

# Manual for Educational Media Researchers: Knowing your Audience



**THE COMMONWEALTH of LEARNING**

**Commonwealth Educational  
Media Centre for Asia**



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**Knowing Your Audience**

*A Manual for Educational Media Researchers*

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## Preface

Common comments we hear about educational television range from “What do the learners learn?”, “What do the learners want?”, “Who watches these programmes anyway?”, “I have made such an award winning programme but nobody watches”, “Why spend so much money on producing programmes in a poor country like ours” to “Why should we spend so much money, when there is no impact on the learners?” These are important and valid questions, and we cannot ignore them. As educational broadcasters, we must respect and respond to them, whether they come from our audiences, from the policy makers, or from the funding agencies and donors. To respond to such questions, there is a need for information and knowledge about all aspects of educational broadcasting, especially at a time when we are no longer in a scenario of public broadcasting monopoly over the content of our programmes.

Gone are the days when there was only one radio or television channel, when audiences had little choice of what to listen to or watch; when one had only to prepare, produce, package and air a programme to ensure that the audience would watch or hear it. A captive audience was guaranteed for any educational programme, requiring the producer to focus purely on the pedagogic aspects of the programme. Those simpler, idyllic ‘good old days’ have now forever gone. Today, it is necessary that we hold the attention of the viewers for the few seconds before channel surfing begins.

In today’s globalized media scenario, viewers have a wide choice of programming. Under such circumstances, an educational channel has to compete with other channels in holding the attention of its potential audience. Research experience and evaluation over more than three decades of media use in development and education have shown that it is possible to use educational broadcasting effectively. Effective use implies timely and proper inputs in terms of all knowledge aspects of the process of education, whether it be in content development, production techniques, or delivery channels. The idea of research input is sound, but often is neglected or given low priority in educational broadcasting efforts.

While media research has different dimensions, and all are important, the first and the foremost requirement is to create a body of knowledge about the audience that relies on research, recognizing that for successful programme planning and production, it is essential to collect information about the target audience and their educational needs in a systematic and scientific manner.

Research to know the audience does not have to meet the high procedural standards of conventional research, but it does help reflect the needs of the target audience, the setting, the context and the environment in which the needs arise. Audience research is less rigorous than the conventional research approaches, but it is often more likely to provide information which may ultimately determine a project’s ability to meet its goals.

Good audience research is, therefore, more a matter of commitment and involvement of the researchers for the cause of community than formal qualifications and prior experience in research. With a little common sense and some training, which this manual promises to provide, any one can do a good job in knowing the audience.

The manual introduces the rationale of knowing the audience in an educational broadcasting project, and presents broad guidelines for facilitating it. The first chapter underlines the importance of research in educational broadcasting, and presents a broad picture about what all media research comprises. Chapter two delineates different kinds of information needed at different stages during the life span of a media project.

The third chapter distinguishes between two major approaches to research—quantitative and qualitative—and highlights aspects significant to media research in general and audience research in particular.

Dealing specifically with the audience research, the fourth chapter focuses on the assessment of different kinds of educational needs of the audience.

As the project objectives are formulated based on the information needs of the people, it is profitable to establish the current situation in relation to the objectives just before the project activities begin so that future effect of the project could be easily evaluated. How to go about doing a baseline study is dealt with in the fifth chapter.

Meeting the educational needs calls for study of the context, the constraints and the socio-cultural environment of the people, and their demographic and other relevant characteristics. This is discussed in the sixth chapter on audience profiles.

Researchers use different sources for collecting different types of information. What sources of information have more relevance for audience research is discussed in the seventh chapter.

The chapter eight lists various research methods available for data collection, and presents guidelines helpful in search of the best methods in audience research.

A detailed discussion on different research methods namely, the surveys based on questionnaires and interviews, participant and non participant observation methods, case study method commonly used for audience research, and the experimental designs has been attempted in chapters nine to twelve, along with practical advice and useful hints supported by illustrations and examples on using these methods for data collection.

The thirteenth chapter talks about sampling procedures with particular reference to qualitative audience research.

How to understand, tabulate and analyze data followed by an explanation of how to write a report that is both functional and easy to read rather than a research treatise are brought out in the last chapter.

The manual is addressed to the project managers, media researchers and programme producers. It sells the idea that the audience research is essential and easy to do. Project managers will see here the importance of providing for meaningful audience research from the very start of the project as part of the overall project management schema. Media researchers will find here a less complex, less costly and a quick way of generating useful information about the audience. The programme producers will find here an approach to knowing their audience, especially when help of the researchers is not readily available.

As the manual began to take shape, we realized that exposition of audience research alone would not suffice. To be effective, the research must be built into different stages of the media projects and the manual should provide guidance to these aspects also and should also address the key question - how do I proceed. Clear-cut guidelines, checklists and action points must backup general suggestions.

For this reason, we decided to enlarge the scope of the manual and accordingly reshaped it to make it a comprehensive kit containing a series of specific, short and focused write-ups on different aspects of media research in the form of pullouts that could be used independently or together with the manual, with an emphasis on how to do it.

