



Australian Centre
for International
Agricultural Research



Agribusiness Master Class

Foundation Week | Cebu, Philippines
25-29 November 2019





Day 2: Methods for conducting value chain analysis

Anton Simon-Palo



Supply chains vs value chains

Lilly Lim-Camacho



Heterogeneity in chains

Tiago Wandschneider

Some Concepts and Terminology



Learning Outcomes

By the end of this session, you should have a good understanding of:

- categories of chain participants
- market typologies
- marketing functions and activities
- implications for value chain research and value chain development strategies

Structure of the Presentation

- I. Market participants and market intermediaries
- II. Categories of chain participants
- III. Market typologies
- IV. Marketing functions, activities and services

I. Market participants and market intermediaries



market participants

agents involved in the purchase and sale of products / services

(i.e. all chain participants – including farmers and consumers –
plus all businesses servicing the chain)

market intermediaries

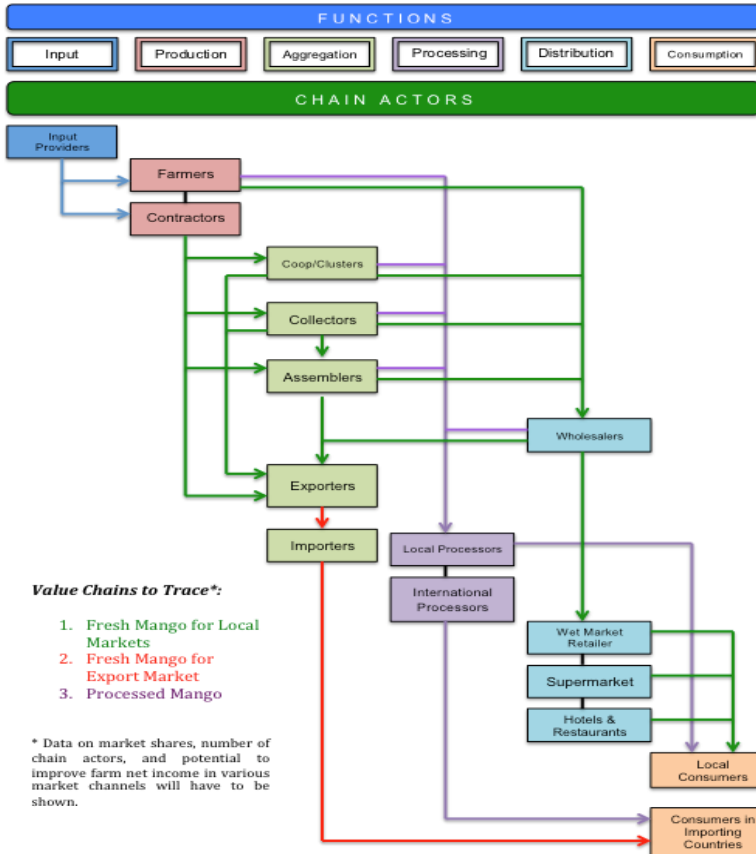
chain participants linking farmers to input manufacturers

(e.g. input distributors and input retailers)

chain participants linking farmers to end-users or consumers

(e.g. collectors, assembly traders, wholesalers, importers)

Discussion



- Identify the market intermediaries in the diagram
- Which market intermediaries are missing from the diagram?

Discussion



Please discuss the following statements:

