

ANNEXES

ANNEX 1: SOCIAL DISCOUNT RATE OF VARIOUS COUNTRIES

The social discount rate is the rate at which the future benefits and costs of a government investment project are discounted, in order to determine the convenience of implementing it. Since a public investment project extracts resources from the society, at the expense of private investment and consumption, the use of this rate guarantees that, whenever the government requires resources to execute a determined project, the project will only be carried out if it represents a net benefit for society.

Country	Rate (%)
Argentina	12
Bolivia	12.67
Chile	12
Colombia	12
Mexico	12
Peru	10
Uruguay	12

(Continued)

Country	Rate (%)
United Kingdom	4
France	3.8
Japan	5

ANNEX 2: SOME SUSTAINABILITY INDICATORS¹

Sustainability	Topic	Sub-topic	
Social	Organizational	Corruption	
		Better relationship with actors	
		Free advertising	
		Achievement of goals	
		Process improvement	
		Child nutrition	
	Health	Mortality	
		Life expectancy at birth	
		Immunization against infectious childhood diseases	
		Access to basic health services	
		Mortality from major diseases, such as AIDS, Malaria, TBC	
		Education	Enrollment in primary education
			Conclude primary education
			Literacy

(Continued)

Sustainability	Topic	Sub-topic
		School level in secondary education
	Poverty	Income poverty
		Income inequality
		Unemployment
		Sanitation services
		Drinking water
		Access to energy
		Standard of living
Environment	Natural risks	Population living in areas susceptible to natural risks
	Air	Air quality
		Carbon dioxide emissions
		Consumption of ozone layer-depleting substances
	Soil	Soil condition and use
		Desertification
		Agriculture
		Forests
	Water	Quantity of water
		Water quality
	Biodiversity	Ecosystems
		Species
	Sustainable consumption and production	Consumption of materials
		Use of energy
		Waste generation and handling
		Transport

(Continued)

Sustainability	Topic	Sub-topic
Economic	Economic development	Higher income Capitalization of assets Savings Avoided costs Generation of employment Information and communication technologies Research and development Access to finance

ANNEX 3: INFORMATION GATHERING TECHNIQUES

A general description of the most widely used information gathering techniques is provided below:

A. Surveys²

Research by means of surveys studies large or smaller populations, selecting and analyzing chosen “samples” of the population in order to discover the relative incidence, distribution, and interrelation of sociological and psychological variables. Thus, they are usually called “sampling surveys.”

Steps for carrying out a survey are listed as follows:

- The flow plan of a survey begins with the objectives of the survey. What is the information that is desired to obtain? Does it relate to a specific problem and a simple variable, or a more complex variable with different facets and dimensions?

- After defining the objectives and facets of the problem, the preparation of drafts of the possible questions begins, seeking to achieve a clear, simple, and concrete form.
- Every survey is preceded by relevant personal data that also serve to relate the problem being researched according to the characteristics or conditions of the subjects themselves, such as age, sex, profession, years of experience, and marital status.
- In order to standardize and facilitate its application, an initial presentation must be drafted, which justifies the importance of obtaining the required information. It is advisable to guarantee the privacy of the data provided.
- The next step is to study the sampling plan. In the best survey research, random samples are used.

After designing the survey, it is tested on a small representative sample of the universe. It is reviewed with various experts and it is given its final form. This constitutes the process of verification of the validity of the instrument.

Here ends the first part, which involves the design of a survey. The collection of data by means of the survey is the second part. The interviewers or implementers must be trained and sent into the field with precise instructions. In most cases, they are not granted freedom regarding who to interview. Their work must be programmed, supervised, and verified.

The third part of the flow plan is the analytical part. The replies are coded and tabulated. *Coding* is understood as the process of translation of the replies and the information from the interviewee into specific categories for the purposes of analysis.

Advantages and disadvantages

The survey has the advantage of its broad scope, it can be quickly constructed and is economical in its application. It adapts better to “extensive” rather than “intensive” research, since the information that is sought, more precise and specific, is usually detrimental to deep study. Another disadvantage is that in certain cases, it may temporarily separate the interviewee from his own social context, and this may invalidate the result of the survey. The interview is an extraordinary event in the life of the interviewee. This separation may affect the manner of interaction with the interviewer in an unnatural way.

B. The Interview³

Interviews or oral questionnaires can adopt various forms, from a totally informal question and answer session in the street to a highly structured and detailed interaction. Although it is not necessary to worry about the physical format of the interview questions (because the interviewee never sees them), attention must be paid to questions such as the transitions between sections, being sensitive to the type of information that is requested, and being objective and direct.

They are usually very useful when it is necessary to obtain information which would otherwise be inaccessible, which includes first-hand knowledge of peoples’ feelings and perceptions. The results of the interviews are combined with other observation techniques and important documents.