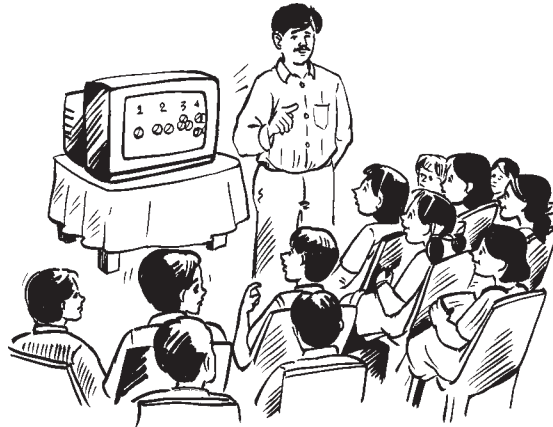
A team of well known field researchers helped us to write the pull outs on such topics as Pre-production research – previewing and testing of scripts and programmes, Feedback research and monitoring of broadcasts, Prototype production research, Monitoring utilization of the broadcasts and studying factors affecting utilization, Experimental research method in media research, Critical review of existing programme materials vis-à-vis the project objectives, Action research , and Participatory research.

Several rounds of writing, reviewing by both individuals and expert groups have preceded the final manual, now in your hands. We are particularly grateful to the experts who have so willingly spared such valuable time and knowledge as they offered valuable comments and suggestions for its improvement.

Among the various materials referred to by us during the preparation of the manuscript, we wish to make a particular mention of ‘Participatory Evaluations’ by Jim Freedman (1994), the University of Calgary, Canada, and ‘Guidelines to Monitoring and Evaluation’ by Tom Barton (1997) brought out by the CARE International in Uganda, Africa, which we found very helpful in completing the manual.

Prof. P.R. Ramanujam, Director, STRIDE, IGNOU, New Delhi did the language editing, for which he deserves our thanks.

Finally, our thanks are due to Sunny Joseph, Office Assistant, CEMCA for his ungrudging co-operation in processing multiple drafts before the final version came out.



# 1 RESEARCH IN EDUCATIONAL BROADCASTING

*An essential requirement for the success of any educational media project is appropriate research input.*

## Importance of Research in Educational Broadcasting

The use of broadcasting media in education has been a mixed experience all over the world. Several research studies point towards the instructional viability of the broadcasting media. An equally large number of studies give just the opposite picture.

There is no single answer to the questions: why do some educational broadcasting projects succeed while others fail? What are the ingredients of success or failure? What are the factors one must watch out for?

Varied and different factors in different situations influence the success or failure of the media projects. But what is clear is that one basic factor which contributes to the success of educational broadcasting is the investment in terms of time, resources and effort in collecting information through research, and integrating the results of such research into planning, production, utilization and other aspects of broadcasting.

In the present age of multiplicity of channels, viewers have a wide choice of selecting a channel. An educational channel has to compete with other channels in holding the attention of its potential audience. A successful research effort can go a long way in presenting programmes in such a way that viewers find them interesting, useful and relevant. Research can also help improve the system for optimum utilization of the media service at the receiving end.

## Educational Broadcasting Has Many Advantages

- Educational broadcasting has the capacity to reach a very large audience simultaneously.
- It opens up a 'window to the world' enabling us to bring such rare experiences to the audience as may not be otherwise possible, except in some isolated cases. This includes doing experiments, showing demonstrations, visiting distant places and people, and meeting renowned persons. In this way broadcasting can function as an equalizer of opportunities helping to solve the problem of disparity in learning.
- The best teachers, the best resources and the most sophisticated educational processes can be pooled for effective and quality programming. Learners and audiences, no matter how far scattered,



## Educational broadcasting has immense potential



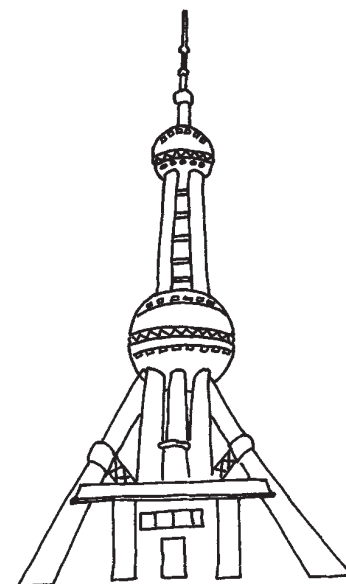
disadvantaged, and isolated, can have exposure to the best of teaching resources, laboratories, and knowledge that their more fortunate urban peers normally have access to.

- Educational broadcasting can be made versatile. Various production formats such as documentaries, lecture demonstrations, drama, among others, and production techniques, methods and materials such as animation, slow motion, graphics, effects, models, specimen, etc. can be used to make content not only informative but also stimulating and even motivational.

Thus, the potential of educational broadcasting is immense, but in practice this has been limited by other considerations.

