

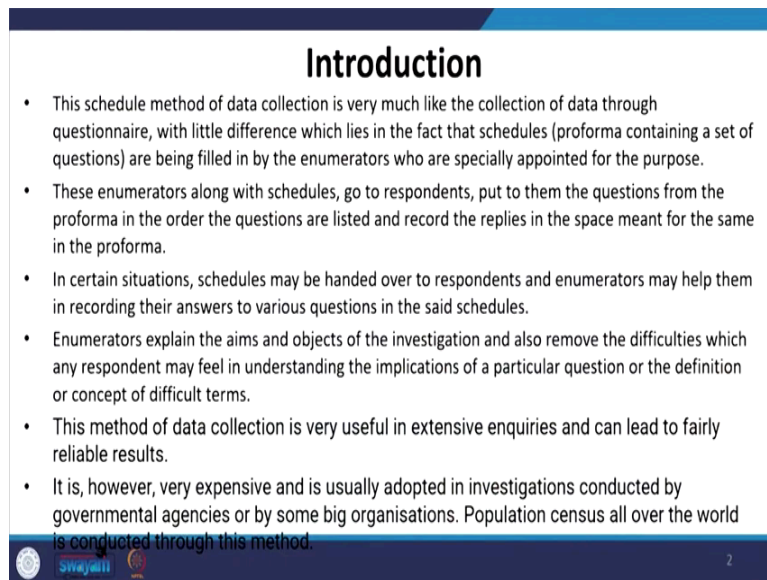
Exploring Survey Data on Health Care
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Lecture - 07
Preparing Schedule and Questionnaire

Welcome friends once again to this NPTEL module on Handling Survey Data on Health Care. We are here to explain the procedure or the steps to go for a field survey and in the last lecture, we especially discuss understanding sampling design and sampling frame. In this lecture, we will be clarifying for you about preparing the schedule and questionnaire. And usually, a common notion we have in this regard is that the schedule and questionnaire are the same, but they are different.

So, let us move on and I will give you guidance through these details. This schedule method of data collection is very much like the collection of data through a questionnaire, with little difference, which lies in the fact that schedules are being filled in by the enumerator. Whereas the questionnaire are not necessarily filled by them but by the respondent.

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Introduction

- This schedule method of data collection is very much like the collection of data through questionnaire, with little difference which lies in the fact that schedules (proforma containing a set of questions) are being filled in by the enumerators who are specially appointed for the purpose.
- These enumerators along with schedules, go to respondents, put to them the questions from the proforma in the order the questions are listed and record the replies in the space meant for the same in the proforma.
- In certain situations, schedules may be handed over to respondents and enumerators may help them in recording their answers to various questions in the said schedules.
- Enumerators explain the aims and objects of the investigation and also remove the difficulties which any respondent may feel in understanding the implications of a particular question or the definition or concept of difficult terms.
- This method of data collection is very useful in extensive enquiries and can lead to fairly reliable results.
- It is, however, very expensive and is usually adopted in investigations conducted by governmental agencies or by some big organisations. Population census all over the world is conducted through this method.

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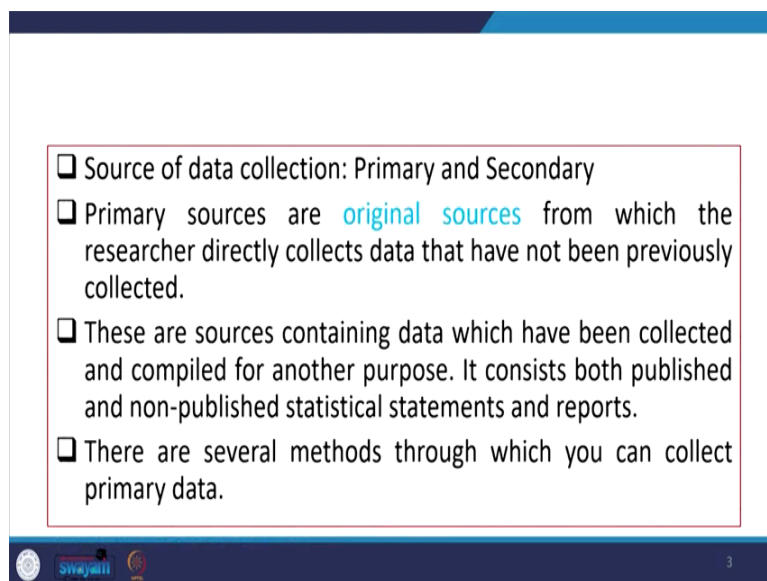
And enumerators are appointed for this purpose only and who can also correct the process. These enumerators, along with schedules, go to the respondents and put to them the questions from the proforma in order the questions are listed and record the replies in the space meant

for the same in the proforma. In certain situations, schedules may be handed over to respondents and enumerators may help them in recording their answers to various questions in the said schedules.

Enumerators explain the aims and objectives of the investigation and also removes the difficulties which any respondent may feel in understanding the implications of a particular question or the definition or concept of difficult terms.

This method of data collection is very useful in extensive enquiries and also leads to fairly reliable results. It is, however, costly and usually adopted in an investigation conducted by governmental agencies or by some big organizations. Population census all over the world is conducted through this scheduling method.

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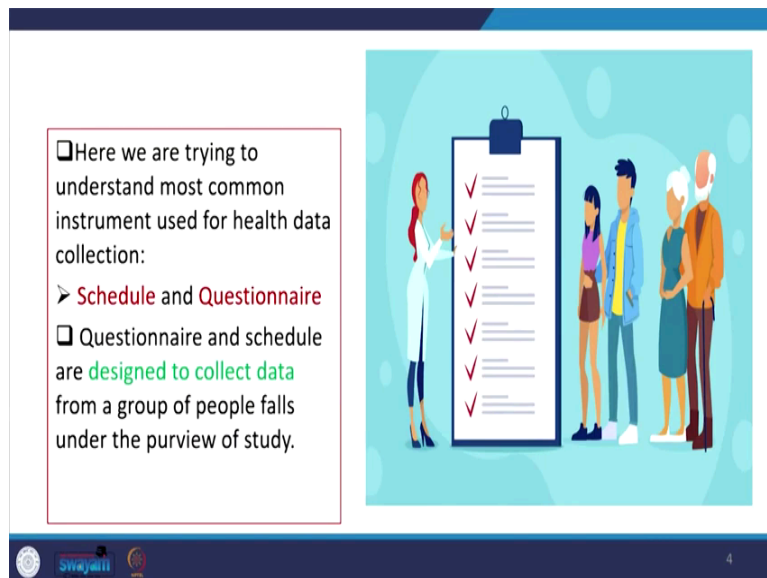
- ❑ Source of data collection: Primary and Secondary
- ❑ Primary sources are **original sources** from which the researcher directly collects data that have not been previously collected.
- ❑ These are sources containing data which have been collected and compiled for another purpose. It consists both published and non-published statistical statements and reports.
- ❑ There are several methods through which you can collect primary data.

So, let us understand that the data we are going to collect through the schedule data are broadly primary and secondary. The primary source gives original information that the researcher directly collects from the respondent and which are not previously dealt with. These are sources containing data which have been collected and compiled for another purpose. It consists of both published and non-published statistical statements and reports.

There are several methods through which you can collect primary data. We are going to discuss with you first of all on the questionnaire then we will move to understand steps of

collecting data. Here we are trying to understand the most common instrument used for health data collection: schedule and questionnaire.

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Slide 4 contains a text box on the left and an illustration on the right. The text box lists two points: 1) Here we are trying to understand most common instrument used for health data collection: > Schedule and Questionnaire. 2) Questionnaire and schedule are designed to collect data from a group of people falls under the purview of study. The illustration shows a female doctor in a white coat pointing to a large clipboard with a checklist. The checklist has several red checkmarks. To the right of the clipboard, a diverse group of four people (a young woman, a man, an older woman, and an older man) are standing and looking at the clipboard.

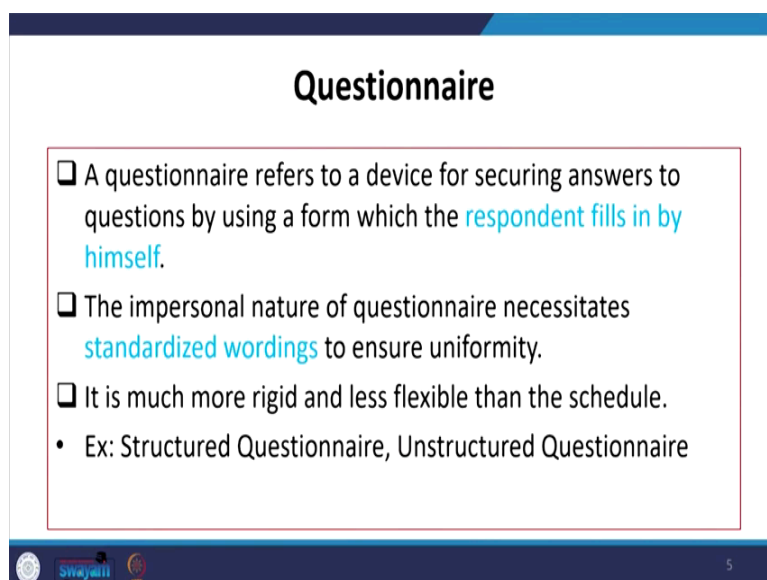
Here we are trying to understand most common instrument used for health data collection:

➤ **Schedule and Questionnaire**

Questionnaire and schedule are **designed to collect data** from a group of people falls under the purview of study.

The questionnaire and schedule are designed to collect data from a group of people who fall under the purview of the study.

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Slide 5 is titled 'Questionnaire' and contains a text box with three bullet points: 1) A questionnaire refers to a device for securing answers to questions by using a form which the respondent fills in by himself. 2) The impersonal nature of questionnaire necessitates standardized wordings to ensure uniformity. 3) It is much more rigid and less flexible than the schedule. Below the third point is an example: Ex: Structured Questionnaire, Unstructured Questionnaire.

Questionnaire

A questionnaire refers to a device for securing answers to questions by using a form which the **respondent fills in by himself**.

The impersonal nature of questionnaire necessitates **standardized wordings** to ensure uniformity.

It is much more rigid and less flexible than the schedule.

- Ex: Structured Questionnaire, Unstructured Questionnaire

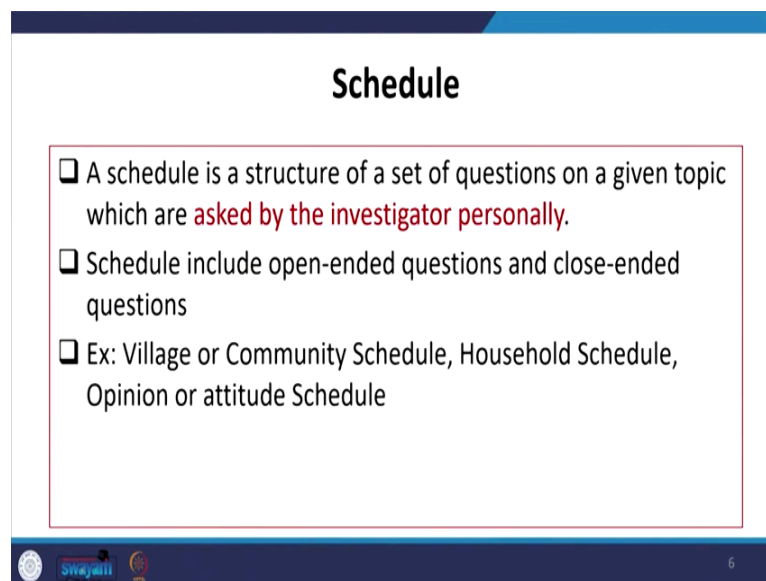
So, then what do you mean by questionnaire? A questionnaire refers to a device for securing answers to questions by using a form that the respondent fills in by himself. The impersonal

nature of the questionnaire necessitates standardized wordings to ensure uniformity. It is much more rigid and less flexible than the schedule.

Whereas, the schedule is flexible because it is the responsibility of the enumerator to finally enter. Usually, questionnaires are of structure and non-structured; structured means it is with bounded questions. Bounded questionnaires like if you are giving income in a bracket, and you are simply asking them to respond it within the bracket within the limit. There are five options let it be less than 1 lakh income in a year or 1 lakh to 5 lakh income in a year.


