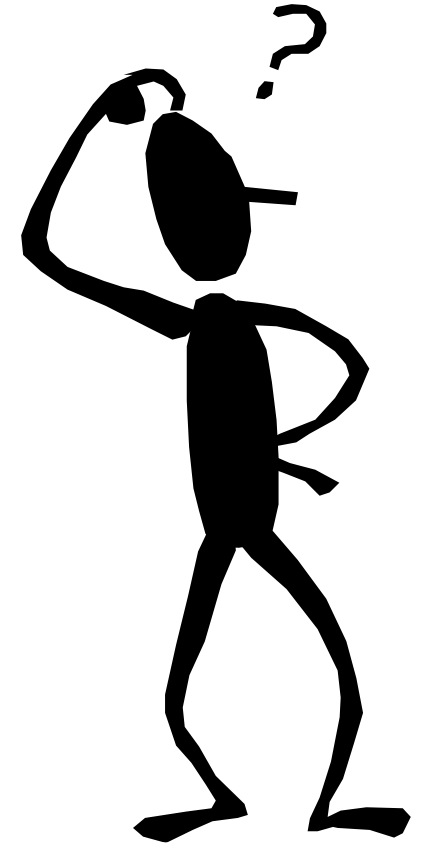


Introduction to Sampling

Snapshot Question

Should we always use sampling methods?



Exhaustive Survey

- Measurements taken from **entire population**.
- Exact picture of nutritional status and/or IYCF practices



Syrian Refugee Camp, Qiam, Iraq - 2012

- ❖ Only in geographically concentrated populations.
- ❖ **Rare.**

True Population Value vs. Estimate

Ex: 5,000 people in your population

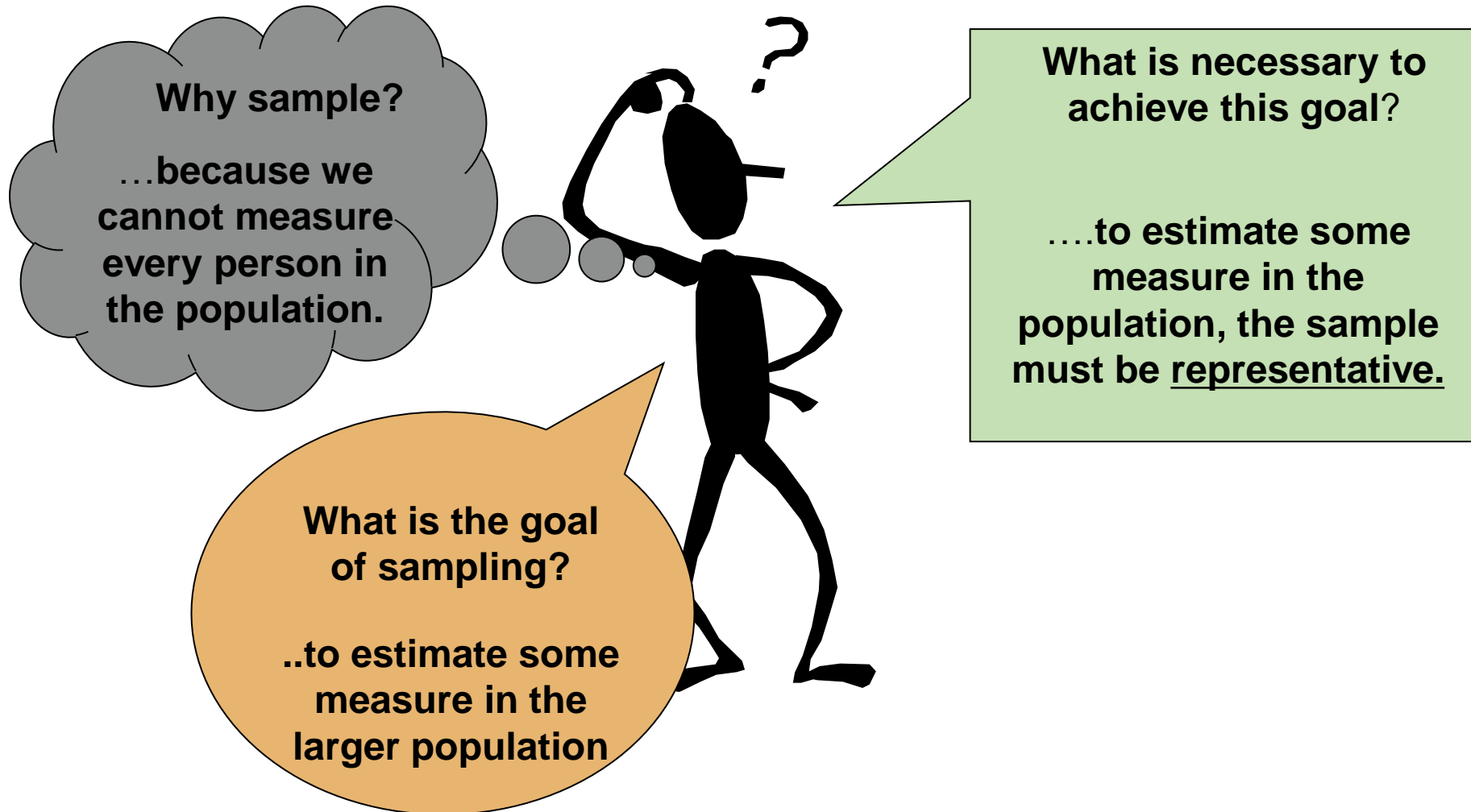
- Exhaustive Survey

You measure ***all*** 5,000 individuals and you obtain the **true population value**, therefore there is **NO confidence interval**.

