

CENSUS

Date: / /

Page No.:

Census — total process of compiling, evaluating, analysing, collecting and publishing of demographic, social and economic data at a specified time to all persons in a country or in a well defined part of the country.

HISTORY OF CENSUS

Traced before the birth of Jesus Christ. In Africa, censuses are recent, in most cases black people were excluded from the censuses. After world II we began to see some "classic census" which involved collecting data of individuals.

So - Lesotho in 1956 had the kind of census,

- Botswana had in 1956

- Bahr el Jebel Cameroon in 1962 and 1953 (research)

- Cape Verde had a census in 1950 & 1960

- Ghana in 1948 and 1960

- Kenya in 1948, 1961 and 1962.

- Nigeria in 1953 & 1962

- South Africa 1950 and 1960

- Swaziland 1956

- Tanganyika or Zanzibar 1948 and 1957

- Uganda in 1959 and 1948

- Zanzibar and Pemba Island in 1948 and 1958

These classic censuses excluded blacks (in Africa).

SAMPLING CENSUSES

- Took place in Belgium and Congo (DRC) in 1952 & 1950.

Ivory Coast in 1958 and 1960

Niger in 1959 and 1960

Rwanda Burundi 1952 and 1960

Northern Rhodesia in 1950 and 1961

needs for the electro-commission of Zambia. This information is very critical for the government.

- Helps the ECZ to plan.

• The 2010 census added another new dimension which is maternal mortality component or ratio. This was to facilitate the evaluation of the MDGs particularly goal no. 5.

There are the changes that have taken place so far.

FEATURES OF A CENSUS

- Sponsorship - A census requires money to be conducted e.g. technical expertise, human resource, financial etc. These resources can come from locals or foreigners i.e. donors such as UN, etc. They find a component that is lacking in a census in that particular country e.g. printing questionnaires etc. At large, the census is sponsored by the national govt.
- Legal framework: A census has to be legal, have necessary legal backing traced from various acts.
- Individual units / individuality: ensure the characteristics of every citizen are collected, if it fails to do so, the census is lacking.
- Defined territory: Areas enumerated must be defined.
- Universality: The census must include everybody, everybody in that territory must be counted. If one is left out, it becomes a sample survey.
- Simultaneity: It must happen at the same time and questionnaires must be the same.
- Periodicity: Regular intervals (period between census) e.g. in Zambia, a census takes place every 10 yrs.

- publication: Results must be published or nothing happens.
- comparability: we compare because data is used by international agencies like the UN, to plan.
- must have a scope: national / international: what a nation needs to inform the decision makers about.

ENUMERATION APPROACHES

There are two approaches in census enumeration

- De-facto and
- De-jure
- under de-facto - counting popo where there are found also called "place where found" or "present in area ~~where~~ found".
- The De-jure: takes into account the usual place of residence hence also called "usual place of residence". The temporary absence is considered present and the temporary absence is not counted. In some countries like Colombia, we use both methods of ^{due to some challenges} enumeration of a census.

ADVANTAGES OF THESE METHODS

- Theoretically, it gives correct geographical allocation - i.e. the De-jure method.
- Minimizes chances of double counting.
- The De-jure method is also cheaper than the De-facto method. bcz under the De-facto method you need alot of resources while under the De-jure you find everyone popo at same place.

DISADVANTAGES

- It requires to find certain standard definitions for the De-jure method. under the De-jure method,

the definition as a person that ~~is~~ ^{is} considered as a residence. Hence this method + ...

- Some people do not have permanent places or residence hence this method has limited the national comparability. (Ethnic of the street kids)

DE FACTO METHOD

ADVANTAGES

- Simple (Coz u just count people anywhere u find them).
- You can compare it across countries.

DISADVANTAGES

- Difficult to estimate the distribution of the population.
- It is expensive (counting mobile population).
- Shorter reference period.
- It tends to reflect the population size.

The de facto method gives the total population as the upper limit (it over estimates the total population).