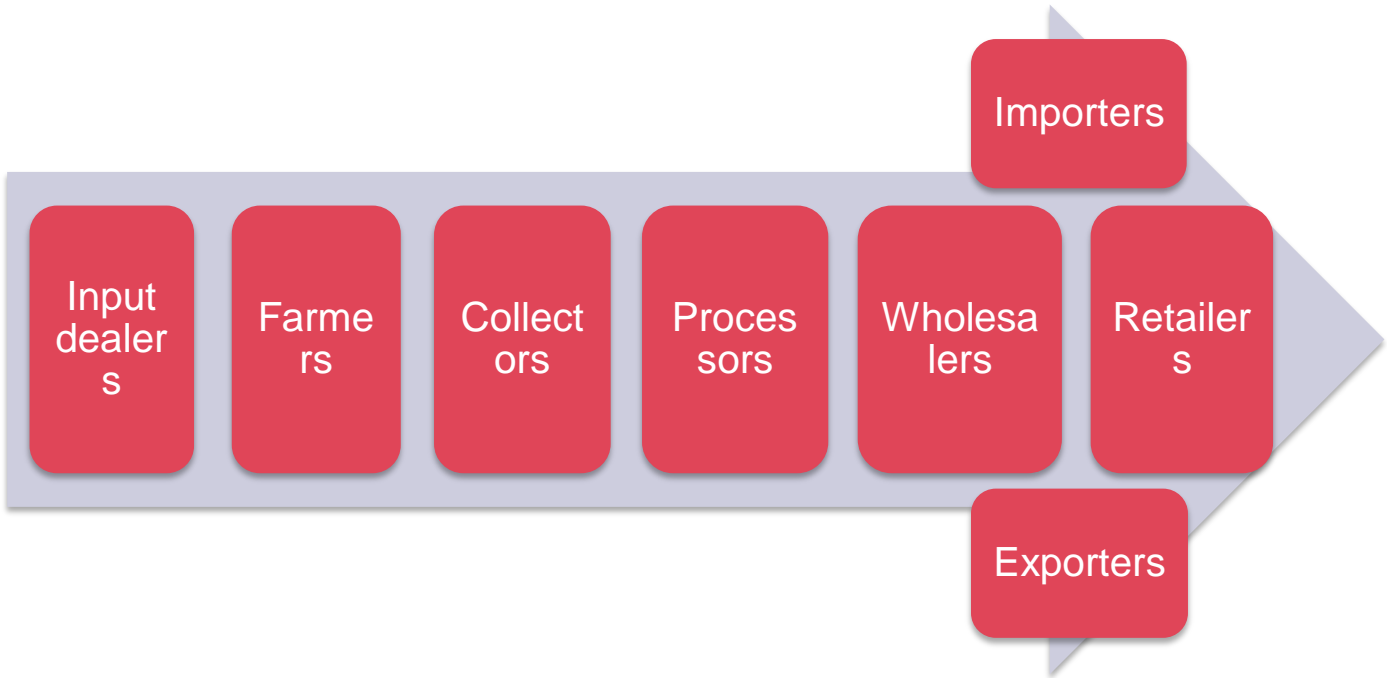
“Many attempts to link farmers to markets under-estimate the critical role and efficiency of market intermediaries”

“Many attempts to link farmers to markets over-estimate the profit margins earned by market intermediaries”

II. Categories of Value Chain Participants



A simplified representation of a value chain...



A more disaggregated perspective...

input suppliers

input manufacturers
input wholesalers / distributors
input retailers

producers

Smallholder (male and female) farmers
Commercial farms
plantations

traders

collectors
assembly traders
Primary and secondary wholesalers
Traditional and modern retailers
importers
exporters

processors

Small / medium / large
Traditional / modern

there are many different kinds of input suppliers...



there are also many different types of farmers and farms...



and traders...



Assembly traders are not collectors!



	Collectors	Assembly traders
Location	production areas (village)	production areas (village, small town)
Scale	small	medium, sometimes large
Target markets	local	regional, national
Transportation	bicycle, motorbike, mini van	mini van, truck
Suppliers	farmers	farmers, collectors
Main clients	assembly traders, wholesalers, processors, retailers	wholesalers, processors
Organization	independent or purchasing agents for larger traders and processors	independent

Primary versus secondary wholesalers



	Primary wholesalers	Secondary wholesalers
Location	major cities	large towns and cities
Scale	medium to large	small to medium
Geographical outreach	regional, national	local (urban and peri-urban)
Main suppliers	collectors, assembly traders	primary wholesalers
Main clients	wholesalers	retailers, restaurants

Modern versus traditional wholesalers



	Traditional wholesalers	Modern wholesalers
Location	large towns and cities (inside wholesale market)	major cities (outside wholesale market)
Scale	small to large	small to medium, sometimes large
Focus	price, freshness, volume	quality
Coordination w/ suppliers	informal	informal
Coordination w/ clients	informal	informal, formal
Main clients	traditional wholesalers and retailers	modern processing firms, supermarkets, high-end grocery chains, high-end hotels and restaurants, traditional wholesalers or retailers

Modern versus traditional retailers



	Traditional retailers	Modern retailers
Location	villages, towns, cities	cities
Scale	small	Small to large
Focus	freshness, variety, price	variety, presentation, packaging
Coordination w/ suppliers	informal	formal
Payment modalities	prompt	30-45 days
Main suppliers	traditional wholesalers	commercial farms, modern wholesalers, traditional wholesalers

Processors can also differ significantly in their organization, scale, technology, products and markets...



Discussion



Value chain participants are categorized according to the main marketing function performed: farmers, collectors, assembly traders, wholesalers, etc.