- Sample

You measure ***only*** 500 individuals and you obtain an **estimate**, with an associated confidence interval.

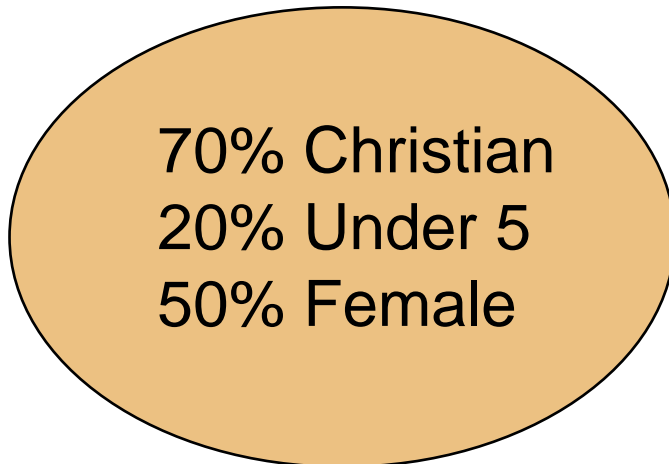
Sampling



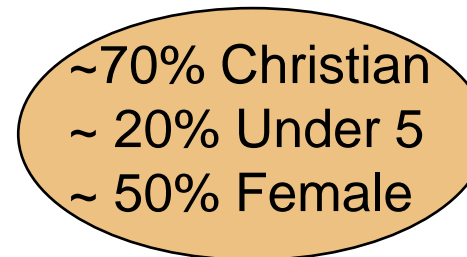
Representative Sample

When your measurements are taken from a population subset with the **same characteristics** as the rest of the target population, you will obtain a **representative sample**.

Example:
Target Population



Without counting, your
representative sample
will also have:



What is a representative sample?

Technically, a representative sample means that:

1. Each individual or sampling unit in the population has a **known non-zero** chance or probability of being selected (*preferably the same chance*).
2. The selection of one individual should be **independent** of the selection of another.

How to achieve representativeness?

Probability Sampling

To be statistically representative, probability sampling requires “randomness”: no one has control over the selection of individuals or households.

Non-Probabilistic Sampling

- Does **not** use random selection to make up a sample and thus cannot be used to obtain a representative sample.
 - E.g., Purposive or convenience sampling.
- Very useful to gather **qualitative** data.
 - E.g., Focus group discussions, for example.

Remember this point!

Regardless of the sampling method, if the sample is not representative, it will not provide a valid estimate of the prevalence in the population.

Exercise- Definitions

Objective of your survey: To assess nutritional status of children 6-59 months and household access to safe water and latrines in typhoon-affected villages of the Maungdaw Township

1. What is your sampling universe?
2. What is your sampling frame?
3. What is your sampling unit?
4. Who is/are your respondent(s)?
5. Who is/are your survey subject(s)?

Sampling Universe

- **General**

- Population from which a sample is selected.

- **Maungdaw Township**

- Population present in the typhoon-affected villages of the Maungdaw Township.

Sampling Frame

- **General**

- The description of the sampling universe that is, the **list** of the elements to be selected for your sample (e.g.: households or individuals.)

- **Maungdaw Township**

- List of typhoon-affected villages in the Maungdaw.

Sampling frame considerations

If the survey excludes areas because of a lack of access:

- The results are **not representative** of the entire Township.
- State clearly in the report which areas were excluded from the survey. Attach to the final report a **map** indicating the excluded areas, and those included in the survey.
- Discuss in the report the most probable **status** of the populations in these villages.

➤ Maungdaw Township

- All typhoon-affected villages that cannot be accessed are removed from the sampling frame.

Example of
a sampling
frame

SL	Ward/Village Tract	Total Population	Male	Female	# of HH
1	Sha Ra (W)	1055	640	415	147
2	Myo Ma (W)	1118	611	507	176
3	Raw Kaw (W)	271	145	126	52
4	Pi Naung Sut (VT)	1000	501	499	163
5	Kye Tha Yauk (Sun Par) (VT)	507	271	236	70
6	Tha Man Chaung Son (VT)	283	147	136	45
7	Kyaing Raing (VT)	269	146	123	40
8	Yaung Ngway (VT)	152	69	83	30
9	Har War (VT)	461	231	230	81
10	Lar Khu (1) (VT)	70	34	36	10
11	Ga Gaw Ka Bar (VT)	3201	1893	1308	392
12	Thar Man (VT)	150	86	64	30
13	Lein Hnoke (1) (VT)	151	81	70	33
14	Ah Htet Lu Lun (VT)	344	187	157	60
15	Hpar Kyet (VT)	463	244	219	74
16	Ngaing Maung (VT)	245	114	131	50
17	Lar Haung (VT)	107	59	48	18
18	Ha San Kaing (VT)	222	116	106	30
19	Chammakauntlonekaung (VT)	445	219	226	67
	Nanyun Tsp Total	10514	5794	4720	1568

Sampling Unit

- **General**

- The element or entity selected during a sampling process.
 - Villages, districts, households.

- **Maungdaw Township**

- The typhoon-affected villages in Maungdaw

Respondent

- **General**

- The person who answers your questions in the field.

- **Maungdaw Township**

- WASH: the head of household living in the typhoon-affected villages of Maungdaw
 - ANTHROPOMETRY: the caretakers of children aged 6-59 months.

Survey Subject

- **General**

- The person about whom questions are being asked.

- **Maungdaw Township**

- WASH: the head of household living in the typhoon-affected villages in Maungdaw
 - ANTHROPOMETRY: the children aged 6-59 months.

Any Question?