INTERVIEWING METHODS

- The canvasser method

It is also called based on a question. It involves enumerators go out for enumeration.

- SELF enumeration method.

The canvasser method is appropriate for developing countries like Zambia because most people do not know how to read and write.

Under the self-enumeration method, the questionnaire is ~~not~~ dropped at home and the elder member of that house reads and fills in the questionnaire. This method is common in developed countries coz most people know how to read & write. Some countries use both methods like Australia.

TYPES OF CENSUS

- 5 yrs census (every after 5 years)
- 10 yrs " (" " 10 yrs)

5 yrs census are called quinquennial censuses
10 yrs " are called Decennial.

The quinquennial depends on how much money you have. In Zambia, we use the Decennial.

STAGES IN CENSUS ENUMERATION UNDERTAKING

1 - PLANNING

Items of activities or its logistics or all that we need for us to carry out a census.

- BUDGETING

plan on how much will be spent during the whole process of enumeration (census)
e.g how many enumerators, are needed etc.

- ADVERTISING

is a key component of a census, it involves informing the citizens on an upcoming event.

Zambia we combine both de-jure and de-facto.

Date: / /
Page No.:

addresses come on radio, tv, newspapers etc.

4 - **CATOGRAPHIC WORK** ^{areas} ^{area} (mapping)
It ~~entire~~ ^{entire} entries demarcating boundaries for
census. CSA: census supervisory area.
Within the CSA there is a household;
The cartographic estimates the no of households.

5 - **FUNDRAISING**: Raising money from the government,
donors, coz the census undertaking process is expensive.

6 - **PROCUREMENT**
process of acquiring all census materials,
logistics that are needed to conduct a
census.

7 - **TABULATION PROGRAMME**
no ~~interest~~ is there the use of folder campin.
you should come up with a layout on how the
census information will be coded. out-type or table
to use also is considered.

8 - **QUESTIONNAIRE PREPARATION**
method of enumeration - in Zambia we combine
both the methods of enumeration, we should
plan how the questionnaire will look like,
type of data to be collected how to be
considered also.

CENSUS TESTS

- (i) pre-enumeration survey
- (ii) post-enumeration survey

(iii) Test for evaluation: This is used to see how credible the data is.

- Census tests eliminates potential problems.

pre-test
- Assessing the census results before census enumeration.

post-enumeration
- test after census enumeration

- * Census test holds 3 purposes
- Testing for enumeration
- " " processing
- " " evaluation

under enumeration we conduct 2 surveys:

- pre-enumeration survey which is conducted before undertaking the census.
- post-enumeration survey which is undertaken after the census.

PHASES OF ENUMERATION

- Plan the type of enumeration to be used.
- How do you control for quality & ensure that there is no cheating.
- Consider the resources - security, supervisors

PLAN FOR DATA PROCESSING

* Basically entails entails how you want the data to come out.

* Location of the data processing. Do you want to have the data processing centre in all the districts or it should just be at the headquarters.

* Staff recruitment and training
- After doing everything, the planning, you have to recruit people. Recruitment at different levels. You have to recruit enumerators, supervisors (Census supervisor area), master trainers (are transformed into district Census) supervisors are recruited so as to ensure that enumerators are doing their job. The committee of training of trainers later designs the questionnaires, and they train.

Committee

Zambian census in 2010 had a no of committee at different levels. The highest committee of a census is a committee of cabinet ministers...

2 COMMITTEE OF CABINET MINISTERS

The composition of the committee

- Ministry of finance and national planning
- Ministry of Education
- Ministry of Health
- Ministry of Labour and Supply
- Ministry of Labour and Social Security
- Ministry of Community and Social Services
- Ministry of ~~Information~~ and Broadcasting Services

Information

- Ministry of defence.
- Ministry of Home Affairs
- Ministry of Agriculture and Cooperatives
- Ministry of Youth, Sport and Child Development

TERMS OF REFERENCE

- 1. Terms of Reference
 - To be the overall overseer of the census undertaken.
 - To facilitate the administration and financial requirements for the proper conduct of a census.
 - To perform any other functions that the president might have deemed fit in terms of

2. COM THE NATIONAL CENSUS COMMITTEE

- Secretary to the Cabinet was the chairperson. members in this committee were as follows:

- 1. Deputy Secretary to the Cabinet.
- 2. Secretary to the Treasurer.