These types of responses if their consumers are bound to respond within the limit. Whereas in the case of an unstructured questionnaire you may simply ask: what is a question it is open-ended, they may write down the number. Coming to schedule, it is less rigid as we already said, then the schedule is a very structured set of questions on a given topic that are asked by the investigator personally.

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Schedule

- A schedule is a structure of a set of questions on a given topic which are **asked by the investigator personally**.
- Schedule include open-ended questions and close-ended questions
- Ex: Village or Community Schedule, Household Schedule, Opinion or attitude Schedule

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The schedule includes open-ended questions and close-ended questions. And these may include village-level schedule, community schedule, household schedule, attitude schedule etc.

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□ The choice of a particular instrument of data collection will depend on the **characteristics of the respondents** as well as **the field situation**.

□ The hypothesis of the study will suggest the type of data needed, and the framework of argument will indicate the form they shall be in.

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The choice of a particular instrument of data collection will depend on the characteristics of the respondents as well as the field situation. The characteristic of the respondents is important so far as the particular instrument is adopted. The hypothesis of the study will suggest the exact type of data needed and the framework of argument will indicate the form they shall be in.

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	BASIS FOR COMPARISON	QUESTIONNAIRE	SCHEDULE
Differences	Meaning	Questionnaire refers to a technique of data collection which consist of a series of written questions along with alternative answers.	Schedule is a formalized set of questions, statements and spaces for answers, provided to the enumerators who ask questions to the respondents and note down the answers.
	Filled by	Respondents	Enumerators
	Response Rate	Low	High
	Coverage	Large	Comparatively small
	Cost	Economical	Expensive
	Respondent's identity	Not known	Known
	Success relies on	Quality of the questionnaire	Honesty and competence of the enumerator.
	Usage	Only when the people are literate and cooperative.	Used on both literate and illiterate people.

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Here are certain differences taken from different sources and the basis for comparison between the schedule and questions are like the difference in terms of meaning, in terms of

who is filling these questions or schedule, response rate, coverage, cost or budget respondents, identity, success and usage etc.

Coming to the meaning of it, a questionnaire refers to a technique of data collection that consists of a series of written questions along with alternative answers. It says taking of data collection consists of written questions whereas is in the case of schedule is a formalized set of questions statements or spaces for answers. There are might be some spaces provided to the enumerators who ask questions to the respondent and note down the answers by accumulating all different facts.

So, who filled the questionnaire or schedule? The questionnaire was filled by the respondents whereas, the schedule is by a professional enumerator. The response rate is quite low in the case of the questionnaire since the schedule is quite structured so, the response rate is better.

Coming to the coverage is since the questionnaire is expected to be less loaded. So, a large number of coverage is expected, but in the case of schedule, coverage is expected to be low because it is more structured and more systematic and it follows different approaches. Coming to the cost, the cost is economical in the case of questionnaires. Usually, the researcher who is dealing with less sample usually go for a questionnaire whereas, schedule it is usually expensive.

Regarding the respondent's identity, identity is not known in the case of the questionnaire, but in the case of the schedule respondent's demographic characters are also noted for cross-checking and purposes as well.

But in the case of schedule, honesty and competency of the enumerator are important. Where do we use all those things? We use the questionnaire only when the people are literate and cooperative, but in the case of schedule use on both literate and illiterate people then what are the key differences which we have already said.

A questionnaire refers to the technique of data collection which consists of a series of written questions along with alternative answers. The schedule is a formalized set of questions statements spaces for answers provided to the enumerator who asks questions to the respondents and note down the answers.

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The slide is titled "Key Differences" and lists four points comparing Questionnaire and Schedule methods. At the bottom, there are logos for Swajati and a small number 9.

Key Differences

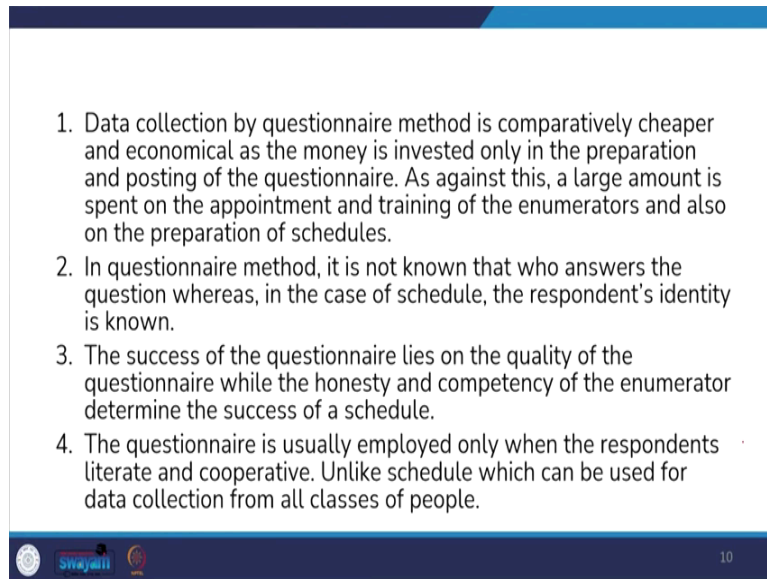
1. Questionnaire refers to a technique of data collection which consist of a series of written questions along with alternative answers. The schedule is a formalised set of questions, statements, and spaces for answers, provided to the enumerators who ask questions to the respondents and note down the answers.
2. Questionnaires are delivered to the informants by post or mail and answered as specified in the cover letter. On the other hand, schedules are filled by the research workers, who interpret the questions to the respondents if necessary.
3. The response rate is low in case of questionnaires as many people do not respond and often return it without answering all the questions. On the contrary, the response rate is high, as they are filled by the enumerators, who can get answers to all the question.
4. The questionnaires can be distributed a large number of people at the same time, and even the respondents who are not approachable can also be reached easily. Conversely, in schedule method, the reach is relatively small, as the enumerators cannot be sent to a large area.

So, that is the first key difference. The second one is questions are delivered to the informants by post or by mail and answers is specified in the cover letter whereas, in case of schedules are actually directly filled by the particular worker who is assigned with the duty they are called enumerators. And also they interpret the questions to the respondents if necessary because without interpretation it is difficult to get the right response.

The third one is on the response rate is quite low in the case of questionnaires as many people do not respond and often return it without answering the questions. On the contrary response rate is better since the enumerator simplifies the respondents by sometime translating, interpreting, by filling the missing link in between.

And the fourth difference is that the questionnaires can be distributed to a large number of people at the same time. Even the respondents who are not approachable can also be reached easily whereas, schedule method the reach is relatively small and the enumerators cannot be sent to a large area.

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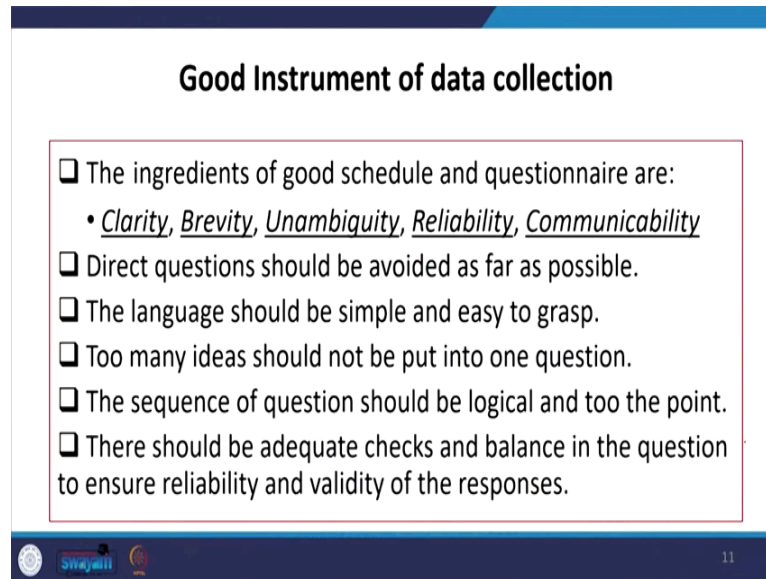
1. Data collection by questionnaire method is comparatively cheaper and economical as the money is invested only in the preparation and posting of the questionnaire. As against this, a large amount is spent on the appointment and training of the enumerators and also on the preparation of schedules.
2. In questionnaire method, it is not known that who answers the question whereas, in the case of schedule, the respondent's identity is known.
3. The success of the questionnaire lies on the quality of the questionnaire while the honesty and competency of the enumerator determine the success of a schedule.
4. The questionnaire is usually employed only when the respondents are literate and cooperative. Unlike schedule which can be used for data collection from all classes of people.

Then there are other differences as well if we just try to understand this we can move to the next like the data collection by questionnaire method is comparatively cheaper. And economically as money is invested only in the preparation and posting of the questionnaire; whereas, in the case of schedule it is required to have more spending because the enumerator or the experienced person is supposed to reach to the respondent and it is also time-consuming.

And in the questionnaire method, it is not known who answers the question whereas, in the case of schedule respondents' identity is known. In the questionnaire, we are simply collecting information not highlighting or identifying the information about the respondent.

In case the success of the questionnaire lies in the quality of the questionnaire whereas, the honesty or the competency as I already mentioned in case of schedule. The questionnaire is usually employed only when the respondents are literate and cooperative, unlike the schedule which can be used for data collection from all classes of people because it is the responsibility of the enumerator or the experienced person who is taking the responses.

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Good Instrument of data collection

- The ingredients of good schedule and questionnaire are:
 - Clarity, Brevity, Unambiguity, Reliability, Communicability
- Direct questions should be avoided as far as possible.
- The language should be simple and easy to grasp.
- Too many ideas should not be put into one question.
- The sequence of question should be logical and to the point.
- There should be adequate checks and balance in the question to ensure reliability and validity of the responses.

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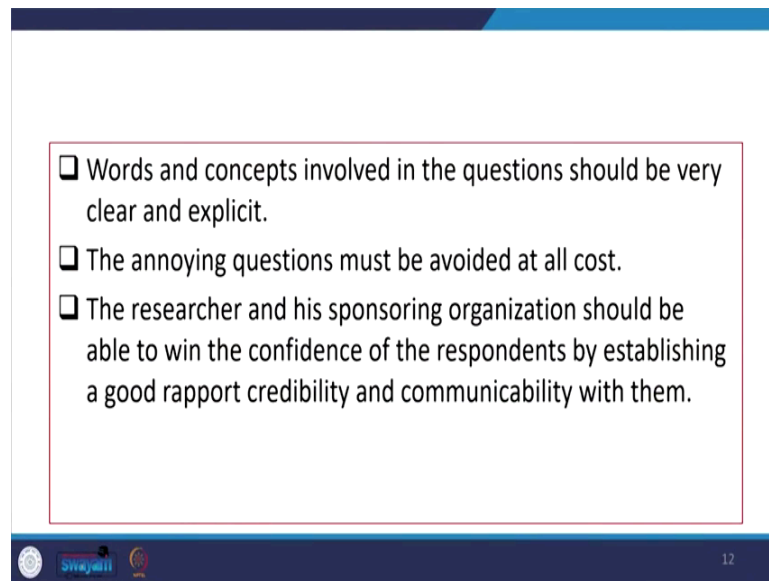
After differentiating these two concepts which are questionnaire and schedule, it is good to identify what are the good instrument for data collection then. What instrument we must follow to understand whether it is a good schedule or a good questionnaire? First, one is called clarity, then the brevity of the analysis, unambiguity, reliability and communicability those five indicators are very essential to identify whether it is good or not good.

Direct questions should be avoided as far as possible; no direct questions because they may be reluctant to answer. There is a number of direct questions possible, especially on women's identity, women issues they may be reluctant to answer. So, indirectly questions should be set and they could be answered.

A language should be simple and easy to grasp as simple as the possible it is should have local content, should be with their local languages. Too many ideas should not be put into one question it should be very straightforward and it should be focusing on your objective. The sequence of questions should be logical and to the point and should follow the next step.

There should be adequate checks and balances in each question to ensure the reliability and validity of the responses. Then, the words and concepts involved in the questions should be very clear and explicit words and sentences should be as simple as possible.

