

AGRICULTURAL MARKETING IMPROVEMENT STRATEGIES PROJECT

Sponsored by the

U.S. Agency for International Development

**Assisting AID Missions and Developing Country Governments
to Improve Agricultural Marketing Systems**

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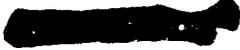
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OPERATIONAL GUIDELINES:

**RAPID APPRAISAL
OF AGRICULTURAL
MARKETING SYSTEMS**



OPERATIONAL GUIDELINES

FOR

RAPID APPRAISAL

PREPARED FOR:

**THE AGRICULTURAL MARKETING IMPROVEMENT
STRATEGIES PROJECT**

**S&T/RD Project 936-5447
Agency for International Development**

Prepared by:

**John Holtzman
Jerry Martin
Richard Abbott**

**Abt Associates, Inc.
4250 Connecticut Avenue, N.W., Suite 500
Washington, D.C. 20008**

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INTRODUCTION

This document has been prepared for the guidance of marketing specialists and their host country counterparts, who are conducting rapid appraisals of commodity marketing systems for the AMIS Project. It draws heavily on the work of Dr. John Holtzman, formerly of Michigan State University and now Senior Agricultural Economist at Abt Associates. Jerry Martin, AMIS Project Manager for Abt Associates, and Richard Abbott, Senior Market Analyst for the Postharvest Institute for Perishables, University of Idaho, a subcontractor on the AMIS Project, co-authored the report.

We are grateful for the assistance of the following individuals, each of whom reviewed a draft of the guidelines and contributed valuable substantive comments.

Dr. Paul L. Farris
Department of Agricultural Economics
Purdue University

Dr. Bruce W. Marion
Department of Agricultural Economics
University of Wisconsin

Dr. John C. Abbott
Consultant
(Formerly Chief, Marketing and Credit Service, FAO)

This is the second draft on the Operational Guidelines. Following field testing of the methodology in FY89, AMIS plans to publish a revised final draft. In the meantime, we welcome comments from those who have occasion to read or utilize the guidelines.

AMIS--AN OVERVIEW

The objective of the Agricultural Marketing Improvement Strategies Project (AMIS) is to improve the efficiency and effectiveness of agricultural marketing systems in less-developed countries. Core funding for AMIS is provided by AID's Office of Rural Development, Bureau of Science and Technology. The project addresses the complex issues related to producing, processing, storing, transporting and distributing agricultural commodities. The underlying rationale is that marketing is a key factor in increasing agricultural production, generating employment and the associated economic and financial benefits.

Through its technical assistance component, AMIS provides USAID Missions with the services of specialists in all aspects of agricultural marketing. The AMIS approach to marketing consists of three principal activities--Rapid Appraisals, Applied Research and Pilot Innovations. These three project activities follow each other in logical order (diagnosis, focused study, interventions) as the means to understand and improve critical aspects of a marketing system. Identification of those dynamic elements which move marketing systems to greater levels of specialization, efficiency and effectiveness, particularly the institutional, organizational and management components of marketing systems, is a major aim of the project.

AID has selected Abt Associates, Inc., a research firm specializing in economic analysis and policy research, to execute and manage this project. Abt Associates has two subcontractors: The Postharvest Institute for Perishables at the University of Idaho, a research and information center dedicated to improving postharvest handling and marketing of perishable crops and Deloitte Haskins & Sells, an accounting, management and development consulting firm with a unique capability in parastatal reform and liberalization of agricultural marketing organizations.

GLOSSARY OF ACRONYMS

RA - Rapid Appraisal

ADO - Agricultural Development Officer

AID - Agency for International Development

USAID - AID Overseas Missions

AMIS - Agricultural Marketing Improvement Strategies Project

CDSS - Country Development Strategy Statement

HC - Host Country

MOA - Ministry of Agriculture

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**FIRST PHASE:
PREPARATION**

STEP ONE: INITIAL VISIT

- Task 1 -- Determine Appropriateness of RA Approach
- Task 2 -- Determine Feasibility of Conducting an RA
- Task 3 -- Identity Critical Elements of the Marketing System

STEP TWO: RECRUIT RAPID APPRAISAL TEAM

STEP THREE: STUDY DESIGN

- Task 1 -- Statement of Objectives
- Task 2 -- Identify Performance Indicators
- Task 3 -- Select Key Areas of Investigation
- Task 4 -- Prepare Preliminary Study Outline
- Task 5 -- Collect and Review Relevant Market Studies

STEP ONE: INITIAL VISIT

This section describes the critical factors which determine the technical and operational feasibility of applying the Rapid Appraisal approach to the examination of an agricultural marketing system. It is designed to be used by a single market analyst during a preliminary visit to an AID mission interested in AMIS technical assistance.* The guidelines cover three steps:

1. Determination of the appropriateness of the RA approach given the needs of AID and host country officials;
2. Given the appropriateness of the RA approach, determination of the feasibility of conducting a Rapid Appraisal in that setting;
3. Given the determination of appropriateness and feasibility, and provided this RA has priority over other potential RA's, execution of the initial steps of the Rapid Appraisal.

As Chart 1 illustrates, these guidelines are a series of steps which constitute a logical sequence in the process of deciding whether to conduct a Rapid Appraisal, given a specific set of circumstances.

Task 1: Determine Appropriateness of the RA Approach

The first step is to determine if a Rapid Appraisal is a useful analytic approach given the problem or need to be addressed. Clearly, if the RA approach is not compatible with the purpose, scope, or subject of the problem, then no further effort is called for.** Making this determination will require simultaneously defining the research problem and relating it to the Rapid Appraisal approach.

* It is assumed a number of weeks or months will pass between this preliminary visit and commencement of the RA.

** The analyst, obviously, would advise AID and the government on more appropriate methods for addressing the problem.

Exhibit 1

Guidelines for the Application of
The Rapid Appraisal Approach

Step 1 -- Determination of the Appropriateness of the
Rapid Appraisal Approach

Characterize RA

- . Focus on commodity subsystem or segment of subsystem

- . Purpose is to diagnose constraints

- . Short-term, preliminary in nature

Characterize Marketing Problem

- . Is problem related to a commodity or set of commodities or segment of subsystem?

IF YES ---- IF NO

- ←----- . Redefine study
- ←----- . Conduct RA on subset of problem
- . Reject RA approach
- . Recommend alternate approaches

- . Is there a need to systematically appraise the subsystem?

IF YES ---- IF NO

- . Explore applied research possibilities
- . Reject RA approach
- . Recommend alternate approaches

- . Is study objective compatible with short-term approach?

IF YES ---- IF NO

- . Reject RA approach
- . Determine if long-term research is required
- . Determine if pilot innovation is possible
- . Recommend alternate approaches

. Limited geographic scope

. Can problem be adequately examined without national coverage?

IF YES

IF NO

- . Assess mitigating factors--size of country, ease of travel, etc.
- . Propose RA on a sample area
- . Reject RA approach
- . Recommend alternate approaches

. Leads to in-depth research and/or pilot-testing of innovations

. Is there AID and host government interest in pursuing findings of RA?

IF YES

IF NO

- . Determine, judge if interest might be kindled by RA
- . Reject RA approach
- . Recommend alternate approaches

GO to Step 2: Determine Feasibility

The analyst must assess the problem in terms of the five critical characteristics of Rapid Appraisal.

1. RA is narrowly focused on a commodity subsystem or some part of this subsystem.
 - Is the problem in question related to a particular commodity, a set of related commodities, or some segment (e.g., processing, wholesaling) of a commodity subsystem?
2. RA is designed to diagnose the critical marketing constraints in a commodity subsystem.
 - Are AID and the host country interested in a diagnostic approach to the problem; that is, is the problem already well defined or is there a need to systematically appraise the situation?
3. The RA approach is short-term (1-3 months) and preliminary in nature.
 - Does the problem require indepth data gathering and analysis? In other words, is this an applied research problem?
4. The RA usually covers a geographically restricted area and is rarely national in scope.
 - Can the problem be adequately examined without national surveys or countrywide travel?
5. The completed RA should lead to additional research on critical constraints and/or pilot-testing of innovations aimed at removing these constraints.
 - Is there interest on the part of AID and the host country to consider, at this time, a program of indepth study and intervention based on findings of this RA.

The role of the AMIS analyst should be one part education--this is what we mean by RA; one part detective--identification and definition of the problems; and one part diplomat--(how) can we define this problem to fit the RA approach and AID and host government needs at the same time? There are no hard and fast rules in this process, but it should be clear, for example, that if there is no felt need for a diagnostic approach, then it would be inappropriate to recommend and to conduct a Rapid Appraisal. If it is agreed among the analyst, AID, and host country officials that a RA is appropriate, then the analyst begins Step 2.

Task 2: Determine Feasibility of Conducting an RA

The problem at hand may be ideal for the RA approach, yet it may not be feasible to conduct the Appraisal for institutional, technical, or operational reasons. The analyst must satisfy him or herself that the conditions exist for the successful implementation of the Appraisal. Some of these conditions are imposed by the approach itself (RA's reliance on local researchers and institutions) and others result from external sources (e.g., political will or seasonality).

A. Ascertaining Level and Character of USAID Support

Conducting a successful RA requires a significant level of support from the AID Mission. The first stage in determining the feasibility of doing an RA is to review these requirements and the mission's resources.

- Cost--RA will be fully funded by the mission. Cost will vary depending on the problem, available data, and other factors. As a rule, these costs will range between \$50,000 and \$100,000.
- Involvement of Key Mission Personnel--The collaborative nature of the RA approach means that the ADO should be willing to spend time fostering contacts between the RA team and host country officials. The analyst should try to determine the likely level of involvement by the ADO and the quality of AID's contacts with the government.
- Compatibility with CDSS/Mission Strategy--RA will usually be the first part of a long-term relationship between AMIS and the Mission. It will be important for the analyst to assess the interests of people outside the Agriculture and Rural Development Office. Meetings with the Mission Director, Deputy Director, Program Officer, and others, should be arranged for this purpose.
- What are the overall USAID development goals?
- What is the agriculture and rural development strategy?
- How does marketing fit into these goals?
- What are other donors doing in these areas?
- How does AID perceive the government's policy toward agriculture and marketing?
- Where and how does AID's program fit into the government's program?

- What are reasonable expectations of host government support?

B. Ascertaining Level and Character of Host Country Support

The RA approach is built upon active cooperation and collaboration between the AMIS team and the host country public and private sectors. In particular, government support will be essential for the implementation of a useful RA. Among the issues which should be explored by the analyst and representatives of the government are:

- Government's perception of the problem (Step 1 addresses this issue, too);
- Government's understanding of the RA approach and what is expected in terms of local support;
- Likelihood of government commitment of resources; people, facilities, money, etc.;
- Government's assistance in securing access to people, data, and different regions of the country;
- Designation of an institutional base for RA collaboration: Marketing Division of MOA, some other government ministry, the national university, a private voluntary organization, etc.

C. Assessing Local Institutional Capacity to Support RA

A solid local institution is important for the RA because a great deal of preparatory work may be required before field work. It is also important because local researchers' knowledge of the socio-cultural and political context is critical to the design and conduct of rapid field work. Among the issues which the analyst must attempt to assess are:

- Appropriate institutional setting -- Public sector institutions such as the Ministry of Agriculture, a national research institute or a national university department convey official support and may have important links to policymakers. Private sector institutions such as voluntary organizations, religious organizations, and private consulting firms may provide less politically oriented research agendas, quicker mobilization of resources, etc.
- Capacity to carry out RA -- Capacity should be defined in terms of personnel, facilities, and resources.