3. SECRETARY TO THE TREASURER

The fourth category of members where all permanent secretaries of

Terms of Reference

- To review and to endorse the terms and objectives of the census.
- To report Cabinet on the progress of a

know and make proposals for appropriate interaction to be undertaken.

- to provide financial, logistical, administrative and human resources for required for the census role undertaken.
- to perform any other functions deemed fit for the cabinet committee members

4 THE NATIONAL CENSUS SECRETARIAT

in other words it is a central statistical office.

- The director of the CSO as a chairperson
- vice chairperson directors of the CSO
- census manager, deputy, ~~also~~ assistant census managers, IT manager, various statisticians or labour statisticians, programmes, geographical information officer CSO, principle of monitoring and evaluation officer, senior statistical officer, ministry of education

TERMS OF REF

- to prepare a census methodology
- to document systematically all census materials
- to implement the recommendations of all census committees
- to be the central office of coordination on all stages of the census undertaken.

5 CENSUS STEERING COMMITTEE

- This is composed of permanent secretaries
- ~~members~~ PS Ministry of Commerce
- PS Home affairs, Education
- PS Community development and Social Services
- PS Local govt and Housing
- PS Works and Supply
- PS Ministry of Justice and Vacation training was chair person

TERMS OF REF

To ensure that the census ^{programme} is highly monitored, reviewed and also to provide the necessary renewed and also to provide

- to perform n other functions deemed fit by the national census committee system.

6 COMMITTEE OF DIRECTORS

- This was headed by different directors
- The Controller of the govt. function

TERMS

- To monitor the operations of the committee
- To reduce
- To scrutinise and endorse all the census
- To perform all any other functions deemed fit by the national census committee

7 PROVINCIAL CENSUS COMMITTEE

- Each province has ↑ chaired by the

Provincial Permanent Secretary including
 Traditional leaders representatives (chievas)
 District Commissioners in ~~the~~ Comm

TERMS OF REFERENCE

- to ensure proper implementation of strategies
- to mobilise ^{support} mobilise 2010 census
- to promote dissemination and utilization of labor & health information from 2010 census
- to perform any other functions deemed fit by the Census --

8 THE DISTRICT CENSUS COMMITTEE
 chaired by district commissioners / WAs,

TERMS OF REF

- to ensure proper
- mobilize on 2010 census

9 PLANNING AND METHODOLOGY COMMITTEE
 chaired by Coordinator, census manager

- to consider and approve proposals from

- to review and analyse
- to advise on the scope coverage and

- to RE-WRITING OF THE NOTES!

5. THE CENSUS STEERING COMMITTEE,
 This is comprised of permanent secretaries
 PS Home affairs, education PS, PS Ministry
 of Justice and vacation training was the
 Chairperson. PS Ministry of Health, PS local
 government and housing, PS works and supply

TERMS OF REFERENCE.

- It had two mandates to ~~submit~~ all what
 the census program was closely monitored
 reviewed and also to provide the necessary.
- to perform any other functions deemed fit
 by the national census committee system.

6. COMMITTEE OF DIRECTORS.

This was chaired by different directors, the
 Controller of the government function

TERMS OF REFERENCE

- to monitor the operation of the committee.
- to scrutinize and endorse all the necessary
 census instruments.
- to perform any other functions deemed
 fit by the national census committee system.

7. PROVINCIAL CENSUS COMMITTEE

It was chaired by provincial permanent secretary. It was including traditional leaders representatives, provincial (chiefs), district commissioners, private sector representatives, NGOs, representatives.