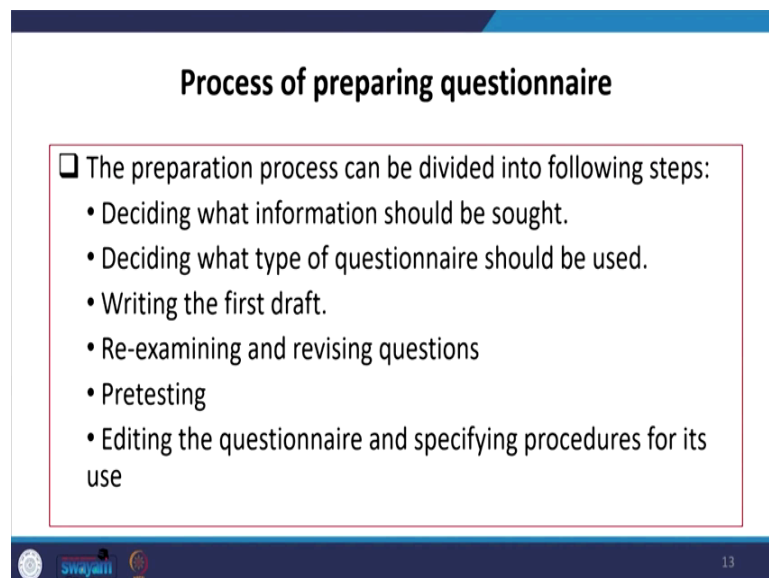
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- ❑ Words and concepts involved in the questions should be very clear and explicit.
- ❑ The annoying questions must be avoided at all cost.
- ❑ The researcher and his sponsoring organization should be able to win the confidence of the respondents by establishing a good rapport credibility and communicability with them.

The annoying questions must be avoided at all cost. The researcher and his sponsoring organization should be able to win the confidence of the respondents by establishing a good rapport credibility and communicability with them that will help them to respond questions correctly.

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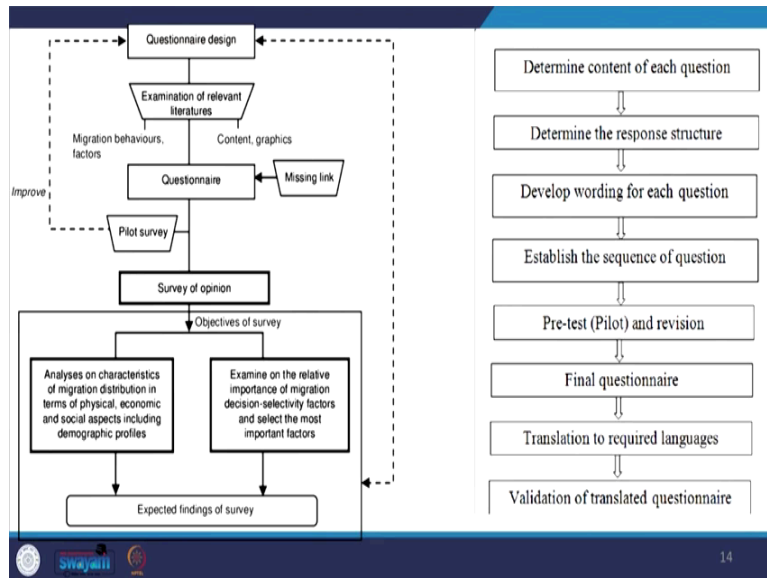
Process of preparing questionnaire

- ❑ The preparation process can be divided into following steps:
 - Deciding what information should be sought.
 - Deciding what type of questionnaire should be used.
 - Writing the first draft.
 - Re-examining and revising questions
 - Pretesting
 - Editing the questionnaire and specifying procedures for its use

Process of preparing questionnaire - what sort of process do we follow to prepare the questionnaire; preparation process can be divided into the following steps they are deciding what information should be sort, deciding what type of questionnaire should be used and

writing the first draft of the questionnaire. Then re-examining and revising questions, pretesting then editing the questionnaire and specifying the procedure for its use.

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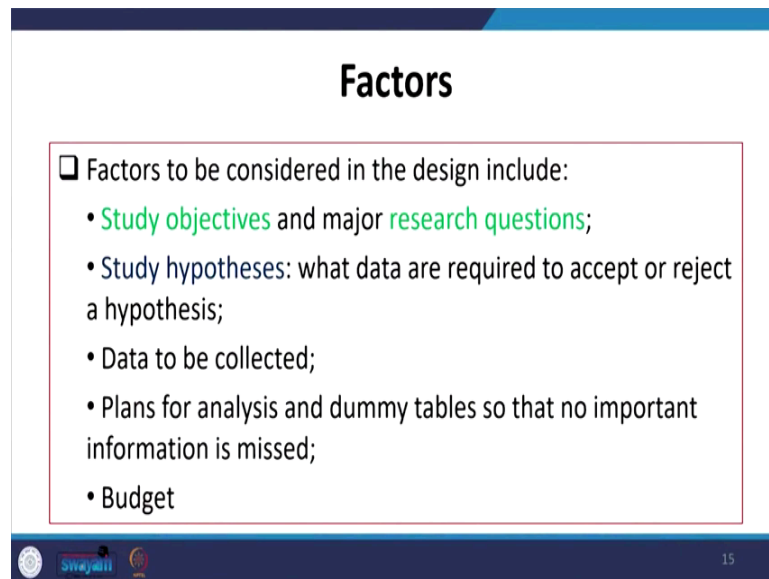
Some of the important steps I have mentioned here, now this is the design taken from different sources and I am just presenting usually we follow nine important steps, by starting from the questionnaire design with examining the relevant literature what the population of your study all about, what your idea to a larger segment what is the existing study discusses about it.

What are the genesis of it, how do people feel about the context so a general perspective on the context can be derived? And in case of migration issues, migration behaviour and its factor should be identified their content some graphics should also be mentioned. Then, we should follow after understanding a literature review based on all such factors, we must go for defining a questionnaire.

The questionnaire must include all your existing as well as the new dimensions. Now, based on the available information we can do certain piloting of the questionnaire so that the missing link in the questionnaire, some errors in the questionnaire can be avoided. Finally, we can go for the survey, the final survey with the enumerators; then once we decide about the survey we should have to cross-check whether the objectives of the survey are well spilt, and the expecting findings are also clearly established from the survey.

So, what components does it follow? What are the sequences? It has content of each question determining response structure, then develop wording for each question then establishing sequence of the question then pretest or pre-pilot even testing, a revision of the questions; then final questionnaire then translation to the local language if it is required; then validation of the translated questionnaire finally, going to the field.

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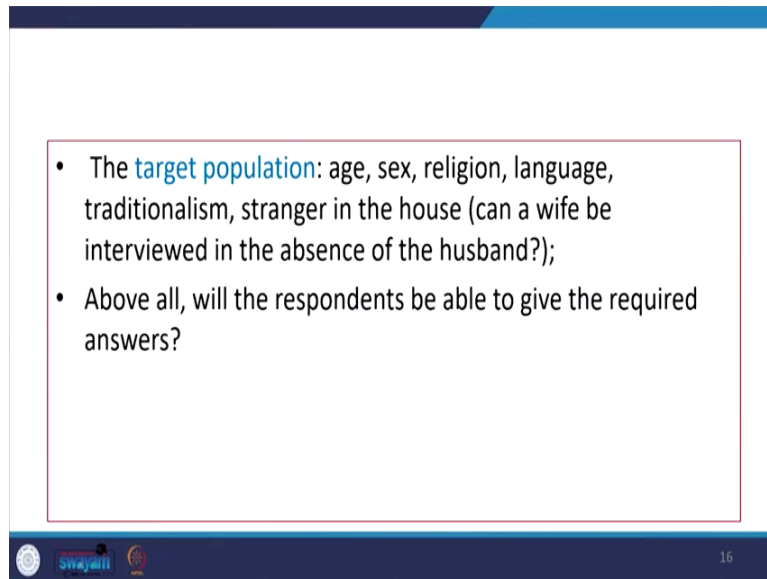
Factors

- Factors to be considered in the design include:
 - Study objectives and major research questions;
 - Study hypotheses: what data are required to accept or reject a hypothesis;
 - Data to be collected;
 - Plans for analysis and dummy tables so that no important information is missed;
 - Budget

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So, the factors which you already said are the determining factors and derived from the existing literature. Those give study objectives and the major research questions. The study hypothesis gives what data are required to accept or reject a hypothesis. You should also consider what sort of data to be collected what are the plans of analysis or dummy tables so that no important information is missed some dummy tables should have been defined and the right budget is essential.

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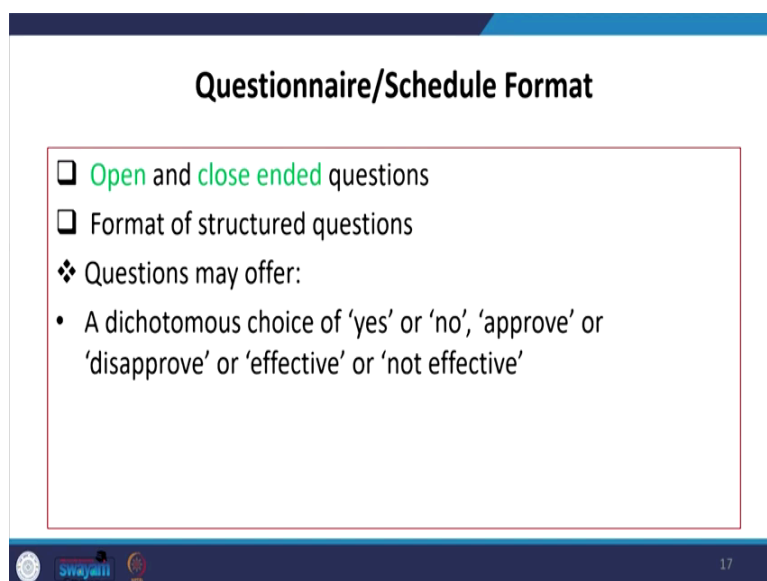


Slide 16 contains a list of considerations for the target population. The text is enclosed in a red-bordered box. The slide footer includes the Swajati logo and the number 16.

- The **target population**: age, sex, religion, language, traditionalism, stranger in the house (can a wife be interviewed in the absence of the husband?);
- Above all, will the respondents be able to give the required answers?

The target population's age, sex, religion, language, traditionalism stranger in the house (can be a wife can a wife be interviewed in the absence of a husband ?) should also be taken care of and has been taken care of in national family health survey. However, with the respondents being able to give the required answers we need to think carefully, will the response be able to give the required answer for the particular question? those aspects should be also taken care of.

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Slide 17 is titled 'Questionnaire/Schedule Format' and lists several points. The text is enclosed in a red-bordered box. The slide footer includes the Swajati logo and the number 17.

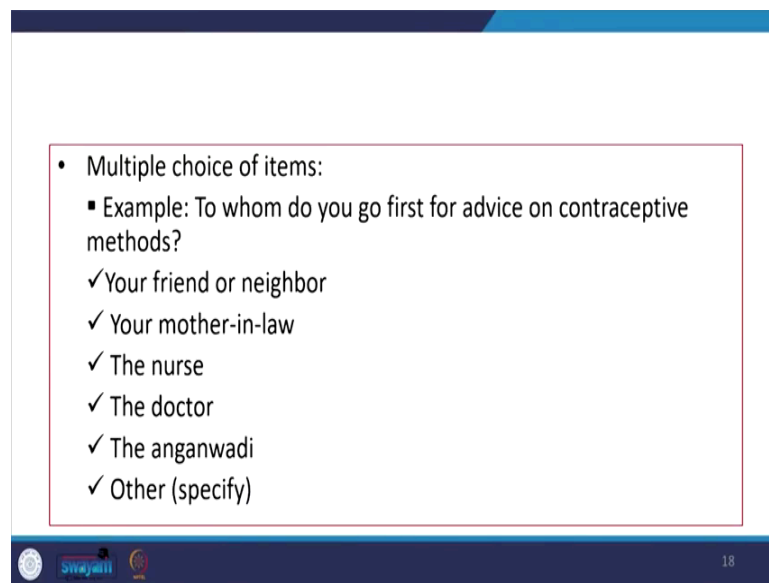
Questionnaire/Schedule Format

- Open and close ended questions
- Format of structured questions
- ❖ Questions may offer:
 - A dichotomous choice of 'yes' or 'no', 'approve' or 'disapprove' or 'effective' or 'not effective'

So, coming to the questionnaire or schedule format - there should be open-ended and close-ended questions both must have been there. So, why open-ended questions? Because it keeps the number of answers for qualitative responses, some behavioural content. So, some qualitative responses are required.

