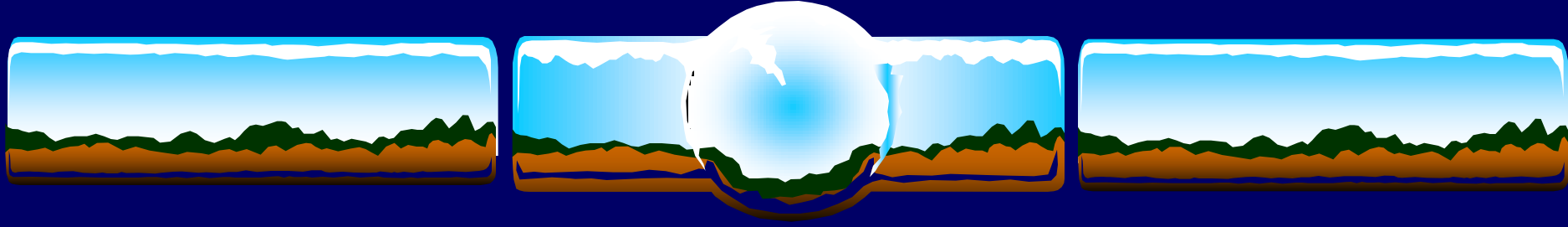


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***WORKSHOP ON
RESEARCH METHODOLOGY***

*Prof. K.A.P. Siddhisena
Department of Demography
University of Colombo
2nd and 3rd August 2018*





Session No. 3

Methods of Data Collection

Prof. K.A.P. Siddhisena

2nd August, 2018





Approaches in Data Collection

- **Collecting Primary Data**
- **Collecting Secondary Data**
- *Secondary data* are data already collected by other researchers or institutions for their purposes and available for your use.
- *Primary data* are data collected by researcher for his/her specific purpose (s) and his/her specific use.



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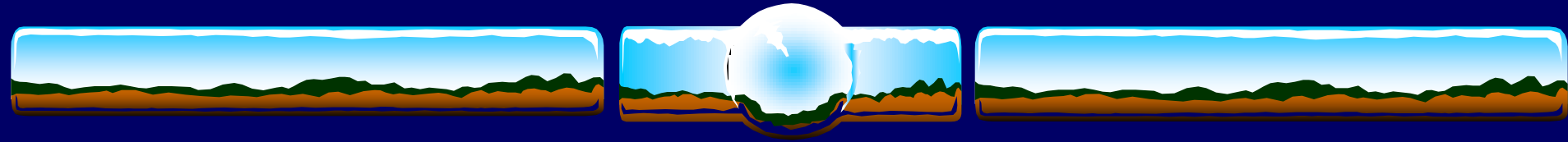
- ❖ **Colleting Quantitative Data**
- ❖ **Collecting Qualitative Data**

- ❖ ***What are quantitative data?***

The data that are of numeric form referred to as quantitative data. In quantitative data analysis the researcher mostly use parametric statistics.

- ❖ ***What are qualitative data?***

The data that are of non-numeric (label or groupings) form referred to as qualitative data. In qualitative analysis the researchers use non-parametric statistics.



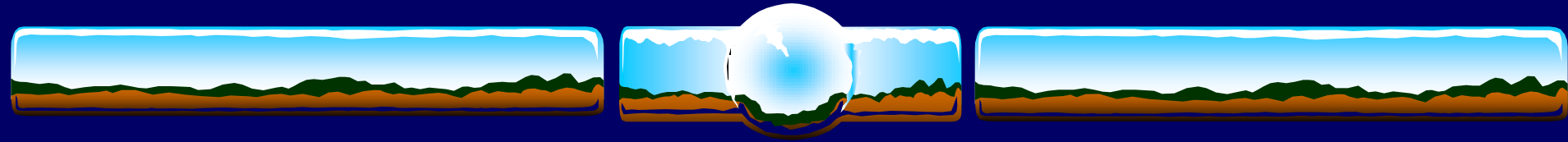
Methods of Data Collection

1. Observation Method

- Participant observation
- Non-participant observation

2. Questionnaire Method

- Postal questionnaire
- Questionnaire to be filled by interviewer



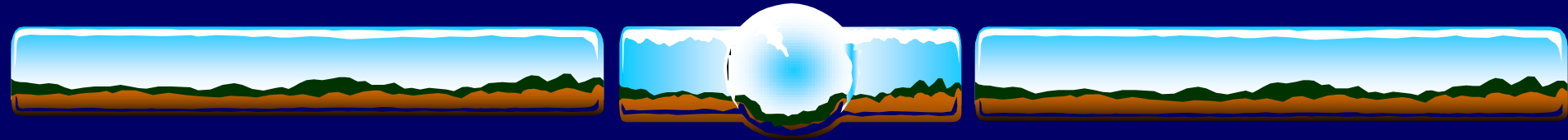
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3. Interview method