Yet, some may perform more than one major marketing function (e.g. farming and produce collection; collection and wholesaling; primary and secondary wholesaling; wholesaling and exporting; wholesaling and retailing).

How to categorize these value chain participants?

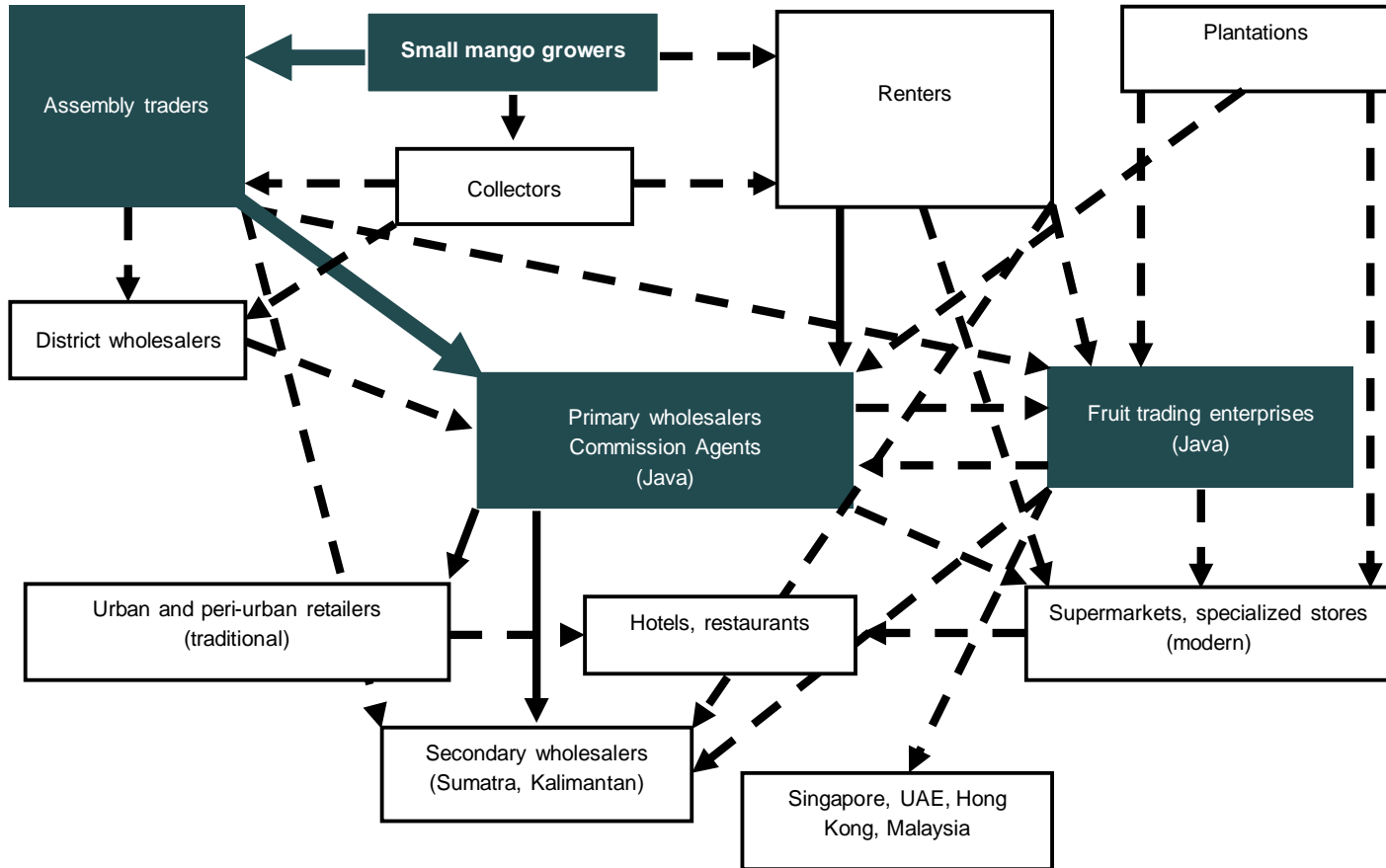
Discussion



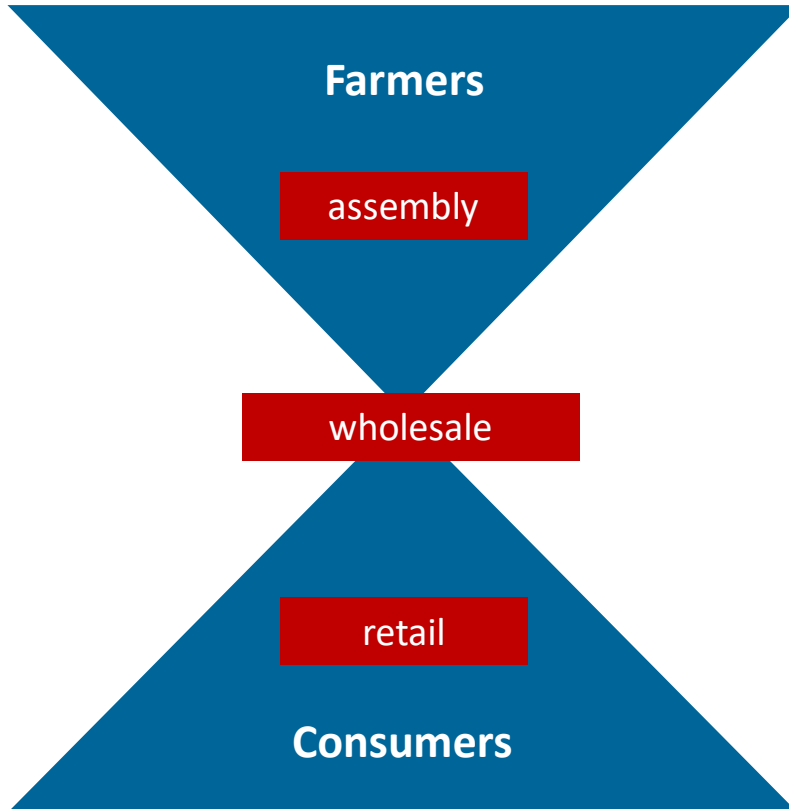
Why are all these distinctions necessary? Why is it so important to identify the different types of value chain participants?

- Design of value chain studies => sampling
- Design of value chain interventions => selection of entry points for intervention / targeting strategies

The case of mango in East Java



III. Market Typologies



Assembly Markets

markets in production areas where farmers and collectors come to sell their products to assembly traders, wholesalers and processors

- ✓ Rural
- ✓ Specialized / diversified
- ✓ All-year round / seasonal
- ✓ Daily / weekly / by-weekly



Wholesale Markets

markets where wholesalers, retailers and businesses buy their supplies, mainly from wholesale traders

- ✓ Urban or peri-urban
- ✓ Daily (often at night)
- ✓ Large volumes of a wide range of products (fruits and vegetables) in one single location



Retail Markets

places where consumers and small businesses buy their supplies

- ✓ urban and rural
- ✓ daily / specific days of the week



Discussion



Please think of examples that support or illustrate the following statement

“Many value chain transaction take place outside physical markets.”

IV. Marketing functions, activities and services



Marketing functions / activities and services

ensure that agricultural products are available
for consumption:

- in the right **place**
- in the **form** wanted
- in the **quantities** and **quality** required
- at the **time** needed

Marketing functions / activities and services

- product collection
- product assembly
- product wholesaling
- product retailing
- importation
- exportation
- processing

- shelling
- drying
- cleaning
- sorting and grading
- bundling
- packing
- transportation
- Certification
- branding etc