- Primary importance must go to the availability of qualified personnel. Among the considerations are:
 - * Academic training
 - * Field research experience
 - * Knowledge of the agricultural sector, especially the commodity market in question.
 - * Demonstrated writing skills
 - * Local languages

Determining the availability of these individuals will be very difficult during a preliminary visit, so heavy reliance must be placed on the judgement of the ADO. The local institution should be able to provide copies of past work and the analyst can contact those who supported this work for evaluations of performance. The management and administration of the institution should be reviewed. Some pertinent factors are length of operation, source and stability of funding, and length of time the directors and other senior staff have been in office.

The types of facilities and resources at the institution's disposal can be important, though not critical. For example, presence of some or all of the following indicate stability and capacity, in addition to being of use to the RA team: personal computers, adequate office space, other supplies such as paper, typewriter and copy machines, vehicles in good operating condition, shortwave radio, reliable electric power, etc.

In the end, the analyst should have an idea which institution, if any, will be able to do the following:

1. Access relevant secondary data;
2. Provide two or three qualified researchers for the duration of the RA;
3. Provide logistical support in the field;
4. Provide office facilities, if necessary;
5. Be credible in the eyes of the government and AID;
6. Provide additional support staff, such as enumerators, interviewers, drivers, etc.

It is desirable to conduct a training session in Rapid Appraisal methodology for counterpart personnel during the initial visit. Not only does this assure the availability of trained people for the RA but data collection can also begin before the analysts return for the RA.

D. Availability and Quality of Secondary Data

The length (and cost) of an RA can be significantly reduced and the validity of its findings significantly increased if the team has a foundation of reliable, well-targeted secondary data. During this preliminary visit the analyst's goal should be to learn the following things:

- . Quality of government statistics--a composite based on opinions of AID, other donors, government officials, etc.;
- . Other sources of data--AID reports, other donors and organizations;
- . Accessibility of other data by the RA team;
- . Types of data available--Price, production, imports, exports.

E. Seasonality and RA Implementation

Since RA is conducted only once, it is important to time the RA to coincide with the most informative segment of the crop production and marketing cycle. Timing of the RA will depend on the need to observe particular marketing functions and processes. The perceived food system constraints and opportunities (i.e., the preliminary problem as defined by the host government, AID, and the analyst) will indicate the best timing for the RA. Some examples follow:

- A perceived storage problem would suggest a RA during periods of storage and sales from storage.
- RA could be carried out immediately after harvest to examine impact of a marketing parastatal on sales, or effect of deficiencies in market information or in grade and quality standards.
- An input marketing problem would indicate an RA just before and during the planting season.

Once having determined the appropriate timing for the RA the analyst must verify the feasibility of conducting the RA with the other principals involved. Any number of factors may come into play: a scheduled national election may preclude field work, the RA may coincide with the end of tour for the key AID officer, a religious period such as Ramadan may occur, or the simple fact that the appropriate time is only weeks away so that a 12-month wait is judged best.

The analyst who follows this course to determine the feasibility of RA will, of course, be ultimately relying on his or her professional judgement. In some cases each of these points may be considered critical; in others, some will be judged to be desirable but not essential. However, it is hard to imagine a case where either AID or host country support is judged to be inadequate and yet an RA is recommended and attempted.

Task 3: Identify Critical Elements of the Marketing System

Having determined that a Rapid Appraisal is both appropriate and feasible in the country setting, the analyst should lay the groundwork for the appraisal by identifying those elements or aspects of the marketing system which appear on initial inspection to most strongly influence performance. In the course of conversations with USAID and HC officials under Tasks 1 and 2 above, the analyst will usually acquire a broad understanding of the situation and be able to isolate key factors. This information is important for proper design of the study in Step 3.

The trip report prepared by the analyst should include a section dealing with these issues, organized somewhat as follows:

Objective: What does the Mission want to achieve with the RA? How will it be used? Is there a secondary purpose?

Impetus: Who in the mission is the main proponent of the study? Are there differing views within the mission about the purpose or value of the study? Who in the host government supports the work?

Previous work: What prior studies have been done on the situation? How does the mission view this work? Opinions of HC officials?

Problems/Constraints: What do informants say about factors which constrain performance of the marketing system? Are there differing views as between the mission and HC government officials? What were conclusions of other analysts in prior studies, and do informants generally agree with them?

Dynamic Factors: What are the changes, if any, which are occurring in the system, and what external or internal factors are causing these changes? Since when have such changes been taking place? What is different from when prior studies were carried out? What do informants say about the future?

STEP TWO: RECRUIT THE RAPID APPRAISAL TEAM

Upon completion of the initial country visit in Step 1, and assuming the decision to do a Rapid Appraisal is positive, the next step is to recruit the team.

The mix of expertise required will be dictated by the particular objectives and thrust of the RA as formulated in Step 1. Typically, it will consist of two to four persons.

If the objectives of Rapid Appraisal are limited, multidisciplinary teams are not usually necessary. The quality of most RA surveys will usually improve, however, if researchers with complementary disciplinary skills participate. These teams may include an economist or agricultural economist, an agri-business management specialist, an economic anthropologist, a postharvest technician, a transport economist, institutional analyst, or commodity specialist. It is important that an analyst with a general background in agricultural marketing (typically an agricultural economist) lead the team, and edit and complete the final report to provide an integrated picture.

STEP THREE: PRELIMINARY STUDY DESIGN

Preliminary design of the Rapid Appraisal will normally be done by members of the study team prior to departure from the U.S., based on information collected in an initial on-site visit. The study design developed at this early stage is only preliminary, because it will normally evolve in an iterative fashion during the course of the field work. As the work proceeds and the investigators learn more about the system, they will tend to focus on those factors which most influence change.

An overriding consideration in study design is a concentration of effort on those aspects of marketing systems which afford the opportunity to pursue further research and to test innovations and interventions -- a principal thrust of the AMIS Project.

Task 1: Statement of Objectives

Before beginning to design the study, a clear statement of objectives should be set down. Information and discussions from the initial on-site visit will be the basis for this formulation, which will then be reflected in the study design.

A Rapid Appraisal is most appropriate when AID and the host government are engaged in a discovery process regarding an agricultural commodity marketing system. The need would be to learn about, or confirm ideas about, how the marketing system is functioning. From this perspective, RA may be appropriate for studies whose objectives are among the following:

- Design of an agricultural marketing project;
- Measuring or evaluating the initial impact of a policy reform
- Evaluation of effects of a marketing project;
- Diagnosis of system constraints as the basis for long-term research or a pilot innovation.

Task 2: Determine Study Focus

The Rapid Appraisal methodology calls for a highly focused study which emphasizes the dynamic rather than the static elements of a marketing system. An AMIS Rapid Appraisal is designed to be carried out within strict time and cost limitations; it does not pretend to be an exhaustive analysis of all aspects of the system. Nor is this necessary in most instances, since AMIS will typically be involved where the study sponsors are seeking to introduce improvements rather than measure performance of the system at any given moment. The aim is rather to know how the system is responding to change and how to bring about desired changes.

Operationally, the study will move through four phases:

1. Achieving an understanding of the way the marketing system is organized and how it functions.
2. Selecting the factors which influence performance (system dynamics).
3. Focusing the investigation on these influential factors.
4. Making appropriate recommendations.

It is therefore important to identify as early as possible the key factors influencing system performance. The key factor could be a system constraint, such as an export tax which renders a product non-competitive in external markets, or the lack of an adequate market information system to inform farmers and traders of current prices prevailing in the principal markets. A discussion of typical constraints encountered in marketing systems is included as Appendix A to the guidelines.

Or the key factor might be an underlying cause -- what may be called a driving force in the economy which has an indirect but important effect on the marketing system. Examples would include increased urbanization and accompanying changes in consumption patterns, or the introduction of new technology in the handling or processing of a commodity. Additional examples of driving forces which investigators should be aware of is contained in Appendix B.

While an AMIS Rapid Appraisal does not attempt to quantify every aspect of performance of a commodity market, investigators will need to draw conclusions about the dynamics of system performance based on their knowledge of constraints and driving forces. A discussion of both static and dynamic performance indicators appears in Appendix C.

The initial site visit is the time to make a first determination of study focus. It will usually be possible to identify the key factors influencing performance through discussions with USAID and host government officials and to establish the Rapid Appraisal focus. At this point it will have the status of a working hypothesis, and will be subject to change as the study progresses.

Task 3: Select Key Areas of Investigation

This early determination of study focus will lead naturally to a selection of areas of investigation in the field work. These in turn will be reflected in a study outline to be prepared before the study team leaves the U.S. (Task 4).

The attached matrix (Exhibit 2) lays out ten broad areas of investigation for Rapid Appraisals, lists components of each area, notes methods of inquiry for obtaining necessary information, and outlines the reasons for investigating each of the areas. Investigators will need to select those areas which contribute relevant information in the light of the study focus. An exhaustive study of all of the areas listed will not be possible, nor is sufficient information likely to be available to do so in most cases.

In carrying out Rapid Appraisals under time and resource constraints, investigators are generally recommended to estimate orders of magnitude rather than attempt to obtain precise estimates of marketing variables. The benefits of increasing precision will likely not be justified by the high opportunity costs of gaining such precision. Investigators need to ask themselves continually whether it is worth the time and effort to gather particular types of data.