## Educational Broadcasting Has Many Limitations Too

- Educational broadcasting may be introduced more for prestige and political reasons than for educational compulsions.
- It may begin on an experimental basis leading to the development of the public broadcast system. Anxious to use the new medium in the service of education, policy and decision makers hurriedly require the production of programmes, which are only loosely connected with the requirements of the target audience.
- Even when educational broadcasting is initiated by the education sector, the service may begin without enough preparatory work toward effective planning and programming.
- The programme producers may not be the educationists. Coming from different backgrounds, the producers may not be conversant with the audience and the learning needs of audiences.
- Educationists and producers may not establish close working relationship necessary to pool their resources and knowledge necessary to exploit the full potential of the medium.
- Broadcasting media are essentially one way. The broadcaster cannot normally assess the response of the audience. Efforts may not be made to obtain feedback of the audience on a regular basis. Alternately, research inputs may come in too late, often after the programme is transmitted, leaving no opportunity for correction.
- Research reports, using sophisticated methods and jargon, which may be hard for producers to understand and use, increase the divide between researchers and producers.
- Programme effectiveness may not be regularly evaluated through pre-testing the materials with the audience.
- The heterogeneous nature of the audience may tempt the producers to pitch the programmes at the average mark, and in doing so they may introduce superficiality in the programmes, making them less precisely defined.
- Factors outside the producers' control, such as broadcast timings, channel reach and access, audience viewer ship patterns and commercial and managerial factors may reduce the effectiveness of educational broadcasting.



Experience shows that timely and meaningful research, as an active policy and operational input, can play a crucial role in strengthening the potential and overcoming the limitations of the broadcasting

media to a great degree. The research investigations can also guide improvement in the implementation of the project.

## What Does Media Research Involve?

Ideally, any research effort should begin before plans for media policy and programming are made. However, a new media service is usually tempted to postpone research in its early stages of development, with the argument that the system should be allowed to stabilize before research can be taken up. When a media service delays using research, it misses out on the answers to a number of questions about policy decisions that are necessary for proper planning and implementation. As a result, there may be *ad-hoc* planning, and avoidable expensive mistakes made by the broadcaster.

A comprehensive research plan should cover the following different activities:

- Policy planning research
- Programme planning research
- Channel management research
- Pre-production research comprising previewing and testing of scripts and programmes
- Prototype production research
- Mapping of resources for programming
- Feed-back research
- Monitoring the broadcasts
- Monitoring utilization of the broadcasts at the receiving ends
- Determining audience availability
- Reviewing the programme materials vis-à-vis the project objectives
- Studying the impact and effectiveness of the project



These various research activities can be grouped under the following three broad categories:

- Formative research
- Process research
- Summative research

## Formative Research

This is done at the formative stage or beginning of the project, sometimes even before a project is launched. Data collection at this stage should help formulate general and specific objectives, strategies of broadcasting, develop prototype materials, and improve upon the programmes during their formation. The salient components of formative research are:

- Feed forward research
- Pre-production research
- Prototype production research, and
- Resource mapping

First know  
your audience!



### **Feed Forward Research**

The evidence collected here should help in understanding the audience, their characteristics, needs and constraints. Based on such information, relevant goals, specific themes, topics and contexts of the programmes can be determined.

### **Pre-Production Research**

The purpose of research at this stage is to improve the programmes during their initial planning and design. This includes previewing of the scripts and the programmes in a team mode including subject experts. This also includes testing of the scripts and the programmes with the audience. Revision of scripts and programmes on the basis of previewing and field-testing at this stage ensures greater acceptability of the programmes by the audience, and also proves cost effective and time saving.

### **Prototype Production Research**

Here, a pilot programme with a given set of pre-determined objectives is produced in different formats such as drama, feature, documentary, magazine etc. The different formats are tested with the audience to find out which format works better with them in holding their attention as well providing instruction with respect to the given objectives. The selected programme format is then revised and retested before prototype production comes out.

### **Resource Mapping**

It may be worth exploring and identifying institutes and their resource persons having the expertise in the academic content, and the production centers, production facilities and the appropriate software already available with them. This information can be of great use in establishing linkages and building up experiences for enhancing production quality.

### **Process Research**

Process research is aimed at determining the progress of the project so that mid-course corrective measures could be taken. This comprises the following kinds of researches:

- Feed back research
- Monitoring the broadcast of the programmes
- Monitoring the utilization of the programmes at the receiving ends
- Audience availability
- Critical review of the existing materials

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#### **Feed Forward vs. Feed Back Research**

Knowing about audience first before deciding upon the content and treatment of the programmes is feed-forward research as opposed to feed-back research which is done after the communication has taken place.

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#### **Feed Back Research**

This involves obtaining feed back about the materials and the system.

Feed back obtained consistently and regularly in a variety of ways from a number of sources (such as audiences, extension workers, NGOs etc) should go a

long way in assessing the value of what and how we are doing. Based on the feed-back we can bring about continuous improvement in the materials and the system.

### Monitoring the Broadcast of the Programmes

Monitoring broadcasts provides information about the sequencing of different series of programmes, capsuling of the programmes, scheduling with reference to audience segments, frequency of repeats, quality of broadcasts, transmission and reception and the like. This information should help rationalize programme scheduling and capsuling pattern.