Questions may offer a dichotomous choice like in yes or no, approve or disapprove, effective or not effective may be in binary form, maybe in categorical form maybe in so open-ended.

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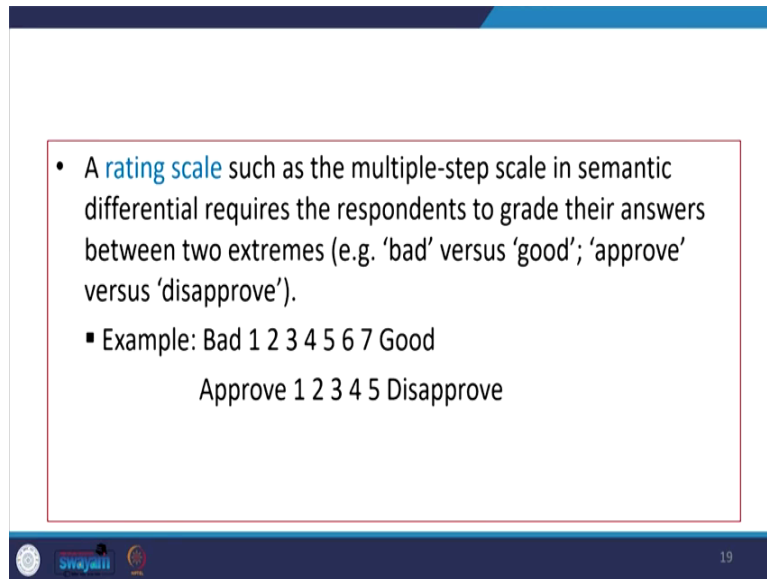


The slide displays a multiple-choice question within a red-bordered box. The question is: "Example: To whom do you go first for advice on contraceptive methods?". Below the question are six options, each preceded by a checkmark (✓): "Your friend or neighbor", "Your mother-in-law", "The nurse", "The doctor", "The anganwadi", and "Other (specify)". The slide has a dark blue header and footer. The footer contains a logo on the left, the word "swajati" in the center, and the number "18" on the right.

- Multiple choice of items:
 - Example: To whom do you go first for advice on contraceptive methods?
 - ✓ Your friend or neighbor
 - ✓ Your mother-in-law
 - ✓ The nurse
 - ✓ The doctor
 - ✓ The anganwadi
 - ✓ Other (specify)

Similarly, there should be multiple-choice questions. There must be some questions on the Likert scale or maybe on different scales. It should not be of one type of scale only there must be multiple scales adopted.

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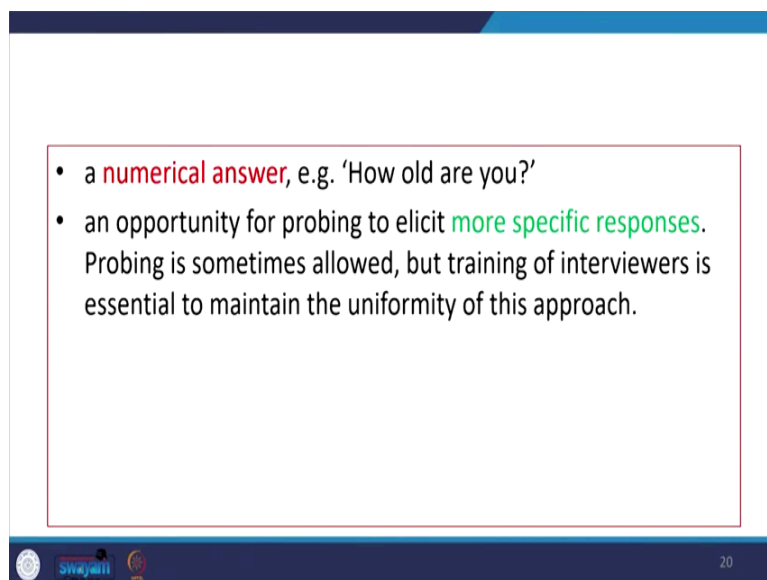
• A **rating scale** such as the multiple-step scale in semantic differential requires the respondents to grade their answers between two extremes (e.g. 'bad' versus 'good'; 'approve' versus 'disapprove').

- Example: Bad 1 2 3 4 5 6 7 Good
Approve 1 2 3 4 5 Disapprove

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Rating scale - as I mentioned such as the multiple-step scale in semantic differential requires the respondents to grade the answers between two extremes that is bad or good we have already said.

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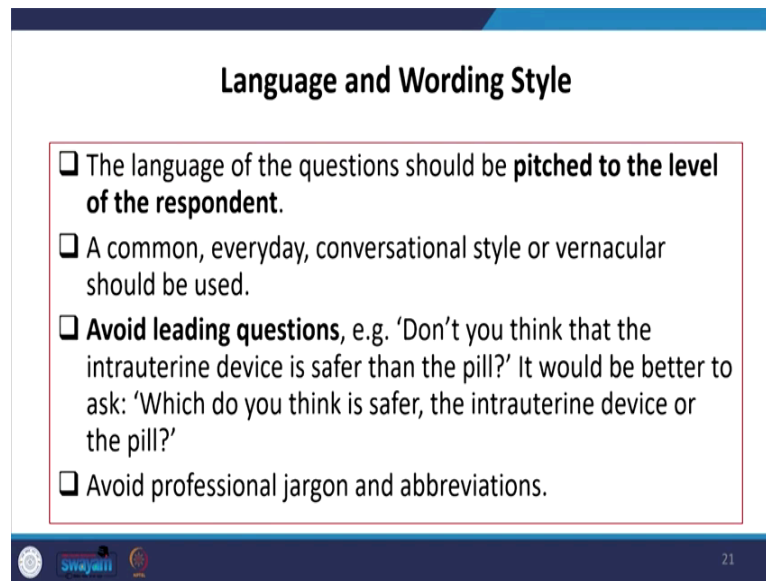


- a **numerical answer**, e.g. 'How old are you?'
- an opportunity for probing to elicit **more specific responses**. Probing is sometimes allowed, but training of interviewers is essential to maintain the uniformity of this approach.

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How old are you? What is your age? What is your income? An opportunity for probing to elicit more specific responses. Probing is sometimes allowed, but the training of interviewers is also essential to maintain uniformity in the approach.

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The slide is titled "Language and Wording Style" and contains four bullet points. The first bullet point states that the language of questions should be pitched to the level of the respondent. The second bullet point suggests using a common, everyday, conversational style or vernacular. The third bullet point advises against leading questions, providing an example of a leading question about the safety of an intrauterine device compared to a pill, and suggesting a more neutral alternative. The fourth bullet point recommends avoiding professional jargon and abbreviations. The slide footer includes the Swayam logo and the number 21.

Language and Wording Style

- The language of the questions should be **pitched to the level of the respondent**.
- A common, everyday, conversational style or vernacular should be used.
- Avoid leading questions**, e.g. 'Don't you think that the intrauterine device is safer than the pill?' It would be better to ask: 'Which do you think is safer, the intrauterine device or the pill?'
- Avoid professional jargon and abbreviations.

So, finally, some other aspects like language and wording style – the language of the question should be pitched to the level of the respondent and a common, every day or conversational style or vernacular language should be used. So, that the respondent will be comfortable in answering. Avoid leading questions such as don't you think that the intrauterine device is safer than the pill? So, it would be better to ask which do you think is safer the intrauterine device or the pill?

If you think that this is safer; that means, you have given certain biases in the question. So, the interviewer should not be making bias while asking questions you have already given one set of the question. Then the second one is to avoid professional jargon or abbreviation. Any sort of abbreviation has to be clarified to the respondent else respondent might be in a difficult situation to respond.

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Coding responses to questions

- All possible responses should be included in the response category.
- This usually entails adding a phrase like "I don't know," "sometimes," or "maybe" category in the response.
 - Ex: The response code for the question: "Is there a doctor present when you visit the hospital?" can be:
a) always b) usually c) sometimes d) don't know e) never

Coding responses to questions like all possible responses should be included in the response category. If coding is there, those codes should be mentioned in the questionnaire. This coding usually entails adding a phrase like "I do not know" "sometimes" or "maybe" category in the response. The response code for the question "Is there a doctor present when you visit the hospital can be: a) always b) usually c) sometimes d) do not know e) never. But it has to be clearly mentioned.

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- There should not be any blank left in any coding space.
- All questions that may be skipped by certain types of respondents should be coded with the letter '**NA**' (Not applicable), which is commonly 9 or 99.
- A '**cascade**' format is the best way to collect some data.

Some coding, a, b, c, d may be mentioned and there should not be any blank left in any coding space. All questions that may be skipped by certain types of respondent should be

coded with a letter like 'NA' (not applicable), which is commonly coded with 9 or 99 or even 999 or so. A cascade format is the best way to collect some data a cascading technique.

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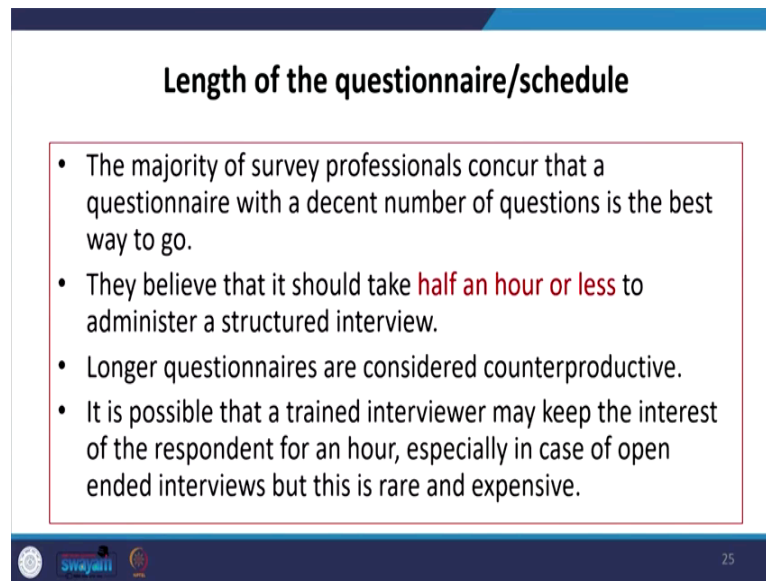
- Ex. of cascade format:
- Have you ever seen a poster for family planning anywhere?
 - No **1** Go to question **9**
 - Yes ----- Did you read the information on the poster?
 - No **2** Go to question **9**
 - Yes ----- Did you get any information about family that you already didn't know?
 - No ----- **3**
 - Don't know-- **4**
 - Yes ----- **5**

Then, for example, have you ever seen a poster for family planning anywhere? If you say no, then you go to another question like if it is not relevant. If it is yes, then you need to answer to other questions. It has certain branches if it is no then straightway you skip other sequencing questions and you go to another question.

Like if it is yes, then some relevant cascading questions would be asked. Regarding family planning, did you read on your own? Again if it is no, then you straightaway skip other questions go to straight away question number 9. Or if it is yes, then did you get any information about family planning that you already did not know. So, from the poster did you get any new information.

Now, some more qualitative questions like no, do not know, and yes. It is not just one question it is asked from the beginning it has cascading questions as well. And the correct direction of answering and not answering is mentioned as well.

(Refer Slide Time: 25:50)



Length of the questionnaire/schedule

- The majority of survey professionals concur that a questionnaire with a decent number of questions is the best way to go.
- They believe that it should take **half an hour or less** to administer a structured interview.
- Longer questionnaires are considered counterproductive.
- It is possible that a trained interviewer may keep the interest of the respondent for an hour, especially in case of open ended interviews but this is rare and expensive.

swayam 25

Similarly, regarding the length of the questionnaire or the schedule, the majority of the survey professionals conclude that a questionnaire with a decent number of questions is the best way to go. They believe that it should not take half an hour or less to administer a structured interview. Longer questionnaires are considered counterproductive and there might be non-responses as well.