KEY AREAS OF INVESTIGATION IN RAPID APPRAISALS
Exhibit 2: Key Areas

AREAS OF INVESTIGATION	COMPONENTS	METHOD OF INQUIRY	REASONS FOR INVESTIGATING
1. Commodity Characteristics	<ul style="list-style-type: none"> a) Different grades, end uses. b) Degree of bulkiness, perishability c) Physical handling requirements. d) Degree/type of processing. e) Types and magnitude of post-harvest losses. 	<ul style="list-style-type: none"> 1) Review commodity manuals, studies. 2) Develop commodity calendars showing periods of production and transformation. 3) Observation of handling, processing and storage. 4) Assess nature and degree of post-harvest losses in a rough way. 	<ul style="list-style-type: none"> a) Commodity characteristics can influence operation of subsystem, which functions are performed, how they are performed, and relative cost at which performed. b) Nature of production process influences timing and magnitude of producer sales and marketed flows. c) Post-harvest losses are high in many countries. Identification of causes and means of reducing losses can expand food availability.
Production Analysis	<ul style="list-style-type: none"> a) Seasonal and secular trends in domestic and export markets. b) Disaggregated consumption patterns by socio-economic and ethnic group. c) Future market prospects. 	<ul style="list-style-type: none"> 1) Review consumption studies, food balance sheets, and demand projections. 2) Construct food balance sheets if data available. 3) Interview nutrition/consumption researchers, selected commodity importers and exporters and institutional buyers, and selected rural and urban consumers. 	<ul style="list-style-type: none"> a) Demand drives (or pulls commodities through) subsystems. b) Strength and seasonality of demand affect production and storage incentives, as well as direction and magnitude of marketed flows. Longer run trends and opportunities affect investment decisions of participants in subsystem
Demand Analysis	<ul style="list-style-type: none"> a) Production by year and by region for recent years, noting trends and variability. b) Stocks for transformation and consumption by season and region. c) Flows from major supply areas to major markets, including imports and exports. 	<ul style="list-style-type: none"> 1) Review commodity studies. 2) Interview large wholesalers, parastatal managers, crop production researchers, importers, exporters, processors, cooperative and trade association officials. 3) Use map to show flows and apparent surplus and deficiencies. 4) Describe seasonal variation in stocks and flows. 	<ul style="list-style-type: none"> a) Supply and demand are basic elements of economic analysis. b) Production levels and variability affect prices (depending on elasticities), returns via price mechanism, and risk perceptions of producers. c) Level of stocks during different periods affects seasonal variation in prices and commodity availability. d) Shifts in supply over time may indicate response to policies, technological change, institutional environment and alternative institutional arrangements.
Price Relationships and Seasonality	<ul style="list-style-type: none"> a) Secular trends in real prices at the farmgate, wholesale and retail levels. b) Seasonal and cyclical trends in prices. c) Changes over time in relative price relationships. d) Changes over time in input/output price relationships. 	<ul style="list-style-type: none"> 1) Gather secondary price data for commodity and close substitutes/complements for ten or more year period. 2) Deflate prices or express in constant price terms. 3) Analyze secular, cyclical and seasonal price trends, and changes in relative price relationships. 4) Estimate supply and demand relationships if data permit. 5) Calculate input/product price ratios. 	<ul style="list-style-type: none"> a) Prices are a measure of incentives facing food system participants. b) Changing relative price relationships may indicate shifts in production and marketing incentives, especially if coupled with accurate cost of production data. c) Pricing structure provides insight into regional and national comparative advantage. d) Input/product price ratios are a proxy for profitability of agricultural production.
Marketing System Organization	<ul style="list-style-type: none"> a) Marketing channels and commodity subsector stages. b) Important assembly, redistribution and terminal markets. c) Types, numbers and geographic distribution of firms at key subsector stages. d) Prevalence and importance of alternative institutional arrangements, such as contracts, vertical integration, direct marketing, and cooperatives, to spot markets. 	<ul style="list-style-type: none"> 1) Review previous commodity studies. 2) Check if existing enumerations or sample frames in government agencies (e.g., licensing offices). 3) Interview knowledgeable observers of subsectors and selected participants. 4) Draw subsector map (flow chart) showing principal stages and marketing channels. 5) Use map to show important marketplaces. 6) Identify firms using alternative coordination mechanisms. 	<ul style="list-style-type: none"> a) Food system organization (or structure) influences conduct of participants, which in turn affects performance. b) High levels of concentration of firms at particular stages of food system may lead to higher production/marketing costs than under conditions of lower concentration. c) Prevalence of myriad small firms who fail to specialize at one or more levels of food system may lead to scale diseconomies and high costs. d) Analysts need to examine the benefits and costs of alternative institutional arrangements as the food system evolves.

Exhibit 2 (cont'd)

AREAS OF INVESTIGATION	COMPONENTS	METHOD OF INQUIRY	REASONS FOR INVESTIGATING
Marketing System Performance	<ul style="list-style-type: none"> a) Practices and strategies of subsystem participants (individuals, firms, organizations for procuring inputs, productive transformation, storage and marketing of outputs). b) Vertical coordination mechanisms: exchange arrangements, risk-reduction/sharing, information dissemination. c) Sources, uses and distribution (equity) of production and marketing information. d) Adaptability and responsiveness of subsystem to shifting supply/demand, exogenous shocks, policy changes and uncertainty. e) Evidence of market power. 	<ul style="list-style-type: none"> 1) Identify key stages and participants. 2) Develop informal interview guidelines. 3) Sample purposively based upon knowledge of universe from previous records or studies, or from above characterization of subsystem (#5). 4) Conduct selected in-depth informal interviews. 5) Crosscheck findings with other subsystem participants and knowledgeable observers. 	<ul style="list-style-type: none"> a) Operation and behavior in the aggregate affect food system performance. b) Information is costly to gather and process, and access is unequal. This affects ability of different size firms to respond to changing market conditions. c) Adaptability and responsiveness of commodity subsystems to changing conditions and uncertainty affect levels of output and performance, as well as continued viability of subsystem in a particular country.
Marketing System Infrastructure	<ul style="list-style-type: none"> a) Physical infrastructure (transport, marketplaces, storage and processing facilities, communications). b) Adequacy and bottlenecks. 	<ul style="list-style-type: none"> 1) Review studies of transportation and communication infrastructure, storage/processing capacity and utilization, and marketplaces. 2) Inspect and assess adequacy of sample of above. 3) Use map to show key infrastructure. 4) Identify bottlenecks. 	<ul style="list-style-type: none"> a) In some developing countries infrastructural constraints constitute severe bottlenecks to slow food system development and penalize isolated areas and regions.
Government Regulatory and Support Institutions and Policies	<ul style="list-style-type: none"> a) Regulatory environment: rules; input and product regulations; laws affecting marketing and trading activities; property rights. b) Public marketing institutions (parastatals, cooperatives, joint ventures): extent and nature of participation in marketing; effect on behavior and performance of private participants in food system. c) Macroeconomic policies: price policies; exchange, interest, wage rate policies; fiscal and monetary policies. d) Banking and credit policies. 	<ul style="list-style-type: none"> 1) Regulations: use informal interviews with sub-sector participants to identify vexing or constraining regulations. Followup interviews with selected policy-makers. 2) Institutions: interview managers, determine mandate, outline functions, estimate market share, examine pricing policies, assess effectiveness of marketing services, assess impact of participation on system. 3) Policies: review macroeconomic assessments of World Bank, IMF or others. 4) Interview bank and credit agency officers. 	<ul style="list-style-type: none"> a) The regulatory environment and particular regulations affect the behavior and incentives of food system participants. b) Public marketing institutions dominate food systems in some countries, influence the organization, operation and performance of food systems in all countries, and generally affect behavior of system participants. c) Macroeconomic policies condition and shape the environment in which system participants make decisions about investments and operations. d) All of the above contribute to food system stability and/or uncertainty, which greatly influence behavior. e) Banking and credit policies determine who gets access to formal credit, which is often subsidized.
International Trade	<ul style="list-style-type: none"> a) Commodity exports and world market situation. b) Imports of commodity or substitutes and impact on domestic production, markets and prices. c) Trends in exports and imports. d) Likely changes in exports and imports, and emerging market opportunities or dependencies. 	<ul style="list-style-type: none"> 1) Analyze trade quantity and price data available in statistical abstracts or outside assessments. 2) Review commodity production, price and trade forecasts. 	<ul style="list-style-type: none"> a) Few, if any developing country food systems are autarkic. International trade in agricultural commodities affects production and marketing incentives, consumption patterns and preferences, and the behavior and opportunities of system participants. b) International market conditions influence developing countries' comparative advantage in production and export (import) of agricultural commodities.
Representativeness of Period Under Study	<ul style="list-style-type: none"> a) Timing of RA relative to annual production/marketing cycle. b) Agricultural and economic characteristics of year of RA relative to earlier years or climatic cycles. 	<ul style="list-style-type: none"> 1) Compare rainfall data and production estimates with earlier years. 2) Compare economic data: GDP, balance of payments, inflation rates, trade patterns. 3) Assess political factors: change of government, policy changes. 	<ul style="list-style-type: none"> a) The period of observation may be unusual with respect to climate, agricultural production, economic and political conditions, and effects of recent changes. b) Food system development is an ongoing process. Historical perspective of long run patterns of

Task 4: Prepare Preliminary Study Outline

A preliminary outline of the written report should be developed before field work begins. As field work proceeds, modifications can be made and details filled in. Drafting of the final report should start while work is underway. Sections dealing with secondary information, for example, can be drafted early on. Writing as one proceeds is a good disciplining process. It helps to clarify analysis and understanding, it helps to identify needed mid-course corrections, and it eases the preparation of the final report. It will be much easier to revise and edit a report that has been in process than to start from a preliminary outline after most of the empirical work has been done.

When preparing the final report, separate papers along disciplinary lines are discouraged. It is the responsibility of the team leader to integrate different disciplinary findings into a summary report. A concise (less than 10 page) summary which discusses key findings and marketing system problems should always be prepared, leaving the more detailed reports of subject matter to the body of the report or to the annexes. A generalized format for the report follows in Exhibit 3.

Exhibit 3

RAPID APPRAISAL REPORT FORMAT

SUMMARY OF FINDINGS

PART I. INTRODUCTION: THE RAPID APPRAISAL

- 1.1 Background
- 1.2 Rapid Appraisal Objectives
- 1.3 Study Focus
- 1.4 Rapid Appraisal Methodology
- 1.5 Study Limitations

PART II. OVERVIEW OF COMMODITY SYSTEM

- 2.1 Commodity Characteristics
- 2.2 Production Analysis
- 2.3 Demand Analysis
- 2.4 Price Relationship
- 2.5 System Organization
- 2.6 System Performance
- 2.7 System Infrastructure
- 2.8 Government Regulatory and Support
Institutions and Policies
- 2.9 International Trade

PART III. SYSTEM DYNAMICS

- 3.1 Key Factors Influencing Performance
(System Constraints, Driving Forces)
- 3.2 Conclusions on System Performance

PART IV. RECOMMENDATIONS

- 4.1 Proposed Changes to System and Expected Effects on
System Performance
- 4.2 Implications for Government Policy
- 4.3 Further Work and Additional Resources Needed

Task 5: Collect and Review Relevant Market Studies

Before beginning field work a literature search should be conducted to turn up any studies with relevance to agricultural marketing in the country under study. Principal resources will be the AID library, as well as those at the World Bank, Interamerican Bank, FAO, USDA/ERS and National Agricultural Library. Others include studies by private consultants, and dissertations or papers by advanced students at national and overseas universities.

If export crops are to be studied, it will be useful to obtain recent world trade information on the commodity under study, as well as general export trade information for the country, before departure.

**SECOND PHASE:
INFORMATION GATHERING (IN COUNTRY)**

STEP FOUR: INITIAL PLANNING

- Task 1 -- Team Preparation Meetings
- Task 2 -- Project Planning Meeting

STEP FIVE: MOBILIZATION FOR FIELD WORK

- Task 1 -- Select Key Informants
- Task 2 -- Develop Research Itinerary
- Task 3 -- Train Host Country Counterparts

STEP SIX: COLLECT AND REVIEW SECONDARY DATA

STEP SEVEN: FIELD SURVEY

- Task 1 -- Interviews
- Task 2 -- Periodic Team Meetings

STEP EIGHT: FIRST DRAFT PREPARATION

STEP FOUR: INITIAL PLANNING

Task 1: Team Preparation Meetings

During the first few days in country, the team will need to define RA objectives, review available studies and secondary data, identify data gaps and needs, develop information gathering strategies, and define clearly the objectives of the RA and the roles of each of the team members in the survey. Study sponsors in the AID Mission and host government should be consulted. It is often useful to do a preliminary outline of the RA report (see Step 3). This helps the team to focus on information needs and priority topics.

Preferably local counterpart personnel will have been already selected during the initial visit and introduced to RA methodology so that no time is lost in mobilizing the team. These persons should be involved in planning from the beginning.

After the discussion of the methodology and review of the literature and secondary data, team members should be encouraged to jot down their hypotheses about the food system components under examination, identifying key factors which affect performance. Developing hypotheses about the organization and operation of the system will help to focus data gathering efforts. It will also hopefully make the researchers more conscious of possible sources of bias in their forthcoming information gathering. As a result, they must plan to offset these biases and preconceptions consciously in their research.

Task 2: Project Meeting

This larger meeting will bring together involved USAID officers and representatives of host government agencies--the "sponsors" of the study.

Items on the agenda would include:

A. Review of study objectives

- Comments are sought with the purpose of getting general agreements on objectives

B. Identify information sources

-- Government agencies, names of individuals

-- Private sector sources

C. Assignment of counterpart personnel from appropriate government agency (if not already done)

D. Selection of government agency or private firm to provide logistic support, i.e., enumerators (if applicable), transport, office space, etc.