### Monitoring the Utilization of the Programmes

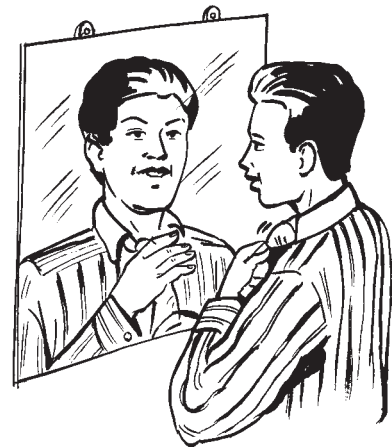
The data should help the broadcaster know about the extent of utilization of the medium, and the factors influencing its utilization.

Several factors affect utilization, and all need to be taken into account. It may, therefore, be meaningful to determine the availability of the hardware with the audience, problems encountered in its safe custody, operation and maintenance, quality of reception, timely availability of power to operate the hardware, additional requirement of hardware vis-à-vis size of the audience, distance from home, and seating and other conditions at the receiving end.

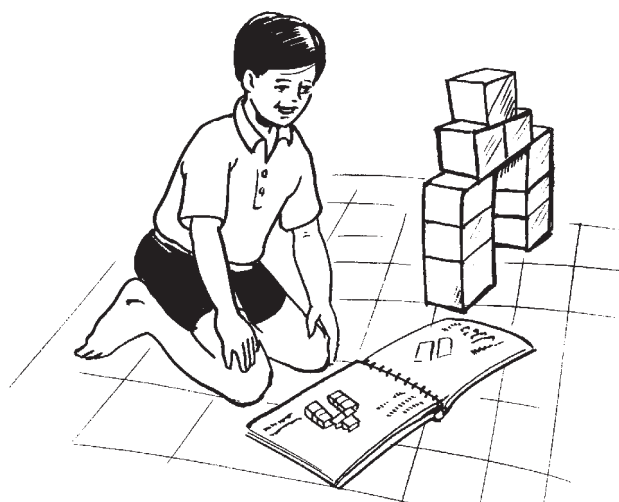
It may also be essential to study the dynamics of social factors influencing the listening or viewing behaviour of the audience. For example, people of different sexes, communities and economic strata may not like to mingle with each other under one roof for the purpose of receiving broadcasts.

### Audience Availability

It may also be desirable to include studies to find out the optimum time/ season when different segments of the audience (children, male adults, female adults etc) are generally available to receive the intended messages.



Feed-back helps you improve



Summative evaluation helps you see if you have done right

### Critical Review of the Existing Materials

Available materials are reviewed to determine the themes and topics, and the behavioural objectives already covered by these materials. Such an exercise should help determine as to which of the stated goals/objectives, themes and topics are over emphasized, under emphasized and neglected; and what more need be done to make the materials more comprehensive. The scope of the review exercise may be expanded to determine coverage of audience segments (for example, marginal farmers, small farmers, big farmers etc.) use of different techniques of programme presentation, programme formats, locales, sets, characters, conceptual loading, level of language difficulty, values, attitudes and ideologies etc.

## Summative Research

Over a period of time, it is advisable to study the impact of the educational media on the intended audience. Such studies should aim at the nature and effects of the media exposure not only in respect of the stated educational objectives, but also the unintended outcomes, if any.

To be useful, studies should include determination of the factors that contribute towards the success of the media exposure or limit its impact.

It would, however, be necessary to start the media project with the collection of baseline data with respect to the stated educational objectives, so that the impact can be measured more precisely. By comparing baseline data to that collected after exposure to the media, it is possible to determine the extent of impact and the effectiveness of the medium and the content in meeting the stated educational objectives.

If the media project is of a longer duration and continuous in nature, it may be desirable to undertake research at reasonable intervals in the form of a longitudinal study.

At the end of the summative research, it should be possible to put forward definite recommendations for the improvement of not only the materials but the system as a whole for maximizing the impact of the media project.

The research areas mentioned above are not exhaustive or exclusive by themselves. This is a suggestive list only. Depending upon the need of the situation, and human and material resources in hand, necessary and relevant research studies may be planned. It is, however, important that research activity should be regular and comprehensive covering different phases and aspects of the project. The progress of the project usually suffers due to lopsided or inadequate research inputs in a programme.

### Researchers and programme producers, work as a team!



### In-house vs. Commissioned Research

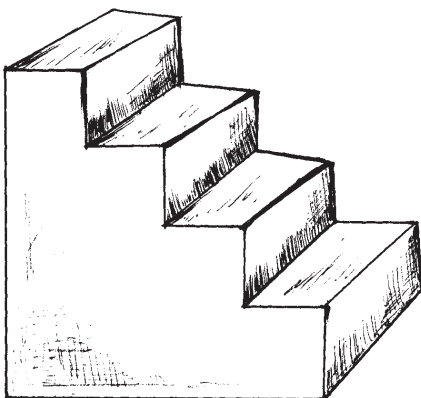
It is often argued that media research is best done by an external agency for greater objectivity. Research conducted by an external agency often adds credibility to the project effect, and identifies areas of importance that might have been missed by those deeply involved in the project.