It is possible that a trained interviewer may keep the interest of the respondent for an hour, especially in the case of open-ended interviews, but this is very rare and expensive. So, it is also possible that the experienced person collates so many questions together and asks the respondent and respondent based on the respondents' view, the enumerator can able to enter it correctly; instead of making a more monotonic way of asking questions.

Since there are so many questions, so it is better to keep those questions in tips and ask them while sitting in front of you.

(Refer Slide Time: 27:01)

Reliability of questionnaire/schedule

- Reliability can be insured by following means:
 - *In-built reliability*: Accomplished by asking some questions again, rephrasing the second inquiry, while keeping the same or comparable response codes.
 - *Repeat reliability*: Achieved by repeating the interview with small subsample of the respondents (chosen at random).

*Note: Factual questions are used to measure reliability.
Opinion question do not provide direct measure of reliability*

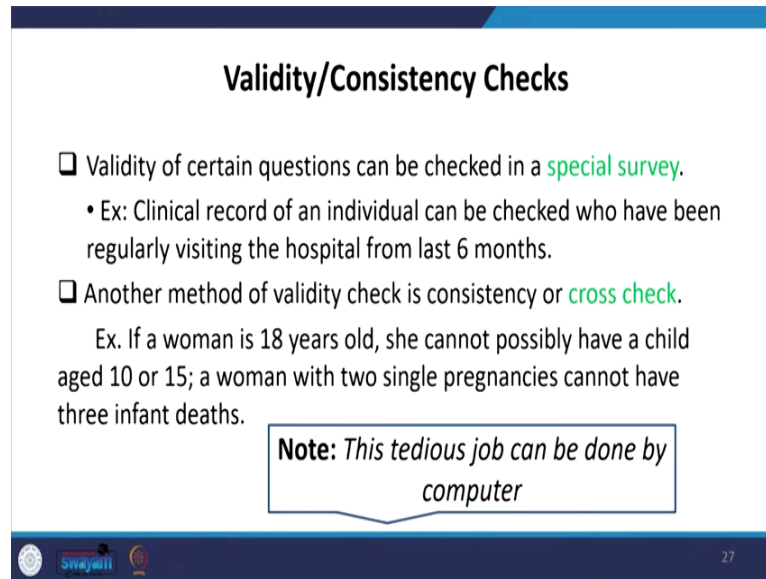
Now, coming to the reliability of the questionnaire and schedule, reliability can be insured by the following means. There are reliability techniques called inbuilt reliability. This is accomplished by asking some questions again, rephrasing the second inquiry, while keeping the same or comparable response codes.

If it is asked a second time about the same information on another page the person might be confused and if the same response is given; that means, the answers are actually reliable; that is called inbuilt reliability. The second one is repeat reliability; this is achieved by repeating the interview with small subsamples of the respondents. So, within the questionnaire or schedule, you have some related repeated questions that are called inbuilt reliability.

But another is called repeat reliability which says that you can have a subset of samples and can test whether the respondents, in general, are giving the same response or not. And those small sets of samples should be chosen at random, which will represent your questionnaire technique better. Factual questions are used to measure reliability. Opinion questions do not provide a direct measure of reliability.

Those questions require factual understanding should be actually adopted for reliability testing similarly another one is called validity and consistency check. The validity of a certain question can be checked in a special survey like the clinical record of an individual can be checked who have been regularly visiting the hospital for the last 6 months their validity can be ascertained.

(Refer Slide Time: 29:06)



Validity/Consistency Checks

- ❑ Validity of certain questions can be checked in a **special survey**.
 - Ex: Clinical record of an individual can be checked who have been regularly visiting the hospital from last 6 months.
- ❑ Another method of validity check is consistency or **cross check**.
 - Ex. If a woman is 18 years old, she cannot possibly have a child aged 10 or 15; a woman with two single pregnancies cannot have three infant deaths.

Note: *This tedious job can be done by computer*

swayamii 27

Another method of validity check is consistency or cross-check. The first one is to check through a clinical record of the person and the second one is to cross-check if a woman is 18 years old and she cannot possibly have a child aged 10 to 15 years. So, a woman with two single pregnancies cannot have three infant deaths.

This kind of error are serious errors in the question like 18 years of old women cannot have 10 years old son or daughter or if they have been two pregnancies they cannot have three infant deaths. This type of result is derived; that means, you have to cross-check your questions.

This is tedious in fact and can be done by computer and very difficult to check. So, these two methods special survey and cross-check are important for the validation of your questions.

(Refer Slide Time: 30:14)

Sequence of questions

Questions should be placed in proper sequence.

Some general guidelines for sequence is as follows:

- **Introduction:** A clear and concise introduction to the questionnaire is helpful. It should indicate the **purpose of questionnaire** and remove any hesitation on the part of respondent.
- Coversheet or identification page
- **Warm-up questions** or statements should start the questionnaire itself. Do not start with threatening questions about income and other sensitive issues.

Country _____
Area/Zone _____

Household schedule

Identification number

1	2	3	4	5	6	7	8	9	10	11	12

Columns 1-2 (Code last) : Country _____
Area _____
Religion (P. 11) _____
Social class (P. 35, EW) _____

Columns 3-4 : Card Number G1 _____

Columns 5-8 : Household serial number _____

Columns 9-10 : Total households size (P. 11) _____

Column 11 : Total no. eligible women (P. 11) _____

Column 12 : Type of family (P. 11) _____

Address of household : _____

Household number : _____

Name of head of household : _____

Name of respondent (if not head of household) and relation to
 head of household : _____

Name of interviewer : _____

Date of interview : _____

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Now, the sequence of questions is also important. Questions should be placed in proper sequence some general guidelines for the sequence is as follows: give the introduction about the survey. Then you may follow with a certain identification page then some warm-up questions. You need to give a clear and concise introduction to your questionnaire. It should indicate the purpose of the questionnaire and remove any hesitation on the part of the respondent.

There must be a cover sheet or identification page as well. Warm-up questions should start the questionnaire itself. Do not start with threatening questions about income and other sensitive issues like gender, or the age of the other gender, those threatening questions should not be there.

(Refer Slide Time: 31:12)

Pretesting the Questionnaire

- Are respondents willing to answer questions in the way you have asked them?
- Are any of the questions particularly difficult to answer or do they address sensitive issues?
- Are the questions well understood by the respondents?
- Can the interviewers follow the instructions easily, or do they misinterpret them?
- Is the questionnaire designed with adequate space and is the coding of answers clear?
- Is it necessary to create new codes for common answers which were not included in the original questionnaire?
- How long does an interview take? (This will help you to decide how many interviewers you will need.)

Note that during the pretest the interviewers are still learning the questionnaire, so the time spent per interview is longer than it will be in the field after they become more experienced.



I will show some of the direction in my sample questionnaire. So, some pretesting of the questionnaire is required. Pretesting of the questionnaire like are respondents willing to answer questions in the way you have asked them? Are any of the questions particularly difficult to answer or do they address sensitive issues? Are the questions well understood by the respondents? Can the interviewer follow the instructions easily or do they misinterpret them?

Other questions like is it necessary to create a codes for common answers which are not included in the original questionnaire? How long does the interview take? How many interviewers will you need? We need to note here that during the pretest interviewers are still learning the questionnaire.

So, the time spent per in interview is longer and it will be in the field after they become more experienced. So, some experiences are gained also and some correction they do it in between. So, I wanted to show some questions to you like here.

(Refer Slide Time: 33:30)

RURAL CENTRAL
 URBAN STATE

GOVERNMENT OF INDIA
NATIONAL SAMPLE SURVEY OFFICE
SOCIO-ECONOMIC SURVEY
SEVENTY FIFTH ROUND: JULY 2017 - JUNE 2018
SCHEDULE 25.0: HOUSEHOLD SOCIAL CONSUMPTION: HEALTH

[0] descriptive identification of sample household

1. state-UT		5. hamlet name	
2. district		6. investigator unit no./block no.	
3. sub-district tehsil town		7. name of head of household	
4. village name		8. name of informant	

[1] identification of sample household

item no.	item	code	item no.	item	code
1.	st. no. of sample FSU		6.	sample household number	

(Refer Slide Time: 33:32)

[1] identification of sample household

item no.	item	code	item no.	item	code
1.	st. no. of sample FSU		6.	sample household number	
2.	round number	7 5	7.	serial number of informant (as in column 1 of block 4)	
3.	schedule number	2 5 0	8.	response code	
4.	sample hg/sb number		9.	survey code	
5.	second-stage stratum number		10.	reason for substitution of original household (code)	

CODES FOR BLOCK 1

item 8: **response code:** informant - co-operative and capable -1, co-operative but not capable -2, busy -3, reluctant -4, others -9.

item 9: **survey code:** original -1, substitute -2, casualty -3.

item 10: **reason for substitution of original household:** informant busy -1, members away from home -2, informant non-cooperative -3, others -9.

* tick mark (✓) may be put in the appropriate place

This is the NSS seventy fifth last round question. Here the questions are like we start with certain different blocks, I think I have already guided you in my previous lecture identification about sample household.

(Refer Slide Time: 33:51)

[2] particulars of field operations							
sl no	item	Field Investigator (FI) Junior Statistical Officer (JSO)			Field Officer (FO) Senior Statistical Officer (SSO)		
(1)	(2)	(3)			(4)		
1 (a)	(i) name (block letters)						
	(ii) code						
	(iii) signature						
1 (b)	(i) name (block letters)						
	(ii) code						
	(iii) signature						
2	date(s) of	DD	MM	YY	DD	MM	YY
	(i) survey inspection						
	(ii) receipt						
	(iii) scrutiny						
	(iv) despatch						
3	number of additional sheet(s) attached						

(Refer Slide Time: 33:52)

	(in minutes) [no decimal point]		
5	number of investigators (FI/JSO) in the team who canvassed the schedule		
6	whether any remark has been entered by FI/JSO supervisory officer (yes-1, no-2)	(i) in block 12.13	
		(ii) elsewhere in the schedule	
[12] remarks by investigator (FI/JSO)			
[13] comments by supervisory officer(s)			

(Refer Slide Time: 33:55)

Schedule 25.03.2

[3] household characteristics			
1. household size		8. type of latrine usually used (code)	
2. whether the household paid major share for childbirth expenses for any non-household female member(s) during last 365 days? (yes-1, no-2)		if code in item 8 is 01-09	9. access to latrine: exclusive use-1, common use of households in the building-2, public community latrine-3, others-9
3. principal industry (NIC-2008)	description		10. how many members use the latrine?
code (5-digit)		11. major source of drinking water (code)	
		12. arrangement of garbage disposal (code)	
4. principal occupation (NCO-2004)	description:	13. primary source of energy for cooking during the last 30 days (code)	
	code (3-digit)	14. was there a sudden outbreak of communicable disease (see list* below) in the community afflicting at least one household member during last 365 days? (yes-1, no-2)	
5. household type (code)		15. amount of medical insurance premium paid for household members during last 365 days (Rs.)	
6. religion (code)		16. household's usual monthly consumer expenditure (Rs.)	
7. caste/tribe group (code)			

(Refer Slide Time: 33:55)

6. religion (code)		16. household's usual monthly consumer expenditure (Rs.)
7. social group (code)		

CODES FOR BLOCK 3

item 5: household type: for rural areas self-employed in agriculture -1, self-employed in non-agriculture - 2, regular wage/salary earning in agriculture- 3, regular wage/salary earning in non-agriculture- 4, casual labour in agriculture - 5, casual labour in non-agriculture -6, others-9

for urban areas: self-employed -1, regular wage/salary earning - 2, casual labour -3, others -9

item 6: religion: Hinduism -1, Islam -2, Christianity -3, Sikhism-4, Jainism -5, Buddhism -6, Zoroastrianism -7, others -9

item 7: social group: Scheduled Tribes (ST)-1, Scheduled Castes (SC) -2, Other Backward Classes (OBC) -3, Others- 9

item 8: type of latrine usually used: flush-pour flush latrine to piped sewer system-01, septic tank-02, pit latrine -03, elsewhere (open area, street/road/plot drainage ditch, not latrine etc.)-04.