TERMS OF REFERENCE

- to ensure proper implementation of the proper execution of field census activities
- to mobilize for support for the 2010 census.
- to ensure the implementation of the technical recommendations of the
- to promote dissemination of information and utilization of labour to have information from the 2010 census.
- to perform any other function deemed fit by the National Census.

8. DISTRICT CENSUS COMMITTEE

It was chaired by the district commissioner, district planning officers, traditional leaders, NGOs, private directors.

TERMS OF REFERENCE

- to ensure proper

9. THE PLANNING AND METROLOGICAL COMMITTEE

Chaired by coordinators, census managers, secretary

TERMS OF REFERENCE

- to consider and approve proposals on the conduct of the census.
- to review and analyze proposals.
- to advise on the scope, coverage and methodology of the census.
- to collaborate with other technical committee on census matters.
- to provide reports to the census steering committee.
- to perform any other functions deemed fit by the census steering committee.

10. THE CARTOGRAPHIC TECHNICAL COMMITTEE steering by the survey general, geography information office, ministry of mines, the university of Zambia, National Remote Service Centre.

TERMS OF REFERENCE

- to consider and approve proposal on the cartographic mapping activities.
- to and procedures of the cartographic mapping produces
- to perform any other function

11. DATA PROCESSING TECHNICAL COMMITTEE ministry of finance and national planning also the chair person, IT manager CSO and other members.

TERMS OF REFERENCE

- to consider and approve proposals.

- To collaborate with other technical committee on census matters.
- To periodically provide reports to the census steering committee.
- To perform any other function deemed fit

11. PUBLICITY

Steered by directors etc. Zampost, ZANIS

TERMS OF REFERENCE

- To consider and approve proposals
- To provide census publicity and awareness for use in the census.
- To participate in the preparation of materials.
- To participate in the demonstration of the 2010 census.
- To perform any other function.

12. LOGISTICS AND

Steered by the Minister of finance or Home affairs etc.

Mandate:

- To consider and approve proposals on
- To collaborate with other technical committee.
- To provide reports on logistics and
- To perform any other functions deemed fit by for the steering committee.

THE CENSUS ANALYSIS AND TECHNICAL COMMITTEE

chaired by the Chairperson on the coordination

of demography. UNZA lectures UNZA, representative

TERMS OF REFERENCE

- To conduct the analysis of data in time with international and other countries.
- To participate in the writing of analytical various reports.
- To participate in the preparing & dissemination of materials.
- To participate in the dissemination of the 2010 census.
- To perform any other functions deemed fit by the steering committee of the census.

ROLES OF THE SUPERVISOR

MASTER TRAINER AND ASSISTANT MASTER TRAINER IN THE CENSUS UNDERTAKING

Roles of the master trainer

- To do the recruitment of enumerators for the district plus in line with other census officers.
- To conduct a training program in the district.
- To train supervisors and enumerators jointly with the assistant master trainer.
- To allocate census supervisors - parcels of enumeration area again formed to the respective jurisdiction affairs.
- To display supervisors and enumerators to the respective work place in the district.
- To co-ordinate all the census operation in

The distances and assist in enumeration jobs where there are challenges.

- To work closely with the supervisors in all matters relating to the census operation.
- Ensuring that due to lack of personnel supervisors are allocated in accordance so that areas adjacent to each other are given all supervisor to minimize challenges.
- Ensure complete enumeration in all areas in the district.
- Attend to technical and administrative problems.
- Report on the progress of the census to the Zone managers from time to time.
- ensure that all questionnaires are properly edited accounted for, batched and dispatched to the district centres. This is done so that we can countercheck the questionnaires.
- ensure that all census materials e.g. questionnaires, bicycles etc are in place. And all those not used should be returned.
- To perform non-technical duties that will facilitate the census to be conducted smoothly.
- To do a summary count for the district.
- To ensure that there is security of all materials including questionnaires.
- To write the report at the end of the exercise.

ROLE OF THE SUPERVISOR

- To participate in the training of enumerators.
- To make sure that the enumerators see to it that they are performing accordingly.