STEP FIVE: MOBILIZATION FOR FIELD WORK

Task 1: Select Key Informants

There are two sets of key informants: subsector participants and knowledgeable observers of subsectors.

Subsector participants are linked forward and backward to other participants in the production-distribution system. Some participants, particularly wholesalers and processors, have a systems perspective about the interrelationships among the parts of the system and resulting system performance. They are able to identify both system-wide problems and potentials as well as stage-specific constraints. Other participants have long years of experience in the commodity subsector and in-depth knowledge of particular problems. They often have parochial views and attitudes and may not be able to identify system-wide problems. Their perceptions of stage-specific marketing problems are important, however, and need to be tapped by RA researchers.

Exhibit 4 lists key informants who can be interviewed during RA surveys. The advantages and disadvantages of each type of informant are noted. The types of informants who will be interviewed during a Rapid Appraisal will depend on the objectives and focus of the study. It is clearly not necessary to contact all the types of informants listed in Exhibit 4. Moreover, other researchers will doubtless be able to add to the list.

Sampling of disadvantaged and less vocal groups, such as landless laborers or nutritionally vulnerable consumers, as well as systematic contracting of women or their associations, may be necessary to offset common biases of many Rapid Appraisers. It is noteworthy that women play an important role in staple food crop production, processing and retailing in many developing countries, particularly in Africa. While agricultural production and marketing interventions affect female participants in the food system and may exclude women from gaining access to certain resources, some analysts have failed to anticipate these impacts. Given recent interest in disaggregated welfare effects of food policies, most analysts will probably devote some attention to examining consumption patterns of disadvantaged groups in food systems.

KEY INFORMANTS IN FOOD SYSTEM RESEARCH

KEY INFORMANT	ADVANTAGES AS INFORMANTS	DISADVANTAGES AS INFORMANTS
Wholesalers	<ul style="list-style-type: none"> a) Located at system node which offers vantage point and system perspective. b) Knowledge of production, stocks, flows, prices and strength of demand in different rural and urban areas. 	<ul style="list-style-type: none"> a) Extremely busy and often difficult to interview for more than a short period. b) Given typical hostility of government, they may be uncooperative informants.
First Handlers	<ul style="list-style-type: none"> a) Detailed knowledge of exchange arrangements with producers and wholesalers. b) Knowledge of market opportunities, production stocks, and prices in particular rural areas. 	<ul style="list-style-type: none"> a) Knowledge rarely extends outside circumscribed rural areas. b) May have parochial perceptions and attitudes.
Managers of Processing Firms	<ul style="list-style-type: none"> a) Located at system node which offers vantage point and system perspective. b) Knowledge of production and prices in selected rural areas, and demand for processed products in urban markets. c) Detailed knowledge of exchange arrangements and risk-sharing mechanisms with producers or producer groups and buyers of processed commodities. 	<ul style="list-style-type: none"> a) Given typical hostility of government, firms may be uncooperative informants. b) May be unwilling to divulge details of exchange arrangements with producers. c) Will often underreport throughput in order to evade taxation.
Transporters	<ul style="list-style-type: none"> a) Knowledge of direction and magnitude of commodity flows. b) Familiar with structure of commodity trade. Can often identify large volume traders. 	<ul style="list-style-type: none"> a) Do not actually participate in trade, so lack knowledge of trading practices, prices and strategies.
Importers/Exporters	<ul style="list-style-type: none"> a) Knowledge of magnitude, timing and prices of imports and exports. b) Detailed knowledge of import/export practices, procedures and regulations. 	<ul style="list-style-type: none"> a) May know little about how commodities are assembled for export, or how they are distributed after importation. b) Since smuggling and underinvoicing are common practices in many countries, they may be unwilling to report volumes or prices. c) If rights to import/export are obtained through privileged access or rentsharing they may be unwilling to discuss business practices.
Representatives of Cooperatives, Trade Associations	<ul style="list-style-type: none"> a) Knowledge of numbers and sizes of member firms, and their output. b) May effectively represent membership and perceptions of constraints, opportunities. 	<ul style="list-style-type: none"> a) If representatives are appointed by government, they may not effectively represent membership. b) Membership may be restricted to larger firms and producers.
Bank Loan Officers	<ul style="list-style-type: none"> a) May possess information about the operations, throughput and returns of larger wholesalers, processors and retailers. b) Access to information about composition of commercial bank loan portfolios. 	<ul style="list-style-type: none"> a) May not possess systems perspective. May make judgements on basis of narrow rate of return criteria. b) May be unwilling to divulge confidential information about borrowers' operations.
Institutional and Private Sector (Large Supermarket) Buyers	<ul style="list-style-type: none"> a) Often major buyers of high value commodities, such as fruits and vegetables, livestock products. b) May have negotiated contractual arrangements with large volume wholesalers, processors or importers. 	<ul style="list-style-type: none"> a) As buyers of final products, may have limited knowledge of system organization and operation. b) Usually constitute small proportion of final demand for staple commodities.

KEY INFORMANTS IN FOOD SYSTEM RESEARCH

KEY INFORMANT	ADVANTAGES AS INFORMANTS	DISADVANTAGES AS INFORMANTS
Missionaries, PVOs	<ul style="list-style-type: none"> a) Well-placed to describe difficult to observe phenomena and report on phenomena others unwilling to discuss. b) Sometimes provide extension, input supply and marketing services to rural clients. 	<ul style="list-style-type: none"> a) Usually have separate agendas that lead to parochial perceptions and attitudes. b) May regard donor agencies or government as adversaries. c) May not participate directly in commodity subsystems.
Extension Agents	<ul style="list-style-type: none"> a) May have detailed knowledge of farmers' production and marketing practices and strategies, producer-first handler exchange arrangements, and the structure of the first handler stage. b) Knowledge of size distribution of farms, alternative technology utilization and range of marketed surplus, and food security situation of local farms. 	<ul style="list-style-type: none"> a) Agents often not natives of area. b) May have few funds and no transport for extension visits. c) Low pay and difficult working conditions may induce poor performance. d) May be biased source of information regarding farmer production practices and technology utilization.
Managers of Parastatal Agencies	<ul style="list-style-type: none"> a) Parastatals may buy a large proportion of marketed surplus and manage reserve stocks. b) Parastatals are often major importers and exporters of commodities and inputs. c) Parastatals are often important distributors of inputs. 	<ul style="list-style-type: none"> a) If possess legal monopoly powers, may know little of private competitors' operations and oppose them categorically. b) If parastatal under attack, it may be very defensive and try to justify/rationalize parastatal functions and role.
Agricultural Producers	<ul style="list-style-type: none"> a) Knowledge of sources of input supply, production practices and strategies, alternative technologies, prices, and marketed surplus in own area. b) May be able to identify largest and most productive farmers, as well as least successful farms with precarious food security situations. c) Detailed knowledge of local marketing opportunities and outlets. d) Able to identify constraints to increased production, marketed output, and input use. 	<ul style="list-style-type: none"> a) Primarily subsistence farmers may know little of current prices and market opportunities. b) Some producers may have parochial perspective and malign traders. c) Few producers have systems perspective and knowledge of functions at other stages of the food system.
Urban Consumers	<ul style="list-style-type: none"> a) Can discuss current and seasonal consumption practices and preferences. b) Able to discuss pros and cons of alternative retail food outlets. c) Able to report consumption basket and food prices. 	<ul style="list-style-type: none"> a) Individual consumers cannot speak for full range of consumer groups. b) Care must be taken to identify and interview nutritionally vulnerable groups.
Retailers	<ul style="list-style-type: none"> a) Possess better knowledge of consumer wants and needs than other market system participants. b) Knowledge of wholesaler-retailer exchange arrangements. 	<ul style="list-style-type: none"> a) Small volume retailers in many countries are relatively homogeneous, parochial, unprogressive and lack systems perspective.
University or Agricultural Researchers	<ul style="list-style-type: none"> a) Detailed knowledge of literature and secondary data sources and reliability. b) May possess analytical framework that leads to better understanding of system and its constraints/opportunities. 	<ul style="list-style-type: none"> a) May have narrow disciplinary perspective and perceptions. b) May lack detailed knowledge of business objectives, practices and problems of participants at different stages of the system.

Task 2: Develop Research Itinerary and Interview Guidelines

Researchers will rarely have the luxury of developing formal questionnaires (which are pre-tested, translated and back-translated, etc.) for each type of participant interviewed. Nevertheless, it is useful to develop interview strategies and topic guidelines for different groups of participants, including specific questions, desirable sequences of questions, and types or ranges of questions for initial and follow-up interviews. Some examples are included in Appendix F.

Before actually beginning the RA field work, it is useful to develop a research itinerary and activity lists. These lists should note tentative research plans for each day, including towns, agricultural processing plants, rural markets, and producing areas to be visited and government officials, types of marketing agents, and producers to be interviewed. If researchers plan to visit rural periodic markets, it is advisable to find out beforehand which days or how often particular markets are held. It is also useful to plan around government holidays, communal work days, religious festivals, days of worship and rest, or particular times of the day when potential informants are praying, working or otherwise engaged. An activity list is a useful tool in focusing data gathering on critical and necessary activities. It enforces discipline in planning research logistics. When travel and protocol requirements are taken into account, there are often strict limits on the number of places that can be visited and the number of informants interviewed. However, the researchers do not need to be slaves to an activity list, and it is wise not to overload it. Unanticipated opportunities to observe marketing processes or interview system participants may arise which can justify deviation from a fixed itinerary. It is advisable to allow time for improvisation, possible repeat visits or interviews, and other contingencies.

Task 3: Train Host Country Counterparts

It is expected that counterpart personnel from the Ministry of Agriculture or other agency will be assigned to the team during the mobilization phase. As noted under Step One, Task 2C, it is desirable to conduct a training session on RA methodology during the initial site visit. If this is not possible, it should be done during this mobilization phase.

Time will not permit in-depth training -- it is unlikely that more than a half-day will be available. These Rapid Appraisal guidelines may be used as a training tool by asking the counterparts to read them ahead of time, then conducting a task-by-task discussion. It is useful to have available copies of previously-completed Rapid Appraisals as models. Another helpful activity is practicing interview techniques (role playing). Once the field survey work has begun, counterparts may be further trained by having them sit in on interviews conducted by senior team members, and conducting trial interviews under the supervision of senior staff who later critique the interview.

Finally, interview guidelines or questionnaires prepared for the upcoming field work (Task 2 above) can be tested and reviewed with the counterpart trainees, both as a training exercise and a check on suitability for the particular cultural environment.

The AMIS Project is developing a set of Rapid Appraisal training materials which will be suitable for more in-depth training of local nationals at various educational levels. Training of this type may be offered through USAID Missions in conjunction with other AMIS appraisal and research activities.

STEP SIX: COLLECT AND REVIEW SECONDARY DATA

Although it may seem obvious to many that a logical place to begin research is by reviewing earlier work, there are many cases where this is not done, or not done very systematically. There is often a wealth of useful information and data in scholarly studies (including student theses), annual reports of governments agencies or parastatals, Ministry of Agriculture data banks, records of cooperatives and private firms, project documents, trade and professional journals, and consulting reports. Although many researchers like to think that earlier studies are inadequate or unfocused for their particular purposes, this work often contains useful information and insights.