Maize shelling in Laos





rice threshing in India



drying of cassava chips in Vietnam

maize drying in India



Vietnamese farmer bundling chayote shoots





Removing damaged chillies at a packing house in Indonesia

Unsorted tomatoes in Indonesia

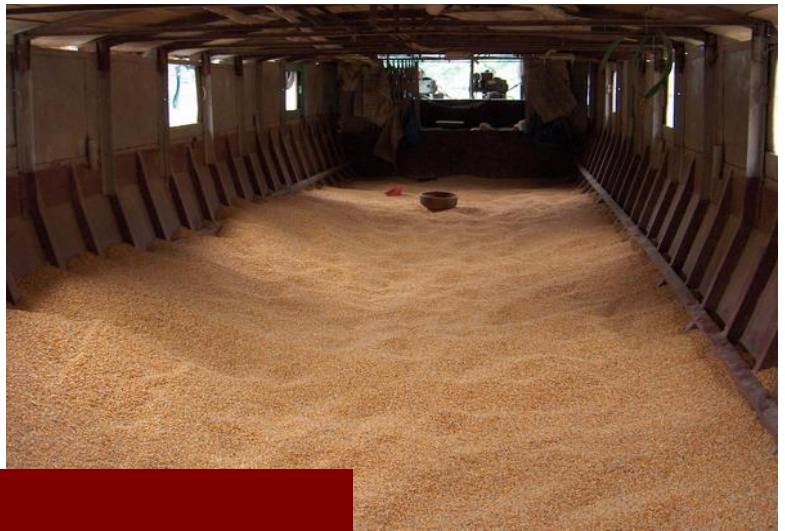


trimming shallots at a
packing house in Indonesia



peeling shallots at a
wholesale market in Indonesia





transportation



unloading gourd at a wholesale market in China



on-farm maize storage in Vietnam



rice storage in Indonesia



Forced ripening of persimmon by a wholesaler in Vietnam





packing potatoes
at a farm in Vietnam

Re-grading and re-packing potatoes at the China-Vietnam border



Re-grading and re-packing shallot at the China-Vietnam border



Packing mangoes at a wholesale market in Indonesia





packed shallots
in a supermarket
in Indonesia



CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM
Độc lập - Tự do - Hạnh phúc

GIẤY CHỨNG NHẬN
CƠ SỞ ĐỦ ĐIỀU KIỆN AN TOÀN THỰC PHẨM

CHI CỤC QUẢN LÝ CHẤT LƯỢNG NÔNG LÂM SẢN VÀ THỦY SẢN SƠN LA

CHỨNG NHẬN

Tên cơ sở: Tổ hợp tác sản xuất rau an toàn An Thái - Mường Sang

Địa chỉ: Bản An Thái, xã Mường Sang, huyện Mộc Châu, tỉnh Sơn La

Điện thoại: 01683. 545. 229

Đủ điều kiện an toàn thực phẩm để sản xuất kinh doanh sản phẩm:

1. Sản xuất rau an toàn.

2. _____

3. _____

Số cấp: 38/2013/CCQLCL - Sơn La

Giấy chứng nhận có giá trị 03 năm kể từ ngày ký

Sơn La, ngày 17 tháng 5 năm 2013

CHI CỤC TRƯỞNG



Phạm Thế Cường

Certification in Vietnam

branding of safe vegetables in Vietnam



branding and advertising of avocado in Vietnam

AVOCADO

NATURALLY MAKES YOUR SKIN AND HAIR
BEAUTIFUL AND HEALTHY

cover the beauty benefits

Avocado is a perfect source for beauty care both in and out side the body.
Avocado is rich in vitamins A, D, E, potassium and phosphorus:

- Vitamin A helps to slough off dead skin, and boost the production of collagen.
- Vitamin D plays a important role in the absorption of calcium which is important for strong bones and beautiful teeth.
- Avocados are very rich in Vitamin E that is known to be a powerful antioxidant 'mopping up' free radicals and helping to slow the signs of ageing.
- Potassium and phosphorus are helpful for skin and hair as well as body development.

the high content of lecithin and Beta-sitosterol has an effect on slowing down



Discussion



Why is it so important to have a good understanding of the marketing activities and services performed along the chain and who in and outside the chain undertakes these activities or provides these services?

- Calculation of marketing costs and margins
- Understanding of employment and gender roles along the chain
- Identification of opportunities for innovation
- Design of chain upgrading strategies => entry points for intervention



Value chain research methods and tools

Tiago Wandschneider

Value Chain Research Methods and Tools



Learning objectives

By the end of this session, you should have a basic understanding of:

- Methodological options for a rapid appraisal of value chains
- How to apply key methods and tools (and some of their strengths and shortcomings)
- How to design interview guides or checklists
- Key methods for validation and interpretation of qualitative data

Structure of the presentation

- I. Quantitative versus qualitative methods
- II. Common methods for rapid appraisal of value chains
 - a. Review of secondary sources
 - b. Focus group discussions
 - c. Semi-structured, key informant interviews
 - d. Direct observation
 - e. Structured questionnaires
 - f. Stakeholder meetings
- III. Data validation and interpretation

Discussion



1. Have you ever participated in a value chain study?
2. Explain the study context, objectives and focus.
3. What were the data collection methods employed?
How were they used during the study.

I. Quantitative versus Qualitative Methods



Uses

Quantitative methods

Used for explaining phenomena through collection of numerical data, which is analyzed using mathematically-based methods (e.g. statistics, econometrics)

Qualitative methods

Used for in-depth examination of underlying meanings and patterns of relationships using unstructured or semi-structured interviewing techniques

Some key differences

Quantitative

- Large samples
- Structured
- Data collection and data analysis are conducted sequentially
- Interviewer is an enumerator

Qualitative

- Small samples
- Flexible, in-depth probing
- Data collection often involves some degree of data analysis
- Interviewer is a researcher

Quantitative and qualitative methods complement each other

Quantitative

Measurement of key variables and relationships

How many? How much?
What percentage? How
are different variables
correlated?