- Allocate work
- Issue census forms and other materials
- Account for all the completed forms and materials
- attempt and resolve all challenges faced by enumerators in the conduct of the work.
- make reports to the master trainer on a regular basis.
- do anything possible to make a census a success.

SAMPLE SURVEYS

A sample survey is an investigation of the opinions, behaviour, attitudes and other attributes of a particular group or people which is usually done by asking them questions.

A sample survey involves questioning a small ideally, random selection sample of a population to represent, although these samples may be stratified to represent that other we do not have the actual number of enable sample analysis.

THE WAYS IN WHICH SURVEYS COLLECT INFORMATION

There are two ways in which surveys collect data

- THE RETROSPECTIVE APPROACH
- This approach collects data about past events. Most surveys do this because it is for

- THE PROSPECTIVE APPROACH

One of the recording of information for events as things are happening over time. This helps in coming up with information close to reality.

HISTORY OF SURVEYS.

The history is closely linked to the origin of the census. They were referred to ~~as~~ micro censuses. Unlike censuses, are carried out by private organisations while censuses are mostly carried out by the government. The first survey to be conducted by the bureau of census in the US was in 1937. This survey was more concerned with employment and the demographic data in the narrow sense were not collected. However, this survey is considered as the methodological forerunner of the main sample surveys that have been collected by the Federal government in the US. Since then a number of private survey organisations in the US and beyond have taken up a role of undertaking sample surveys. The organisation here contributed to the knowledge on determinants about differential fertility behaviour, maternal mortality etc.

For example, the survey research centre at the university of Michigan included among its main programs the survey which was established in 1951. The survey included questions on migration, family income and other population topics. Like most, the National Opinion Research Center at the university of

Chicago and some national institutions have been data collectors of important data about population issues. In the last few decades, large scale surveys have been carried out in many developing countries e.g. the world fertility survey which began in 1972 is one such good example. Its purpose was to assist a large number of interested countries, particularly developing countries in comparing international comparable and conducted surveys of human fertility behaviours. However, the WFS did not provide the means to evaluate national family planning programs. A new series of surveys were introduced in the late 1970s. They launched what is called the contraceptive prevalence surveys to fill the gap for evaluations of national family programs. As a result, the DHS program was initiated in 1984, the program was aimed at updating and expanding the data base for the CPS. The objectives included:

- The provision of accurate data for policy makers, planners and researchers.
- During the first research DHS (1) by surveys were carried out in 29 developing countries.
- In second phases, DHS (2) included more than 40 countries. The first DHS in Zambia was in 1992 followed by 1996, 2001 - 2007, 2007, 2013. Having five programs comprising various surveys, research - www.measure DHS.com

- Recent development apart from the DHS program was a launch of introduction of migration labour surveys, migration labour survey, education survey etc. At national level through the CSO, we launch the living conditions monitoring survey. This is conducted every four or five yrs website, the CSO website www.zamstat.gov.zm. The living conditions monitoring survey monitors the living conditions of all Zambians.

Migration
SECRET

THE PROBLEMS AND LIMITATIONS OF A SAMPLE SURVEY

- ② Sample surveys have 3 types of criticisms the first type is philosophically based criticisms and they are:
- Surveys cannot adequately establish causal connections between variables. For example, people with high income are more likely to have more sexual partners and we cannot be certain that a rising income enhances sexual performance.
 - Surveys are incapable of getting at the meaningful aspect of social action because actions are the actions of conscious persons who make choices. They have memory, goals and values which motivates behaviours, research must take things into account.
 - Surveys only look at particular aspects of peoples beliefs, actions without working at the context in which these things are happening. E.g.
 - Sample surveys seem to assume that human action is determined by external forces and neglect the conscious of human. ~~conscious~~ conscious goals and intentions as important role of action.
 - Surveys search independently with a stereo type & stereo ritualistic and rigid

Investigation:

- There are many research designs. We can talk about 4 designs.
- Non-experimental design
- ~~Extra~~ quasi experimental design
- Experimental designs.
- You can choose what design you want depending on the problem at hand.
- We have explanatory study or ^{design} which is preoccupied with explaining why a phenomenon happens. Explanatory studies attempt to provide solution to a problem.
- A conceptual framework: as a depiction of a relationship between variables
- Evaluative design or study - It tries to assign impacts and interactions eg X causes changes in Y, and also finding out what will neutralize the effect.
- * Moreover, you need to plan, what will be needed.
- * Once the budget is done, you represent to the donor and then you can start start conducting a research.

