overview of Existing Agricultural Marketing Situation** (using local marketing terminology):

- Description of the situation, setting, and facilities;
- Definition of different types of traders, organized by those in supply side, within the marketplace, and buyers from the market;
- Display of the basic national marketing network/commodity and dominant marketing channels (graphic presentations) and explanation of the way the urban wholesale marketplace fits into this network;
- Geographic patterns of movement from supply areas to end-users *by season* and type of supply area (highland versus lowland). Include geographic maps and rainfall charts; and
- Explanation of the common trading patterns (who trades with whom and why; form of transaction; terms of trade; internal incentives; etc.) and handling practices (postharvest activities by type of commodity and trader) as well as the implications for system performance or impacts on others within the system.

3) **Performance Expectations and Diagnosis of Primary and Secondary Problems:** The presenters will explain what kind of marketing situation exists, and what the major constraints in the system are, such as limited information, limited capacity of facilities/vehicles, and lack of mechanisms for dialogue between regulators and regulated.

4) **Research Conclusions:** Presenters will outline what they regard as needed changes in the wholesale marketplaces.

5) **Tentative Agenda for Action and Research:** This should include ideas for initiating discussion and making commitments within the committee rather than a set agenda. Suggested key changes in the market should be highlighted, prioritized, and sequenced. Consensus should be reached on who and how to make the necessary decisions for relevant changes, and what is a reasonable time horizon for these changes.

EXHIBIT 3**WHOLESALE MARKETPLACE REPORT FORMAT FOR CHRONICLE WRITERS**

TITLE PAGE

TABLE OF CONTENTS

EXECUTIVE SUMMARY

1. INTRODUCTION (description of assessment objectives)
2. COUNTRY SETTING
 - 2.1. Geography
 - 2.2. Transportation and Communication Network
 - 2.3. Demographics
 - 2.4. Disposable Income and GDP
 - 2.5. Consumption Patterns and Trends
3. FOUR PERSPECTIVES RELATIVE TO URBAN TERMINAL MARKETPLACE(S)
 - 3.1. Urban Food System
 - 3.2. Domestic Produce Supply
 - 3.3. Fruit and Vegetable Imports and Exports
 - 3.4. City Revitalization
4. THE URBAN WHOLESALE MARKETPLACE
 - 4.1. Overview of the Marketplace
 - 4.2. History of the Wholesale Marketplace
 - 4.2.1. Initial Plan and Ownership
 - 4.2.2. Site Selection; Positioning in the Urban Area
 - 4.2.3. Construction and Reconstruction
 - 4.3. Current Situation of the Wholesale Marketplace; Hardware and Software
 - 4.3.1. Physical Structure
 - 4.3.2. Management and Financial Services
 - 4.3.3. Regulatory and Security Operations
 - 4.3.4. Market Information and Extension Services
 - 4.3.5. Market Transport Facilities and Services
 - 4.3.6. Sanitation Facilities and Services
 - 4.3.7. Utilities (Water, Electricity and Communications)
 - 4.3.8. Miscellaneous Services

(Continued on Next Page)

Exhibit 3 (continued)

- 4.4. Constraints and Opportunities for Change
 - 4.4.1. Availability and Access to Land
 - 4.4.2. Condition of Facility
 - 4.4.3. Needs for Improving Management Practices
 - 4.4.4. New Site Selection versus Upgrading Facility
- 5. PERFORMANCE CRITERIA AND EXPECTATIONS
 - 5.1. Government's Perspective
 - 5.2. Private Sector's Perspective
 - 5.3. Lessons Learned — Wholesale Marketplace Establishment and Management
- 6. MARKETPLACE IMPROVEMENTS; FUTURE DIRECTIONS
 - 6.1. Recommendations
 - 6.2. Action Plan
 - 6.3. Monitoring Reforms
 - 6.4. Search Process for Funding

BIBLIOGRAPHY

ANNEXES (See Exhibit 4 for details of information to include)

SECTION THREE

INFORMATION REQUIREMENTS FOR MARKETPLACE ASSESSMENT

Agricultural marketing systems in South and Southeast Asia differ greatly. Consequently, a marketplace assessment in one country may stress topics that are less relevant to another country. However, since some of the information will be used later for a cross-country analysis of wholesale marketplaces, a consistent set of basic data should be collected during each assessment.

This section provides guidelines on the basic types of information to collect during the assessment and arranges the information in a report format for presentation purposes. It begins with a description of the introduction and types of data to collect for the country setting and concludes with a discussion on how to assess market performance. The diagnostic team must always remember to identify clearly the sources of all the information used in the presentation and the report.

INTRODUCTION

In the introduction, the diagnostic team should outline the rationale and objectives of the study, describe each section of the report, and explain any events that may have affected the findings. This should not exceed a few paragraphs.

COUNTRY SETTING

The basic categories of information to collect for the country setting section of the report are organized according to general situation, demand characteristics, and supply conditions. To be concise, only a few key points are included. The *general situation* refers to the geography of the country and transportation and communications networks. The *demand characteristics* include demographics and disposable income. *Supply conditions*, on the other hand, encompass domestic agriculture and trade patterns, especially imports and exports of fresh fruits and vegetables. Most of this information can be readily obtained from government ministries or statistical publications. Below are the specific types of information to collect for each category.

Geography

In this subsection, the diagnostic team should describe how the geography of the country has affected agricultural production and marketing. For example, certain countries may be somewhat isolated island nations while others might have close trade ties with adjacent countries. Some countries have a substantial agricultural sector and a certain degree of food self-reliance while others are heavily dependent on food imports. What are the consequences or advantages of these conditions relative to agricultural marketing systems and major urban wholesale marketplaces? In the annexes, the diagnostic team should include country maps that provide detailed information on the size (square kilometers), type of terrain, elevation, and land use patterns.

Transportation and Communication Network

In addition to information on the geography of each country, the diagnostic team should collect data on transportation facilities. The types of information that will be most useful for the analysis include:

- Major road and water network as mapped and measured (in other words, density as kilometer in length per square kilometer and percentage of roads permanently paved);
- Seaports and airports as mapped and display data on capacity and yearly cargo handled (most recent five years);
- Telephone density as number of main lines/1,000 persons;
- Number of copies of daily newspapers printed; and
- Percentage of households with televisions and radios.

