

Week-02-L-01

# Statistics for Agriculturists

## Sampling versus Census Methods

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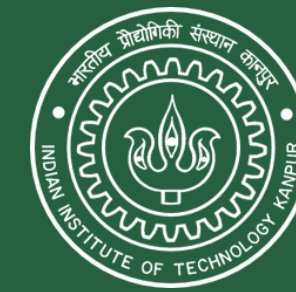
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# Recap



## Last week we covered:

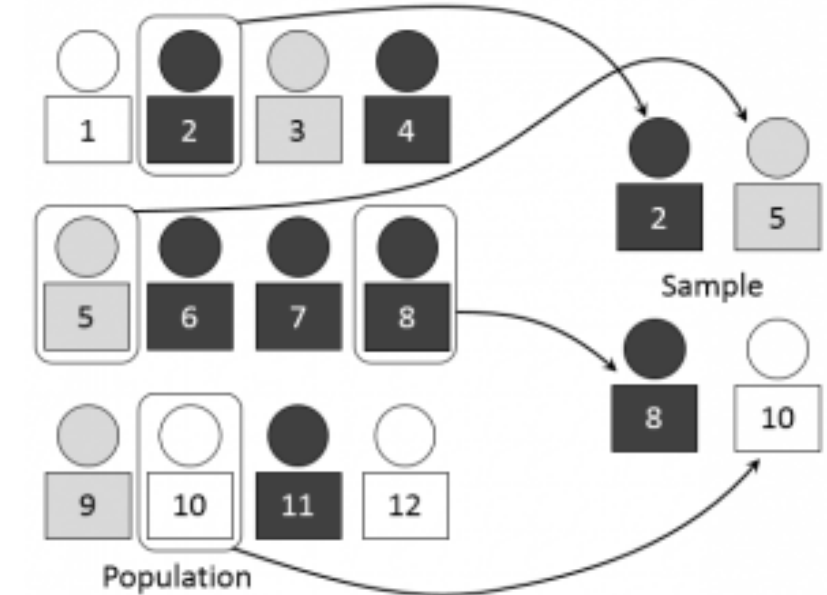
- Role of Statistics in Agriculture
- Why do we use Statistics in Agriculture?
- How do we use Statistics in Agriculture?
- Basics of Statistics
- Statistical Variables

# Sampling

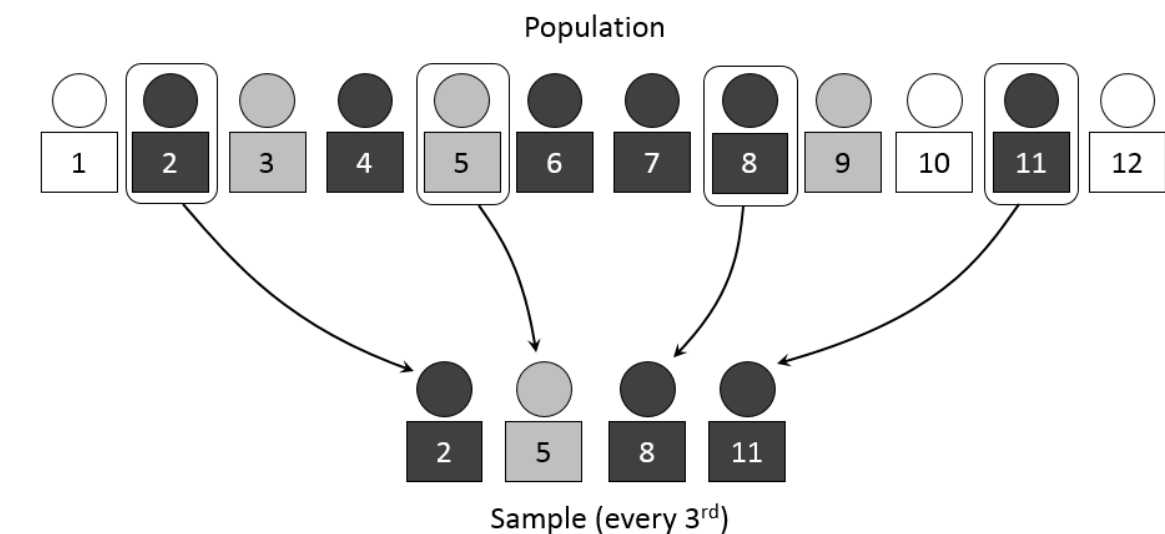


- A **subset** of the target population from which data are collected.
- The best way to fetch samples is to choose randomly, as a biased sample would be useless.

