

# Benefits and Limits of Integration

**Fourth RAP Regional Workshop on Building Training Resources for Improving Agricultural and Rural Statistics: Survey Methods for Agricultural Statistics- Current Practices and International Recommendations**

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# Content

- Why integrate(Benefits)?
- Limits of Integration
- Conclusion

# Why integrate?

- Experiences show provides better coverage for some statistics found in one population of a single kind of activity

Example: Crop & Livestock production from different surveys using different samples

- Impossible to analyse economic characteristics of farms involved

# Why integrate?




**Comparison of sample unit data  
across time and sectors**

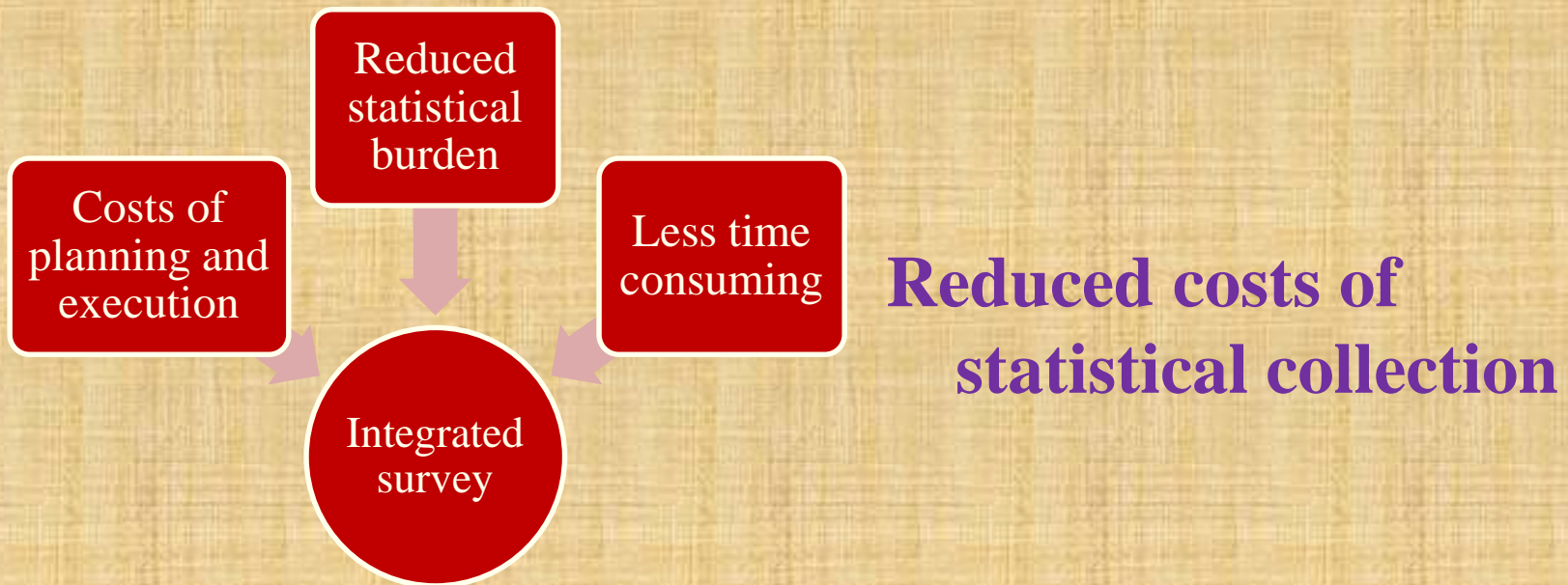


**Major tool for improvement of data  
quality**

# Why integrate

- Adding value to the entire statistical data collection and management system