The diagnostic team should also describe the reliability of different modes of transportation and traders' preferences for shipping commodities. Shipping preferences may change at different times of the year depending on weather conditions (typhoon season) and availability of competing cargo. If relevant, this should also be mentioned in the report.

Data on communication networks are difficult to obtain and measure in most countries. Most commonly, formal communication networks are used among marketing participants in urban areas and for regional trade negotiations whereas farmers and traders in rural areas use informal communication networks to transmit market information. Issues of availability and reliability of telephones, use of fax machines, use of internet systems, and consumer awareness of retail prices can be discussed briefly in the text.

Demographics

The size, growth rates, and distribution of populations directly impact on the demand for agricultural commodities. The authors can describe the population growth trends in the body of the text and how this has affected (and will affect) the agricultural marketing system, especially fruits and vegetables.

In the annexes, tables of population statistics for the last 10 years should be included that cover the following data:

- Total population of the country/year;
- Annual growth rate of the population;
- Percentage in rural areas (most current);
- Population density/year; and
- Population of each of the five major urban areas/year.

Disposable Income and GDP

The diagnostic team can describe the economic importance of the agricultural sector in relation to other sectors (as a percentage of GDP) in the body of the report as well as any general impressions of income trends in the country. If available, the diagnostic team should include information on disposable income by ethnic groups. The types of information to include in the reports annexes on disposable income include data over the last 10 years on per capita disposable income, gross domestic product (GDP), and average national mean per capita in five major urban centers.

Consumption Patterns

The main types of information here include the most recent statistics and statistics for a 10-year prior period, such as 1983-1992, for per capita consumption of rice; vegetables (by type, if possible); fruits (by type, if possible); and meats. In this section of the report, the diagnostic team should analyze any trends observed in consumption patterns of different foods and provide explanations about why these trends are occurring.

FOUR PERSPECTIVES ON THE TERMINAL MARKETPLACE

Each urban terminal marketplace possesses unique characteristics that distinguish it from others. For example, some marketplaces located in national capitals serve as major transshipment points for the arrival or shipments of foreign produce whereas others cater primarily to distributing domestically produced fruits and vegetables. Other marketplaces are relatively modern, well positioned outside the city center, do not impede the flow of traffic, and serve as the center for the national market network. These and other factors are indicators of the current performance of the wholesale marketplaces as a food distribution center and its contribution to urban development.

This section analyzes terminal marketplaces based on four main perspectives: the position of the wholesale marketplace vis-a-vis various retail outlets within the urban food system, the extent and approach for the wholesale marketplace's sourcing of produce from domestic produce supply, the actual and potential linkage to fruit and vegetable imports and exports, and its contributions or impediments to city revitalization. Failures of the urban wholesale marketplace with respect to any of these four perspectives can adversely affect marketing participants, stifle innovative efficiency, reduce pricing efficiency, and result in inferior market performance. Thus, it is essential to understand each perspective and its relationship with the terminal marketplace.

Urban Food System

The urban food system refers to the major marketing participants, marketing channels, and all related facilities and infrastructures from the entry of produce into the urban area to the disposal of waste products. For the fruit and vegetable subsector, this entails the sellers and buyers in the urban wholesale marketplaces as well as the retail or end-user outlets within the city boundaries. This subsection will examine the retail wet markets, supermarkets, vendors, hotels, vendors, and so forth in anticipation of the detailed analysis of the wholesale marketplace in the next section.

In this section, the diagnostic team should address the following illustrative questions:

- How many retail marketplaces that sell fresh produce are servicing consumers within this urban area, what are their locations, and when were they constructed?
- What are the major supermarket chains within this urban area and where are their main offices?
- How many major hotels and restaurants are important users of fresh produce and what are their locations?
- What food processors procure their raw materials of fresh fruits and vegetables from urban markets?
- What other types of major users of fresh produce, including institutions, are located within this city and what are their locations?

The diagnostic team will conduct interviews with a few supermarket owners and procurement managers as well as suppliers of institutions that purchase fresh produce, such as schools and large hotels. Below are some questions to ask during these interviews:

- How does the supermarket or institutions procure fresh produce? What are the names of the main suppliers?
- What types, if any, credit are extended to suppliers? How long after delivery are payments made?
- How do retail prices of fresh produce in the supermarket compare with prices in retail wet markets?
- How does the quality of produce differ in the retail markets and supermarkets?
- Approximately what percentage of the retail sales of fresh produce is sold in the supermarkets? The institutions?
- How do the supermarkets and institutions receive market information? What kinds of information do they receive and in what frequency? Do they have contacts with regional or international markets? Explain.

Domestic Produce Supply

This perspective on the terminal marketplace includes two main components: data on the major types of fresh produce supplied from domestic sources, and the marketing channels that transport produce from the farms to urban markets. The magnitude, location, and composition of the domestic supply of fresh fruits and vegetables are relevant to the positioning and size of the main urban wholesale marketplace.

The diagnostic team should analyze the following data obtained from statistical publications before beginning the observations and interviews with key informants regarding the marketing channels, patterns, and practices:

First, the team should distinguish between the main types of commodities within the categories of fruits and vegetables:

Temperate Fruits

- For the past five years, list in terms of harvested area and production, the top 3-4 temperate fruits produced in this country.
- During which months is each of these temperate fruits usually harvested?
- What locations within the country are the major supply areas of each of these fruits?
- What are the major foreign sources for each, if any? Explain.
- Do the sources change depending upon the time of the year? Describe.

Tropical Fruits

- For the past five years, list in terms of harvested area and production, the top 5-6 tropical fruits produced in this country.
- During which months is each of these temperate fruits usually harvested?
- What locations within the country are the major supply areas of each of these fruits?
- What are the major foreign sources for each, if any? Explain.
- Do the sources change depending upon the time of the year? Describe.

Temperate Vegetables

- For the past five years, list in terms of harvested area and production, the top 5-6 temperate vegetables produced in this country.
- During which months is each of these temperate vegetables usually harvested?
- What locations within the country are the major supply areas of each of these vegetables?
- What are the major foreign sources for each, if any? Explain.
- Do the sources change depending upon the time of the year? Describe.