## Random Sampling



## Systematic Sampling



# Sampling

- **Caution#1**

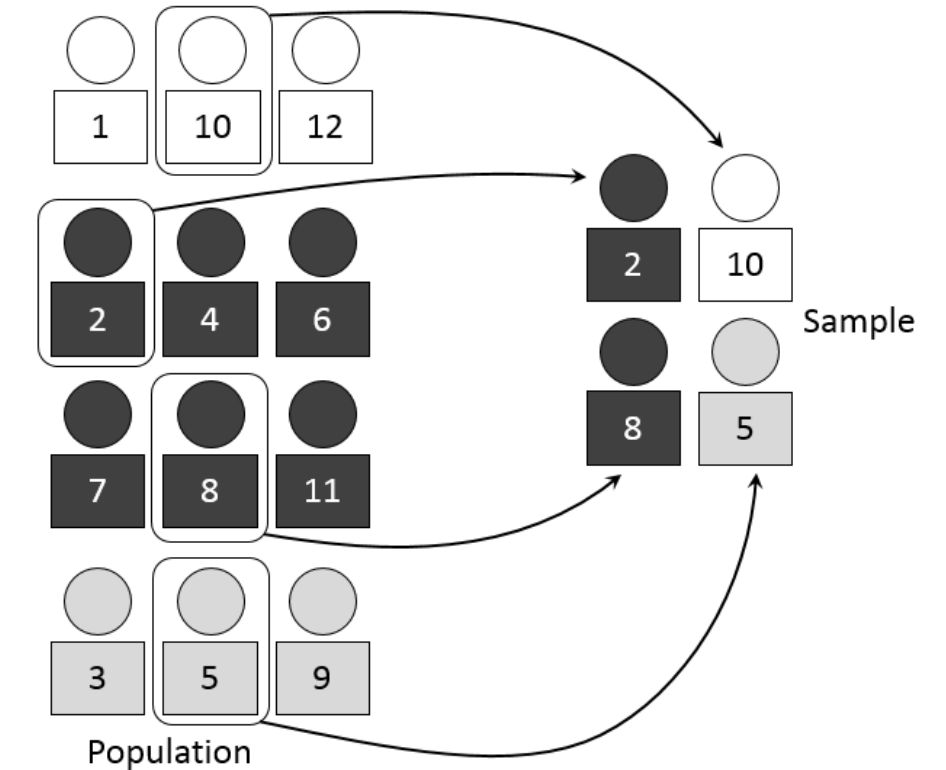
Most sampling methods depend on the independence and lack of bias of the simple random sample only.

- **Caution#2**

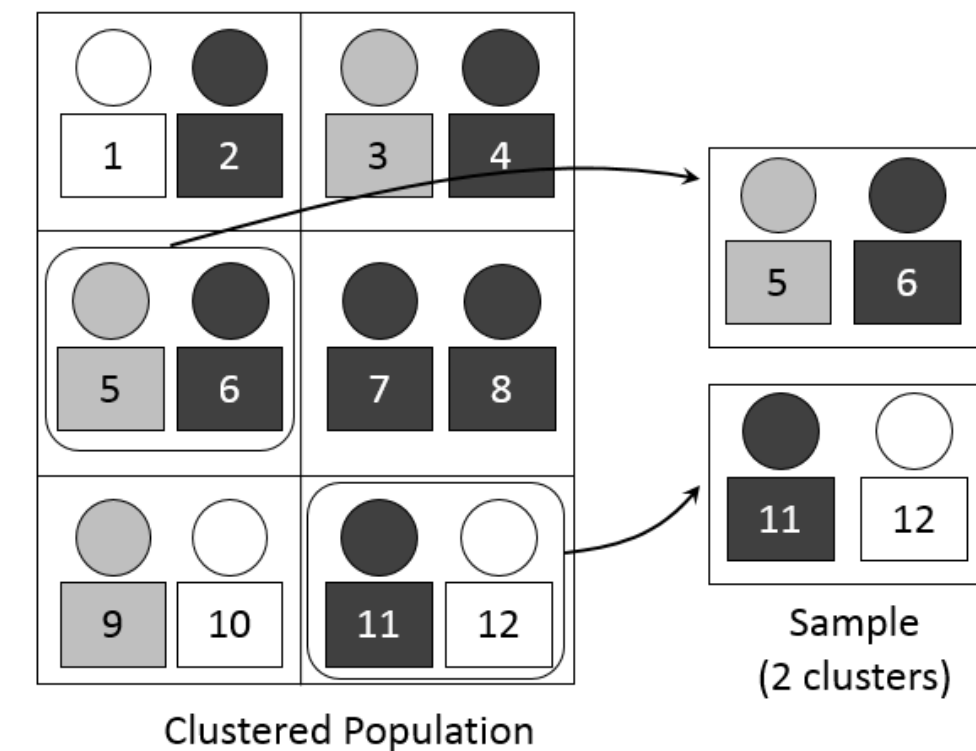
Data obtained should always be randomized as it “Statistically guarantees” the accuracy of the data