Not every team member has to review every document or data set, so division of labor along disciplinary or subdisciplinary lines is usually appropriate. Each team member should summarize the principal findings from the literature and preliminary analysis of available data for other team members. During the first week of the RA, team members can make oral presentations, or draft a series of annotations or memoranda. In preparing important data for others, team members may wish to tabulate secondary data so that it is readily accessible and usable. Critically important papers that every team member should read before beginning the RA surveys need to be identified. The objective of this review is not to burden team members with busy work and supplementary writing assignments. Rather, it is intended to prepare all team members for the RA field work in as rapid and systematic a way as possible.

Types of secondary data that are usually readily accessible include:

1. Wholesale and retail prices for agricultural commodities, usually collected in capital cities and other major urban areas. Farmgate prices are often not collected or may only be official producer prices.
2. Price indices, usually consumer price indices, constructed for a basket of commodities purchased by urban consumers in large cities. Serious attention needs to be paid to how representative the basket of commodities and the weights used in constructing the indices are for different groups of consumers. Consumer purchasing patterns and price relationships among commodities change over time.

3. Data on quantities of commodities marketed, transported, and imported or exported.
 - a. Extension agents or agricultural statistics enumerators sometimes attempt to collect data on the volume of commodities marketed in rural areas, particularly at rural markets, which capture part of total marketed output. While absolute volume figures should not be taken too literally, year to year changes in marketed output may be reasonably accurate indicators of significant changes in production and marketing. It is important to note, however, that policy changes may shift the location of apparent market surpluses, as well as the direction and magnitude of marketed flows. Furthermore, a change in government policy may encourage more officially recorded marketings through formal channels (transfer of sales from informal to formal markets), even though the total quantities sold may not have changed from one year to another.
 - b. Interregional transport data are less common and may be highly inaccurate, depending upon government controls and taxes and whether commodities are transported in smaller or large lots. Data may be collected at entry points to large cities, at shipping and receiving points on rail, air and water lines, and at water crossings (ferries). Origin and destination traffic surveys provide accurate and detailed information but are often carried out at only one point in time, which may or may not coincide with the periods of major commodity flows. When traffic surveys are conducted at intervals over the course of one year, researchers need to assess the representativeness of the periods of data gathering.
 - c. Import and export data (quantities and value) are usually more accurate than other types of quantity and flow data, but they may understate actual volume of imports and exports if government restrictions, quotas, taxes or overvalued exchange rates encourage smuggling or underinvoicing.
4. Data on the volume of processed or transformed commodities are sometimes collected by government agencies for taxation purposes. Processing firms are often asked to submit records of the quantities of produce processed to government agencies. Since taxation encourages evasion, government data may significantly underestimate processed output. For example, livestock slaughter statistics are usually quite accurate for large ruminants (cattle, camels, buffaloes) slaughtered in urban areas, but typically incomplete for smaller stock (goats, sheep, pigs, poultry).

During Rapid Appraisals investigators should collect and analyze only secondary data which can be obtained with a minimum of difficulty. If RA teams can only obtain secondary data through extensive digging in government archives, or if aggregation of voluminous records is necessary, then these activities may be best reserved for later in-depth studies.

STEP SEVEN: FIELD SURVEY

Task 1: Interviews

Interviews will be informal yet structured in the sense that the intention is to cover important topics in a preferred sequence. They will be unstructured in the sense that interviewers will be able to vary the length and format of an interview, probing promising lines of inquiry in depth, where feasible, or adhering to noncontroversial or less sensitive topics, where necessary. For example, in one instance the interviewer might encourage a respondent to focus on subsector problems, government policies, or needs for infrastructure investments or public services. A parallel interview with another informant at the same stage of the subsector might focus on that firm's management, sources and uses of credit, standard operating procedures for carrying out particular marketing functions, and relations with other firms.

While it is useful to develop informal interview guidelines for different types of participants before beginning RA field work, it is important to realize that interviewing busy marketing system participants is an art. Investigators rarely have the time to ask even the most cooperative of informants everything they would like to ask, unless it is possible to arrange a follow-up interview or two. So investigators have to focus the interview on particular issues and problems. Allowing informants enough flexibility to discuss issues and topics which interest them or problems which they find especially bothersome can have high payoff. Investigators can often uncover unexpected insights in this way.

In addition, it can be very effective to challenge informants on particular issues, if only to stimulate discussion and compel them to articulate their views more clearly. Informants who are bored or annoyed by interviews will sometimes offer incomplete or unsatisfactory answers to questions, hoping that the investigator will accept those responses uncritically and continue toward completion of the interview. It is very important to challenge such responses and to demonstrate to the informant that the researcher understands enough about the marketing system to realize that his/her answer is incomplete or unsatisfactory. To do this in a humorous or clever way can liven up an otherwise routine interview, improve rapport, and facilitate the information gathering task.

Informal interviews in Rapid Appraisal are best used to elicit information on informant's perceptions of commodity system problems and opportunities, ideas of how the system can be improved, views of the effect of particular government policies, and the need for policy changes. The emphasis should not be placed on accumulating detailed information on the organization and operation of the subsector at each particular stage.

A common mistake in conducting informal interviews is to postpone writing down observations, perceptions and responses until long after interviews are completed. It is also easy to fall into the trap of taking poor or incomplete notes. It is strongly recommended that researchers record the findings of informal interviews immediately after each interview is completed. In some cases, using a large informal questionnaire is a valuable tool in forcing analysts to record findings during or shortly after each interview. Having this recorded information will be essential at a later state when the investigators write up the research results. Further guidance on interview techniques are found in Appendix D (Planning the Field Survey) and Appendix E (Conducting the Interview).

Task 2: Periodic Team Meetings

Although it is recommended that RA groups divide into two or three person teams during the field research, the teams should not work in isolation. The individual RA teams should meet periodically to discuss preliminary findings during the reconnaissance surveys. The meetings may be infrequent (weekly or perhaps biweekly) due to logistical difficulties. Nevertheless, it is important that the different teams discuss preliminary research findings, tentative conclusions and hypotheses inferred from the findings, information gaps, and needed data gathering emphases during the RA. In some cases there may be disagreement among the participants. In the ensuing debate, the researchers may uncover preconceptions, unstated assumptions, and unclear or unjustified inferences. Periodic meetings are also useful in helping the researchers to focus increasingly on key research issues, which typically emerge during the course of the RA surveys, rather than to continue gathering information in a broader, less directed way.

STEP EIGHT: FIRST DRAFT PREPARATION

It is strongly urged that team members begin preparing first drafts of their assigned sections while field work is proceeding. This will help identify information gaps while at the same time speeding up the writing of the report. This material should follow the draft format included in Step 3 above.

**THIRD PHASE:
FORMULATION OF FINDINGS**

STEP 9: DRAFTING OF REPORT

- Assembly and editing
- Team review of findings

STEP 10: REVIEW FINDINGS WITH STUDY SPONSORS

STEP 11: FINAL DRAFT (WASHINGTON)

STEP 9: DRAFTING OF REPORT

Preparation of the first draft of the RA study will be done by the team in-country prior to departure. This is required not only so that a presentation of findings can be made to the study sponsors, but also because it helps to highlight inconsistencies or data gaps in the findings.

Normally the final week of the team's sojourn in the country will be reserved for this work. Previously drafted material will be assembled and edited and the team will discuss its findings and conclusions prior to making its presentation (Step 10). At this presentation, Study sponsors can be expected to focus on policy issues. While recommendations may be preliminary only at this stage, the study team needs to be prepared to discuss them. Examples of policy issues which may need to be addressed include the following:

1. What changes are needed in policies affecting competition?
2. Should vertical integration of large firms be promoted or restricted?
Should vertical coordination by contracting be facilitated or limited? What policies would achieve the desired objectives?
3. Should cooperatives and cooperative practices be promoted or restricted? By what policies?
4. What institutional and technological innovations would improve pricing performance?
5. Are policies needed to promote technological innovation and productivity?
6. What is the appropriate role of the government in promoting improved performance of the food system? What should be the policy strategy? What existing regulations or policies should be abandoned or modified? What new approaches should be tried?

STEP 10: REVIEW FINDINGS WITH STUDY SPONSORS

In many cases RA investigators will be asked before departure to brief policy or decision makers who commissioned the RA about the principal findings of the investigation. Presentations should be kept relatively short (no more than one hour) and may need to be considerably shorter for senior policy-

makers. Ample time should be left for discussion of the RA findings. The RA team should try to elicit discussion of the identified marketing problems and constraints. Do the policy-makers agree that these are key problem areas? If so, how would they rank order them? If not, what problems were missed, and why are these important? In addition, what areas do policy-makers view as most promising for further research? Do they support research in certain areas but appear reluctant to approve research in other areas? What are the reasons for the enthusiasm and/or hesitancy?

STEP 11: FINAL DRAFT

Editing and necessary revisions to the final draft will normally take place in the U.S. The finished report is submitted to AID Project Officer and through him to USAID Mission which commissioned the study. Time needs to be allowed for translation, if required.

APPENDIX

- A. Marketing System Constraints
- B. Driving Forces Affecting Marketing Systems
- C. Performance Indicators
- D. Planning the Survey
- E. Conducting the Interview
- F. Questionnaire Checklist

Appendix A

MARKETING SYSTEM CONSTRAINTS

Among the more common marketing system constraints encountered in developing countries are the following:

1. Geographical Dispersion of Production
2. Excessive Specialization by Traders
3. Monosonistic Competition in Rural Markets
4. Crude and Inefficient Handling and Sorting
5. Price Volatility
6. High Transaction Costs
7. Pervasive Mistrust
8. Deficient and Uneven Market Information
9. Lacking or Underdeveloped Physical Infrastructure
10. Undeveloped Marketing Infrastructure
11. Atomistic Competition
12. Shortage of Marketing Credit
13. Negative Public Attitudes Towards Marketing
14. Ineffective or Counterproductive Government Policies
15. Excessive or Inappropriate Parastatal Activities

Characteristics of each of these constraints is discussed in the paragraphs to follow.

1. **Geographic Dispersion of Production.** Production of individual commodities takes place usually in a large number of small-scale farming units spread out over wide physical areas. There is relatively little regional specialization. Each small farm tends to produce small quantities of many products instead of specializing in only a few. This of course reflects the need to provide for the consumption needs of the farming family, but also reflects a strategy of reducing risk exposure to losses from price variation or physical product losses. This dispersion leads to high transaction costs due to excessive transport, collection and storage costs.

2. **Excessive Specialization by Traders.** The opposite extreme occurs in the distribution stage of marketing of farm products, that is to say, **food wholesalers and retailers tend to specialize exclusively in one or relatively few products.** The reasons for this excessive specialization are market uncertainties regarding price, lack of market information, small size of lots handled, need to personally inspect each lot, lack of standardized transactions. Each commodity market is so uncertain and complex, and information so difficult to obtain, that the only way for a merchant to stay on top is to concentrate in only a few products.

As a result of excessive specialization, traders in developing countries often fail to capitalize on economies of scale, and the natural product complementarities that exists among products. Consumers also incur additional cost and inconvenience from having to make many purchases from many retailers to obtain the desired assortment of products.

3. **Monopsonistic Competition in Rural Markets.** Partly as a consequence of the geographical dispersion of production mentioned above, producers often **have access to only a few rural traders to whom they sell their products at the farm or in small village markets.** Moreover, given the small amounts sold by each farmer, and lack of access to suitable transport, it seldom pays farmers to take their products to larger markets where they could obtain better prices. This suggests the possibilities of monopsonistic competition in rural markets resulting in lower prices to farmers and higher profits for traders than would be the case in a better organized and competitive market. Nevertheless, empirical studies normally find little evidence of either **artificial barriers to entry or excessive monopsonistic profits.** Both traders and farmers are caught in a situation of great market uncertainty, small volumes, high unit transport and transaction costs, and low profits.