Tropical Vegetables

- For the past five years, list in terms of harvested area and production, the top 3-4 tropical vegetables produced in this country.
- During which months is each of these tropical vegetables usually harvested?

- What locations within the country are the major supply areas of each of these vegetables?
- Do the sources change depending upon the time of the year? Describe.

The diagnostic team should indicate briefly trends in the domestic production of specific key types of fruits and vegetables, especially if in transition.

Second, through key informant interviews, the team should examine deviations in the marketing patterns for those major domestic commodities:

General Marketing Questions

- Are the top domestic fruits and vegetables traded differently in certain wholesale markets as compared with trading in the national capital markets? Explain.
- What are the peak months for domestic supplies of temperate versus tropical fruits and for temperate versus tropical vegetables?
- How have the main sources of fresh fruits and vegetables changed during the slack months of domestic supply within the past 10 years? Please describe.

To support responses to these questions, it is important to have empirical data on domestic production of fresh fruits and vegetables. A few key indicators should be included here and presented as illustrated in Annex 3.

Domestic Supply

- Total production and harvested area of temperate versus tropical fruits/year (most recent five years).
- Total production and harvested area of temperate versus tropical vegetables/year (most recent five years).
- National map highlighting the major production areas for temperate versus tropical fruits and vegetables.

To understand the dynamics of urban wholesale marketplaces, it is necessary to identify the flow of produce from production to consumption areas and the key participants involved in fresh produce marketing. In this subsection, the diagnostic team should identify the types of marketing participants and marketing channels identified during interviews with key informants.

The flow of produce from producer to consumer will vary considerably depending on the type of fruit or vegetable. Consequently, the diagnostic team will illustrate the marketing channels in subsector maps for tropical and temperate vegetables and tropical and temperate fruits that are most commonly traded. The team will also describe in the text of the report how these subsectors operate based on information obtained during assessment interviews.

Fruits and Vegetable Imports and Exports

This aspect of the terminal marketplace has become very important in several countries within recent years and thus should be stressed during the assessment of urban wholesale marketplaces. First, the team must investigate the existing external trade situation. To accomplish this, basic statistics should be collected preceded by interviews with key informants. The types of statistics to collect include:

Foreign Supply

- Total volume of imports of fresh fruits/year (rank top 5 by type for most recent 10 years).
- Total volume of imports of fresh vegetables/year (rank top 5 by type for last 10 years).
- Total volume of exports of fresh fruits/year (rank top 5 by type for most recent 10 years).
- Total volume of exports of fresh vegetables/year (rank top 5 by type for last 10 years).
- National map indicating the location of the major ports.

The team will then determine the marketing channels for the major imported and exported commodities, especially as they affect trading within the urban wholesale marketplace or if they purposely bypass the terminal market. During visits to retailers and urban wholesalers, the following questions should be asked to determine the major marketing channels for the major exported versus imported commodities:

- For the major exported fresh fruits, who are the dominant exporters and where are they located (fruit, exporter's name and address)? How does some of their produce reach the main urban wholesale marketplace?
- For the major exported fresh vegetables, who are the dominant exporters and where are they located (vegetable, exporter's name, and address)? How does some of their produce reach this main urban wholesale marketplace?
- For the major imported fresh fruits, who are the dominant importers and where are they located (fruit, importer's name and address)? How does their fruit reach this marketplace?
- For the major imported fresh vegetables, who are the dominant importers and where are they located (vegetable, importer's name, address)? How do their vegetables reach this marketplace?

If any of these traders conduct business within the urban wholesale marketplace, this information will enable the team to find and interview them regarding the key services of the market and the relative changes in the roles of domestic versus imported/exported commodities.

City Revitalization

This final perspective is extremely important since it is often the main source of funding and catalyst for the relocation, rehabilitation, or updating of urban wholesale marketplaces. Thus, the team

should learn, clearly understand, and carefully document the priority problems and concerns of urban officials and administrators. During interviews with these officials, the types of question to ask include:

- What are your main problems with the existing urban wholesale market facility, regarding:
 - Traffic conditions;
 - Waste disposal;
 - General location (land values);
 - Operating costs relative to revenues;
 - Sources of revenue;
 - Appearance relative to the city's image;
 - Trading practices within the marketplace;
 - Adequacy and quality of produce supply for urban consumers, explain with examples; and
 - Consumer safety issues (excess pesticide scare).
- Are there plans for improving the facility? If so, what are the sources of funding?
- Are the officials working in collaboration with the Ministry of Agriculture on solving the problems within the wholesale marketplace? If so, describe.

THE URBAN WHOLESale MARKETPLACE

This section will provide detailed information on the history, current situation, and constraints and opportunities to future rehabilitation or expansion. In each of the subsections, there are both "hardware" and "software" components. Hardware refers to the physical structure and facilities located in the urban wholesale marketplace whereas software deals with the operating policies, procedures, and practices as well as the types of financial and human resources required for the facility to function. Examples of this latter point would be market management, financial procedures, and the various trader organizations. These services may be provided by the public or private sector depending on the wholesale marketplace. The preliminary questions include:

- How many wholesale marketplaces that sell fresh produce are servicing this urban area and what are their locations (centrally located or on city periphery)?
- What size population does each marketplace service within the radius of its market service area?
- What method(s) of transactions (negotiation, auction, or others) are used in this marketplace and what is the rationale for promoting them?

Overview of the Marketplace

This subsection introduces the marketplace(s) assessed, highlighting the recent level of activities (yearly figure for the past three years) within this marketplace according to the following measures:

- Total volume of fruits traded (by types of tropical and temperate, if possible);

- Total volume of vegetables traded (by types of tropical and temperate, if possible);
- Percentage of traded fruits are imported (by types);
- Percentage of traded vegetables are imported (by types);
- Daily schedule for:
 - Peak arrivals for domestic fruits versus imported fruits;
 - Peak arrivals for domestic vegetables versus imported vegetables;
 - Peak period of wholesale transactions; and
 - Other peak periods of trading activities, such as retailing activities.
- What are the major trading days/week and the delivery times versus sales times in the marketplace? How have these changed overtime? Who decided on this schedule?