But there is an equally valid argument in favour of in-house research. For knowing the audience, understanding the scope and intention of the programmes, appreciating the difficulties faced by the media producers and answering the day-to-day problems, research should be an in-house activity.

The best thing would, therefore, be to arrive at a compromise. A study of the long time effect of the programmes in actual use (i.e. summative research) may be entrusted to an outside agency. Studies to know about the interests and psychology of the audience, audience needs, the way to serve these needs, how best to achieve message understanding and comprehension, the requirements to enhance programme utilization at the receiving end, and the like (i.e. formative and process research) should be done in-house.

The media producers themselves can very well take up in-house research. Where researchers and programme producers are different persons, it is important that they work in a team, plan the research and production inputs together and discuss the research findings in a cordial atmosphere with an attitude of give and take. The idea, after all, of all media research effort is to initiate possible changes and improvements in the programming and the system on a continuous basis for overall quality improvement and effectiveness.

Continuing with the above discussion, the next chapter focuses on the different kinds of information needed at different stages of a media project.



## 2

## STAGES OF MEDIA RESEARCH

Different kinds of information are needed at different stages of any media project. We have described here the stages and the corresponding information needs in terms of questions and the kinds of information needed to address them

**Stage 1 - Before Starting the Project:** *What are the problems? What are the needs and the constraints?*

This is when you identify the problems that need intervention of the project, contributing factors and constraints, and information needs of the people.

At this stage, it is mostly the qualitative information collected from primary sources using such straightforward research methods as observations, focused group discussions and in-depth interviews of key informants that is more helpful.

In the light of this information, the project is designed, and its goals and objectives are spelt out.

**Stage 2 - Project Start-up:** *What is the current situation?*

During this phase, shortly before the project services and activities begin, you are required to collect two kinds of additional information.

**First**, the current situation or the base from which the project activities make a start. This is called the baseline data.

Baseline data are generally quantitative in nature, and are collected through surveys on a fairly large random sample using questionnaires or structured interview schedules.

Baseline data help build on the base, and later help assess progress in the project.

**Second**, at about the same time it is also advisable to develop profiles of the target population. The profiles are of two types and both are important – a general profile and specific profiles.

The general profile should present demographic characteristics of the audience. This comprises such information as age groups, sex, caste, religion, family types, size of families, housing, clothing, food, vocations, social and cultural and other relevant aspects of the life of the audience.

The specific profiles are specific to the information needs of the people, and are developed to obtain an insight into the habits, beliefs, attitudes, and other behavioural patterns towards the specific issues.

The baseline data and the audience profiles help the producers sharpen the learning objectives of the programmes, and make programmes more realistic, appealing and interesting for the audience.

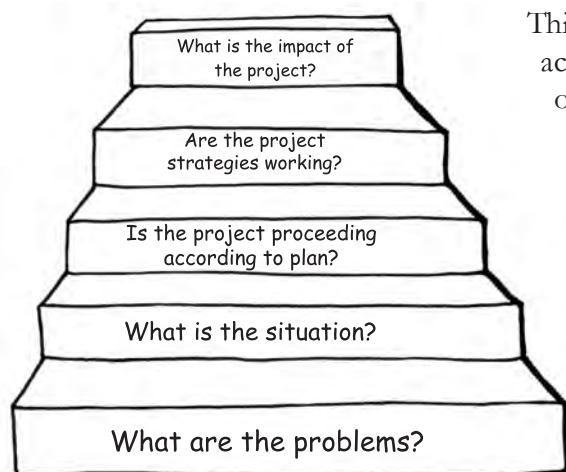
### **Stage 3 - Implementation:** *Is the project proceeding according to the plan?*

As the project services and activities are being carried out, you will be regularly monitoring and assessing whether the project is on the track.

### **Stage 4 - Mid - term:** *Are the project strategies working?*

It is the time for reassessing project strategies, management systems and linkages. We should look for preliminary evidence of project effects so that mid – course corrective measures can be taken and plans may be modified to reflect what can realistically be achieved.

### **Stage 5 - Full - term:** *What is the impact of the project?*

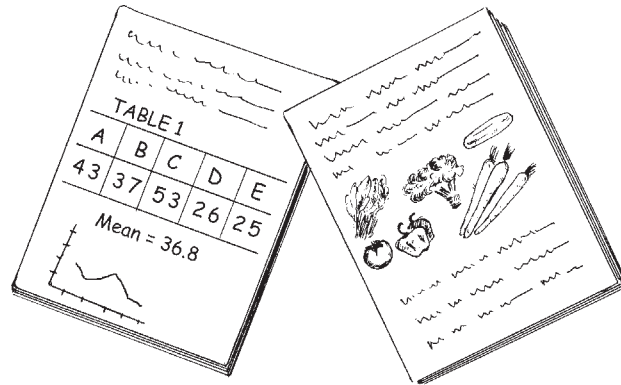


This is the point where we make an assessment of the project achievements in terms of the stated objectives, and, in the light of that, chalk out future strategies to improve and sustain the benefits of the project. Both quantitative and qualitative data is collected here from primary sources through use of different research methods.