4. **Crude and Inefficient Handling and Sorting.** When each farm sells only a small quantity of a product, it isn't worth sorting, selecting, and grading. Produce leaving the farm often contain overripe and damaged units, excessive amount of stems, leaves, insects and other foreign matter. Protective packaging and standardized containers are unavailable to farmers or too expensive to use for such small volumes. The results are high spoilage, high transport and handling costs, and unattractive merchandise for consumers. In addition, it mandates that each lot must be personally inspected by traders at each transaction in the marketing chain, and it precludes the development of uniform buying and selling parties.

5. **Price Volatility.** Price uncertainty and variability are at the core of many problems associated with agricultural markets in developing countries. Small variations in volume reaching the market cause disproportionate fluctuations in current prices; **markets are thin,** it is said. In part this is a result of the small size of each market, inadequate integration with other national or foreign markets, and the absence of stocks and storage capability.

6. **High Transaction Costs.** The main causes of high transaction costs are small lot size and the heterogeneous quality of product. As a rule, commodities from different areas and even different farms vary greatly in variety, size, maturity, cleanliness, packaging, and quality. Under this circumstances each lot has to be inspected by the buyer, and each lot receives a price commensurate with its characteristics.

Product heterogeneity makes it extremely difficult to compare prices even within a market, and more so between distant markets. Haggling over price becomes a necessary part of each transaction. Long distance transactions are out of the question when there are no established quality standards nor uniform units of measure.

7. **Pervasive Mistrust.** Another contributing factor to high transaction costs in developing countries is the prevalence of opportunistic behavior at all stages of the market and the corresponding attitude of **mutual distrust among market participants**. In part this mistrust can be attributed to the aforementioned lack of product homogeneity and quality standards. Traders prefer to deal with those who have proved reliable in previous exchanges because product adulteration is common. As a result seller reputation is important and **transactions are frequently personalized, i.e., among people who know each other well.**

Not being able to trust other market participants severely restricts the set of transaction opportunities for each agent and adds to marketing costs. The common success observed of particular **ethnic groups in marketing**, can be attributed in part to the higher level of trust among themselves than toward the general population. An appropriate role for governments is to provide the institutional mechanisms (courts, agencies controlling grades and standards, etc.) to eliminate the causes of such mistrust.

8. **Deficient and Uneven Market Information.** The information available for economic decision making by producers and traders tends to be deficient and unevenly distributed. Market conditions can typically be assessed fairly readily by buyers and sellers within localized market areas, but knowledge of price and volumes in other markets is often available to only a few people and closely guarded by them. For farmers and small traders with good private communication systems to other markets can thus realize sizeable gains from arbitrage opportunities. The uninformed farmer and small trader are then at a relative bargaining disadvantage. The potential for improving market performance through better communications between markets should receive serious attention from AMIS.

The quality of market information available for public dissemination is typically less than satisfactory, mainly due to the undeveloped state of grades and standards for product transactions. The process of collecting, processing, and disseminating market news and information by government agencies is typically too slow and unreliable. Price and volume information is more likely collected for historical statistical purposes, rather than to aid farmers and traders in their decisions.

9. **Lacking or Undeveloped Physical Infrastructure.** Public and private assets such as roads and other transport facilities, warehouses, communication networks, processing plants, public utilities, water systems, irrigation, and other forms of productive capital are often scarce. Moreover, what is available is not operated effectively because of inadequate administrative organization, management expertise, and skilled personnel. Poor infrastructure leads to higher transport and transaction costs.

10. **Undeveloped Marketing Infrastructure.** Other basic marketing infrastructure that may be missing or undeveloped are data and information

systems, widely accepted grades and standards inspection services, regulatory codes against unfair practices, contractual enforcement procedures, credit services, banking and financial facilities, market research services, and commercial training activities.

11. **Atomistic Competition.** The lack of progressiveness in the food marketing system can be explained in part by the large number of small operators, sometimes referred to as atomistic competition, whereby small traders are caught in a low-level competitive equilibrium. Traders are often caught in a poverty trap. The trading activity does not generate enough income beyond immediate subsistence needs to invest in knowledge, technical inputs, and organization in order to increase their productivity. Concern for subsistence limits innovative behavior that, even though it may increase productivity, involves more risk than the trader is willing to take. Market operators often lack alternative skills. Petty commerce often constitutes a survival refuge for the urban unemployed. Improved market innovations that raise productivity, but that require fewer participants, are hampered by the inability of displaced workers to go into alternative jobs.

12. **Shortage of Marketing Credit.** In most countries financial markets are heavily regulated. Official and commercial credit is directed towards industry, agricultural production, and exports. Marketing firms are expected to finance their activities with equity capital, or borrowings from private money lenders. Whatever credit is left for food distribution activities is quickly absorbed by a few large, financially sound firms. Consequently, innovative marketing firms often encounter difficulty in obtaining the necessary credit to implement marketing innovations. Most credit for financing market functions must be provided by farmers or traders themselves, or borrowed, usually at exorbitant interest rates, from financial institutions or money lenders.

13. **Negative Public Attitudes Towards Marketing.** Middlemen are maligned in most societies. The traditional attitude in developing countries is that marketing firms are at best a necessary evil. This attitude is widespread among both farmers and consumers, in rural and urban areas. Similar attitudes, one should point out, are prevalent in most developed countries as well. Consequently, there is little inclination to assist or encourage marketing firms. Public laws and programs are designed to regulate, control, and discourage middlemen rather than to attempt to change their undesirable traits through education, technical assistance and economic incentives. Laws against "hoarding" and "speculation" of food products are codified in almost all developing countries, thereby making illegal most commercial storage by firms other than farmers, consumers, or the government.

14. **Ineffective or Counterproductive Government Policies.** Most developing countries have no effective strategy for dealing with market related policy issues. Government actions are usually based on conventional (and erroneous) wisdom, rather than empirical and analytical knowledge about the marketing system. As a consequence, government policies and programs often have little positive effect or, even negative impact on the performance of the food production and distribution system.

Instead, governments attempt to correct the very real market imperfections described above, by instituting price and margin controls,

antispeculation laws, and eventually direct state take-over of the marketing functions. While all of these measures may be appropriate under certain circumstances, they can make matters worse, and often do, if applied indiscriminately.

Perhaps the most important marketing policy issue has to do with food prices. Farmers prefer high prices while consumers want low food prices. Official floor prices are mainly established for commercial crops, such as rice or cotton, where large farmers are organized into powerful lobbies to demand government subsidies. Most farmers in developing countries do not, however, benefit from farm subsidies. Government agencies charged with buying farm products, usually run out of funds shortly after the harvest, leaving most farmers to sell at the lower market prices.

Retail food price controls are commonly exercised especially for the principal staples of urban middle classes, such as bread, milk, and meats. When prices are set too low and enforced rigorously, production is discouraged and consumers are faced with product shortages. Most price control mechanisms are difficult to enforce in the marketplace and become ineffective. However, when enforced diligently, very frequently they lead to the development of parallel markets.

15. **Excessive or Inappropriate Parastatal Activities** Parastatal organizations involved in marketing of critical commodities are a common feature in the Third World. They are popular with politicians and much maligned by expatriate researchers who have studied their performance.

Public sector participation in food distribution represents a common feature in developing countries. State agencies often involve themselves in actual buying and selling of commodities, and thus take the function of intermediaries. Political leaders are attracted to these kinds of visible interventions in food marketing that will allegedly eliminate the middlemen, or at least, force them to reduce their margins.

Most marketing parastatals are intended to tackle real problems of traditional marketing systems: to reduce price instability, to reduce marketing costs, to assure food supplies, to improve the availability of farm inputs, and to increase export earnings and foreign exchange, to provide revenue for the government, etc. They frequently fail to achieve all these objectives because of inappropriate policies, poor management, lack of knowledge, and insufficient resources. In many cases, they become instruments of political patronage and corruption. As government employees, neither managers nor workers have incentives to make it succeed, and once organized into unions, they become powerful lobbies intent in protecting their jobs. Parastatals are also notorious for delivering inputs late, announcing prices in mid-season, and failing to honor price guarantees. At their worst, they can become instruments of forced taxation and exploitation of farmers.

Nevertheless, direct government participation should not be completely ruled out, and sometimes it may be the only way to deal with problems of market failure. Where traditional markets are stagnant, change has to be induced from outside the system, and involvement by a state organization may be an effective means of doing just that. Agricultural commodity development boards could be designed to provide functions of active coordination. The

challenge is to define appropriate functions and operating procedures so they contribute to improving the performance of the system in a cost-effective manner.

Throughout the program of AMIS activities, emphasis is placed in going beyond describing how the existing marketing system is currently working, and more on why it functions as it does, and how its structure and performance are changing over time. Once the directions of change are understood and anticipated, the question arises about how appropriate innovations can be identified and implemented so as to accelerate or redirect the internal dynamics of the system. The aim is not so much to understand how markets work, but how they change, and how to change their operation.

Appendix B

DRIVING FORCES AFFECTING MARKETING SYSTEMS

Important to an understanding of how a marketing system functions is a knowledge of driving forces in the economy--those underlying forces which may be both the cause and effect of change. Examples of such forces, and their impact on marketing systems, follows.

<u>Driving Force</u>	<u>Impact</u>
1. Population Growth	Greater demand for food
2. Higher Personal Income	Changes in consumption patterns
3. Increased Urbanization	More complex distribution system
4. Rise in Non-Farm Empl.	Fewer and larger farms
5. Development of Financial and Commodity Markets	Lower transaction costs More investments in marketing
6. Technological Advances	Higher farm productivity Improved marketing efficiency
7. Entrepreneurship	Strength of private sector, degree of competition
8. Government attitude toward private sector	General business climate
9. Infusion of foreign resources (donor aid, private investment)	New technical and financial resources available
10. Changes in international trade (commodity prices and flows)	Rising or declining commodity prices
11. General Infrastructure investment (education, health, communication)	Strengthening of the economy

Risk is an example of an important driving force which is not readily visible. Questions involving how much risk, what kind and who bears it, may have an important influence on the organization of the system, on margins taken and on possibilities for change. The types of risk might include product perishability, storage quality and availability, weather, uncertain supplies, or variable demands.

Unacceptable risks may compel producers and processors or other buyers to negotiate contracts or integrate forwards or backwards in a commodity

subsector. Governments can intervene to offset risk by investing in irrigation, better storage, transport and handling facilities, improved communications and marketing information systems, or by initiating crop insurance schemes.

Investigators should obtain information on these issues from knowledgeable people in the country concerned, and from economic reports such as those published by the World Bank. A section of the Rapid Appraisal report would contain a discussion of these underlying forces and how they effect marketing system performance now and in the future.

Appendix C

PERFORMANCE INDICATORS

Experience and judgement are required in evaluating commodity subsystem or food system performance. Analysts need to be careful to distinguish between symptoms of poor performance and root causes or factors that contribute to poor performance. Developing an exhaustive set of performance indicators and norms in each and every study may be counterproductive.

A series of performance indicators is presented below grouped from I to IV, beginning with static and dynamic efficiency criteria, followed by institutional and policy attributes, equity concerns, and social attributes. Devising quantitative measures of performance is easiest for indicators of static efficiency but difficult for the other categories of indicators. Data requirements for evaluating the efficiency criteria are burdensome, however, and careful judgements will need to be made as to the need and desirability of collecting detailed price, input/output, and cost/return data when they are not readily available. Ease in measurement should not encourage AMIS to focus only on the efficiency criteria. Groups II and III need to receive equal if not greater emphasis, especially as RA focuses on dynamic forces in food system development and key institutional and economic organization issues. Group IV and V may be beyond the scope of some Rapid Appraisals.