Pit latrine: ventilated improved pit- biogas latrine -05, pit latrine with slab-06, pit latrine without slab open pit-07, twin pit/ composting latrine-08, others-09, no latrine facility - use open space or field-10

item 11: major source of drinking water: bottled water - 01, piped water in dwelling/premises/yard - 02, piped water outside -03, tube-well/borewell inside or outside premises-04, protected well inside or outside premises-05, tanker truck/drum/supplied through container-06, protected spring/pond etc for drinking purpose -07, Community RO Plant-08, others - 09, all unprotected source (river/canal, spring, pond, well etc.) - 10

item 12: arrangement of garbage disposal: by Panchayat/Municipality Corporation-1, by resident group of residents-2, others-9, no arrangement-3

item 13: primary source of energy for cooking: firewood and chups-01, LPG-02, other natural gas -03, dung cake-04.

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NO.	QUESTIONS AND ANSWERS	COLLECTION REQUIREMENTS	SRNF
201	क्या मैं अपने पिता या माता के सभी बच्चों के नामों के बारे में पूछना चाहता हूँ? मैंने कभी नहीं पूछा है। How-1 I would like to ask about all the births you have had during your life. Have you ever given birth?	YES 1 NO 2	206
202	क्या आपके कोई भी बच्चे हैं जो आपके साथ नहीं रहते हैं? और जो अभी तक जन्म नहीं ले चुके हैं? Do you have any sons or daughters to whom you have given birth who are now living with you?	YES 1 NO 2	204
203	क्या आपके बच्चे हैं जो आपके साथ रहते हैं? How many sons live with you? और कितने बच्चे आपके साथ रहते हैं? And how many daughters live with you? IF NONE, RECORD '00'	SONS AT HOME DAUGHTERS AT HOME	
204	क्या आपके कोई भी बच्चे हैं जो आपके साथ नहीं रहते हैं? और जो अभी तक जन्म नहीं ले चुके हैं? Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	YES 1 NO 2	206
205	क्या आपके बच्चे हैं जो आपके साथ नहीं रहते हैं? और जो अभी तक जन्म नहीं ले चुके हैं? How many sons are alive but do not live with you? और कितने बच्चे आपके साथ नहीं रहते हैं? और जो अभी तक जन्म नहीं ले चुके हैं? And how many daughters are alive but do not live with you? IF NONE, RECORD '00'	SONS ELSEWHERE DAUGHTERS ELSEWHERE	
206	क्या आपके कोई भी बच्चे हैं जो आपके साथ नहीं रहते हैं? और जो अभी तक जन्म नहीं ले चुके हैं? IF NO, RECORD '00' या '0' यदि आपके कोई भी बच्चे हैं जो आपके साथ नहीं रहते हैं, तो '00' या '0' दर्ज करें।	YES 1	

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212	213	214	215	216	217	218	219	220	221
क्या मैं अपने पिता या माता के सभी बच्चों के नामों के बारे में पूछना चाहता हूँ? मैंने कभी नहीं पूछा है। How-1 I would like to ask about all the births you have had during your life. Have you ever given birth?	क्या आपके कोई भी बच्चे हैं जो आपके साथ नहीं रहते हैं? और जो अभी तक जन्म नहीं ले चुके हैं? Do you have any sons or daughters to whom you have given birth who are now living with you?	क्या आपके बच्चे हैं जो आपके साथ रहते हैं? How many sons live with you? और कितने बच्चे आपके साथ रहते हैं? And how many daughters live with you? IF NONE, RECORD '00'	क्या आपके कोई भी बच्चे हैं जो आपके साथ नहीं रहते हैं? और जो अभी तक जन्म नहीं ले चुके हैं? Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	क्या आपके बच्चे हैं जो आपके साथ नहीं रहते हैं? और जो अभी तक जन्म नहीं ले चुके हैं? How many sons are alive but do not live with you? और कितने बच्चे आपके साथ नहीं रहते हैं? और जो अभी तक जन्म नहीं ले चुके हैं? And how many daughters are alive but do not live with you? IF NONE, RECORD '00'	क्या आपके कोई भी बच्चे हैं जो आपके साथ नहीं रहते हैं? और जो अभी तक जन्म नहीं ले चुके हैं? IF NO, RECORD '00' या '0' यदि आपके कोई भी बच्चे हैं जो आपके साथ नहीं रहते हैं, तो '00' या '0' दर्ज करें।	क्या आपके कोई भी बच्चे हैं जो आपके साथ नहीं रहते हैं? और जो अभी तक जन्म नहीं ले चुके हैं? IF NO, RECORD '00' या '0' यदि आपके कोई भी बच्चे हैं जो आपके साथ नहीं रहते हैं, तो '00' या '0' दर्ज करें।	क्या आपके कोई भी बच्चे हैं जो आपके साथ नहीं रहते हैं? और जो अभी तक जन्म नहीं ले चुके हैं? IF NO, RECORD '00' या '0' यदि आपके कोई भी बच्चे हैं जो आपके साथ नहीं रहते हैं, तो '00' या '0' दर्ज करें।	क्या आपके कोई भी बच्चे हैं जो आपके साथ नहीं रहते हैं? और जो अभी तक जन्म नहीं ले चुके हैं? IF NO, RECORD '00' या '0' यदि आपके कोई भी बच्चे हैं जो आपके साथ नहीं रहते हैं, तो '00' या '0' दर्ज करें।	क्या आपके कोई भी बच्चे हैं जो आपके साथ नहीं रहते हैं? और जो अभी तक जन्म नहीं ले चुके हैं? IF NO, RECORD '00' या '0' यदि आपके कोई भी बच्चे हैं जो आपके साथ नहीं रहते हैं, तो '00' या '0' दर्ज करें।

(Refer Slide Time: 35:06)

NO	QUESTIONS AND FEETERS	CODING CATEGORIES	SKIP
220	W1: NAME OF LAST BIRTH. If you are not sure, write 'N/A'. Have you had any live births (BIRTH)? IF YES, RECORD BIRTH(S) IN TABLE	YES 1 NO 2	
221	W2: NAME OF FIRST BIRTH. If you are not sure, write 'N/A'. Before the birth of NAME OF FIRST BIRTH, did you have any other live births? IF YES, RECORD BIRTH(S) IN TABLE	YES 1 NO 2	
224	CHECK 215 AND ENTER THE NUMBER OF BIRTHS IN JANUARY 2014 OR LATER	NUMBER OF BIRTHS	225
226	FOR EACH BIRTH SINCE JANUARY 2014, ENTER 'N' IN THE MONTH OF BIRTH IN COLUMN 1 OF THE CALENDAR. WRITE THE NAME OF THE CHILD TO THE LEFT OF THE 'N' CODE. FOR EACH BIRTH, RECORD THE NUMBER OF COMPLETED MONTHS THE PREGNANCY LASTED AND RECORD 'Y' IN EACH OF THE PRECEDING MONTHS ACCORDING TO THE NUMBER OF MONTHS. FOR EACH BIRTH ASK: W3: NAME. If you are not sure, write 'N/A'. At any time when you were pregnant with NAME, did you have an ultrasound test? RECORD 'Y' IF YES AND 'N' IN COLUMN 2 OF THE CALENDAR.	YES 1 NO 2 UNKN 3	231
227	W4: How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS ENTER 'N' IN COLUMN 1 OF CALENDAR BEGINNING WITH MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS.	MONTHS	
228	W5: At any time during this pregnancy, have you had an ultrasound test? RECORD 'Y' IF YES AND 'N' IF NO IN COLUMN 2 OF THE CALENDAR.		

And similarly information's are taken in a box and their codes are mentioned here only.

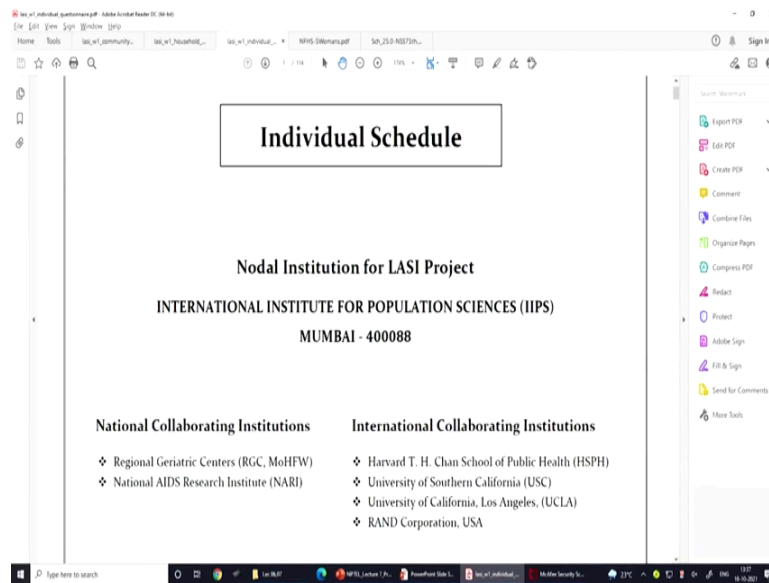
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LONGITUDINAL AGEING STUDY IN INDIA (LASI)

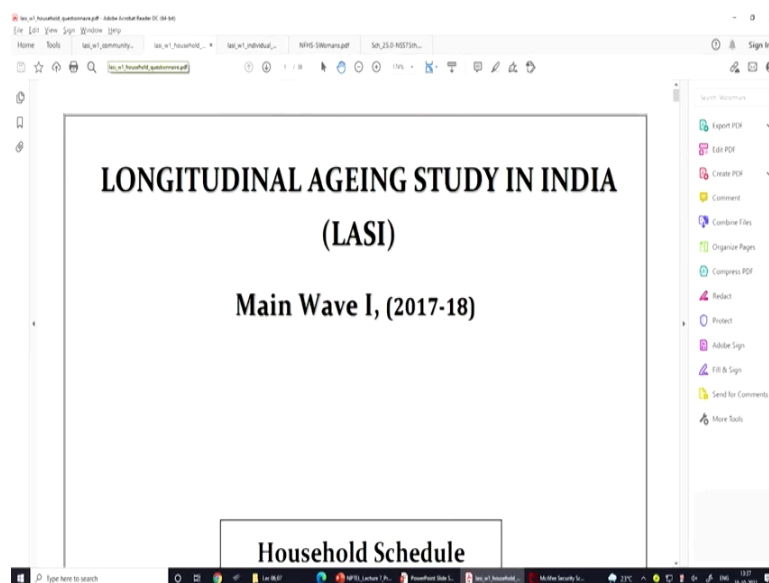
Main Wave I, (2017-18)

Individual Schedule

(Refer Slide Time: 35:24)

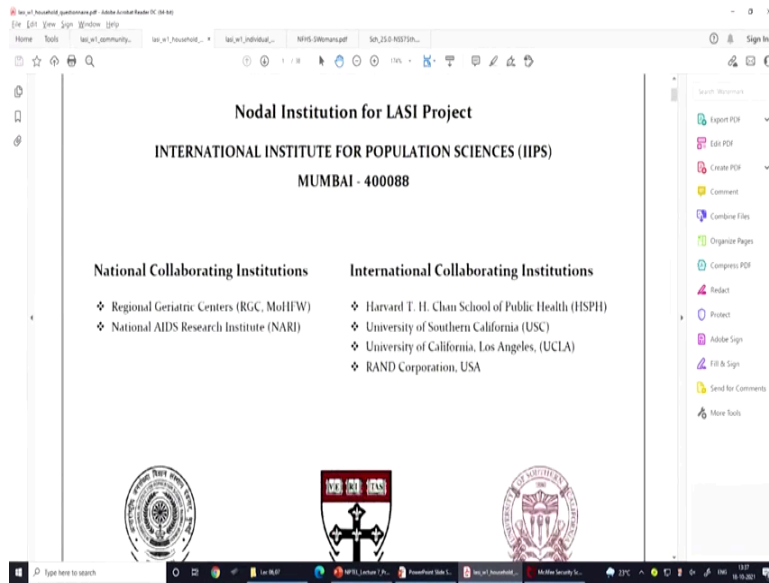


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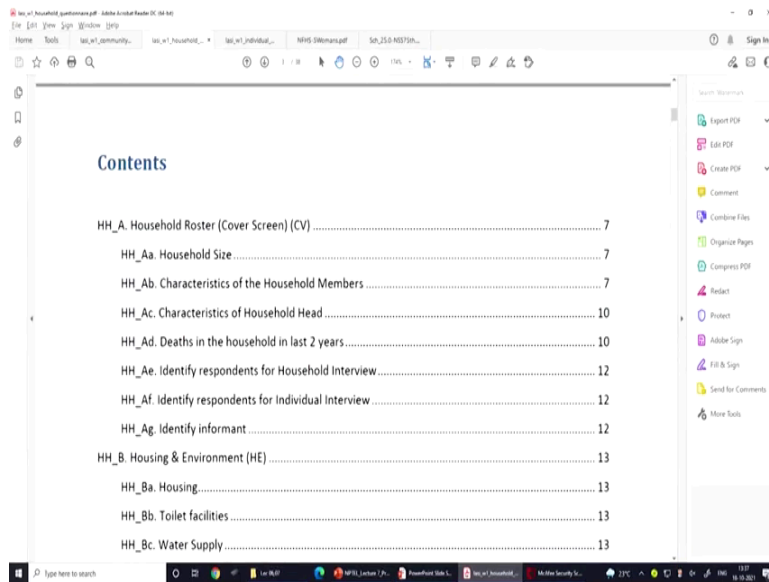
Now, I am showing another questionnaire from Longitudinal Ageing Study in India (LASI) 2017-18.