Qualitative

Provide meaning to
quantitative data

What? Where? When?
Who? How? Why?

Discussion



Why are qualitative methods the most commonly used in value chain research and studies?

Why are structured questionnaire surveys less common in the context of value chain studies?

II. Common methods for rapid appraisal of value chains



```
graph LR; A[Review of existing (secondary) data and information] --> B[Qualitative]; B --> C[Quantitative]; C --> A;
```

Review of existing (secondary) data and information

Qualitative

- FGD w/ farmers
- SSI w/ key informants
- Direct observation
- Stakeholder meetings

Quantitative

- Structured surveys
- Structured interviews w/ chain participants

a. Review of secondary sources

- Cost-effective way of accessing *qualitative* and *quantitative* data (including statistically representative data)
- Draws on existing statistics, surveys, academic papers, studies, reports, books, news articles...
- Be aware of the reliability of sources such as online news
- Scope for further analysis!
- Provides critical understanding of knowledge and data gaps
- Should inform the collection of primary data (issues, information, informants)

b. Focus group discussions (w/ farmers)

Informal and open discussion around key issues with a small group from of farmers from one village or a cluster of villages, conducted by one or two trained moderators with the assistance of a checklist or script







Some observations

- FGD is a cost-effective data collection method
- Discussions can range from one to two hours (or more)
- Ideal number of participants (5-15) depends on purpose
- Group composition matters (knowledge, cultural issues, perspectives, target groups, inclusiveness)
- Strong facilitation and communication skills are essential: interviewers must be aware of dominant voices, group thinking, social desirability bias, and participants' tendency to try to please researchers

Discussion



In value chain studies, why are focus group discussion methods most commonly employed for collection of information from farmers rather than input suppliers, traders or consumers?

Discussion



How can you tailor your focus group discussions to develop a good understanding of gender issues?

c. Semi-structured, key informant interviews

Discussions based on a list of pre-determined questions or issues (checklist)

Semi-structured interviews will normally take 45-90 min.

Their flexible format allows for in-depth investigation of key issues as they arise during the interview, including issues not listed in the interview guide.

Key informant interviews and quantitative data

- Key informant interviews are associated with qualitative data, but can also be used to collect quantitative data (e.g. input costs, farm size and yields, traded volumes, prices, marketing costs, processing yields, employment).
- The data collected can only be used as indicative or illustrative due to small sample sizes.

Key informant categories: Knowledgeable observers



Other?

Academics,
researchers

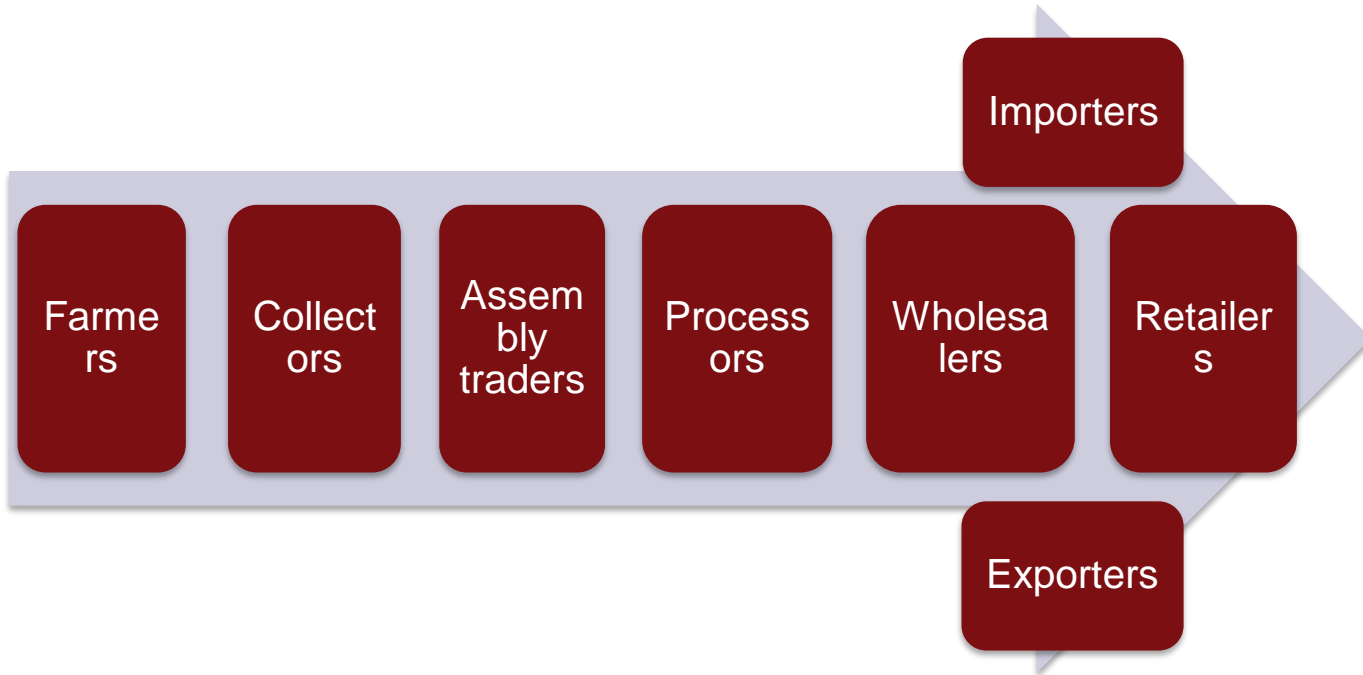
Government
officers
(central,
local levels)