## Stratified Sampling



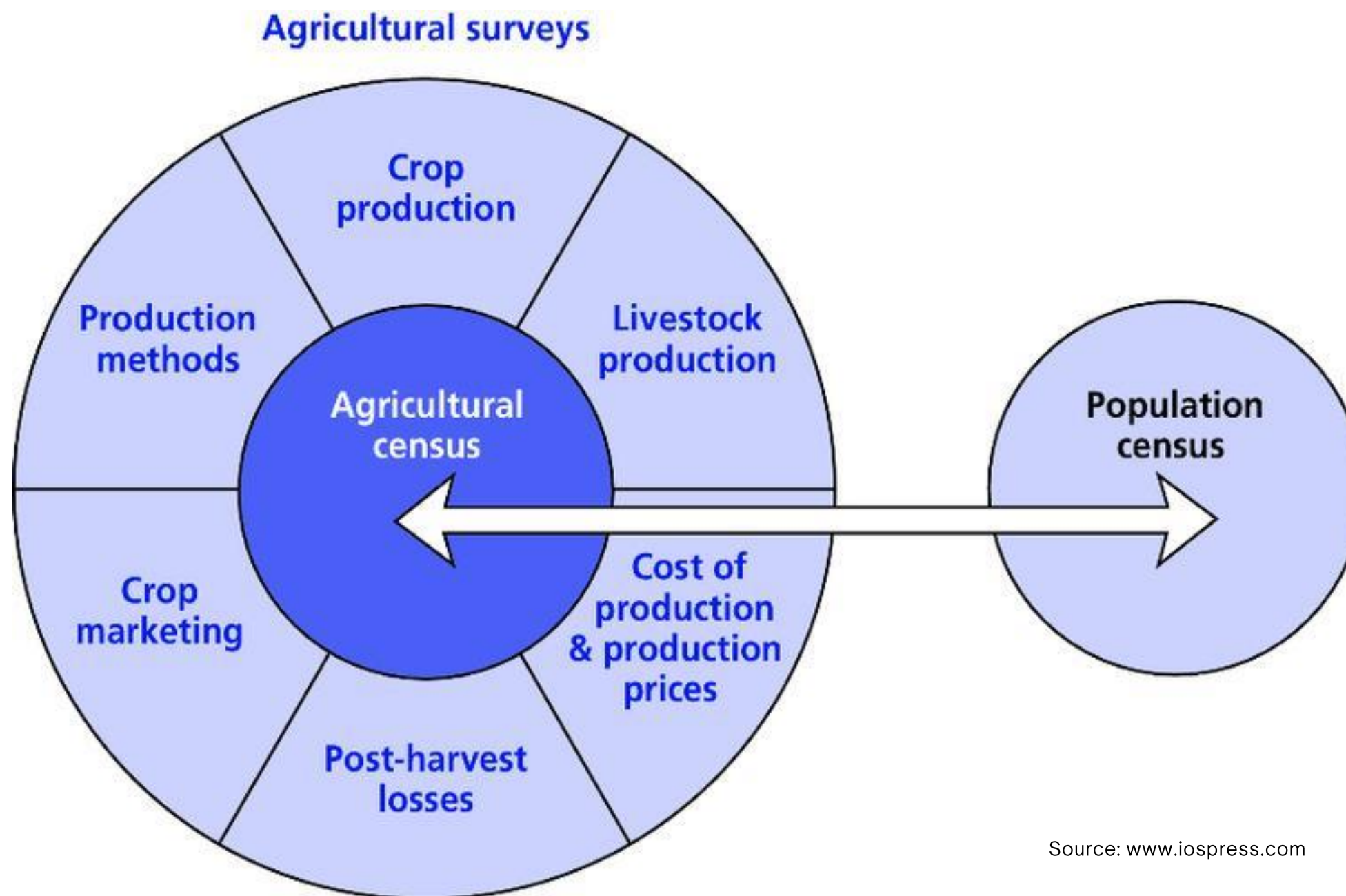
## Clustered Sampling