Advantages and disadvantages of the interview

Interviews offer great flexibility, because the questions can be guided in any direction (within the scope of the project). The non-verbal behavior of the interviewee can also be observed, which provides valuable information. However, they also

have their negative side; they take up a lot of time, as a result of which it is a costly technique, and, as a result of not enjoying total anonymity, the interviewees may be reluctant to provide honest answers. As a result of not having a standardized format of questions and giving freedom to the interviewer to express them, the interview process can fall into subjectivity and variations between interviewers, where some are more inquiring and successful in obtaining the information and others more cautious or prudent in the art of interviewing, who would obtain less information and, therefore, different results.

How to design it

1. State the purpose of the interview, bearing in mind the goals of the research project.
2. Select the appropriate sample for the study, both for its characteristics as well as its size. If we are going to study “styles of educational supervision,” it would be interesting to interview not only School Directors, but also those being supervised, that is, the teachers, and try to appreciate how they feel about being supervised. The sample size is usually smaller when compared to working with surveys or questionnaires, for reasons of time and cost.
3. Design the questions, whether structured or unstructured, they must be clear and direct, without hidden intentions, words that are elaborate or difficult to understand. One of the best ways of finding out how good an interview is, is to submit it to “a pilot test.” Use it with people with the same characteristics as the public to which it is addressed. Ask for feedback and make the changes that you consider pertinent.

4. Once the format or the script of the interview has been defined, it is time to “train the interviewers.” Most of the characteristics that are looked for in an interviewer are obvious: friendly, well presented, a non-provocative appearance, responsible to arrive punctually at the place of the interview, not too timid or too aggressive, capable of sensing when he must dig deeper with a “Why?,” and when to wait for the answer to be given, without pressing.

How to apply the interview

- Do not begin the interview coldly. Warm up with conversation about any subject. Use anything that works to break the ice and make the interaction warmer. This period of time, which may be long or short, is called “rapport” and means “building trust” to begin the interview.
- Recording and video may only be used with the consent of the interviewee. However, do not let the tape run without taking notes that may be very important, such as body language, non-verbal language, etc.
- Remember that your mission is to obtain information. Concentrate on your task and use a series of printed questions as an interview aid or guide. You must be familiar with them in advance to avoid giving the impression of improvisation or disinterest.
- Dress appropriately (too many clothing accessories and details are inadvisable).
- Find a quiet place to carry out the interview, where you and the interviewee are not subject to distractions.
- Be direct with your questions. If the interviewee does not provide you with a satisfactory reply the first time that you

ask the question, present it in another way, until getting as near as possible to the reply that you think you need.

- Make the interviewee feel like an important part of the project and not just someone who is taking a test. Most people like to talk if given the opportunity. Tell him that you realize how valuable his time is and how much you appreciate his participation. Do not forget “to promise and deliver, in due course, the results.”
- Finally, thank the interviewee and invite him to raise doubts or make comments and suggestions.
- It requires practice to become a good interviewer. The first interview is usually full of apprehension and doubts. It is convenient to rehearse and make a video recording in order to observe and try to improve posture, diction, tone of voice, pauses between one question and another, or between replies. As more interviews are carried out, confidence and command of the questions will increase, with a more relaxed interaction, resulting in the obtaining of more useful information.

C. Observation⁴

This involves social interaction between the researcher and the informants in the environment or context of the latter, and during which data are collected in a systematic and non-intrusive manner.

The researcher begins his study with questions and general interests and usually does not predefine the nature and number of cases, scenarios, or informants to be studied. The design of research in participant observation remains flexible.

That being said, how does the observer enter and act in the field or scenario under study?

1. During the initial days, the observers must remain relatively passive, weighing up the situation, advancing slowly, trying not to disturb the established routine.
2. During this initial period, the gathering of data is secondary in order to get to know the scenario and the people. It is important, to the extent that people ask, to clarify who you are and why you are there without saying exactly what we are studying (so as to avoid causing inhibition or feelings of threat). The researcher will often feel uncomfortable, with doubts and even frustration, but this will improve as the study progresses.
3. Observations should not take up too much time, and should be of a length that permits them to be remembered. Therefore, do not remain in the field if you feel that you are going to forget much of the data or will not have time to record it.
4. In order to achieve the level of confidence and acceptance of the informants, you are advised to:
 - Revere their routines, adjust to their way of doing things.
 - Help people, do favors.
 - Be humble, displaying excessive knowledge constitutes a threat.
 - Show interest in what others do or say.
5. Identify key informants. Generally, the researcher relates to all of the informants, but he tries to cultivate closer relations with one or two respected people who are knowledgeable about the environment and become primary sources of information, providing him with a deeper understanding of the scenario. These closer relations

should not be established until a good awareness of the scenario has been acquired.

