MODULE 6: SAMPLING METHODS FOR THE FISHERIES AND AQUACULTURE SURVEYS

SESSION 6.4:
DATA COLLECTION TOOLS FOR FISHERIES AND AQUACULTURE SURVEYS:
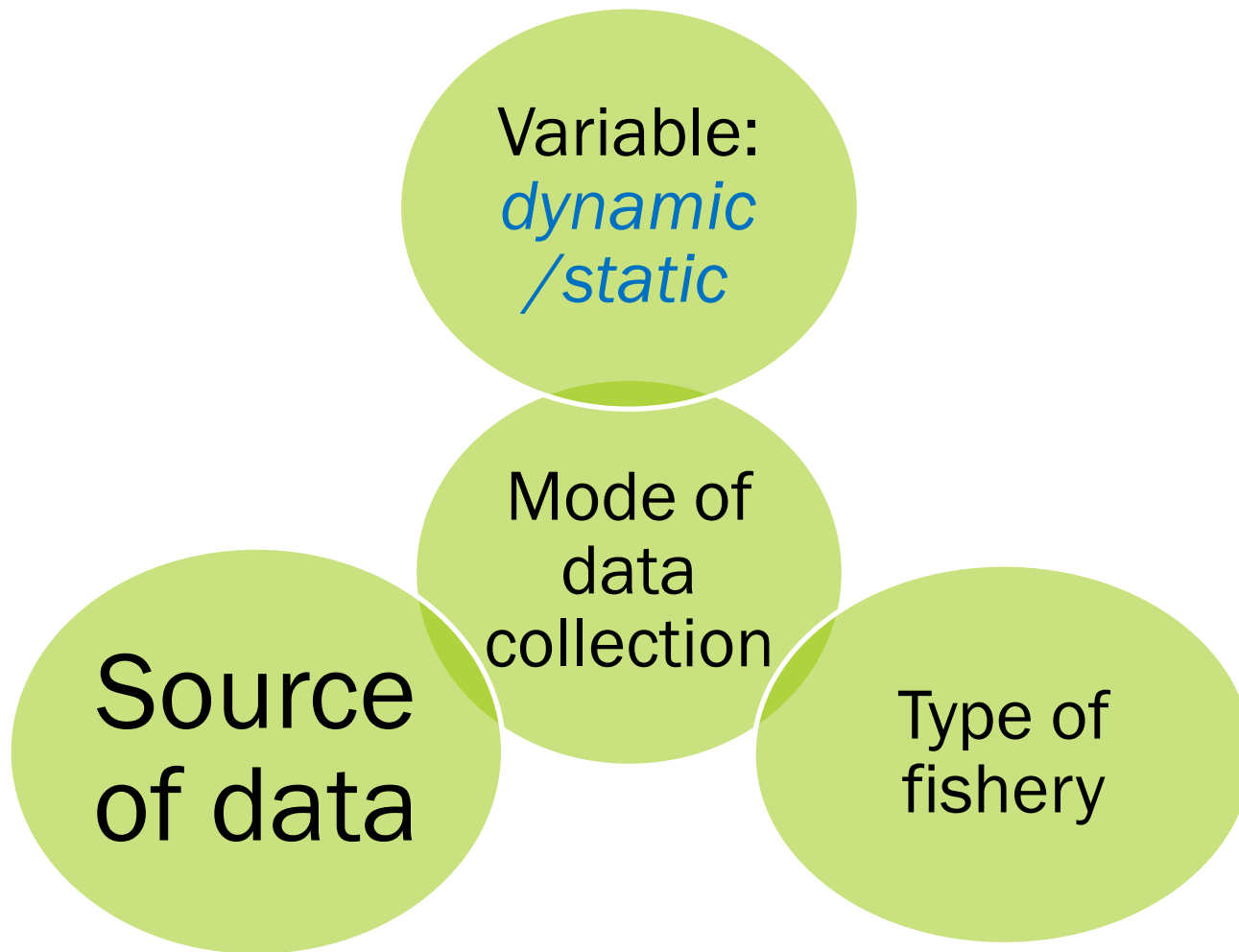
Regional Training Course on Sampling Methods for Producing Core Data Items for Agricultural and Rural Statistics

Jakarta, Indonesia ,29Sep-10 October 2014.