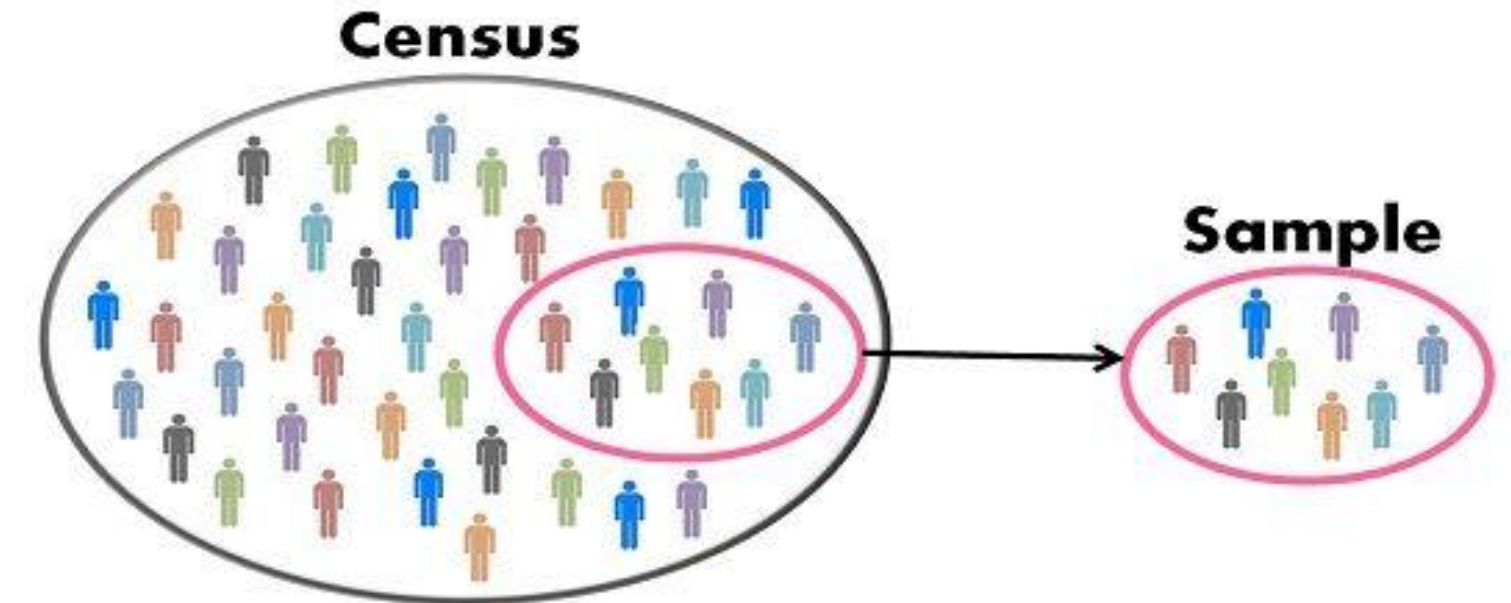
# Census



The collection of data from every member of the population.