6. The researcher will begin to define specific lines of enquiry and will have to formulate questions to allow people to talk about what they have in mind and what interests them. In this sense, when people start to talk, he must encourage them to say more about the subjects that interest them, not take for granted that he is understanding what people are saying, ask What do you understand by this? Can you explain it to me again?, etc. Therefore, as the observers acquire knowledge and understanding of the scenario, the questions become more directive and focused.
7. It is necessary to learn the informants' own language, because the words and symbols used in the world of the researcher may have very different meanings in the worlds of his informants. This is only achieved after an extensive period of observation.
8. The record of notes must be complete, precise, and detailed. In order to achieve greater objectivity and reliability, it is recommended that a colleague should read the notes. These must include descriptions of people, events, and conversations, as well as the actions, feelings, intuitions, or work hypotheses of the observer. The structure of the scenario is described in detail. In summary, the field notes seek to record on paper everything that can be remembered from the observation. A good rule to establish is "if it isn't written down, it didn't happen."
9. Participant observation is commonly combined with other techniques for a study. Generally, in-depth interviews and document analyses are used as supplementary techniques, which produces so-called triangulation. This triangulation

can also be obtained through teamwork, when two or more people study the same scenario.

D. Focus Groups⁵

Focus groups typically comprise between 7 and 10 participants, selected as a result of having certain common characteristics and who are related to the subject or topic to be dealt with in the group. This technique can be repeated several times with different people. A study where this technique is applied requires a minimum of three groups, although research exists which can include up to a dozen groups.

The researcher must be a capable interviewer so as to foster in the group a permissive environment, which nourishes and permits the expression of different perceptions and points of view, without pressure for a plan, voting or reaching a consensus. Group discussion is carried out several times with similar types of people in order to identify patterns and trends in those perceptions. The discussion is comfortable, often agreeable for the participants, and the members of the group influence each other by responding to ideas and comments in the discussion.

This is a technique that uses interviews which permit individuals to reply without feeling limited.

Interviews in focus groups are widely accepted within the research framework, because they produce credible results at a reasonable cost. It is a technique that has been growing in popularity among social scientists. It is a particularly appropriate procedure to use when the objective is to explain how people consider an experience, idea, or event.

The results produced by the focus group are qualitative data that provide a view of the attitudes, perceptions, and opinions of the participants. The interviewer must fulfill various functions within the group: moderate, listen, observe,

and eventually analyze, using an inductive process. The inductive researcher gets to understand processes through discussion, as opposed to wanting to prove or confirm preconceived theories or hypotheses.

The art of asking questions in focus groups

The questions must be stimulating so that people respond. Semi-open questions are advisable, because without suggesting replies, the interviewer maintains the purpose of the focus group. Some examples are:

What do you think about

How did you feel about

How would you suggest improving

What are the biggest problems that parents have with their adolescent children?

When not to use the focus group

1. When the atmosphere is emotionally charged and the search for information may generate or intensify conflicts.
2. When the researcher does not have control of the group or has lost control of the group.
3. When statistical projections are needed.
4. When other methodologies may produce a better quality of information.
5. When the researcher cannot ensure the confidentiality of the informants.

Advantages of the technique

1. It is a natural technique, because people are accustomed to interact with each other, and in that interaction, all of

the dynamics of the relationship, influences, inhibitions, changes of attitude, etc. can be observed.

2. The second advantage is that it permits the researcher to explore in advance possible solutions to problems that may arise.
3. The technique is easily understood by everyone and its results have a high percentage of credibility, as a result of not being presented in complicated statistical tables, but with the participants' own terminology.
4. It is a low cost technique. The participants can even be invited by phone. The sessions do not require major resources, except for a capable interviewer and, if the participants allow it, a recorder or video.
5. Interviews in focal groups provide rapid results. The information that it is intended to obtain may arise rapidly, permitting the preparation of an analysis report thereon in less than a week.

Limitations

1. The researcher can have less control of the session, compared to what he would have with a single interviewee. He needs to stimulate the process of conversation in all of the participants and ensure that they listen to each other, which is not an easy task.
2. The data obtained are difficult to analyze. The results must be interpreted within the context in which they are produced. Sometimes participants tend to change their individual positions after interacting with others.
3. The technique requires carefully trained interviewers.
4. Groups may vary considerably. Each focus group may have unique characteristics; some may be apathetic, others

stimulating, others may show resistance, etc. To avoid this happening, as much as possible, it is recommended that the participants selected should have a diversity of experience and personal characteristics.

NOTES

1. Naciones Unidas (2007).
2. Kerlinger (2001).
3. Salkind (1998).
4. Taylor and Bogdan (1995).
5. Krueger (1994).