  - Richer data bases for comparative analysis and enhancing quality of research
  - Integrate data sets with GIS framework to reveal household disparities
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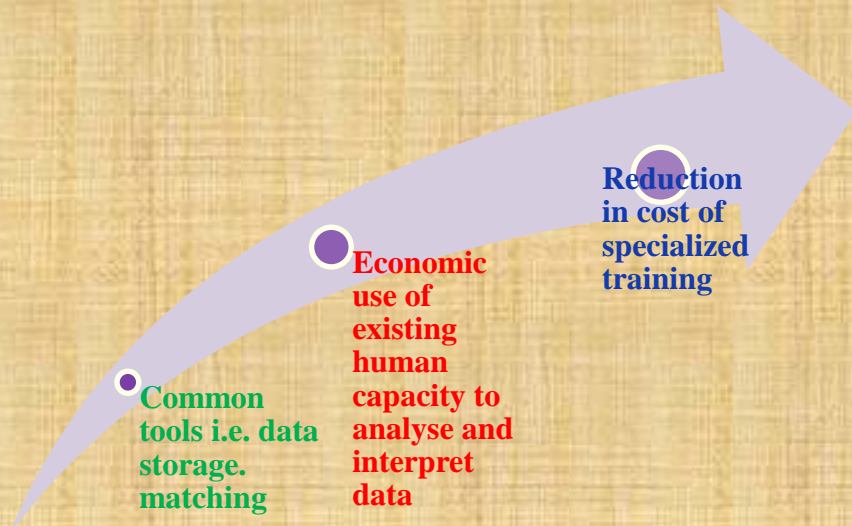
# Why integrate



# Why integrate

- Increasing the consistency and accuracy of statistical units
- Promotion of common standards, methods, sample frames
- Increased data coherence enabling repeated collection of comparable data
- Increased data accuracy by promoting data scrutiny
- Improved data quality through cleaning and reconciliation
- Enabling comparative analysis
- Promoting institutional cooperation

# Why integrate



- **Exploitation of common technology, analytical methods, tools and processes!**



# Limitations of Integration

- Variations in data needs and survey plan
- Different definitions of enumeration units
- Comparison of agriculture units overtime
- Institutional factors limitations
- Technical factors