Source: [www.iospress.com](http://www.iospress.com)



Source: [www.keydifferences.com](http://www.keydifferences.com)

# Sample *versus* Census Surveys



Sample	Census
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Less accurate as compared to census

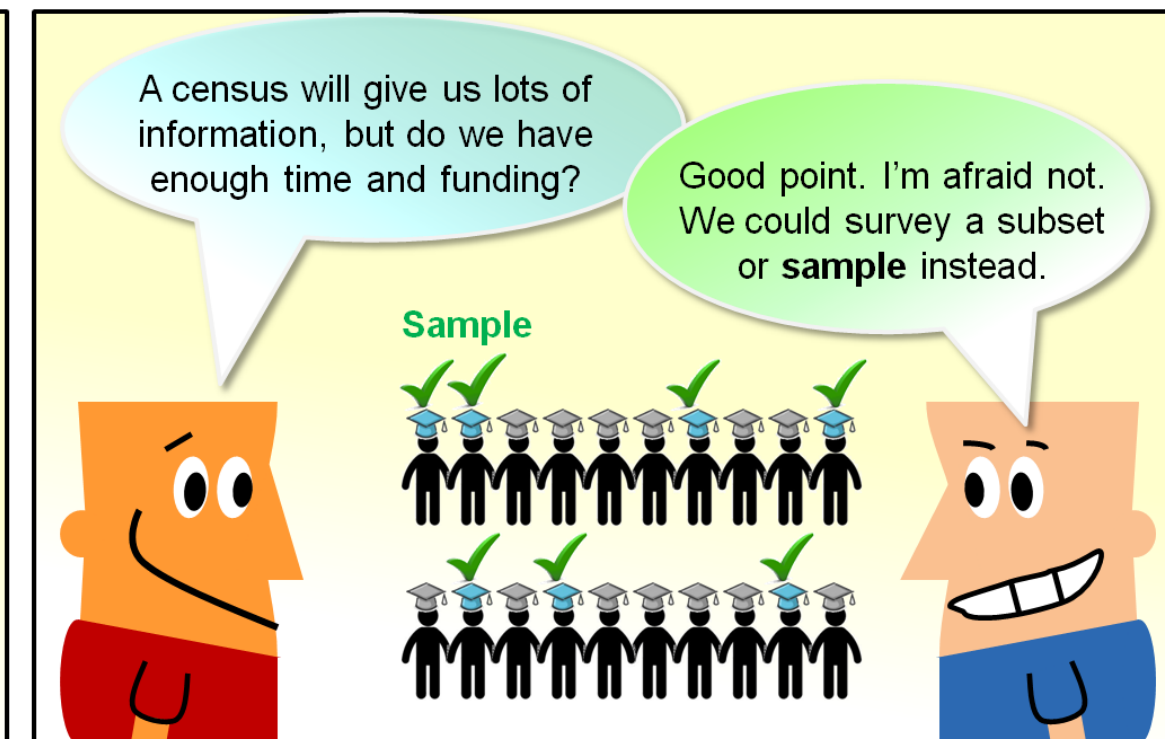
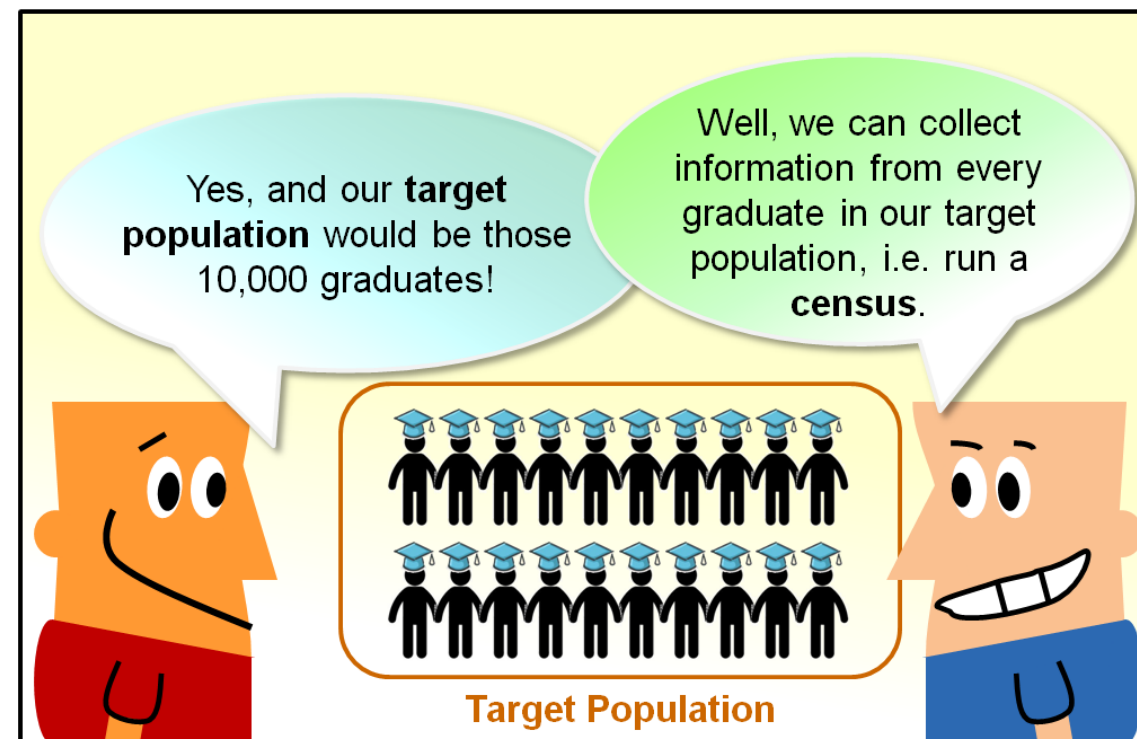
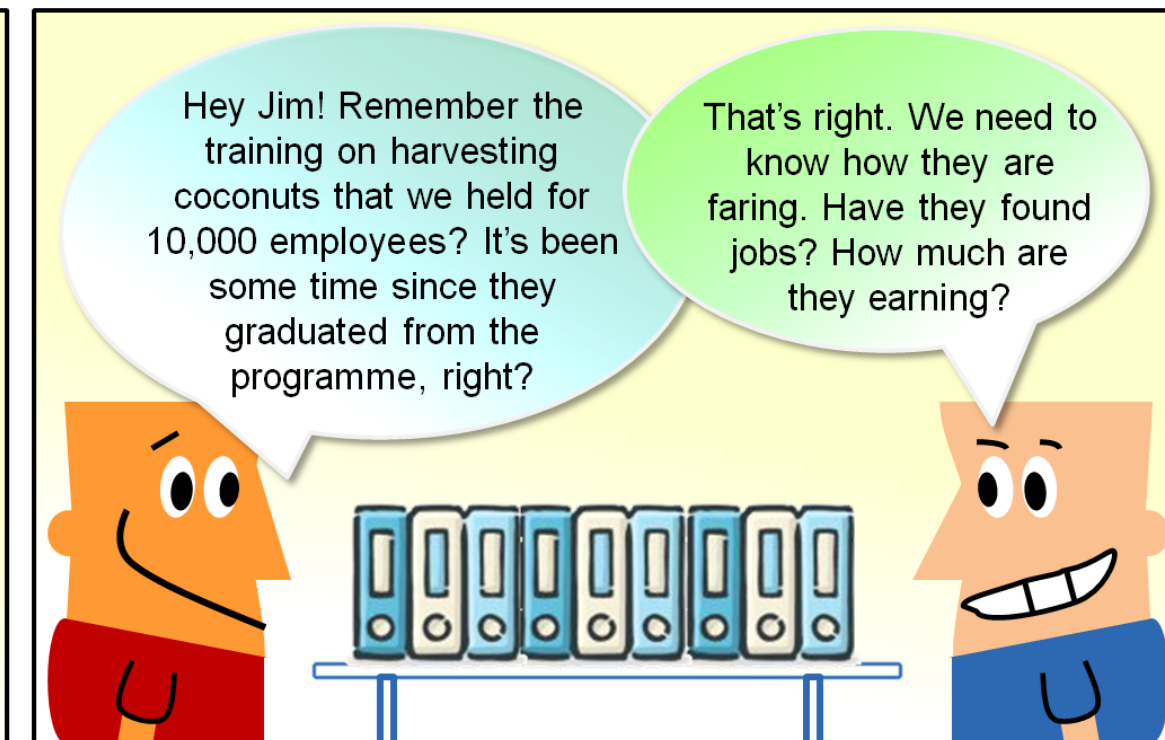
More accurate

Can be conducted by anyone

Conducted by bigger bodies

More frequent

Less frequent



# Verdict



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Thus as per requirement anyone of the required methods can be used,

- sampling is better when there is a very large population.
- census is better for smaller populations.

**Thank you**



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