(Refer Slide Time: 35:29)



It is wave one data and this is an individual file starting with the household file. They have separated the household schedule from the individual schedule.

(Refer Slide Time: 35:36)



(Refer Slide Time: 35:46)

HH_Ea. Agricultural Income from HH's Own Farm/Fishery/Forestry	27
HH_Eb. Non-agricultural Business Income	28
HH_Ec. Individual Earnings: Wages and salaries from Agricultural Laborers, Self-Employed, and Employees	28
HH_Ed. Individual Pension Income	29
<hr/>	
HH_Ee. Private Transfers	30
HH_Ef. Other HH Income	31
HH_Eg. Household Income from Government Transfers	32
HH_Eh. Tax questions	32
HH_F. Health Insurance (HI)	34

Longitudinal Ageing Study in India, Survey Instrument, Wave 1, (2017-18) 3

And these are the contents of the roster household file and there is so much other information you can mark. Here are the details of household income, then household insurance etc.

(Refer Slide Time: 36:01)

Longitudinal Ageing Study in India (LASI)
International Institute for Population Sciences (IIPS)

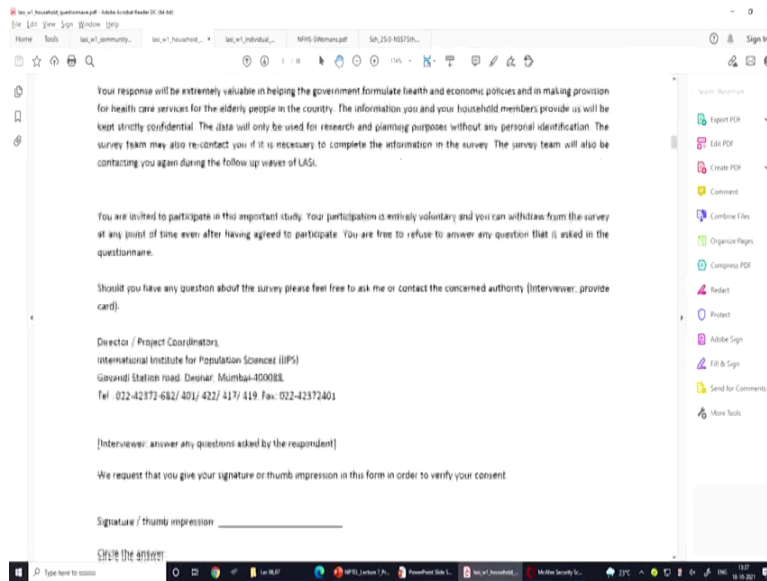
HOUSEHOLD INFORMED CONSENT FORM

Namaste! My name is _____ and I am working with (Name of the Organization). We are conducting a nationwide survey, **Longitudinal Ageing Study in India (LASI)** to understand the health and socio-economic well-being of older adults in India. The Ministry of Health and Family Welfare, Government of India, has entrusted the **International Institute for Population Sciences, Mumbai**, with the responsibility of conducting LASI project. This study will be conducted every two years for the next 25 years. The study is supported by the Government of India, the National Institute of Ageing (USA) and the United Nations Population Fund (UNFPA)-India.

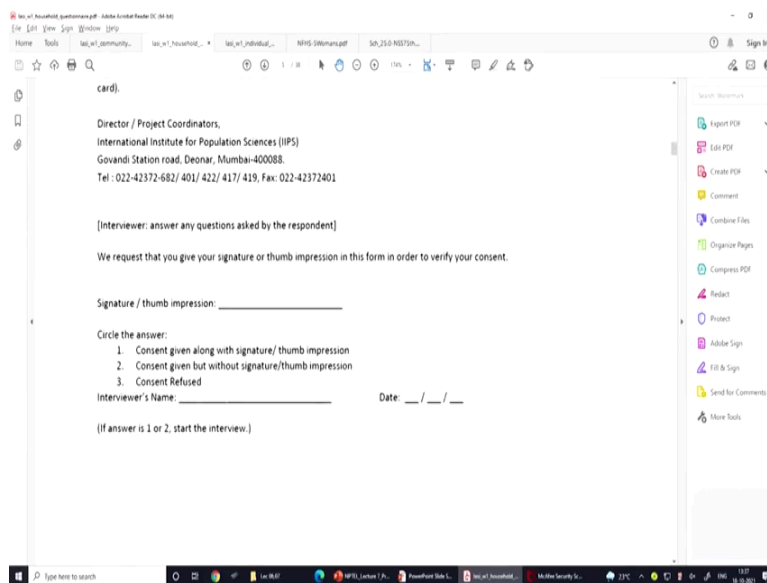
Your household has been selected to be a part of this study. As a knowledgeable person of this household, I would request you to give information about your household members, economic condition and basic amenities in the household. The interview will take approximately 40-45 minutes.

Your response will be extremely valuable in helping the government formulate health and economic policies and in making provision for health care services for the elderly people in the country. The information you and your household members provide us will be kept strictly confidential. The data will only be used for research and planning purposes without any personal identification. The survey team may also re-contact you if it is necessary to complete the information in the survey. The survey team will also be contacting you again during the follow up waves of LASI.

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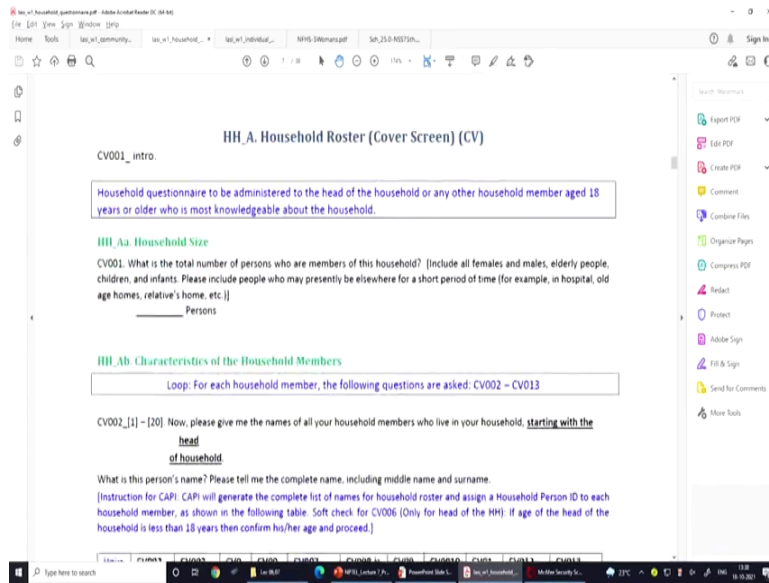


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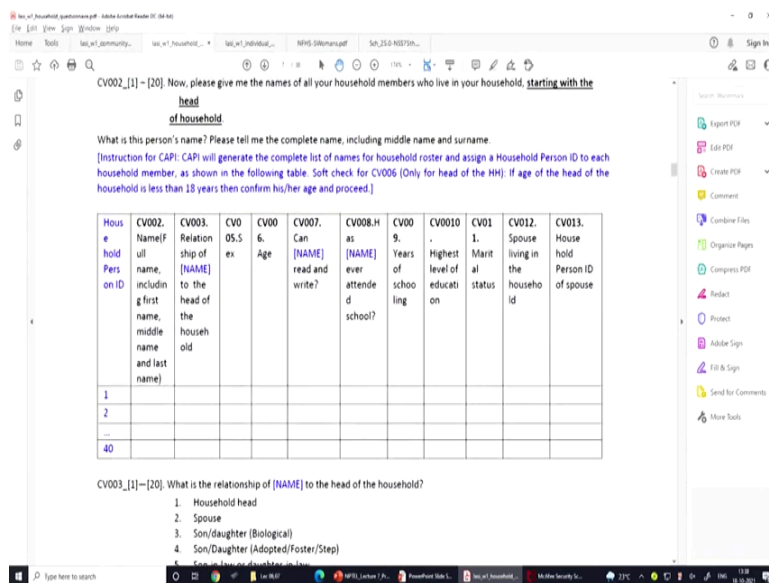


And its details are written and when the consent of the person is taken clarity is given from the beginning like what is the objective of this study and who is conducting all such information are given. Then, it follows with the household rosters and clarity is given in one or two lines.

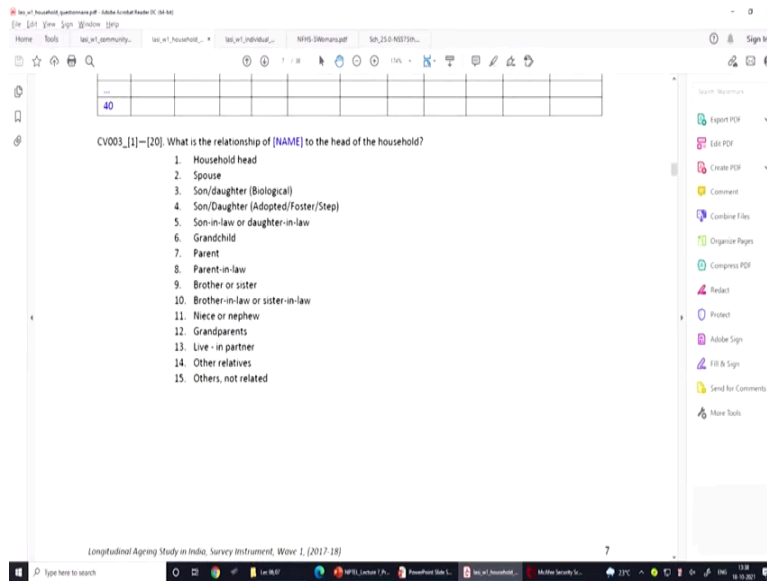
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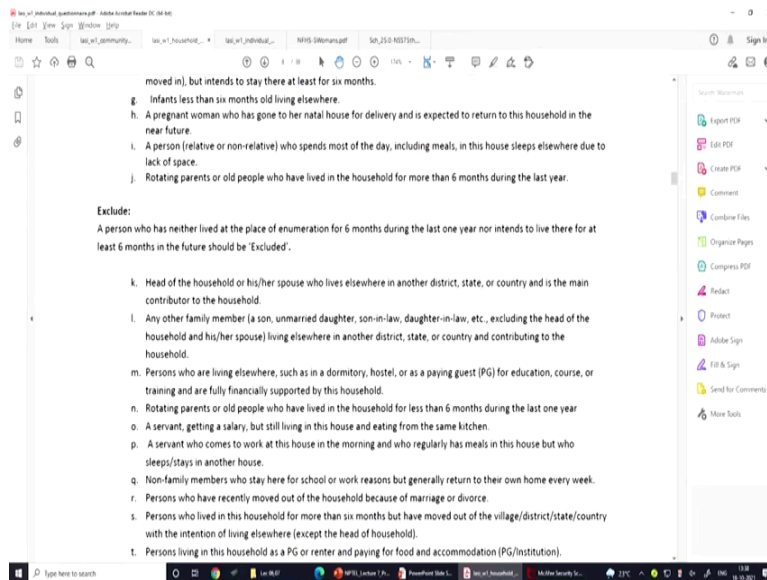


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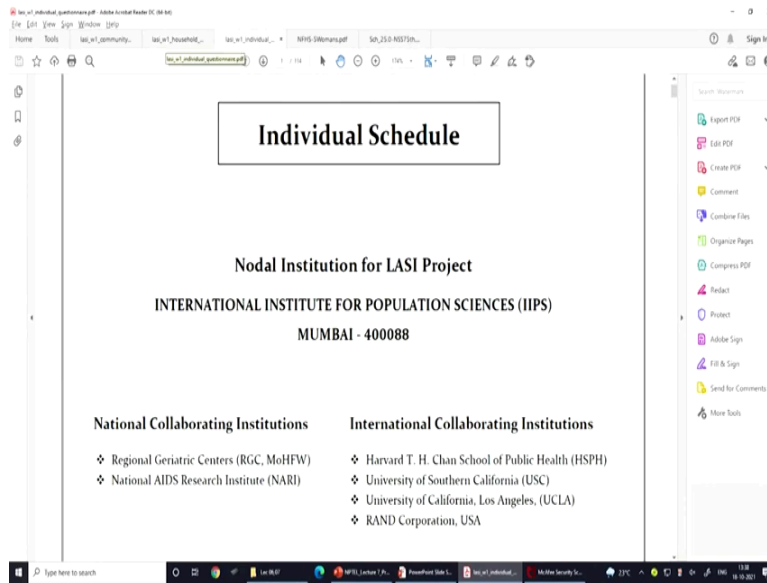


So, household size and their codes everything are given systematically. You can just have a look and I am sure you will enjoy it.