In a project lifespan, information of one kind or another is gathered at every stage. The information collected in the first two stages namely, **'before project'** and **'project start-up'** in combination with its analysis and use is collectively referred to as **Audience Research**, which is the main focus of this manual.

You will learn more about different types of information (quantitative and qualitative), sources of information (primary and secondary), and methods of research (surveys using questionnaires or interview schedules, observations, in-depth interviews, focused group discussions, case studies etc) commonly used in audience research as you move along.

We shall discuss quantitative and qualitative types of information in the next chapter.



### 3

## TYPES OF INFORMATION

There are two main types of information produced by the data collection process:-

- Quantitative data
- Qualitative data

### Quantitative Data

Quantitative data are numerical data expressed in figures. This type of information is needed when we are looking at a macro level to obtain a broad picture of the project. We need quantitative data when a variable must be measured; e.g. the number of people living below the poverty line or the number of illiterates in a given place. You will also need quantitative data when you are measuring the effect or impact of media service after the media service has been in operation for some length of time. For example, how many more people have learnt about the new practices after a media service was launched as compared to the situation before the media service came into being. The numbers may also be expressed in averages, percentages, proportions etc. and presented in the form of tables, graphs and charts.

The following example taken from the report of a study on educational school broadcasts will give you an idea of simple quantitative data

*“It was found that 178 out of the sample of 205 schools (87 percent) had programme receiving facilities. However, radio was found tuned to educational programmes and students listening to those programmes in 25 schools only over the test period of three months. In other words, 12 per cent of the total sample, and 15 per cent of the radio schools made any use of the educational broadcasts.”*

*“Also, all broadcasts were not utilized uniformly. Programmes for the lower standards i.e. V and VI were utilized twice as frequently as those for higher standards i.e. VII and VIII”*

### Qualitative Data

Qualitative data is information that can best be described in words or diagrams and pictures such as description of a situation or an event, observed behaviour, direct quotations, maps etc.

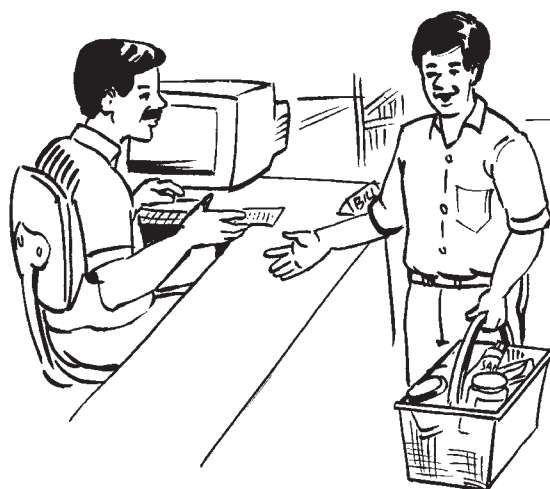


An example of qualitative data is given below. This is taken from the report of a study on bio-gas plants installed by a rural research institute in a surrounding village for demonstration purposes.

*‘None of the bio-gas plants in the five demonstration households were functional two years after their installation. The following reasons emerged for the failure of the innovation as based on observations and in-depth interviews with the houseworkers of the concerned households:*

- *The production of the gas becomes low with the fall in temperature in the winter months reducing the utility of the plant for 7-8 months in a year.*
- *The houseworkers preferred smoldering fire for cooking certain dishes and heating milk. The dishes cooked in this manner tasted well, and a thick layer of cream was formed on the milk in the process, which was used for preparing butter and ‘ghee’. Cooking on slow fire also enabled them to attend to other household and farm chores at the same time. This was not possible with the bio-gas plant which formed direct flame.*
- *The earthen pots usually used for cooking were not suitable for cooking on the direct flame.*
- *Use of bio-gas plant was more labour and time consuming. The cattle were kept in the men’s quarters called ‘Baitbaks’ which were separate and away from the houses in which women and children lived and where the bio-gas plants were installed. It was quite an effort for the houseworker to daily haul the cow-dung to the site, mix it with sufficient quantity of water to prepare slurry, feed the plant with the fresh slurry, and remove the spent-up slurry to the compost pit.*

Collect only what is needed



### Nature of Data for Audience Research

Compilation of baseline data and evaluation of the effect or impact of the media project on certain variables necessitate collection of more of quantitative data. But when you are called upon to increase understanding about the problems, needs, attitudes, beliefs, perceptions and other characteristics of the people, it is the qualitative data that will assume greater significance. Nevertheless, you will still need to collect some quantitative data as well.

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In actual practice, most information systems require the collection of both quantitative and qualitative data.

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The discussion in the next chapter is solely devoted to identification of problem areas and the information needs of the audience.



## 4

## NEEDS ASSESSMENT

*Often, audiences and their needs are determined from outside the media projects, mostly by government departments. This identification tends to be at a very general level and in terms of very broad objectives. Media planners and producers, however, require much more detailed information about the characteristics of the audience and their specific needs to translate broad objectives into implementation. This requires research.*

### How Do Media Projects Usually Begin?

Projects usually begin with the preparation of a software plan. The plan outlines the policy for the use of the medium; identifies the target area and the target audience; suggests broad goals, objectives and approaches; and recommends salient themes of the programmes. A high-level government body comprising policy makers, administrators, academicians and broadcasters generally does the planning at this stage. This is followed by meetings, brainstorming and workshop sessions of educationists and broadcasters. Taking the software plan prepared by the high level body as the basis, they identify specific themes, series and topics for programme production; transmission plans and operational aspects.