Retired
industry
managers

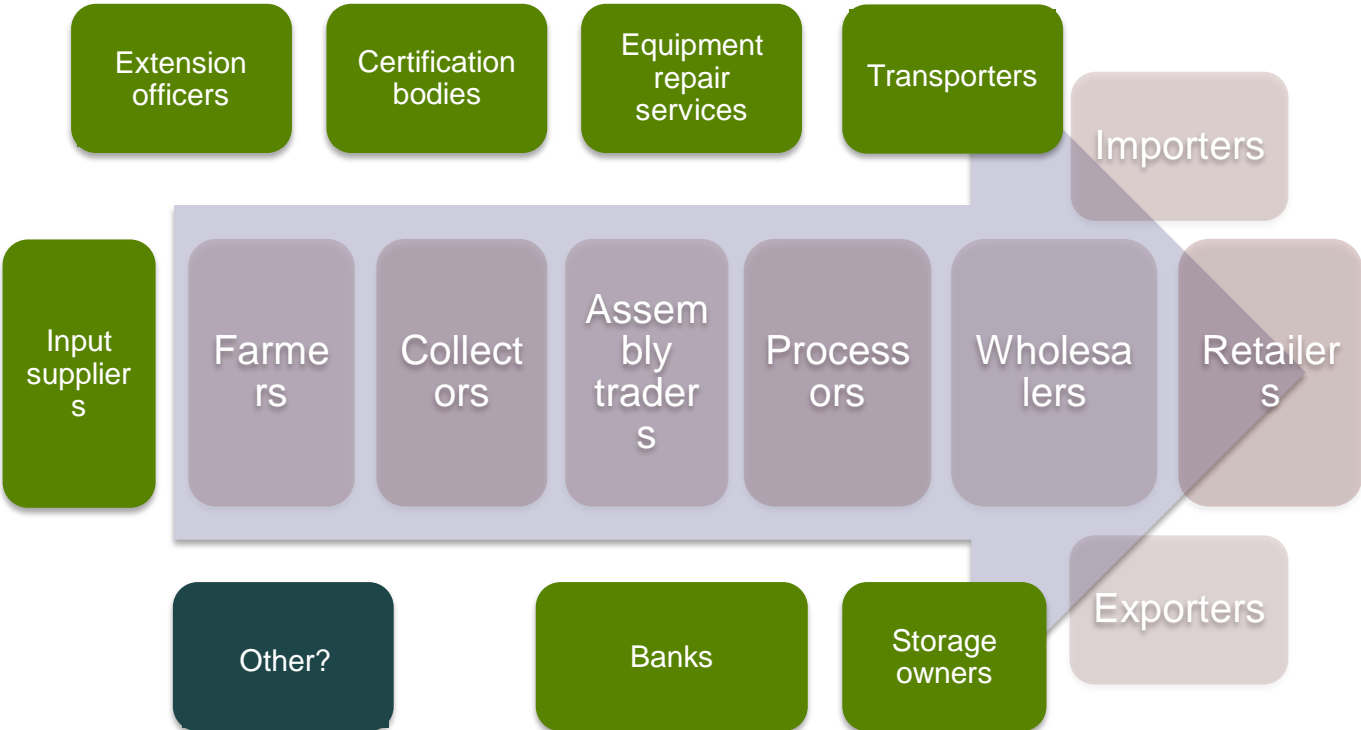
Staff from
donor
agencies,
NGOs,
projects

Policy
makers

Key informant categories: Value chain participants



Key informant categories: Support service providers











676 Lâm
HƯỚNG ĐI - 41







대한민국



Discussion



Why are consumers normally excluded from the list of key informants interviewed in rapid value chain appraisals?