History of the Wholesale Marketplace

Most of the market facilities and management arrangements today are based on decisions made in previous years. Consequently, the diagnostic team should determine the initial rationale for decisions before assessing the current performance of the marketplace. Although the original design may have been adequate for the conditions at that time, subsequent unanticipated changes in population growth or urban expansion may have caused problems in today's conditions. To gain a dynamic impression of the marketplace of today, it is therefore necessary to understand its history. This section provides guidelines for the types of information to collect on the history of the marketplace.

Information on the historical situation of the wholesale markets can be obtained from a number of different sources. In some cases, the diagnostic team may be able to interview knowledgeable officials or the main decision makers responsible for the design and construction of this marketplace. Key informants might also be marketing participants who have been traders for many years, the market master, government officials, or funding agencies. There may be publications or other secondary data sources on the subject.

Initial Plan and Land Ownership

The initial plan or project proposal and description of land ownership would enable analysts to better understand the problems with the old facility, how this particular market facility addressed those problems, why this site was selected, and who was responsible for the design. This background information will be useful for explaining currently observed strengths and weaknesses of this marketplace relative to current conditions. Some questions to be asked during interviews with the market master or key informants include:

- When was the marketplace first planned?
- Who (institutions/individuals) drew up the original plan and approved its implementation?
- Who (company/individuals) designed the marketplace?

- What other marketplaces served as a guide or model for designing this one?
- What population size and volume of throughput was the marketplace designed to accommodate?
- Who originally owned the land on which the marketplace is situated (specify the public agency or private company)?
- Was the land always held by the same owner, or has ownership changed hands since the original construction period?
- Are there restrictions inhibiting construction of marketplaces in other locations?

Site Selection: Positioning in the Urban Area

The strategic positioning of the wholesale marketplace in the urban area differs depending on the size of the city and the time the facilities were constructed. Small and medium-sized urban areas often have centrally located marketplaces whereas large urban centers commonly rely on satellite markets to supply domestic agricultural produce. Satellite markets, located on the city's periphery along major access roads or at the port area, avoid problems of traffic congestion often associated with centrally located markets. The proximity of these markets to public transportation is also critical unless the market provides the hauling services of pick-up trucks for the retailers who come to buy from the market. The diagnostic team should include city maps in this section of the report, highlighting the location(s) of the marketplaces. The following types of questions should be asked during interviews:

- What were the site selection criteria and who chose the site?
- Was this marketplace originally a centrally located or satellite market? Is it still in that relative position?
- What were the impacts of marketplace location on the delivery of commodities versus the distribution of commodities to retailers?
- What were the major sources (production areas or countries) of the commodities supplied to this market?
- Within what radius did retailers come to buy from this marketplace? Has this changed?
- What were the difficulties encountered with the market location in the urban areas? How has this changed?

Construction and Reconstruction

Once the plan was approved, arrangements were made to construct the facilities in the marketplace. Information on the construction of the market could include the following types of questions:

- What were the dates of initial construction, completion, and inauguration of the facilities?

- Compared with original cost estimates, how much did the marketplace cost to construct?
- What company constructed the facilities (local or foreign firm)?
- What were the major problems encountered during the construction of the facility?
- Where and how did they relocate the existing traders during the construction period?
- What additions, major improvements, or modifications have been added to the facility since its construction?
- If any, what were the costs involved with the rehabilitation or modification?
- What were the funding sources and terms for these improvements?
- Were there any improvements that were planned but never implemented? If so, why and what institutions/agencies were responsible?

Current Situation of the Wholesale Marketplace: Hardware and Software

When the diagnostic team is collecting background information on the country settings, they should begin scheduling visits to the urban wholesale marketplaces to interview the staff and marketing participants. As stated earlier, one visit is made during the less busy periods to ask in-depth questions, and one during peak trading periods to observe the market in full operation. The latter period often begins early in the morning when transporters arrive with produce from the rural areas and then buyers arrive to make their purchases. For imported commodities there may be different schedules. Therefore, the diagnostic team may be required to visit marketplaces at dawn or pre-dawn hours.

Information collected in the marketplaces will be obtained through both observation of trading practices and interviews with marketing participants. Some information may also be acquired through previous studies conducted in the marketplaces or interviews with the market authorities. The marketplace visits will provide the diagnostic team with information on the current and historical marketing situation.

Each subsection provides illustrative questions that can be asked marketing participants or key informants. The diagnostic team should identify who is currently responsible for each service, whether it be public or private agencies, and the effectiveness of these services for meeting the needs of the marketing participants.

Physical Structure

The types of information to collect on the physical structure include the design of the layout, the number of stalls and their dimensions, the location of access doors, lighting within the market, and water access. Marketplace building descriptions are also necessary so that the age, type of construction, and type of cover are well documented. The diagnostic team should give a qualitative as well as a quantitative description of how well the buildings are accommodating traders' needs. A diagram of the marketplace design should be included in this section and will provide the answers to several of the

- What are the number, dimensions and position of the buildings in the marketplace (include the chart and descriptions)?
- Illustrate the sections in which trading of different commodities is located (illustrate on the floor plan chart).
- What are the building materials (brick, reinforced concrete, and so on), number of levels and the general condition of the buildings (attach a rough sketch of the structures)?
- Identify the type, location, and number of cold storage facilities, including terms of use.
- Describe the ventilation system, if one is installed.
- What are the number, dimensions, and purchase costs of the stalls in the marketplace?
- What fees are attached to the use of each type of stall?
- What is the access situation? In other words, are traders able to easily unload and haul their goods to the stalls without obstructing the passage of other marketing participants? If not, what are the problems?

Management Services

This subsection deals primarily with software or services issues. The market masters will probably be able to provide most of the information on these services, but the diagnostic team will also want to interview marketing participants to gain a better insight into how each of these services is functioning. The types of questions to ask the market master and other key informants on management and finance are:

- Who and how are the management services provided for operating the marketing facility (describe the public or private management agency)?
- What is the work schedule for the management staff relative to the major trading days/week and the delivery times versus sales times in the marketplace? How has the staff's schedule changed overtime? Who decided on this schedule?
- How many staff are on the market payroll? What are their positions, duties, and salaries?
- What are the main operating policies used by the management staff?
- Describe the systems in place to collect each type of fee or charge to marketing participants — who pays, who collects, collection times, chart of costs per type of trader or transporter, and so on.
- How are these fees used? How are the market management and staff costs covered for operating the marketplace, payments on past construction costs, and funds set aside for further market repairs or expansion?