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DEVELOPING DATA COLLECTION STRATEGY

1. Evaluate existing sources of data
2. Construct frame (describe operating characteristics of sector & identify units)
3. Decide on survey approach (sampling or full enumeration?)
4. Design your survey
5. Test your survey (validate tools and methods)
6. Establish quality assurance system

DATA COLLECTION TOOLS FOR FISHERIES AND AQUACULTURE SURVEYS

Variable: *dynamic /static*

Mode of data collection

Source of data

Type of fishery

DATA COLLECTION TOOLS FOR FISHERIES AND AQUACULTURE SURVEYS

Type: Static ……….. Dynamic

e.g: Vessel's length catch Sea temp

Mode: Register Questionnaire/ Interview/ observation Observation/ records

Data sources
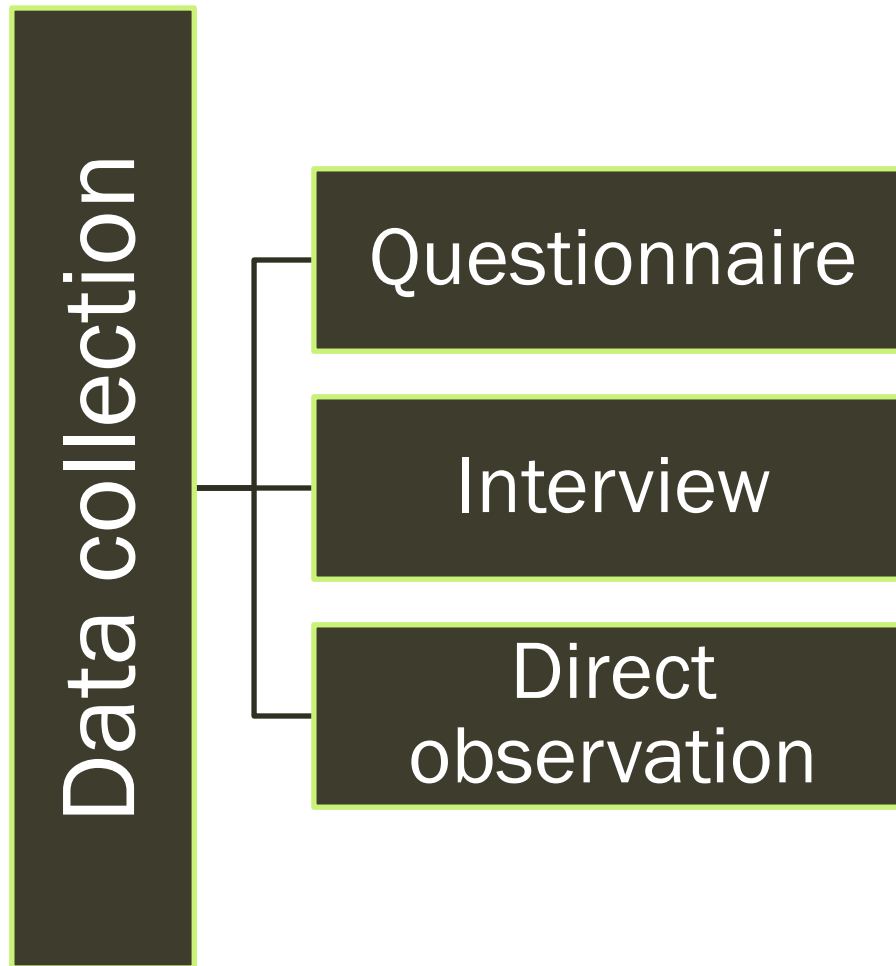
1. Harvest: fish are caught
2. Post harvest: fish are prepared for the market
3. Market: fish are commercially transferred
4. Consumers: products are consumed
5. Government-related agencies: outside fisheries
6. Support industry: material and service provider

Other considerations

➤ Precision required (Kg, tones, ..)

➤ Level of disaggregation (species, gear type, day, region,..)

Questionnaires

➢ Collect routine data *(both regular or infrequent)*

➢ Needs higher level of literacy

➢ As simple and short as possible

➢ Not a direct measurement *(subject to error)*

Interviews

➢ More expensive approach, but more complicated questions

➢ Improve data quality (data can be validated)

➢ Ensures scheduled data collection

➢ Can be combined with questionnaire

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Direct observations

➢ Training and supervision required

➢ Requires trust

➢ Appropriate for specific data items; *landings, biological, effort*

➢ It may involve another stage of sampling (e.g. from fishes)

Using technology in data collection

➢ Automatic location Communicators (ALC)

  ➢ *Position, speed, heading, deployment of gear*

➢ Vessel Monitoring System (VMS)

  ➢ *Combine position and catch assessment information through remote means*

  ➢ *Confidentially is a critical issue*

Design considerations in data collection

➢ Design characteristics; *strata, psu, ssu, domain*

➢ Weighting variables *(in addition to design)*

➢ Quality measures; *non-response, non-coverage*

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Group discussion

1) Identify;
   I.   *Design*
   II.   *Weighting*
   III. *Quality*
   Information

2) Propose addition items required