- Structured interview
- Unstructured interview
- Semi-structured interview
- In-depth interview

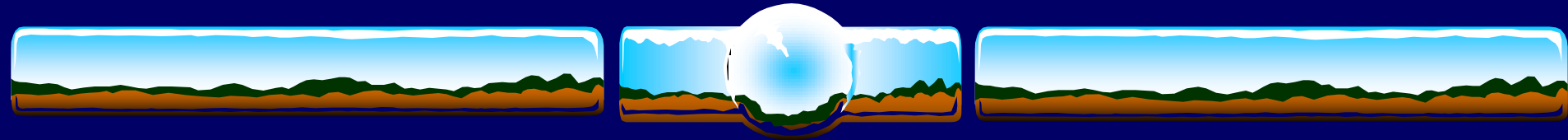
4. Group Discussion

5. Focus group discussion



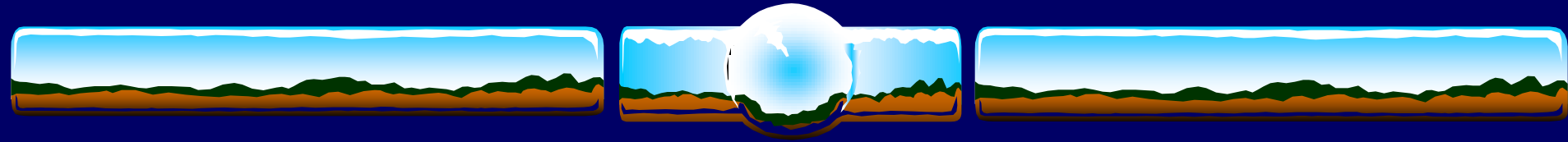
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- 6. Method of Participatory Rural Appraisal (PRA)**
- 7. Case Studies**
- 8. Census enumeration method**
- 9. Survey reports**
- 10. Governmental/Non-Governmental reports/records etc.**
- 11. Internet/websites**



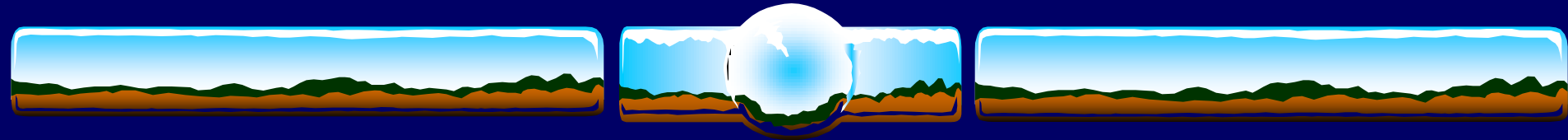
1. Observation Method

- ❖ This method entails sending observer to record what actually happens whilst it is happening (e.g. Traffic census).
- ❖ This is a self reporting and self administrative method of data collection.
- ❖ Observation can take place in a laboratory setting or in a natural setting. A natural setting is a “research environment that would have existed had researchers never studied it (vogt, 1993).



Some features of observation method

- ❖ A method suitable for micro studies; difficult to cover large population.
- ❖ Researchers use their own sensory perceptions to gather information on behaviours and happenings.
- ❖ Observation is an active process. Story of ‘Newton and apple falling’, observes give meaning to things that seemed quite causal.

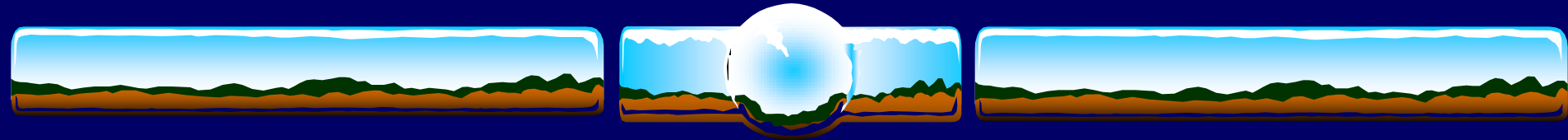


Two ways in which observation can be conducted

- Non-Participant Observation

Non-participant observation is to observe and record what people do in terms of their actions and their behaviour without the researcher being involved.