Regulatory and Security Operations

We are looking for software information here. The market master usually has documentation on market security and the rules and regulations of the marketplace. Sometimes marketing cooperatives or trader associations are also involved in working with public marketing agents to devise these rules. Questions that can be asked to the market master and other individuals involved in regulatory operations are listed below:

- What are the written rules and regulations for traders in the market? (Attach a copy.)
- Who was responsible for writing these regulations?
- Who has enforcement responsibility and how enforced?
- Which regulations do the traders object to the most and why?
- How are security services provided and by whom?
- How many people are involved in security services? At what costs?
- Who pays for these services and how are funds collected for this purpose?
- Who settles arguments in cases of serious disputes?

Market Information, Financial and Extension Services

Many marketplaces offer information, and financial and extension services with the intent to improve marketing participants' decisions, reduce payment periods, and expand suppliers/traders capabilities. Information on prices and volumes of different types of fresh produce marketed are sometimes posted on bulletin boards in the market or are broadcast on the radio. Banking facilities enable quick cash transfers back to distant suppliers. Extension programs sometimes include programs on postharvest handling or food safety. These services are classified as marketplace software. Illustrative questions to ask key informants include:

- What types of information services are available to marketing participants?
- Is price and volume data available? If so, what is the method of collection, frequency, way tabulated, methods of dissemination?
- Who is in charge of collecting, tabulating, and disseminating this information?
- Describe what farmers, suppliers, and wholesalers think about the accuracy and usefulness of the price and volume data.
- Describe any banking or financial services available to traders within the marketplace.
- Describe any training courses or extension services regarding food safety issues, proper postharvest handling, and so forth. Who administers and pays for these services?

Market Transport Facilities and Services

This subsection has both hardware and software components. A good transport system is vital to the efficient movement of goods to, within, and from a marketplace. During the assessment, the diagnostic team should examine the state of the waterways or roads leading to and within the marketplace and the parking facilities available to transporters and buyers. They should also examine the alternative means of transport available to each type of marketing participants. Some of the major information to collect includes:

- Briefly describe the traffic patterns or flows of arrivals and departures of commodities.
- What types of transportation vehicles and how many can enter the market at one point in time to offload produce? (Source: records of the market master.)
- Describe the traffic patterns or flows within the marketplace to unload and load goods. What examples of congestion can be noted?
- For how many delivery versus pick-up vehicles was the parking area designed? How many are accommodated (actual versus planned)?
- Does the marketplace provide any types of transport services to retailers or other types of small traders? If so, at what cost and how accessed?
- What equipment is available for commodity hauling or movement within the marketplace (such as, laborer, hand carts, handtrucks, or other equipment)?
- How do truckers make their "backhaul" arrangements?

Sanitation Facilities and Services

It is important to understand the types of sanitation and waste management equipment and practices adopted in each marketplace. During the assessment, the diagnostic team should inspect the facilities to determine how each marketplace collects and disposes of its wastes. This includes the way they manage to clean drainage channels and dispose of piled trash. The team should also examine software issues such as determining who sets the waste management practices. The market master or person in charge of the cleaning crew will probably be the best source of information in this area. Some illustrative questions to ask on sanitation include:

- Describe how the marketplace is cleaned, time of the day, and its frequency?
- Where and how is market waste disposed? Can you illustrate case examples of wastes being regularly returned to the agricultural sector such as for fish feed, compost making, or hog feed?
- What are all the costs associated with cleaning the facility?
- How are these costs covered?

- Who is responsible for cleaning stalls; aisles or roadways between buildings; access roads; and drainage channels?
- How many toilets are in the marketplace, where are they located, and who cleans them?
- Describe the design and current condition of the drainage system.
- What happens to used shipping and packaging materials, such as plastic crates, wooden boxes, and bamboo baskets?

Utilities (Water, Electricity, and Communications)

Besides the main trading facilities and the transport system for such wholesale marketplaces, there are several related facilities that will directly affect the performance of the market. This subsection has both hardware and software components, since the facilities as well as the services available to marketing participants will be examined. The diagnostic team can answer the following questions through a combination of observations (verify their absence or presence) and interviews with the market master and marketing participants:

- Who pays for the following utilities:
 - Lighting in common areas versus within each stall;
 - Water for cleaning commodities, general versus within each stall;
 - Telephone lines and phones per stall;
 - Electrical outlets in each stall, and others?
- What is the general condition of each and when were they installed?
- What are the monthly costs associated with each?
- Who is responsible for collecting fees for these services?
- What additional utilities have been requested by marketing participants?

Miscellaneous Services

These other services do not fit into the other broad categories of market operations, but are important to consider when assessing the marketplaces. They too are examples of marketplace software. Some illustrative questions that can be asked include:

- Are weighing scales provided for public use in the market? At what service fee and who checks their accuracy?
- Describe any additional marketing-related services, such as packing house, integrated supermarkets, and so forth.
- Who is responsible for these services?

- Are there on-site food services and sleeping accommodations available within or very near the market?

Change: Constraints and Opportunities

This section examines guidelines for the types of information to collect on the constraints and opportunities for future expansion in the marketplace. This type of information is important to provide insights into the future needs and prospects in the marketplaces.

The market masters, government officials, or marketing participants can provide most of this information. The main topics for examination include availability and access to land, need for facility rehabilitation, and improvements in marketing operations.

Land Availability and Access

If no expansion is foreseen or needed, this subsection can be omitted. Otherwise, to expand or locate a new marketplace site, it is first important to determine the availability and accessibility of land in the metropolitan area. Below are some questions that can be asked to city planners or officials:

- What are the major anticipated problems associated with the acquisition of land for any new market sites?
- About how many sites of sufficient size do you know about that could be made available for additional wholesale marketplaces?
- Who would be involved in any decisions regarding site selections and why those persons?

Facilities: New, Upgraded, or Rehabilitated

In addition to land availability, the diagnostic team should enquire about the facility improvements that are programmed as well as the needs mentioned by key informants and market participants. Following the presentations of the study findings, the issue of whether the changes would involve new facilities or the upgrading or rehabilitation of existing facilities can be decided. Below are questions to ask the market master and marketing participants:

- Describe the facility improvements programmed for the near future, including anticipated costs and funding sources.
- Of the additional structural repairs identified by the market participants interviewed (cite them), which would you judge to be the most crucial? Most fundable?
- What types of transport facilities are in greatest need of improvement or repair? Why have they not been repaired yet?
- What types of sanitation equipment are in greatest need of improvement or repair? Why not made yet?