When it is not possible or desirable to devise an exact measure of performance for a particular indicator, analysts will need to make careful, reasoned qualitative assessments. Against what standards will such assessments be based? Assessments for dynamic performance indicators may be as crude as positive (increase), negative (decrease) or no change (about the same level) over a period of five to twenty years. Cross-country comparisons and judgements may also be appropriate. Countries with similar levels of economic development, levels of urbanization, population and population density, resource endowments and food system diversity and complexity can be compared with respect to selected performance indicators.

I. Static Efficiency Criteria

1. Pricing efficiency

- a. Degree of market integration. Degree to which price differences between markets reflect normal transfer costs, at different points during the year.
- b. Interseasonal prices. Extent to which interseasonal price movements reflect normal returns to storage (for storable commodities) and prevailing supply and demand conditions (for all commodities).
- c. Extent to which price swings match underlying supply and demand conditions (rather than being due to imperfect information and speculative excesses).

2. Allocative efficiency

- a. Extent to which supply matches demand at different levels of the subsector or food system.
- b. Avoidance of commodity gluts or shortages (and consequent losses to producers, or consumer hardship and windfall profits to traders).

3. Technical efficiency

- a. Lowest economic level of postharvest losses.
- b. Least cost transformation (processing) of crop/livestock per unit, consistent with quality of performance needed.
- c. Most appropriate technology used for economic environment.

4. Operational efficiency

- a. Least cost provision of input/output marketing services per unit of services, consistent with quality of performance sought by users.
- b. Extent to which marketing margins reflect real costs of services and transformation and normal returns to labor, management and capital.
- c. Firms of size necessary to realize available economies of scale.
- d. Competitively priced inputs available.
- e. Manpower resources sufficient (education and training).

II. Dynamic Efficiency Criteria

1. Progressiveness of subsystem. Extent of technological, institutional and management innovation in performance of functions of production, handling, processing, storage, and distribution of food. Source of investments in R&D: government, universities, large domestic or foreign firms.
 - a. Innovations to reduce costs and increase productivity.
 - b. Innovations to improve quality.
 - c. Innovations to generate new demand or meet unsatisfied demand.
2. Extent of entrepreneurship and leadership in subsystem. Extent to which creative, opportunistic individuals are able to make changes that increase competitiveness by improving productivity, lowering costs, or by tapping new markets.
3. Adaptability of commodity subsystem (or food system), and individual participants in the system, to external factors or shifts (international prices, climatic cycles, political change, etc.).
4. Extent to which subsystem anticipates and respond to changing consumer demands.
5. Extent to which subsystem creates, experiments with and perfects institutional arrangement (e.g., contracts vertical integration) that lower costs, increase productivity, improve quality, and improve coordination.
6. Extent to which ADE subsystem generates and uses information to improve production and marketing decisions.

III. Institutional and Policy Attributes

1. Effectiveness of marketing enterprises (cooperatives, parastatals, private traders, joint ventures) and institutional arrangements in meeting demand for particular types and quality of food and in providing inputs and services to system participants..
2. Effectiveness of marketing enterprises and institutional arrangements in coordinating production, transformation and distribution of agricultural commodities.
3. Effectiveness of marketing institutions in organizing and regulating the food system. Such institutions include regulatory and promotional agencies; trade associations; assembly, wholesale and retail markets; commodity exchanges.
4. Extent to which economic organization and the policy environment foster competition, entrepreneurship, and innovation.

5. Ease of entry into the food marketing system. Absence of entry barriers.

Some analysts emphasize the degree of competition as a performance indicator. Competition in and of itself is not necessarily good. Atomistic competition may be highly inefficient and high cost, as micro-marketing agents are unable to achieve scale economies and innovate. At the other extreme, monopoly is generally not desirable, unless it is heavily regulated, and alternative incentive systems substitute for monopoly pricing. "Workable competition" is sometimes cited as an alternative. This concept recognizes the optimal balance between competition and effective scale for reducing costs per unit and lowering transactions costs.

One way to shorten the list of germane performance indicators in a marketing study is to evaluate performance against stated government objectives, rather than against a set of absolute and universal norms. These are generally stated in important planning documents (e.g., Five Year Plans), or in agricultural sector policy statements. However, government objectives may be conflicting. Promoting high producer prices and incomes is usually not consistent with low consumer prices. Government policies, programs and regulations may be evaluated with respect to:

1. Farm prices and rural incomes.
2. Consumer prices, welfare, food security and satisfaction.
3. Food system participant employment and income (relative to other sectors).
4. Degree of competition in the food system.
5. Quality, availability and timeliness of agricultural inputs.
6. Quality, availability and timeliness of food products and marketing services.
7. Cost of agricultural inputs and food products relative to world prices.

Appendix D

PLANNING THE FIELD SURVEY

1. Where to Begin

In abbreviated surveys, more so than in longer term studies, what one often finds depends heavily on when the surveys are carried out, who is interviewed, what is observed, and where research is conducted. Where an investigation begins is usually a function of the rapid reconnaissance objectives. If RA studies are funded as an input into the design of a project for improving urban food distribution, surveys will begin in urban areas. Researchers will need to analyze demand patterns and prospects and urban food distribution channels before surveying rural producing areas. If RA precedes design of a project which will promote production of particular commodities, surveys will usually begin in rural producing areas. When a particular rural area is targeted for production increases, the researchers will visit that area early in the RA to examine constraints to increasing production and marketed output. If the objectives of the RA are broad and the organization funding the research does not demand that RA focus on any particular segment of the marketing system or a particular geographic area, researchers will usually find it useful to interview wholesalers based in large markets and secondary towns. They are typically more knowledgeable about the organization and operation of the entire marketing system than other participants, and they often have a vantage point acting as "channel captains" in the marketing system. They may be used in developing additional regulations and taxes. Special efforts are often required to relate to key system informants.

2. What to Observe

The following processes, functions and facilities are important to observe and inspect during the rapid reconnaissance:

1. Transactions for both inputs and outputs at the farm level (if possible), at assembly and wholesale marketplaces, and at retail outlets.

2. Handling, weighing and measuring, sorting, grading, packaging, processing, transport, and storage of commodities at different stages of the marketing system, including the farm, assembly markets, processing plants, terminal markets, storage facilities and retail stores.
3. Facilities for buying/selling, processing, transporting, grading and storing commodities in rural and urban areas.
4. Delineate commodity flow patterns, characteristics and reasons.
5. Physical and natural characteristics, including the presence or absence of needed infrastructure.

A useful technique for observing facilities, functions and processes is to follow agricultural commodities from the farm to the terminal market, or at least through part of the production-marketing chain. Accompanying wholesale traders or their agents to rural areas and then back to urban markets is one method of observation. Investigators can observe transactions, note costs and losses for a particular marketing trip, ask the wholesaler how representative these costs and losses are for his/her business, and ask the wholesaler questions along the way about marketing processes and functions. Researchers are also usually able to spot inefficiencies and problems in the system during these trips, as well as to inspect marketing infrastructure and facilities.

During RA field work it is often useful to purchase retail lots of the commodity in question in markets and towns visited during the RA. It is important to bring small scales along so that these purchased quantities can be weighed, the price per unit of measure calculated, and comparisons made with values obtained in other locations. If there are unexpected or unexpectedly large differences, the investigators can interview traders and retailers on the spot in order to ascertain reasons for these differences.

It may also be useful to bring hanging scales (and accompany hooks and ropes for suspending the scale) for weighing bags of produce (or quarters of beef, crates of vegetables, etc.) or other units sold wholesale. By weighing produce sold wholesale, the weight of local units of measures, and any variation therein, can be determined. Since produce is often bought and sold in the same units (e.g., sacks) at the farm, in rural assembly markets, and in urban wholesale markets, prices per unit can be calculated for produce sold at different levels of the marketing system. Adjustments may need to be made as the commodity moves along the marketing chain for shrinkage, loss or addition of foreign matter. Gross marketing margins can thus be established.

Where the RA survey begins will suggest where the investigators wish to go next. Studies which begin in urban areas will usually work back through marketing channels to rural producing zones. Selection of zones is not determined by hard-and-fast criteria. In some cases researchers will go first to the producing area which ships the largest quantity of produce to the urban market.

It may be useful to visit areas where there is agronomic potential for producing the commodity in question, or for producing significantly more of the commodity, in order to examine why production and marketed output are low or nonexistent. When there are several important producing areas, the RA team will need to develop criteria for selecting particular zones and subzones for examination. Random selection is usually suitable for subzones. Selection of zones may sometimes be guided by political objectives or regional equity considerations.

Selection of particular villages or subsector participants presents other problems. In RA selection is generally purposive and rarely defined clearly, so selection criteria have to be established in each case. RA does not include large sample surveys and does not generate estimates which are representative in any statistical sense. In order to sample purposively, RA teams should know something about the population of villages, trading firms, processors, transporters, etc. This can be determined through earlier studies, interviews with key wholesalers or knowledgeable observers of commodity subsectors, and existing enumerations of firms by government agencies. If the general characteristics of the population are known and different strata can be identified, individuals and firms can be selected randomly from each stratum. For example, RA teams may stratify agricultural producers into five groups: small farmers who do not produce the target commodity; small farmers who produce it but who sell little or none; small farmers who sell a significant proportion of what they produce; medium-sized farms which sell most of what they produce; and large farms which sell all or nearly all of the commodity produced. As a second example, wholesalers can be stratified by volume of the commodity they handle, the approximate value of their assets (vehicles, warehouses, storage facilities), or commodity mix.

Purposive sampling becomes more difficult when there are no existing studies or enumerations, if existing enumerations are incomplete or

inaccurate, or if knowledgeable observers cannot provide information about numbers of different size/type firms at different levels of the food system. RA teams are then encouraged to select strategically placed informants, such as large scale wholesalers or processors, for in-depth interviews. They can then proceed to retail firms, first handlers or producers linked vertically to these informants. Alternatively, researchers might interview a second or third informant at the same level of the system.

One RA team can proceed backward through the subsector toward producers, while a second can move forward toward consumers (or institutional buyers). Through this process the teams are able to gain a better understanding of the organization of the food system, marketing processes and vertical linkages in the system. They are also able to cross-check information provided in earlier interviews with informants at the same stage or at adjacent stages of the system. Different perceptions of problems and opportunities can also be elicited. These will vary, of course, depending on where firms are placed in the subsystem.

Appendix E

CONDUCTING THE INTERVIEW

1. Building in Consistency Checks:

Informal interviews can be structured so that information about certain topics is obtained in more than one way, either in different sequences of questions or by approaching the topic from two or more angles. For example, interviewers can obtain information about producers' marketed output by first asking producers directly the number of sacks of a commodity that have been sold since the harvest. An indirect way of obtaining the same information would be to ask the producer the numbers of sacks harvested, given and received, and consumed. The residual would then be the number of sacks sold. Information obtained from interviews with key informants about exchange arrangements, risk reducing and sharing mechanisms, credit arrangements, commodity flows and other vertical linkages should be cross-checked with informants at adjacent stages of the subsector. The overall validity of rapid reconnaissance findings can be also checked with knowledgeable observers of commodity subsectors, including researchers, certain government technocrats, selected agricultural project managers, and regionally important business people. A useful method of consistency checking is mirror-image interviewing. This technique involves asking informants at adjacent stages of a subsector the same set of questions. Major differences in responses are generally an indicator that one or both informants are misinforming the research team. Such differences may also indicate that one or both of the informants does not know or accurately recall the answer to the question.