- The observer is separate from the activities taking place and the subject of the research may or may not be aware that they are being observed.
- Number of ways to do non-participant observation: looking or observing, using video or a still camera.



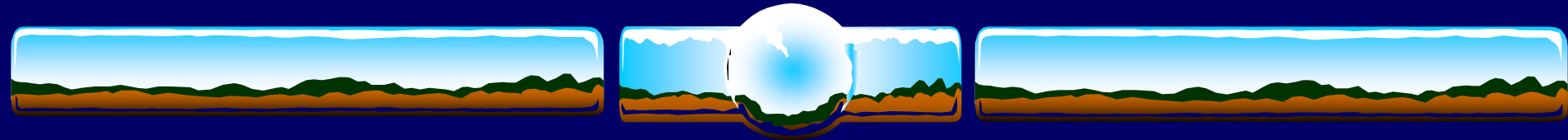
Advantages and Disadvantages

❖ *Advantages*

1. Gather information as an independent observer
2. Critical observation
3. Less risk to conduct
4. Minimize the hazardous

❖ *Disadvantages*

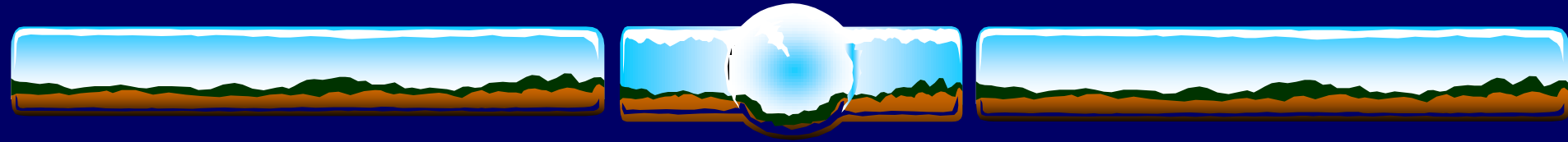
1. In-depth or hidden factors/phenomena can not be collected
2. Difficult to identify the mechanism/operation in the process



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❖ **Participant Observation**

- ❖ *Is a method of collecting data where the researchers is fully involved with the participants and the phenomena being researched.*
- ❖ *An important method adopted in anthropological research- heavily used in relation to ethnographic studies.*



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❖ Advantages

1. In-depth or hidden factors/phenomena can be collected.
2. Convenience to identify the mechanism/operation in the process.

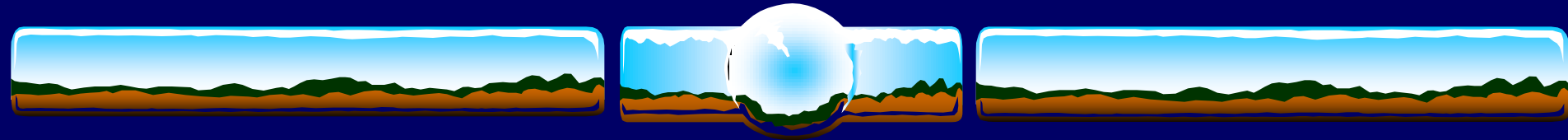
❖ Disadvantages

1. Gather information as a bias observer
2. uncritical observation
3. High risk to conduct
4. Maximize the hazardous



Questionnaire Method

- ❖ A questionnaire is a list of carefully structured questions, chosen after considerable testing, with a view to elicit reliable responses from a chosen sample. The aim is to find out what a selected group of participants do, think or feel.
- ❖ There are two types of questionnaire.
 1. Postal/Mail Questionnaire
 2. Questionnaire to be filled by enumerator/interviewer



Contd.