- Aside from finances, what are the major factors inhibiting facility improvements?

Management — Arrangement and Practices

These needs are more difficult to identify than land availability and facility improvements. However, they are equally important to ensure efficiency in the marketplace. Examples of this could be the transfer from public sector to private sector management or current marketing practices.

Below are some questions to ask market staff and traders regarding the merits of future modifications of the management arrangement.

- How could the management arrangement be improved to better service the needs of suppliers versus traders versus outside buyers?
- What improvements in rules and regulations were suggested by suppliers versus wholesalers versus outside buyers versus the market staff?
- How could marketing information services, financial services, or extension programs in the marketplace be strengthened according to marketing participants?
- What types of sanitation practices are in greatest need of improvement or repair?
- What other services would the marketing participants like to see improved or installed the marketplaces?

PERFORMANCE CRITERIA AND EXPECTATIONS

We here identify performance criteria and realistic expectations for assessing wholesale marketplaces. The diagnostic team should consider two main aspects in this section: the technical criteria recommended by professional marketplace economists and feedback from the public and private sectors on their expectations for improving wholesale marketplace performance. These two perspectives combine the objective, theoretical view of economists with the practical expectations of those actively marketing fruits and vegetables.

Once this is accomplished, the team will then summarize the lessons learned from the initial planning period up to today. These lessons will serve as reference points for all countries interested in constructing improved wholesale marketplaces. Such improvements may result in increased farmer income and increased marketing system responsiveness to consumer concerns about food quality, safety, costs, and an increase in international trade in fresh fruits and vegetables.

Technical Performance Criteria

The selection of technical criteria will depend largely on the time, resources, and advisory committee preference as well as the qualifications of the team members. The structure, conduct, and performance paradigm for marketing system research would represent the ideal basis for a pragmatic set of

especially historical price data, advanced level of expertise, and the substantial research time requirements may be beyond the capabilities of the diagnostic team and interests of the advisory committee.¹

Government Perspective

Information on the government's expectations regarding marketplace performance could be evaluated along several dimensions. Examples include the criteria of agricultural officials promoting sales from farmers' cooperative to wholesalers in the market, city administrators collecting fees and paying expenses of the market, or market management staff who actually manage the facility on a day-to-day basis. Key informants from each of these and other agencies can be asked:

- What criteria do you use for judging the performance of the marketplace? Examples might include fairness of prices to farmers, price transparency or revenues earned exceeding costs incurred.
- How do you evaluate performance based on these criteria?
- Based on your criteria, what are the main strengths and weaknesses of this marketplace?
- Why did these problems or weaknesses arise and why do they persist?
- What actions has government taken to improve this aspect of marketplace performance?
- What changes would you suggest? In terms of urgency or importance, how would you rank the changes that you recommend?
- What future course of actions are planned to improve performance?
- Who will be responsible for implementing these improvements?

Private Sector Impressions of Marketplace Performance

We here examine how suppliers, marketplace wholesalers, marketplace retailers, and outside buyers interact and evaluate both the performance of the marketplace and its operations. It is very important to stress that there are several viewpoints regarding performance criteria from the private sector. Each type of business, whether supplier, wholesaler, retailer, transporter, or outside buyer, has their own expectations depending on their own type of business. For instance, adequate parking space is very critical to transporters from distant production areas but less so for a small resident retailer.

In other words, private sector expectations will vary distinctly by the types of business of the respondent. Consequently, this canvassing of performance expectations and criteria should be related to definable groupings and the findings documented accordingly. Otherwise, the relevance of the performance criteria cannot be assessed, nor can its severity or possible impacts. The team must identify and document the nature of the respondent's business when enquiring about performance criteria.

¹An applied interpretation of these performance options is highlighted in "Performance Evaluation of Fruit and

Examples of the types of questions to ask each set of marketing participants are listed below:

- What criteria do you use for judging the performance of the marketplace?
- What are your expectations for improved market performance?
- In what ways does this marketplace help you do your business versus operating from another location?
- What additional services would be useful for doing your business in this marketplace?
- What are the main strengths of this wholesale marketplace? Organize responses according to:
 - Location;
 - Physical features;
 - Management practices and other market services;
 - Costs;
 - Earning potential; and
 - Others (specify).
- What are the major problems or weaknesses with this wholesale marketplace? Organize responses as above.
- Why did these problems or weaknesses arise and why do they persist?
- What changes would you suggest? In terms of urgency or importance, how would you rank the changes that you recommend?

The collection, tabulation, and interpretation of these responses will require substantial time and energy. Thus the team should limit the focus to those types of respondents who deserve the most attention and confine interviews to those groups. In the report, the diagnostic team should briefly describe the characteristics of each category of marketing participant found in this marketplace, whether distributor, institutional buyer, restaurant operator, retailer, supermarket procurement staff, trucker, importer, exporter, or broker.

MARKET IMPROVEMENTS — FUTURE DIRECTIONS

This final section focuses on the future directions in wholesale marketplace development in this country. It is subdivided into four subsections: recommendations, the action plan, monitoring reforms, and the search process for funding.

Recommendations

Based on the findings from the assessment, the diagnostic team will develop a list of recommendations for improving wholesale marketplace development along with the rationale for each

recommendation. This list should prioritize the most practical and cost-effective interventions that will facilitate the marketing of horticultural commodities.

Action and Research Agenda

The action and research agenda will outline general suggestions on what further information is needed and what research approach can be used to acquire that information. The action aspect will suggest steps for implementing recommendations. The diagnostic team should provide a matrix specifying the type of intervention, agencies or groups responsible, and suggested approach for its implementation.

The intervention list will first recommend the workshop to be held at the end of the diagnostic assessment. At this workshop, the team will present the findings and solicit feedback from relevant public and private sector agencies. The action plan in the report is intended to be a working document and should be modified based on the feedback from the workshop.