4 CHECKS TO GUIDE IN TERMS OF HAVING A GOOD RESEARCH DESIGN

- A good research design is an ethical design. It is a design that does not violate prior rights and dignity.
- A good research design is one which is capable of obtaining the most

reliable and value given ^{limitations} funds, personnel and equipment data sources

- is one that is capable of measuring whatever that which happens in a research field.
- A good research should measure variables adequately
- is one that helps an investigator avoid making mistaken conclusions eg accepting a hypothesis when it is false or rejecting the hypothesis when it is true.

After you are satisfied with the type of design, you can now think of preparing a questionnaire - think of the question to ask to identify a problem or solve a problem. If you

- once you have the right questions, you can write them down, they have to be tested.
- once you have tested the question, you have to employ the write people, those not after money who can do wrong things.
- After the questionnaire had been done, people have been trained, then you are ready.

The next step is selection of area and population - how would you determine the sample. You have to choose the area in accordance with a problem at hand. - define the characteristic you are looking for - is it those aged 0-14, 15-49, or 65+

- After identification, if you have to draw respondents from those households - how? you draw a household list - list the names of people in that house, then you tell them that may after a week someone will come back to interview them.

- How do you go about selecting households?
This can be done in two ways:

- ② • You can have a probability sample. -
- is more likely than a ~~known~~ non-probability sample to be truly representative
from a larger population from which it is drawn and is therefore usually considered to be more representative and is preferred to a non-probability sample. Each element of a pop has a known probability to be selected. or each person has a ^{equal} chance to be participate in a survey

- simple random sampling
- systematic sampling
- stratified sampling
- cluster sampling
- multi-stage sampling
- non-probability sampling

- simple random sampling is done by eg
lotto

- systematic eg there 3000 students, ... picking
a student every after say 2.

- stratified where you say
- cluster sampling: you are looking at certain similar characteristics, not identical to population
- multi-stage: you have several stages by moving at a certain stage

* Non-probability sampling refers to the selection of sample not based on probabilities. Also called convenient samples. Non-probability sampling is used in qualitative studies.

SAMPLING CHECKLIST

- It leads to making decision as whether the sample will be probabilistic or non-probabilistic.

- Consider the extent of the results of a larger pop.
- Consider resource factors things like, time, cost, personnel.

(2) Calculate the size of the sample required for your study.

- You make seek the services of a Statistician ^{or a sample} at this stage.
- This Statistician however will need to know the specifications like degree of accuracy, magnitude of differences, the approximate size of the pop to complete the sample.

(3) Bear in mind the following logic principles

A larger sample will yield more accurate results but will be more costly than a smaller sample.

(B) A probability sample will provide quantitative data that will be a more representative of a ^{target} pop than a non-probability sample. ~~what~~

(C) If with your proposed analysis ^{calls} for a particular subgroup of a sample, your sample will need to expand accordingly. Once this is done, enumerators are sent for a survey survey.

- Check all errors, omissions and discrepancies as soon as possible after the interview is done
- During data collection, ensure respondents are isolated i.e they should answer questions alone.
- For self enumeration questionnaires, make sure the questions are clear.

A DATA CHECKS

- include repeat question, i.e. ^{include} calculations in the questionnaires

- B Have supervisors monitoring the work in the field
- C Re-interview a page of respondents and look for consistency
- D Repeat Records a page of the questionnaires to ensure that there are no coding errors
- E Examine the frequency of distribution on items that are not working.

Q Data processing and analysis
Q Data analysis + use of software
Q when the