❖ **Advantages of a postal questionnaire**

1. Low cost
2. Easy to manage

❖ **Disadvantages of a postal questionnaire**

1. Low response rate
2. Doubtful response/not targeted response
3. Biased response
4. Less probing facilities
5. Less accuracy



Questionnaire to be filled by enumerator

❖ There are two forms of questionnaire

1. Household Questionnaire (H Schedule)

2. Individual Questionnaire

-Advantages of having HH Questionnaire

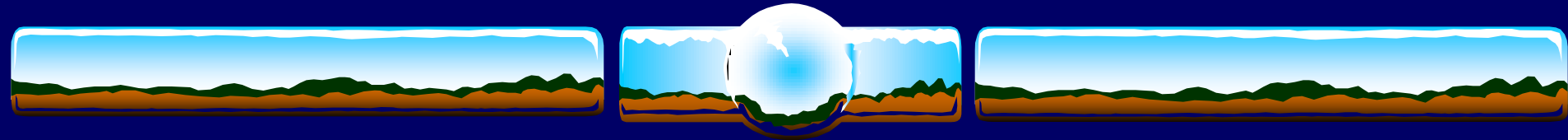
a. Obtaining HH information

b. Identification of the targeted respondents

2. Individual Questionnaire

a. Questions related to **Background information**

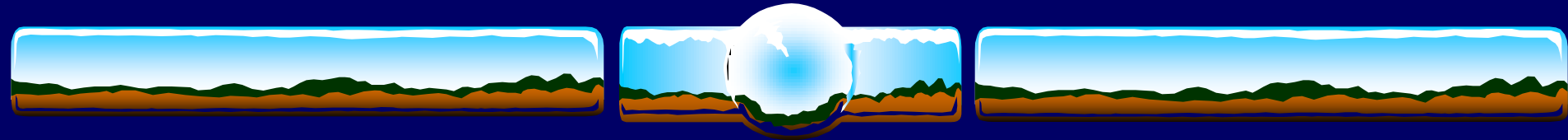
b. Questions related to **subject matter**



Two Types of Questions (Question design)

- ❖ Questionnaire design is concerned with the type of questions, their working, the reliability and validity of the responses. Because designing questions is a crucial element of many of the data collection method.

- ❖ There are two types of questions
 1. Structured Questions (Close-ended Questions)
 2. Unstructured Questions (Open-ended questions)

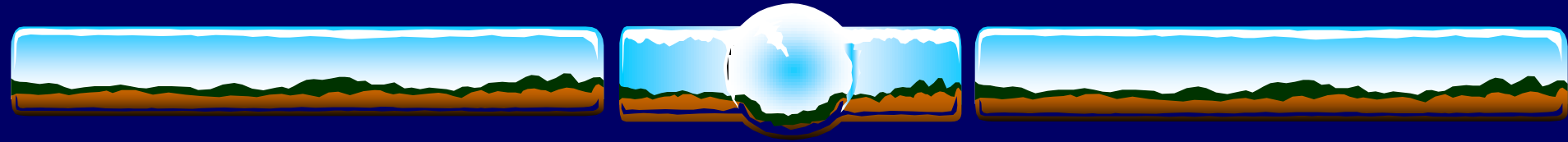


The Characteristics of a Good Questionnaire

❖ The list of desirable qualities that a questionnaire should possess given below would seem to be a matter of common sense. Nevertheless the drafting of questionnaire is one of the most difficult tasks of inquiry. A pilot survey carried out prior to the actual survey invariably leads to alterations and improvements in the questionnaire.

1. The questionnaire should cover the exact object of the inquiry.

No need to question around the items of questions.



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2. Questions should not be ambiguous.

This means that the questions must be capable of only one interpretation.

3. Questions must be easily understood.

This means that technical terms should be avoided, except where the questionnaire is addressed to specialists.



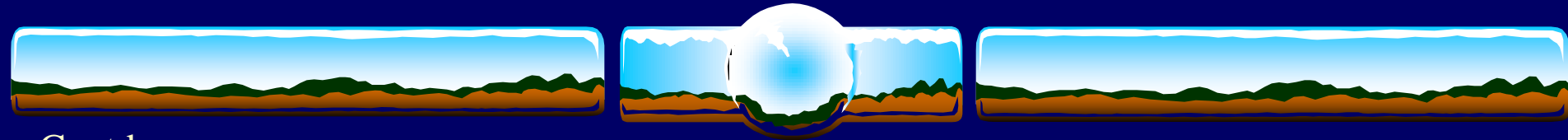
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4. Questions should be capable of having a precise answer.

The answer should take the form of “yes” or “no”, a number, a measurement, a quantity, a date, a place; facts are required, not opinions (except where opinions are wanted, as in opinion polls).

5. Questions must not contain words of vague meaning.

To ask if something is large or if a man is unskilled are example for such questions.



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6. Questions should not require calculations to be made.

