

ARTNeT Greater Mekong Sub-region (GMS) initiative

## *Session 2*

# *Introduction to primary data collection methods*

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# Objectives of this lesson:

- Overview of primary data surveys
  - Steps of survey administration
- Introduction to important primary data collection methods
  - I identify advantages and disadvantages of different data gathering techniques

# First step: Formulating Survey Framework

- What data do you need?
  - understand the purpose of your survey
  - you need to keep this purpose in mind every step of the way.
- Who will be covered?
  - Defining your survey population or sample.

# Example

## What are you going to evaluate?

- Export competitiveness of garment industry.
- Industry needs to be defined by reference to Harmonized System tariff lines (HS 6) or Standard International Trade Classification (SITC)

## How will you measure export competitiveness?

- Relative cost? Relative price?
- Market shares?

## What data do you need? Is the data available somewhere?

### Data

- World Output Price
- Relative Costs
- Relative Productivity
- Changes in Market shares

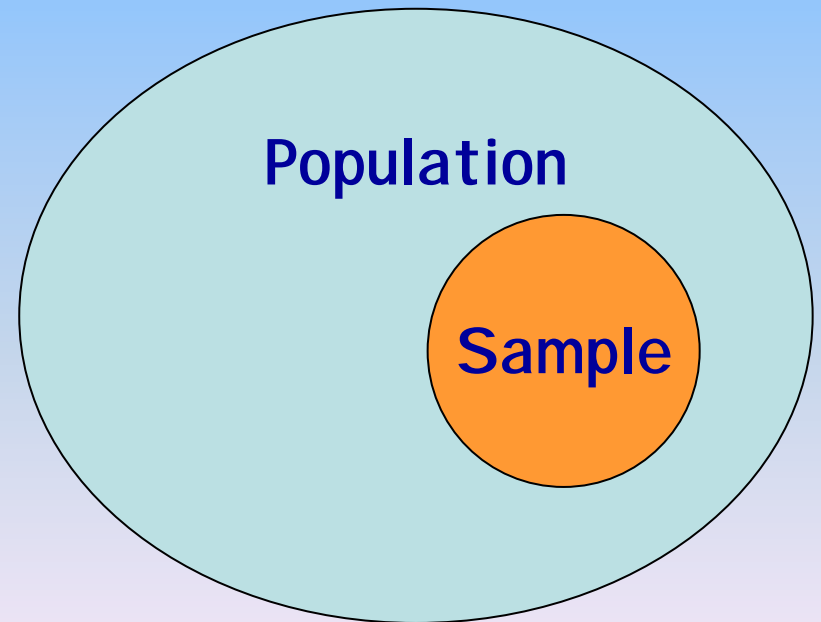
### Sources

Asia-Pacific Research and Training Network on Trade

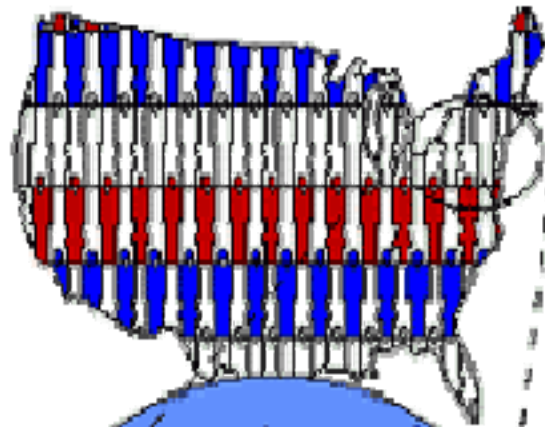
# Who will be covered?

**Population** is the entire group of individuals that we want information about

**Sample** is the part of the population that we actually examine in order to gather information

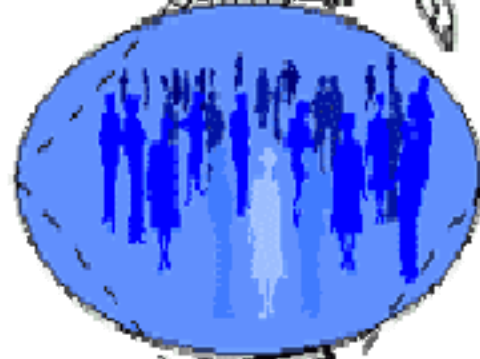


**Who do you want to generalize to?**



**The Theoretical Population**

**What population can you get access to?**



**The Study Population**

**How can you get access to them?**



**The Sampling Frame**

**Who is in your study?**



**The Sample**

# Census

- If you survey *every person* or a *whole set of units* in target population you are taking a *census*.
- Sometimes taking a census can be impossible.
  - For example, a car manufacturer might want to test the strength of cars being produced. Can you perform crashed tests on every car?

# Samples

- *Samples* are taken from populations, and estimates made about the total population based on information derived from the sample.

- We usually base conclusions about the population on data from the sample. Why?

- Is the larger the sample the better for drawing conclusions?



# Second step: Choosing Sampling Techniques

- How to draw a sample from your target population?
  - Random Sampling
  - Non-random Sampling

Note: We will discuss techniques of sampling methods later.

# Third Step: Choosing data collection methods

The main methods include

- Questionnaires
- Interviews
- Observations
- Case Study

No single method is superior to others in all aspects.