Monitoring Reforms

In some cases, monitoring systems have been developed for wholesale marketplaces to determine or indicate the effectiveness of their facilities and operations. This part of the diagnosis appraises any such current or planned systems for monitoring any new reforms that may be implemented. A discussion with the market master may provide insights into this topic. Some questions that can be asked include:

- Is there currently any monitoring or analysis of ascending/descending marketing channels? If so, who does the monitoring and how is it conducted? At what frequency?
- Is there monitoring of the overall growth of throughput?
- If so, how is this information gathered, at what frequency and by whom?
- Are there systems in place to monitor operational performance and deficiency? If so, describe how this is accomplished.
- Are there any plans for future monitoring activities in this marketplace? If so, describe.
- Who is responsible for future monitoring activities?
- What have been the major constraints to implementing such programs?
- How might these constraints be overcome?
- What would you recommend as an effective system for monitoring market performance?

Funding — Local or Foreign

This section of the diagnostic report will provide suggestions on where to look for potential funding sources based on information gathered during the diagnostic assessment. Thus, the diagnostic team will supply names of local and regional donors as well as their addresses and phone numbers.

BIBLIOGRAPHY

The diagnostic team should include a bibliography of any support or reference materials they may have used during the course of the case study. This information will be useful not only to readers, but also for the cross-country comparison reports.

LIST OF ANNEXES FOR THE REPORT

Information contained in the report's annexes is vital, especially for cross-country comparisons. The diagnostic team should make every effort to complete all of the information requested to the best of its abilities. If information is not available or does not exist, chronicle writers are asked to identify the sources or leads that they tried to contact. Exhibit 4 on the following page summarizes essential information that should be included in the annexes of each report.

EXHIBIT 4

TABLE OF ANNEXES: RELEVANT INFORMATION TO INCLUDE IN THE REPORTS

No.	CATEGORY AND DESCRIPTION OF ANNEXES
1.	Geography: <ul style="list-style-type: none"> ● country maps (square kilometers, type of terrain, elevation and transportation networks).
2.	Transportation and Communication Network: <ul style="list-style-type: none"> ● major road network as mapped and measured (in other words, density as kilometer in length per square km and percentage of roads permanently paved); ● seaports and airports as mapped and display data on capacity and yearly cargo handled (most recent five years); ● telephone density as number of main lines/100 persons; ● number of copies of daily newspapers printed; and ● percentage of households with televisions and radios.
3.	Demographics (over last 10 years): <ul style="list-style-type: none"> ● total population of the country/year; ● annual growth rate of the population; ● percentage in rural areas (most current); ● population density/year; and ● population of each of the five major urban areas/year.
4.	Disposable Income and GDP (over last 10 years): <ul style="list-style-type: none"> ● per capita disposable income; ● gross domestic product (GDP); and ● average national mean per capita in 5 major urban centers.
5.	Consumption Patterns (over last 10 years): <ul style="list-style-type: none"> ● per capita consumption of rice; ● per capita consumption of vegetables (by type, if possible); ● per capita consumption of fruits (by type, if possible); and ● per capita consumption of meats.
6.	Domestic Fresh Fruit and Vegetable Production and Trends: <ul style="list-style-type: none"> ● total production and harvested area of fruits/year (most recent five years); ● total production and harvested area in vegetables/year (most recent five years); and ● national map highlighting the major production areas for fruits and vegetables.
7.	Regional Fresh Fruit and Vegetable Trade and Trends: <ul style="list-style-type: none"> ● total volume of imports of fresh fruits each year (by type and for most recent 10 years); ● total volume of imports of fresh vegetables each year (by type and for most recent 10 years); ● total volume of exports of fresh fruits each year (by type and or the most recent 10 years); ● total volume of exports of fresh vegetables each year (by type and for the most recent 10 years); and ● national map indicating the location of the major ports.

No.	CATEGORY AND DESCRIPTION OF ANNEXES
8.	<p>Overview of the Marketplace (yearly figures for the last three years):</p> <ul style="list-style-type: none"> ● Total volume of fruits traded (by types); ● Total volume of vegetables traded (by types); ● Percentage of traded fruits as imported (by types); ● Percentage of traded vegetables as imported (by types); and ● Schedule for: <ol style="list-style-type: none"> a) peak arrivals for domestic fruits versus imported fruits; b) peak arrivals for domestic vegetables versus imported vegetables; c) peak wholesale transactions; and d) other peak periods of trading activities.
9.	<p>Physical Structure:</p> <ul style="list-style-type: none"> ● Number, dimensions, and position of the buildings in the marketplace (include the chart and descriptions); ● Illustrate the sections in which trading of different commodities is located (illustrate on the floor plan chart); and ● Building materials (brick, reinforced concrete, etc.), number of levels, and the general condition of the buildings (attach a rough sketch of the structures).
10.	<p>Regulatory Operations:</p> <ul style="list-style-type: none"> ● Documented rules and regulations to which traders must adhere (please attach a copy).
11.	<p>List of Contacts:</p> <ul style="list-style-type: none"> ● Names, titles, dates, and locations of all key informants interviewed during the case study.

A-1

ANNEX A
QUESTION GUIDELINES FOR INTERVIEWS

There are many methods for conducting informal interviews with agricultural marketing participants, such as wholesalers, retailers, and transporters. Through extensive field experience with rapid marketing appraisals in Asia, the authors have developed a practical technique called PROBs Frame for arranging respondents' questions and answers. The technique is called PROBs because it allows analysts to probe into, link transactions and mentally arrange a large amount of information into meaningful subject groups for rapid interpretation and analysis. PROBs is especially useful when relating sellers' responses with those of the buyers of a particular commodity.

This section provides guidelines for asking questions to each type of marketing participant based on their business functions. The main sections for this PROBs Frame include (a) respondent identification, (b) competitors, (c) suppliers and procurement, (d) internal operations, (e) buyers and sales, and (f) problems of the respondent and the industry in general. Further information on this approach can be found in the *User's Manual on the Fundamental Analytics for Rapid Marketing Appraisals in the Philippines*, by Merle Menegay, Celeste Molina, Ratelieta Millindez, Rachel Quero, and Rosa Alberto, 1990.

