

Week-02-L-02

Statistics for Agriculturists

Planning and Execution of Sample

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Important aspects



The following are important points to keep in mind:

- Formulation of data requirements - objectives of the survey
- Ad-hoc or repetitive survey
- Method of data collection
- Questionnaire versus schedules
- Survey, reference and reporting periods
- Problems of sampling frames
- Choice of sampling design
- Planning of pilot survey
- Field work and processing of data
- Preparation of report.



Objectives, repetition and Method of collection



→ A very clear & brief objective should always be stated, the specification of the domain of study, data tabulation form, accuracy predicted and cost of the survey should be standardized first.

→ While an adhoc survey is conducted with no intention to repeat but a repetitive survey is conducted to fetch values periodically

→ There are 2 probable ways to collect data:

a) On-field sampling

b) Direct Interview



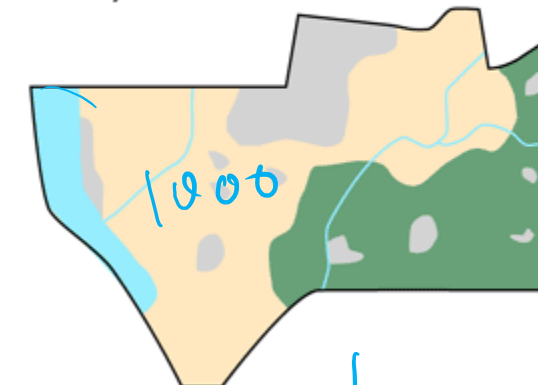
Questionnaire, sampling frame, and design



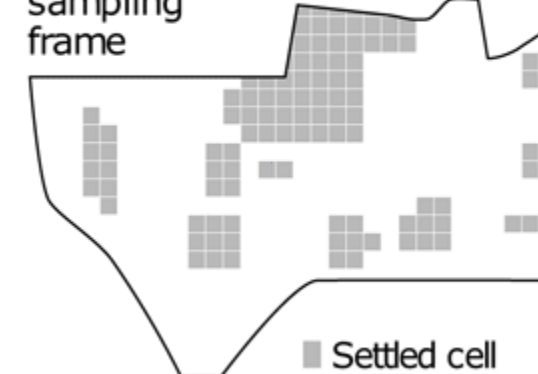
- A questionnaire is a set of characteristics according to which the survey proceeds.
- Frames aren't perfect as they might have omission, duplication or other imperfections.
- The design in general should reduce overall cost for a pre-specified permissible error or reduce margin of error of the estimates for a given fixed cost

A Sampling frame

A1 Study area

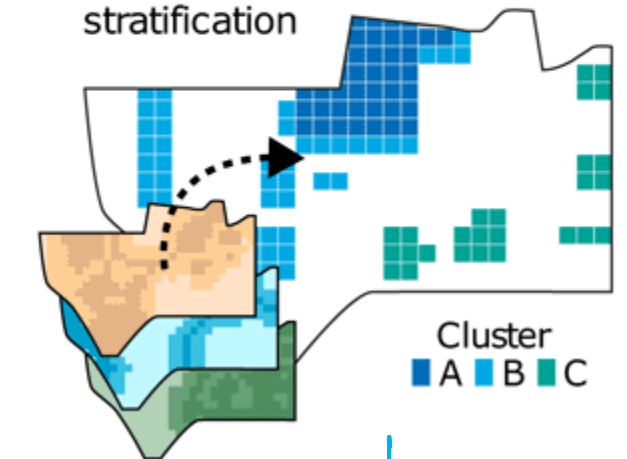


A2 Gridded sampling frame

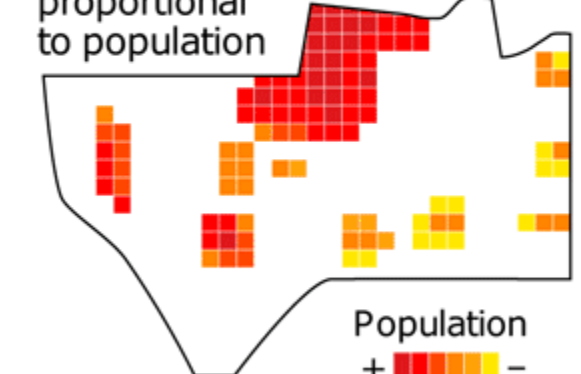


B Sampling design

B1 Contextual stratification



B2 Probability proportional to population



Time Periods



a) Survey period: The time period during which the required data is collected.