2. Repeat Interviews:

Repeat interviews with cooperative and knowledgeable informants, or interviews with informants who substitute for uncooperative or less useful informants, are often necessary in order to:

- 1) Follow up on initial, more general interviews with questions about the organization and operation of particular firms (especially if these firms play an important role in the subsector or at a particular stage of the subsector).

- 2) Clarify statements or viewpoints presented during an earlier interview.
- 3) Cross-check information provided during an earlier interview or by another informant at the same stage of the subsector or an adjacent stage.
- 4) Discuss more sensitive topics, such as credit arrangements, price formation, relations with other firms, circumvention of government restrictions, parallel markets, etc.

Follow-up interviews with selected key informants during the Rapid Appraisal can lay the base for case studies during later phases of research. Case studies entail multiple visits over a longer period, typically a year.

3. Interviewing Village Headmen and Other Local Informants:

One information gathering shortcut in rural studies is to interview traditional leaders, such as village leaders or headmen. In many African countries local notables meet periodically as a group to arbitrate between conflicting parties. These groups often discuss issues of land tenure and use, disputes between farmers and herders and other grievances, and issues of collective organization, such as constructing social infrastructure (schools, clinics), road maintenance, and formation of cooperatives. While calling together all the members of a local deliberating body may take time, it may prove valuable if some of the above issues are addressed in an RA study. When the focus of a Rapid Appraisal is agricultural marketing, it will generally not be necessary to convene a large group of notables. An interview with a village leader or headman will usually suffice. Interviews with older members of the community who are producers or traders can also be very valuable in learning about change in agricultural production and marketing practices and policies over long periods. These informants possess a wealth of local knowledge, as well as a longer term historical perspective. Such perspectives are valuable and researchers can elicit perceptions of current problems in historical context, as well as historical information on when particular types of agricultural production technology were first tried and adopted, when rural roads and wholesale trading networks penetrated rural areas, and shifts in agricultural production patterns over time in response to marketing opportunities and availability of inputs.

As a general word of caution, it is advisable not to ask sub-district or village headmen questions which demand detailed responses that they are unable to provide. In other words, it is best to tailor questions to respondents' frame of reference and level of knowledge. For example, a sub-district official is unlikely to possess detailed information about the size distribution of farms in his jurisdiction or of marketed surplus of particular types of farms, whereas a village headman may well be able to answer questions about these topics.

4. Group Interviews:

Depending upon the cultural context, interviews of relatively homogeneous groups of subsector participants can elicit views of subsector performance, the need for and effects of government policies and regulations, and system bottlenecks and opportunities. Group interviews can also serve to legitimize the process of inquiry among potential participants. In many Asian and African countries, for example, agricultural producers are more likely to cooperate in survey research agenda. The main drawback of group interviews is that they can be dominated by especially articulate and forceful individuals, whose views and perceptions may not be widely shared. The findings of group interviews or of meetings with representatives of producer, trade or industry associations must always be cross-checked with individual informants. Preferably some of these informants will not have attended the group meeting.

5. Informal Delphi Techniques:

Informal Delphi techniques for obtaining information about the views and perceptions of marketing system participants are sometimes appropriate in rapid reconnaissance field research. Delphi methods are an iterative form of information gathering that can involve several group interviews with brainstorming and intense interaction or iterative, private consultations with anonymous informants. Either form of Delphi is designed to elicit candid appraisals of participants' views, perceptions and ideas (in this case, about marketing system performance, problems, constraints and opportunities). The Delphi approach assumes that the group will move toward consensus and that false or misleading views and perceptions will be exposed and discredited.

This approach is a potentially attractive information gathering shortcut for RA researchers in that reliable information on sensitive topics can supposedly be obtained in a short time span. Moreover, the difficult process of trying to separate out reliable information from unreliable information and misinformation supplied by individual informants can be largely avoided.

There are several potentially serious problems with Delphi methods, however, particularly in group meetings. In heterogeneous groupings of Delphi participants, some individuals may not express their views and ideas candidly, deferring to participants with more power in the marketing system or to representatives of government agencies. Less powerful participants avoid risks by being reticent and not openly criticizing participants who can apply sanctions or use confidential information in a way that harms them. Among groups of peers (participants at the same stage of the marketing system), Delphi methods are most likely to generate reliable information. Individual participants are less likely to refrain from criticizing the government or marketing agencies, or other groups of participants (especially powerful participants) in the marketing system.

Informal Delphi techniques can be quite useful in evaluating the performance of organizations and agencies within the marketing system. For example, representatives of producer cooperatives could diagnose problems associated with the input procurement and distribution, crop storage, and crop marketing practices of the cooperative. It is not recommended to include government overseers of the cooperative or appointed cooperative officers, who are often not producers, in the discussions. Unequal status among participants will usually preclude frank discussion of problems.

6. Recording Rapid Appraisal Findings:

When recording information during RA interviews, time-saving techniques must be adopted. There are few things more disturbing to a busy marketing agent than to sit through long interviews where the investigator spends half or nearly half of the time writing longhand notes. Several shortcut techniques are possible. Researchers might only note quantities, prices, and other continuous variables, which are more difficult to recall than qualitative data, during interviews and reserve detailed recording of other

information until after the interview is completed. Standardized formats for different types of data gathering, such as forms for recording prices and quantities in marketplaces, and for different types of informants, such as producers, can also speed up the note-taking process. And, of course, developing an effective shorthand for recording information is another means of shortening the time required for interviews.

7. Speeding up Information Gathering in the Field:

Depending on the circumstances, the two or three members of a RA team can work separately to increase the rate of information gathering. For example, one member of the team can interview wholesalers and retailers at a rural market, while a second can observe the market, counting the numbers of traders of each type, estimating the quantities of the commodity brought to the market that day, noting the numbers and types (make, tonnage) of trucks at the market, and chatting with truckers to obtain information about transport costs and the magnitude and direction of marketed flows. When the RA team is in rural areas interviewing producers, team members can individually interview producers to get a broader sample. The more standardized the informal interview format for producers, the less risk there is in having team members carry out individual interviews. When researchers are not following informal interview guidelines but are extemporizing, research findings may differ quite significantly, reflecting the interviewers' different interests and biases, or perhaps the asking of questions on similar topics in quite different ways.

While splitting up RA teams will accelerate information gathering, this may not always be desirable. When two or more researchers participate in an informal interview, they may interpret the informant's responses in different ways. At the end of each day, or perhaps immediately after each interview, the team members can discuss informants' responses and their implications. By comparing interview findings and inferences within each RA team, possible bias in interpretation can be offset. Teaming up to do interviews can also speed up individual interviews. One researcher can pose questions in an informal, conversational style, while the other records the informant's responses. The two researchers can take turns asking questions in their areas of specialization during an interview.

In the final analysis, researchers participating in rapid reconnaissance surveys will need to evaluate the tradeoff between breadth of coverage (numbers of participants interviewed) with depth and accuracy of coverage. Choices about interviewing strategies will be influenced by the time available for RA, the skills and experience of researchers participating in RA, and the degree of variation in interview findings and interpretations of informant responses.

APPENDIX F

QUESTIONNAIRE CHECKLIST

1. Farmer Questionnaire

- a. What volume or proportion of your crop do you sell? Compare this year with previous years.
- b. How do you decide how much and when to sell? (What influences your decision?)
- c. To whom do you usually sell? Where and by what means of transport do you deliver goods to the buyer? Why did you choose this buyer?
- d. Does the buyer (first handler) provide other goods and services as part of the sale, i.e. inputs, credit?
- e. Do you get information on market prices prior to the sale, and if so, from what source? Does this influence your decision on when and where to sell?
- f. Do you sort the goods before sale to meet market requirements? Are there price differences according to quality?
- g. What changes have occurred in the past three years in the way you market your crop? What changes would you like to see?

2. First Handler Questionnaire

- a. What volume of business do you do in a normal year? How has this changed in the past three years? What are the reasons for this change?
- b. What trading area do you cover? What transport means do you use?

- c. How long do you typically store goods? What are approximate losses due to spoilage or insects?
- d. To whom do you sell? Wholesaler? Direct retail sale? If to wholesaler, on what terms? Do you sell to one wholesaler all the time, and if so, why?
- e. How are prices established? What are seasonal or quality variations?
- f. How do you finance purchases? If you receive credit to finance purchases, from whom do you receive it and on what terms?
- g. Are there any quality standards for the goods you sell, and if so what are they and how are they enforced? Are there price differences according to quality?
- h. What changes have occurred in the past three years in the way you do business? What do you believe are the reasons for these changes? What changes would you like to see?

3. Wholesalers

- a. What volume of business do you do, and approximately what market share does this represent? How has this changed over time?
- b. From which first handlers do you buy? The same ones all the time? What determines selection of first handler?
- c. What are the terms and conditions of the purchases? Do you extend credit to first handlers in cash or in the form of ag inputs? Are other services provided?
- c. What is the quality of the goods purchased? Do you have quality standards which must be met? Are there price differences according to quality? Do you sort the goods prior to sale?

- d. How do you obtain price information in the markets where you sell? What variations by season have you noted?
- e. Are the first handlers with whom you deal able to supply anticipated quantities of produce on a reliable basis?
- f. Do you store produce, and if so for how long and in what facilities? What losses are experienced? How do you decide when to remove goods from storage and sell them?
- g. Do you handle other goods as well as the commodity under study? What percent of his business does the commodity represent?
- h. Do you own transport facilities? If not, how do you arrange for transport? What does it cost? Are there problems getting adequate transport?
- i. How do you finance your investments and working capital? Commercial banks? Buyer credit?
- j. What changes have occurred in the past three years in the way you do business? What caused these changes? What would you like to see changed in the future?

4. Retailers

- a. What is your volume of business (annually, seasonally)? How does this compare with last year and other previous years?
- b. How do you purchase the goods you sell? Do you have regular suppliers? Why or why not? Do you have contracts with suppliers? How does this work out? Do you collaborate with other retailers to procure goods? Describe these arrangements.

- b. How do you finance your purchases? If credit is used, what are terms and conditions? How could this be improved?
- c. How often do you turn over your stock? Does this vary by season or from month to month?
- d. Do you store goods? If so, where and for how long? Do you own or rent storage space? What losses do you have to spoilage or insects?
- e. Do you buy and sell other commodities? If so, what percentage of your sales are from the commodity under study?
- f. If you have employees, how many and what do they do?
- g. What changes have occurred over the past three years which affected your business? What do you think caused these changes? What would you like to see changed in the future?

5. Processors

- a. What is your volume of business and your market share, and how have these changed over time?
- b. How many people do you employ and in what capacities?
- c. How do you procure raw material for processing? Spot purchases? Contracts with growers, assemblers or wholesalers? Why do you use this method and what advantages does it have for you? Are there quality problems with the commodity you purchase? If so, how could this be improved?
- d. Where do you obtain funds for investment in plant and equipment and for purchasing raw material? Do you use commercial bank or other outside sources?

- e. What is daily, weekly or monthly capacity of your plant and how much do you actually produce in that time period?
- f. To whom do you sell your products? Do you have contracts with customers for fixed amounts of goods? What payment arrangements are used?
- g. What is the market outlook for your products? Are there marketing opportunities you are unable to exploit? If so, what are they and what do you need to be able to do so?
- h. What changes have occurred over the past three years that affect the way you do business? What do you think was the cause of these changes? What would you like to see changed in the future?

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