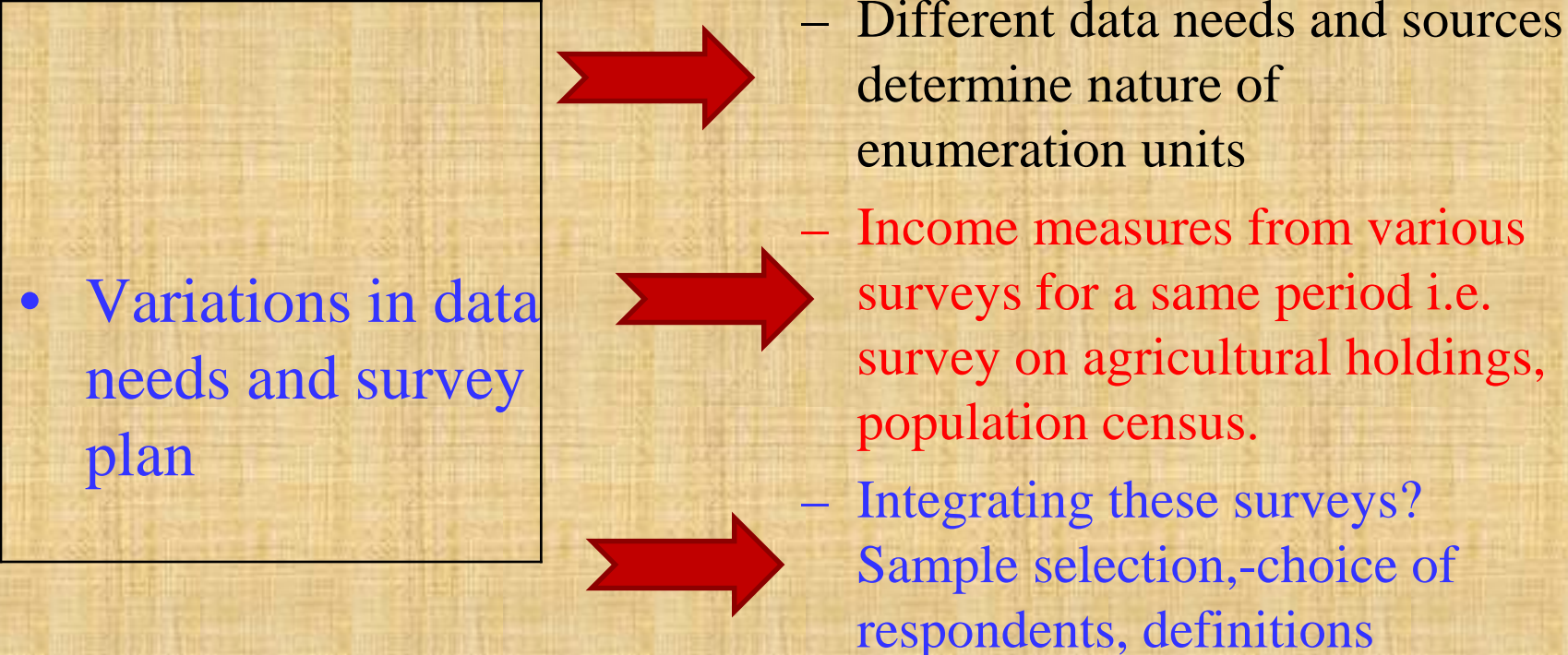
# Limitations of Integration

- **Variations in enumeration units**

- Different data needs and sources determine nature of enumeration units

- Income measures from various surveys for a same period i.e. survey on agricultural holdings, population census.

- Integrating these surveys? Sample selection, -choice of respondents, definitions



- Variations in data needs and survey plan

# Limitations of Integration

- **Variation in variables collected and coverage**

- Variation needs like survey organisation can alter questions asked or sample size;

- Reduction in number of key variables for each unit/number of units that can be linked



**Variations in data needs and survey plan**

# Limitations of Integration

## Variations in definitions of enumeration units

- ✓ Agricultural holding or agricultural household
- ✓ *Holding is recommended because it considers size but most surveys still use agricultural household*

# Limitations of Integration

- Unclear definition of household across countries-inconsistent data

**Variations in definitions  
of enumeration units**



# Limitations of Integration

- **Variation in production methods and farming techniques.**

- Sample units through other criteria such as zoning than ownership for comparison purposes

**Factors that make comparison of agriculture units overtime difficult**

- **Timing of data collection**

- Lapse in crop season and surveys can lead to inaccurate estimations (case of Kenya)

# Limitations of Integration

**Factors that make comparison of agriculture units overtime difficult**

- *Varying sampling Methods.*
  - *Limited resources tend to force countries to adopt different sampling methods for similar surveys but different objectives*
- *Nomadic and migrating households*

# Limitations of Integration

**Factors that make  
comparison of  
agriculture units  
overtime difficult**

❖ *Impact of diseases on  
data collection;*

• *Impact of cultural  
barriers;*

□ *Impact of insecurity  
and conflicts.*



# Limitations of Integration

## Institutional factors limitations

- Policy and legal constraints.
  - *Confidentiality of personal data and commercial value of data*
- *Limited skilled manpower of National Statistical Systems (NSSs).*

# Limitations of Integration

## Institutional factors limitations

- **Weak coordination and collaboration between producers of statistical information**
  - *Different producers using different methods; Data inconsistency*

# Limitations of Integration

## Technical Factors

- Choice of integration technology and lack of skilled manpower
- IT infrastructure
- Data inconsistency and poor quality
  - Data collected with lack of common standards, definitions, lack of meta data

# Conclusion

- Integration process is the use of the most suitable unit of enumeration, standards, definitions, and classifications!
- Devise prudent ways to overcome existing constraints, especially those related to technological development and associated capabilities

Thank You