Such questions give rise to unnecessary sources of error.

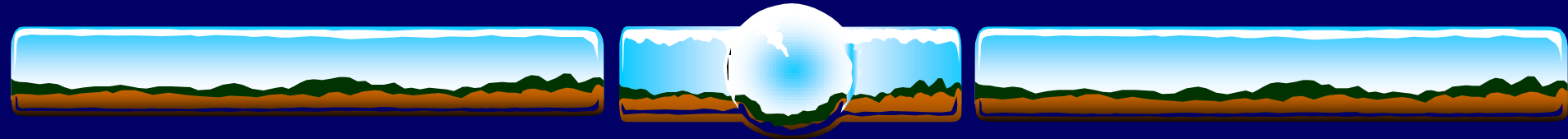
7. The questions must not be in a such a form that answer will be biased.

The questions must not therefore contain emotionally colored words, they should not be leading questions – that is they should not put answers into the respondents' mouth.

8. The questionnaire should not be overlong.

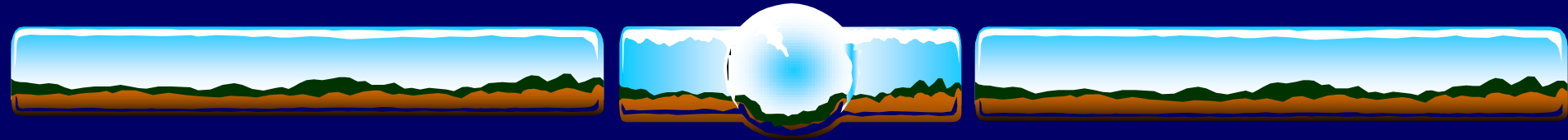
If a questionnaire is too long, the respondent will not be cooperative, this may mean inaccurate answers.

9. Minor or related questions should follow the main questions.



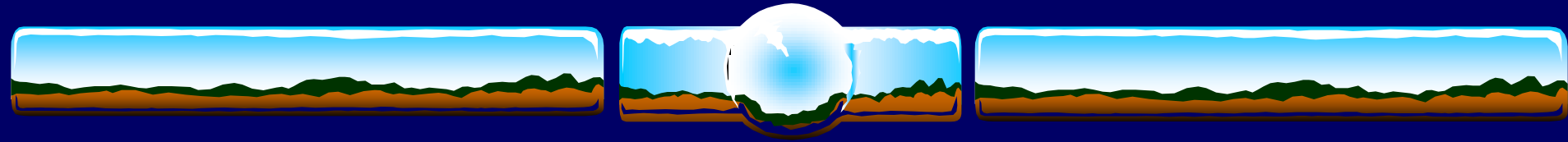
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10. Questions should not require the respondent to decide upon classification.
11. Include Questions which serve as cross-checks on the answers to the other questions.
12. Avoid offensive questions or sensitive questions which could cause embarrassment.
13. Avoid questions which are nothing more than a memory test.



Interview Method

- ❖ The term interview is constructed out of two words ‘inter + view’. View means to look at to have a perception of and ‘inter’ means between two objects or points.
- ❖ Therefore the interview refers to the act of perceiving as conducted between two separate points or two separate persons.



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❖ There are several types of interview:

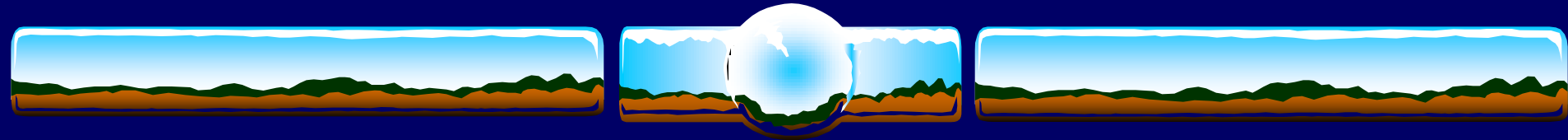
❖ 1. Face to face interview

❖ one to one interview

❖ one to many

❖ many to one

❖ many to many interview



Cont.

- ❖ 2. voice to voice interview
- ❖ 3. Screen to Screen interview
- ❖ **Another classification:**
 1. Structured interview
 2. Unstructured interview
 3. Semi-structured interview
 4. In-depth interview



FOCUS GROUPS

❖ What are focus groups?