In such contexts, how can researchers and analysts develop some understanding of market preferences and consumer demand and behaviour?

Discussion



Please discuss the following statement:

“Each category of key informants has its own strengths and weaknesses as a source of information about value chains”

Tips for conducting key informant interviews

- Adopt a friendly, relaxed attitude
- Ask simple, direct questions
- Use questions that start by “who, what, when, where, how, why”
- Avoid influencing replies
- Make the informant feel s/he is the expert
- Do not repeatedly interrupt the informant
- Use silence to encourage the informant to speak
- Ask for clarification when needed

- Paraphrase statements from key informants to make sure their message has been understood
- Question your informants when unsure about the accuracy of the information (e.g. give examples of different information or views from other informants)
- Give an opportunity for the informant to also ask questions (before, during and after the interview)
- Leave sensitive questions for last
- Ask key informants for their contacts (for possible follow-up) at the end of the interview
- Avoid excessively long interviews (unless the key informant is happy to continue the conversation)

Guidelines for preparation of checklists

- Develop key informant-specific checklists
- Cover key issues
- Follow a logical sequence
- Focus not only on the activity of key informants, but also on their broader knowledge of production and marketing systems
- Avoid hypothetical questions
- Checklists can be refined during the fieldwork!

Discussion



Checklists should be used flexibly to allow the researcher to follow promising lines of enquiry.

What does this mean in practice?

Group exercise



Please spend 10 minutes reviewing 2 checklists used in two different studies in Cambodia.

How do the checklists vary in style?

Can you identify some of the key issues under investigation in each of these studies?

d. Direct observation

Observation provides opportunities to document activities, behaviors and assets without having to depend on people's willingness or ability to respond to questions.

- farm management practices
- scale of farm and other enterprises
- gender division of labor
- Technologies
- physical infrastructure
- quality management systems, product quality
- prices
- etc













↑
15.900

↑
14.500

↑
14.500



Some observations

- In value chain studies, direct observation methods are used opportunistically.
- The scope of observational activities is limited by the timing, duration and location of the fieldwork.
- Checklists are important for consistency in the gathering of observational data.
- It is often better to take notes immediately after rather than during the observation.

e. Structured questionnaires

- ❑ Commonly used for collection of farm cost and farm revenue data for different types of farmers
- ❑ Sample of farmers is usually small
- ❑ Consequently, data only has illustrative power: it provides an indication of orders of magnitude, but should not be presented as representative estimates





f. Stakeholder meetings

Meetings that bring together selected value chain stakeholders can be organized for validation of study data, discussion of strategic issues and interventions, and identification of potential “chain champions”.

Stakeholder meetings are not appropriate for collection of in-depth, value chain data.

Examples of chain stakeholders:

- Government agencies
- NGOs and projects
- Producer and trade associations
- Women associations
- Certification agencies
- Input companies
- Processing firms
- Supermarkets



III. Data validation and interpretation



Methods

- Triangulation is the main method employed to ensure that the value chain data collected is valid and interpreted correctly, resulting in findings that are both reliable and credible.
- Direct observation is another, very useful data validation method.

Two types of triangulation

Methodological Triangulation

Comparison of the results from different methods (e.g. FGD, SI, SSI, direct observation) to identify regularities and inconsistencies.

Data Triangulation

Method of cross-checking data from multiple sources to search for regularities and inconsistencies.

How are data triangulation methods reflected in the design of checklists?

Mirror image interviewing

- Prices
- Grades and standards
- Contract design
- Market channels
- (...)

Same questions asked to different key informants

- Policies and regulations
- Trends
- Technologies
- Constraints and opportunities
- (...)

Reading material

Alexandra Miehlbradt and Linda Jones (2007) Market Research for Value Chain Initiatives, December 2007, MEDA.

<http://www.fao.org/3/a-at402e.pdf>

Carlos A. da Silva and Hildo M. de Souza Filho (2007) Guidelines for rapid appraisals of agrifood chain performance in developing countries, Food and Agriculture Organization of the United Nations, Rome.

<http://www.fao.org/3/a1475e/a1475e00.pdf>

John S. Holzman, Rapid Appraisals of Commodity Subsectors.

<http://web.worldbank.org/archive/website00660/WEB/OTHER/RAPIDAPP.HTM>