In yet another workshop of subject matter experts and the media persons, programme briefs on the suggested themes and topics are prepared.

The programme briefs thus prepared are finally passed on to the media producers to produce the programmes.

At times, the software plan may be very sketchy just giving the target area, the target audience and the broad objectives of the use of the medium, leaving the specifications to the discretion of the individual producers.

### What Else Should Be Done?

The described procedure of developing a software plan and programme briefs may sound impressive. But in actual implementation, it may be found lacking in many respects for it has omitted a thorough analysis of the actual situation and the community needs.

It is just like a doctor writing a prescription without first fully knowing the patient, understanding the disease, examining the symptoms and feeling the pulse.

The prescription written in this manner may work, but the chances of mishap are even greater. Surely, there are far more chances of success, if the doctor first does some probing with the patient.

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What a patient is to a doctor, the audience is to a broadcaster. In fact, the job of a broadcaster is more delicate. If a doctor errs, generally one particular patient is harmed. But if a broadcaster fails, a number of persons comprising the audience are adversely affected at one time.

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The policy planning group and the groups formulating specific programme topics and briefs would be better equipped if they had well documented findings that describe the audience. More specifically, they need different types of information for formulating relevant and realistic recommendations. For instance, they require information on:-

- Needs of the audience for media support
- Audience profiles and other background information about the audience.

A good media project thus evolves itself by going through various stages: from the first idea to greater and greater clarification of the setting, problems, needs, constraints, objectives, choices and actions.

We will first describe the problems and specific educational needs of the audience for media support.

## Needs are of Different Types

There are generally four types of educational needs:

- Felt needs or manifest needs
- Unfelt needs or latent needs
- Real needs or constraints to development
- Social and cultural needs

### Felt or Manifest Needs

Felt needs are directly perceived by the people. They are conscious about these and are able to express them. It is another matter that they may not be sufficiently motivated to meet them.

Students, for example, would tell about the portions in each subject area, which they find difficult to learn.

Farmers would be able to talk about the problems faced by them in raising the yield of their crops.

Mothers would come out with their concerns about the ill health of their children, and so on.

### Analyse community needs



On a little probing, people are able to talk about the needs uppermost in their mind. Among them the community leaders are generally more articulate in expressing the needs.

### Unexpressed or Latent Needs

There are always some needs that are important for the well-being of the people, but may remain unexplored. These are latent needs, all or some of which are unexpressed, but require urgent attention.

Safe drinking water may be a genuine need of the rural people, but they may not be able to articulate it to the agency or the officials concerned.

Farmers may not realize that the yield of their crops is limited by certain soil borne pathogens.

Mothers may not be aware that dehydration following diarrhea in children is the major cause of mortality among them.

Students may clear examinations without realizing the need to master the content of the subjects they study. Teachers may continue with their routine without realizing the need to review and revise their methods of teaching.

At times, unfelt needs may outnumber the felt needs, and these may be even more relevant to the development of the people.

For realistic programme planning, it is imperative that the planners form a clear idea of the different needs of the people. And it is your responsibility as a researcher to determine the needs of the people, and let the programme planners and producers know about these.

### Real Needs or Constraints to Development

The cause of some problems at times may not be the inadequacies or the ignorance of the people, but may be due to the inadequate infrastructures, lack of facilities and services and wrong political priorities. Also, there may be some vested interests in the society or institutions that want to maintain the status quo for their advantage. These vested interests often try to under play or cover up the real needs of the people.

Identify the real needs  
of the people



For example, the children may not be able to complete school education because of inadequate physical infrastructure, insufficient attention by the teachers, fear of corporal punishment, failure in the examination etc. Educational institutions may keep silent about the real needs of the students for fear of taking extra responsibility or losing their grip over the students. And students may not articulate their needs in clear terms.

Farmers may not be able to diversify to more income generating propositions for lack of credit facilities and marketing avenues. Similarly, they may not be able to adopt high yielding varieties of crops due to non-availability of improved seeds.

In other words, the backwardness of the people may be more a symptom rather than the cause of their existing situation. The various constraints to their development are the real needs of the people that need to be determined by you.

Your duty as a researcher is to help the producer use the media to conscientise the people about the oppressive and inequitable socio-economic and political structures which pose obstacles to their development, and motivate them to move out of inertia and take individual and collective action about the removal of the constraints.

### Social and Cultural Needs

For any social order to remain organized, most of its members should hold certain values and attitudes close to their heart. Development of cultural identity and fostering a basic common set of values and goals among the members of a society should be considered another important role of the medium. These values differ from one society to another, and therefore also need to be determined.

While social values may change with time and from society to society, some other values such as hard work, honesty, caring for others and the like are more abiding in nature and are held in great esteem by all organized and civil societies.

Similarly, every nation expects its citizens to pursue certain aspirations considered necessary for its all round development.