## Fourth Step: Developing Survey instruments

- Designing questions

## Fifth Step: Pilot testing and revising your survey instruments

- Poor question design will reduce the survey response rate.
- Bad questions and response format can lead to invalidity and unreliability of the survey result.

# What next?

- Collecting data in the field
- Analysing the data
- Preparing the report

# Summary: Steps for survey administration

- Define the objective and research questions
  - Identify data types and sources.
- Define sample (or population)
- Develop methodology
  - Data collection methods
  - Data analysis techniques
- Draft a survey instrument (questionnaire)
- Pilot test and revise survey instrument
- Collect data in the field
- Evaluate and analyze the data
- Prepare the report

# Important Survey Methods

# Questionnaires

- Questionnaires are lists of questions used to find out what people think or feel about an issue, product or service.
- They can be filled in the absence of the researcher in the form of a self-administered, group-administered or postal questionnaire.

What do you think about questionnaires compared to interview/observation/ etc.?

- Can it cover a larger number of respondents?
- Is it more expensive to administer
- Is it more time consuming to design and interpret?



# When is it good to use a questionnaire?

- **When studies involve large sample sizes and large geographic areas.**
  - Example: a Nation-wide survey on competitiveness of small garment firms.
- **When it is necessary to protect the privacy of the participants.**
  - Example: Asking about tax evasion. (confidentiality is necessary to ensure participants will respond honestly)
- **When corroborating other findings.**
  - It can be a useful tool to confirm other expensive data collection schemes

# Limitations of questionnaire surveys

\* What happens if you get a low response rate ?

\*\* If your response format has little flexibility, you might lose insightful information

E.g. What is your main export market?

a) US b) EU c) China d) Other \_\_\_\_\_

\*\*\* Is a written survey to a group of poorly educated people workable?

E.g. Survey on competitiveness of small chicken farms?

# Interviews

- *Interviews* are a way to get in-depth and comprehensive information.
- Structured versus Unstructured Interviews
  - *A structured interview* follows a specific questionnaire. The aim is usually to gain fixed responses for further quantitative analysis.
  - *An unstructured interview* is not controlled by a specific set of detailed questions, but the interviewer is guided by a pre-defined list of issues. The aim is to find out how people think and how they react to issues.

# Types of Interview Surveys

- Interviews can be undertaken on a **one-to-one basis** or in a **focused group**.
- Interviews may be conducted **face-to-face**, or through media such as the telephone.
- But, conducting phone interviews in the developing world may have bias towards some groups of people :
  - urban?
  - above average incomes?
  - relatively large enterprises?

# When is it good to use personal interviews?

1. When the required respondents are within a specific target group?  
(experts)
2. When you are investigating decision-making processes?
3. You may use interviews for pilot testing other data collection methods.

# When is it good to use a focus group interview?

Focus groups are group-depth interviews in which a small group of participants (usually 8 to 12 persons) are interviewed about selected subjects.

E.g. Bringing a group of people representing various business sectors together to discuss problems of a new trade regulation.

- Looking for insights (qualitative data) into why individuals feel the way they do about particular issues.

E.g. Competitiveness and export potentials of GMS garment industry in AFTA markets.

# Limitations of interviews

- Time and cost consuming
- Limited sample sizes and geographic areas
- Differences in the settings may produce variability in the quality of results
- Lack of privacy for sensitive questions

# Observation

- Recording the behavioral patterns of people, objects and events in a systematic manner\*.
- Direct observation versus Unobtrusive Observation
  - Direct observations: respondents are aware they are being observed.
    - Does it affect the accuracy of the survey? \*\*
    - Can you suggest a way to reduce the error?\*\*\*
  - Unobtrusive observation: respondents do not know they are being observed.



# When to use observation?

- When you want direct information\*
- When you try to understand an ongoing process or behavior\*\*
- When there are physical products or outcomes that are readily observable.\*\*\*

# Limitations of observation

- Time consuming
- Findings may only reflect a unique population and therefore cannot be generalized
- Risk of researcher bias. The researcher may "see what they want to see".

# Case Study

- A fairly intensive examination of a single unit such as a person, a small group of people, or a single company.
- It enables the researcher to explore, and understand problems, issues and relationships.
- Can you conclude that the findings from one case study apply generally?
  - If we do a case study on key garment exporters and the study shows that the firms are successful in exporting, does the result apply to other garment firms in the country as well?

# When to use a case study?

- When it is important to understand why the instance happened as it did,
  - historical issues may shape the present situation \*,
- When it is more important to clarify the deeper causes behind a given problem and its consequences than to describe the symptoms of the problem and how frequently they occur.

# Summary (1)

No single survey mode is superior to others in all aspects.

## Things to consider

- Types of information needed
  - complex data?
- Data Coverage
  - Wide geographic areas ? Large sample size?
- Time and resources (e.g. money and staff)
  - Sample size and survey methods will impact budget, time and available resources.

# Summary (2)

Key research processes:

- Define sample (or population)
  - Who am I going to interview?
  - How large is the sample size? How to locate them?
- Choose Data collection methods
  - Written surveys/ Interviews/ Case study/ etc.
- Choose Data analysis techniques
  - Descriptive / Statistics / Econometrics Analysis
  - Patterns of data collection and question designs have to support the analysis technique.