The PROBs approach analyzes subsectors based mostly on primary rather than secondary information. Each respondent is viewed from at least two perspectives; vertically or horizontally. The vertical perspective refers to the respondent's interaction with his/her buyers (product demand) and his/her sellers (product supply). The horizontal perspective, on the other hand, refers to the individual's own internal business operations and that of all other similar businesses or competitors. The respondent is often secretive, and is not willing to discuss details about his/her own business. But, he/she is more willing to describe the situation of competitors. Thus, through cross comparisons, one can learn how respondents conduct business and their problems and prospects associated with agricultural marketing.

During discussions regarding these perspectives, diagnostic team members will receive an overwhelming amount of information that can be interpreted differently and may sometimes be contradictory. Since no survey questionnaire will be used, one needs a mental framework to arrange the information in order to achieve a quick, useful interpretation as well as cross-check for internal consistency. That is the rationale for applying the PROBs Frame.

At the beginning of this section, an orientation will be outlined for each likely type of respondent encountered during the urban wholesale marketplace assessment. At the end of the section, a basic set of questions posed within the PROBs Frame are provided. Each situation, type of respondent and individual analyst will determine the need to tailor the questions. Therefore, these questions are to be used as guides rather than as a "cookbook" for such analysis.

It is important to realize that respondents will help to identify commodity system constraints to expansion or improvement as well as opportunities for progressive change to urban wholesale marketplaces. Given the large amount of information collected, this key point must not be overlooked during an assessment. The following types of respondents should be contacted during the assessments:

Public Sector:

- Municipal Authorities
- City Planners
- Traffic Control Officials
- Managers of Public Markets
- Personnel of Price Information Agency

Private Sector;

- Importers**
- Exporters**
- Retailers/Wholesalers (old established firms)**
- Wholesaler/Distributors**
- Wholesaler/Assemblers**
- Supermarket Produce Staff**
- Wholesaler/Shipper or Transport Company**
- Managers of Farmers Associations**
- Processors, if relevant**

ILLUSTRATIVE QUESTIONS FOR PRIVATE SECTOR INTERVIEWS

Date: _____ Location: _____ Name: _____
Business Address: _____
Respondent Position: _____

A. Firm Identification: Measure this firm, farm group or trader group by:

- 1) Years in business or in operations (agency)
- 2) Name of commodities handled, processed, responsible for, etc.
- 3) General size and ownership of business (agency)
- 4) Other measure unique to this type of entity _____

B. Competitors: Determine number, size and change in this type of firm or business:

- 1) In this location, how many firms of this kind are there? How is size determined in this industry (number of employees, volume of raw materials procured, number/size of trucks operated, etc.)? How many of these firms are larger, smaller, and similar in size to the interviewed firm? Who are the main firms among them?
- 2) How many of these firms began operating within the past 3-5 years?
- 3) How many of these firms closed or went out-of-business within that 3-5 years?
- d) How do you usually compete with these firms, in other words, special products, additional services, better connections, or what? (Give examples and explanation)

C. Suppliers: Understand procurement patterns of this firm:

- a) In what months do you buy most of your commodity?
- b) How do you buy this commodity, in other words, find suppliers; pay in cash, barter, or credit; delivery or pick-up; agree on quality; determine price; etc.?
- c) Who do you buy from? For example, what type of suppliers, number of suppliers per type, and percentage of volume from each type? Name your three largest suppliers.
- d) What types of business relationship (by credit, advances, relative or family member, or what) do you have with different types of suppliers?
- e) What quality characteristics are most important to you when you buy?
- f) What type of supplier usually offers the best price and why?

g) How typical was this past season's procurement compared to the previous season? To the same season in the previous year?

h) Did you buy from any government institution, such as the Department of Agriculture,? If so, what was your experiences dealing with them?

D. Internal Operations: Describe this firm's business operations once it has its commodities.

a) What happens to the commodities from the time you buy them until you sell them (describe all functions performed); for example, from buying shelled corn to preparing to distribute corn grits?

b) What equipment, vehicles, major tools, containers, storage areas, etc. are needed for this type of business?

c) From whom and how do you obtain your working capital?

d) How normal was your past year of operations, describe any deviations?

e) Which months are the most and least busy?

f) What government agencies, institutions, etc. affect your business? How? (Tax, inspections, industry registration, cooperatives, etc.)

E. Buyers: Describe the sales practices of this firm.

a) What methods do you use to sell each major form of your commodities, in other words, find buyers, receive cash or credit, decide prices, etc.?

b) To whom did you sell most of your commodities/form, in other words, type of buyer and percentage sold to each type? What type of links (by credit, advances, family relationship, others) do you have with the different types?

c) How did the range of prices vary by type of buyer (why)?

d) How typical was this past season compared to previous seasons?

e) Do you sell to any government agency or institution? Explain your experiences.

F. Problems/Opportunities: Discuss problems/opportunities of this firm, then of the industry:

a) What kinds of major problems does this *type of business* usually encounter?

b) What type of problems sometimes occur regarding procurement, internal operations, sales or others? How would you rank these in terms of increased costs of doing business?

- c) If there are no problems worth mentioning, why is your business not expanding and what is inhibiting other entrepreneurs from entering the same business?
- d) What important changes do you anticipate in the near future for this type of business? What types of changes would you like to see?
- e) How can costs be reduced and/or increase prices for your commodities or services?

B-1

ANNEX B
REFERENCE MATERIALS

RAP has identified and assembled materials on the position, role, and conditions of wholesale market places and related topics. Studies, dissertation abstracts, reports, and case examples of marketplace development are available. Major technical areas include agricultural economics; produce marketing; urban development, as part of the services for urban households; and infrastructure, the construction of market places. The box at the right describes specific keywords used in the literature search to identify publications. Documents are arranged according to their title followed by the author's name. When ordering a document, please indicate the title, author, date, and the number listed on the left side of the page. For further information contact: Dr. Merle Menegay at the RAP Clearinghouse, 7250 Woodmont Avenue, Suite 200, Bethesda, Maryland, 20814, USA. The fax number is (301) 907-2655 and the internet address is rap@dai.com.

**Key Words Used in
Literature Search**

- ▶ market facilities
- ▶ wholesale markets
- ▶ wholesale facilities
- ▶ market places
- ▶ public markets
- ▶ urban infrastructure
- ▶ vegetable markets
- ▶ fruit markets
- ▶ fruit trade
- ▶ produce marketing

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