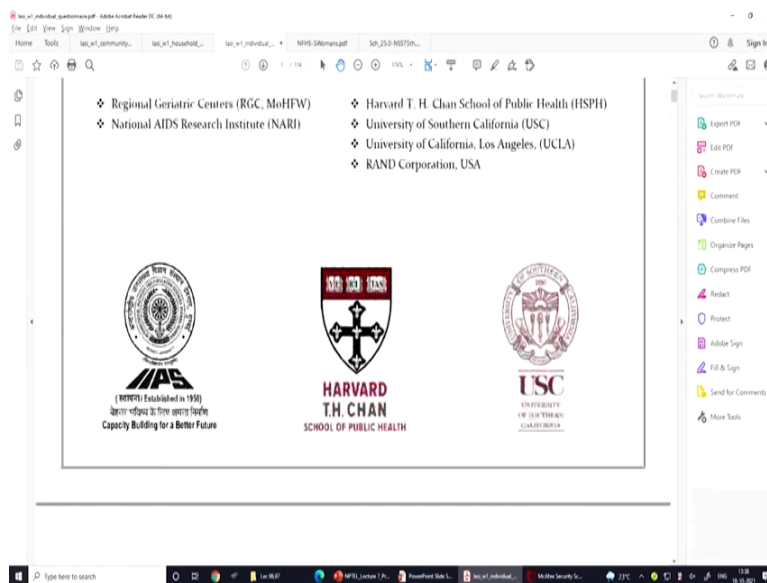
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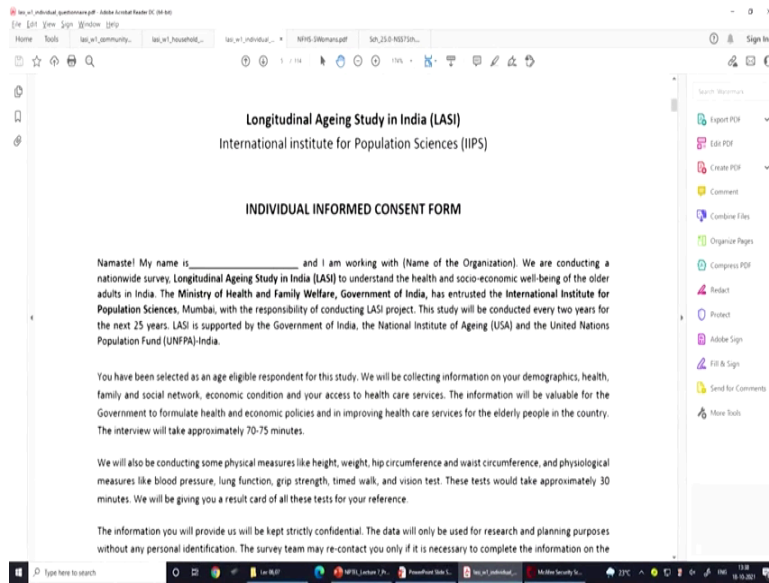


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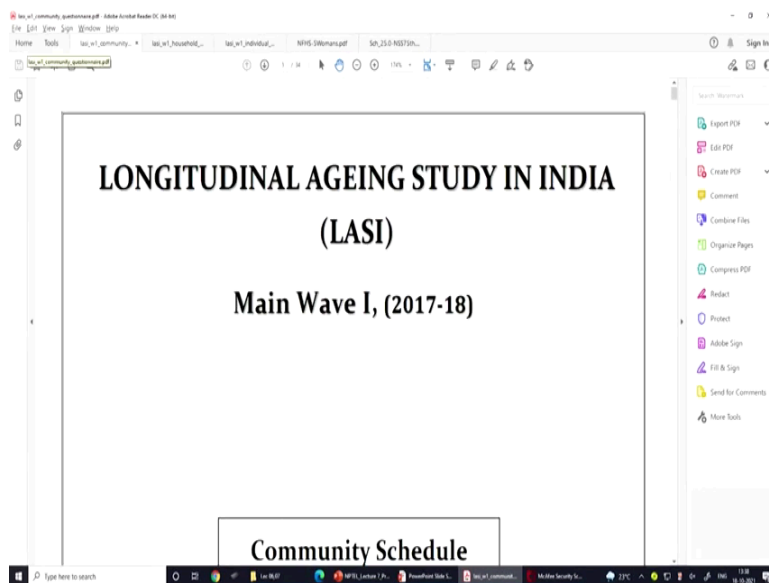


Similarly, individual schedule its purpose space is given, its show demographic characteristics then further details of the individual respondents about the LASI data is very clearly given.

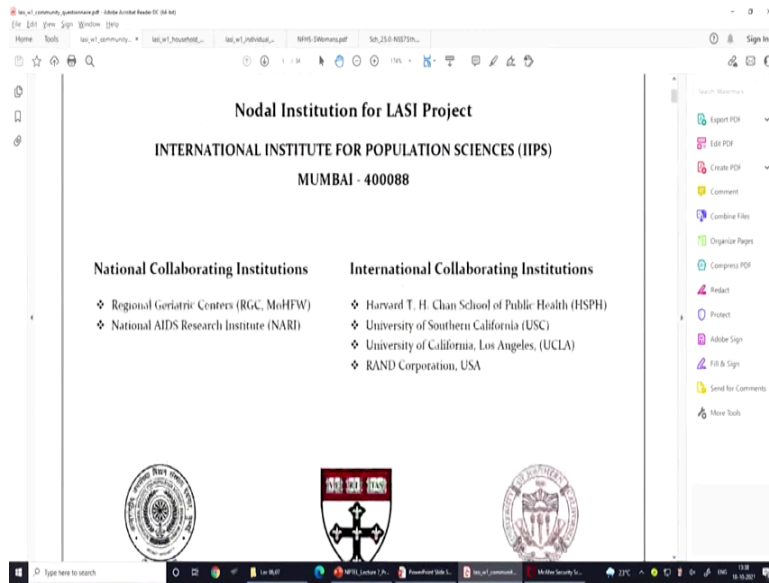
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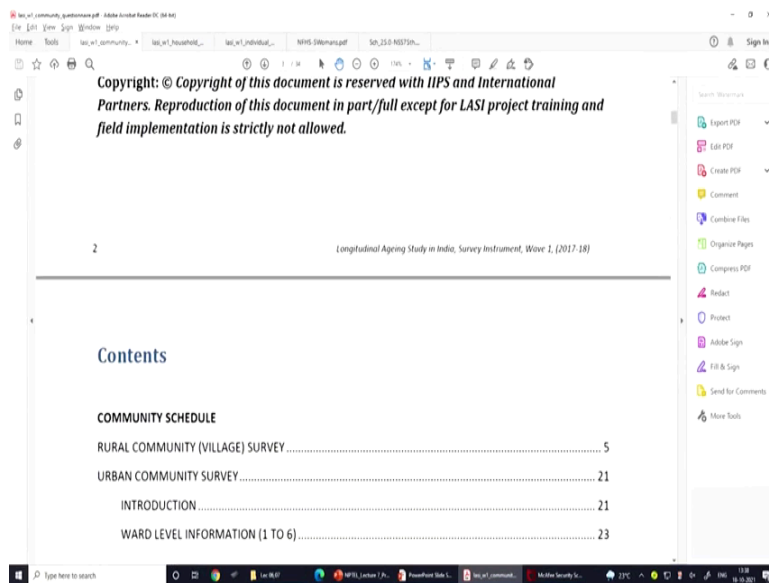


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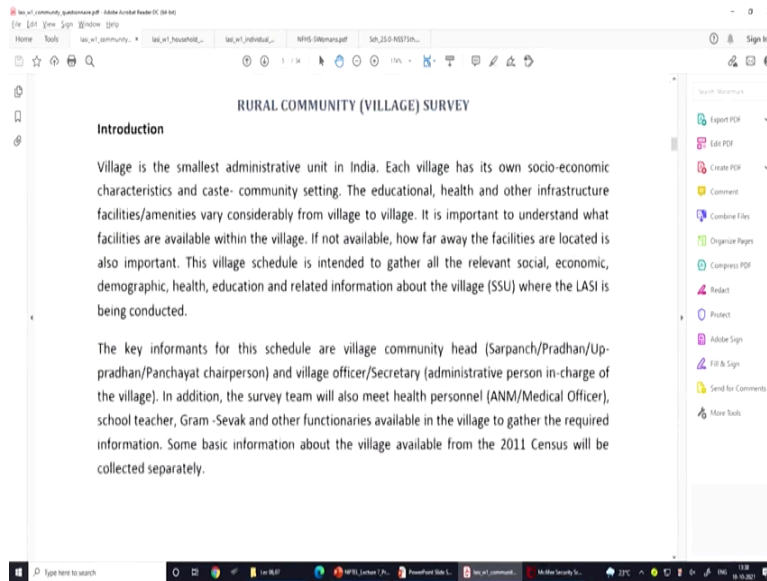


The community questionnaire is also there. Community characteristics, community amenities facilities all are given very clearly. Rural communities and urban communities are given separately.

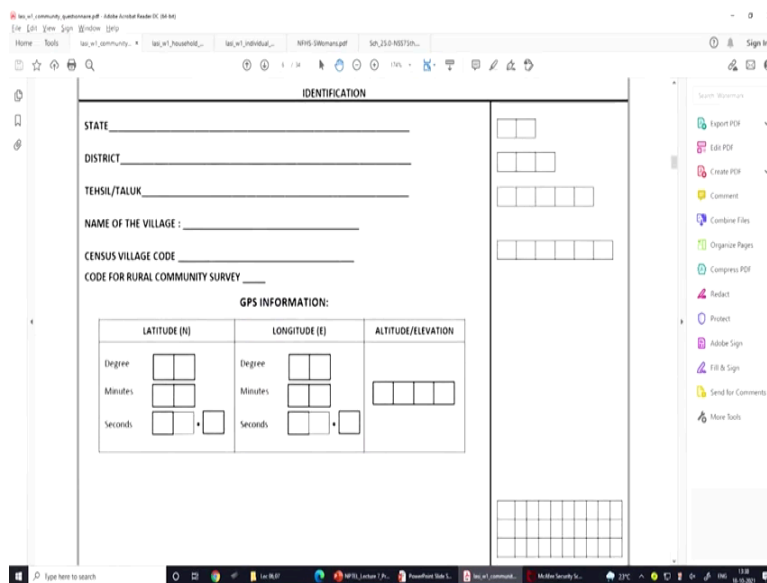
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So, I suggest you please go through it once again, we will certainly use it in our analysis. I am not going into the depth of each of these questions and I think we need to go back to our lecture slide. And I have already discussed the pretesting after all those sample questionnaires and we have discussed about some pretesting; what are the notes required, what set of preparation should do it. So, our questionnaire process is completed.

So, these are all details for this lecture and I am sure you might have got certain ideas about questionnaires or schedules. And, if there are any sort of queries difficulties please do not hesitate and I will be most happy to respond in our live session.

So, thank you, I will look forward to see you in the next lecture.