- Focus groups are group discussions that gathers together people from similar backgrounds and experiences to discuss a specific topic of interest to the researcher. The discussion is guided by a group leader (called a moderator) who asks questions and tries to help the group to have a natural and free conversation with each other.
- Focus groups are aimed at encouraging participants to talk with each other, rather than answer questions back to the moderator.
- It also focused because the participants usually share a common characteristic. This may be age, sex, educational background, religion, or something directly related to the topic.
- The group interaction of focus groups is important because it gives us some understanding of how the people are thinking about the topic.



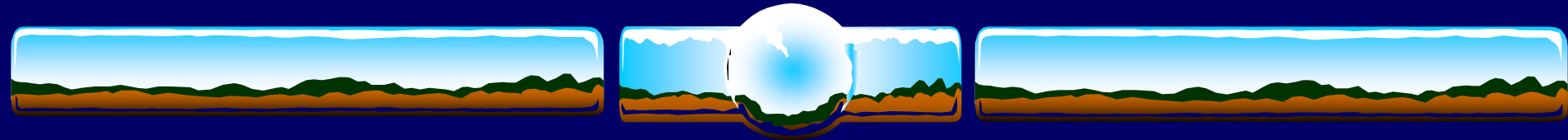
Advantages and limitations of focus groups

❖ Advantages

They produce a lot of information far more quickly and at less cost than individual interviews

They are excellent for obtaining information from illiterate communities

If the focus group is used to explore relatively simple issues, it can be easily managed by people not trained in qualitative research methods



Cont.

Because the questioning is so flexible, it means that you may discover attitudes and opinions that might not be revealed in a survey questionnaire

The researcher can be present at the session which allows follow-up of responses if required

They are usually well accepted by the community as they make use of the group discussion which is a form of communication found naturally in most communities

And, focus groups are good fun!



Limitations

Results from focus groups cannot usually be used to make statements about the wider community, that is they can indicate a range of views and opinions, but not their distribution.

Participants often agree with responses from fellow group members (for many different reasons) and so caution is required when interpreting the results.

The moderator who is not well trained can easily force the participants into answering questions in a certain way.

Focus groups have limited value in exploring complex beliefs of individuals, and as a result, in-depth interviews are a more appropriate method for this purpose.

Focus groups can paint a picture of what is socially acceptable in a community rather than what is really occurring or believed, although this problem can be limited by careful participant selection and good moderating skills.



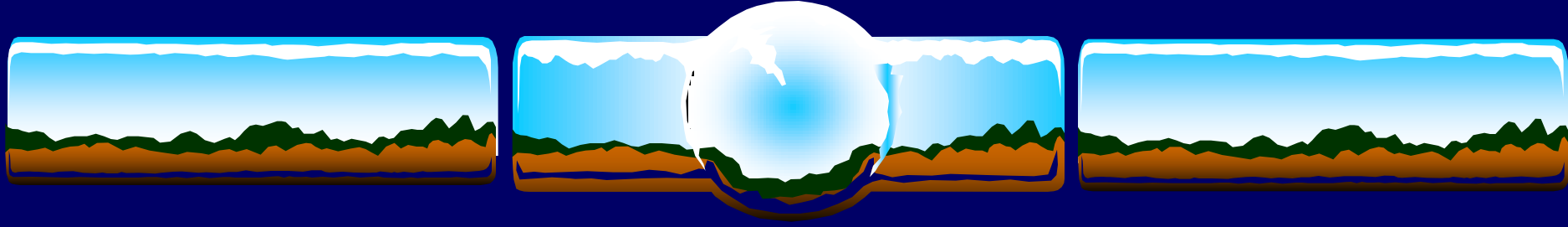
Participatory Rural Appraisal (PRA)

- ❖ A simple method to collect information from a small number of particular group of people in a short period of time.
- ❖ Ranking system, Venn diagram and preferential methods are used to reveal the information which are collected through this method.
- ❖ Participatory Rural the Appraisal (PRA) today is not limited to rural studies but adopted in policy research, poverty reduction, conflict resolution etc.



Case studies

- ❖ A particular individual or a community or an object or an event or a specific action, which is called a case, is an element in the data collection.
- ❖ Case study is a full description of the above selected case; eg. women who had sexual harassments in the middle-east.
- ❖ A small number of cases however cannot be easily generalized to a larger population.
- ❖ Drawing boundaries as to what include in a case study and what to exclude remains an issue; the major guide line here is to remember what is it a case of



Thank you