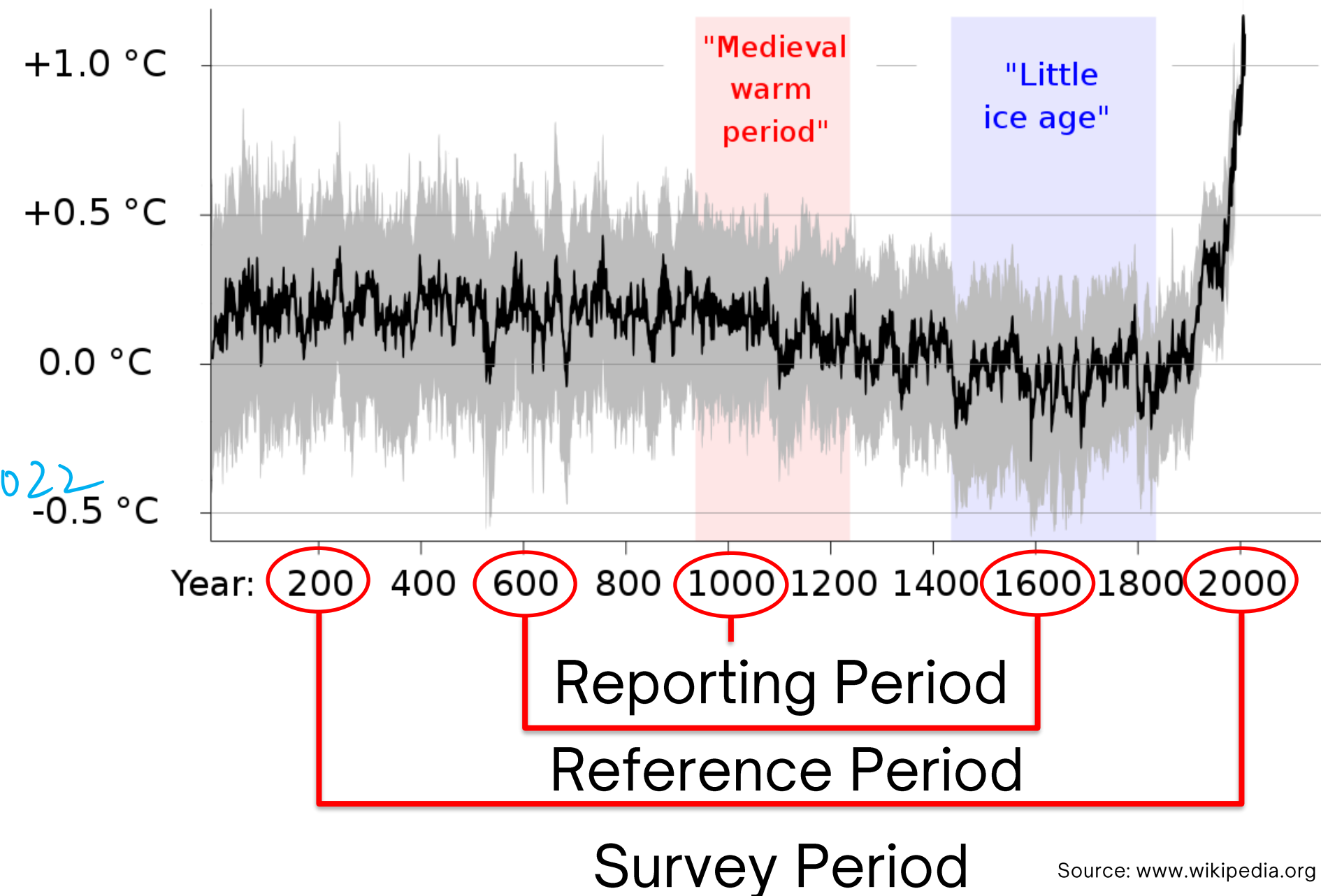
b) Reference period: The time period to which the collective data for all the units should refer.

c) Reporting period: The time period for which the required statistical information is collected for a unit at a time

on June 21, 2022

- apple
- mango

Consider this example
Global Average Temperature Change



Pilots, Field work, Processing & Presentation



→ Conducting pilots helps in:

- testing the preparation
- evolving procedure (if reqd.)
- training field & tabulation staff

→ Field work i.e. the people collecting data. For adhoc surveys, one may plan for adhoc staff, but for regular surveys a field agency is required.

→ Finally data needs to be processed to tables, graphs and plots, it is mainly tabulating & summarizing data and analysis the subject. This then finally is compiled to a report.



Thank you



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