It is also your duty to sensitize the producer about the social, moral and ethical issues confronting the given society, relevant national and global issues.

This is, however, not to suggest that a series of value-based programmes may be designed separately and exclusively. What is intended is that the desirable values may be woven and built into the programmes while developing scripts based on felt, unfelt and real needs of the people. Creating desirable images on the mind of people in a subtle manner could be more effective than teaching them about the values directly.

Projects based on systematic assessment of the needs of the people have far greater chances of success. After having assessed the gamut of needs of the people, and the project objectives having been formulated based on that, your next job is to determine the current situation with respect to the stated objectives. This is covered by baseline study, which is the subject matter of the next chapter.

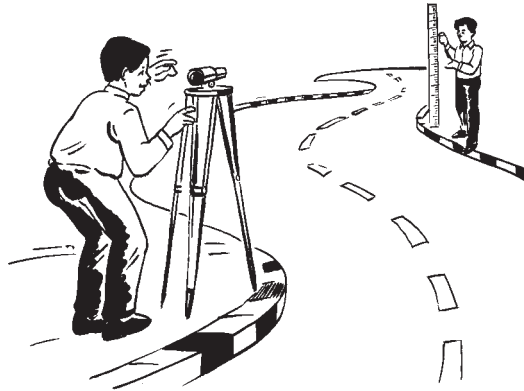
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It is important to have faith in the people that it is they and not the experts who know what is best for them and their village, and given the opportunity they can create knowledge for the improvement of their lot.

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## 5

## BASELINE STUDY

*Baselines are done mainly to establish benchmarks so that subsequent monitoring and evaluation can assess the effects of the project for the target population.*

Assessment of information needs of the target population will help planners formulate long-term or broad and intermediate or specific objectives of the project. Examples of different levels of objectives are given below:-

Long - term Objective	Intermediate Objectives
<i>Improve the economic condition of the farmers</i>	<i>Increased number of farmers taking to better methods of agriculture e.g. use of improved implements, high yielding varieties of crops, new crop rotations, water management, pest management, storage and marketing</i>

Your next job is to carry out a baseline study in relation to the different levels of objectives of the project.

### Need for Baseline Study

Like every researcher, you will also face the challenge of knowing whether the project has done what the plans said it would do and understanding the ways it has made a difference in the lives of the people. In other words, assessing the value of what the project has done will be a challenge.

Your job of evaluating the impact of the project (i.e. summative evaluation) becomes easier, if shortly before the project services and activities begin, you attempt to know the current situation or the base from which the project activities make a start. This information is called baseline data. Without a baseline, subsequent demonstration of the effects of the project and changes in the behaviour of the target population is generally difficult and unconvincing.

### Nature of Baseline Data

Baseline study relies on new data collected from the target population and other primary sources.

The data are often quantitative in nature, but some descriptive data might also be obtained.

The data are in terms of certain indicators. Indicators are simply criteria, which are used to check whether proposed changes have occurred. In the above example of agricultural education project, one indicator could be:

*'Number and percentage of target families who have adopted improved varieties of maize crop'*

Before the project is launched, information on the selected indicators is collected and similar information is collected again after a certain period of the project. The difference gives an idea about the achievement of the project.

## Selection of Good Indicators

Choose your indicators carefully. Quality of assessment of the project will largely depend on the selection of the indicators. Some criteria for selection of good indicators are given as under:

- The indicators should be directly linked to the objectives of the project.

For example, if in a literacy media project, literacy is directed towards women only, frame your indicators accordingly. Guard yourself against collecting excessive and non-specific information that may not be analyzed and used.

- Determine indicators, which are specific, objectively measurable and that which reflect the progress in the project.

## Choose indicators carefully



Let us look at the following indicator:

*'60% of the farmers will participate in income-generating activities'*

It is expressed as a target, is vague and not clearly linked to the specific objectives. A better indicator would be:

*'Number and percentage of farmers with project propagated income generating activities in place, like milk production, egg production and fish farming'*

- Indicators should indicate various levels of achievement in the project. For example, in the agricultural education project, the farmers may not be able to adopt improved varieties due to non-availability of seeds or their high cost. Non-adoption of the recommended varieties should not mean that the project has made no progress.

To account for that, you also select such indicators that reflect new knowledge and change in attitude of the farmers about the varieties as a result of the project efforts. Inclusion of indicators of the following nature will meet this purpose:

*'Number and percentage of farmers who are aware of the existence of improved varieties of maize'*

*'Number and percentage of farmers who can name one or more improved varieties of maize'*

*'Number and percentage of farmers who show inclination to switch over to the cultivation of improved varieties of maize'*

- There could also be indicators, which show the extent of utilization of certain services and institutions, if these were the objectives of the media project. For example,

*'Number and percentage of farmers visiting the Agricultural Research Centre or Agricultural Extension Office for the purpose of obtaining information'*

- Indicators should be comprehensive. Frame indicators to cover all the objectives, and the different aspects of each objective of the project.
- The information provided by the indicators should be usable. It should help make decisions or improve work and performance of the project.

- Baselines are mostly quantitative in nature (numbers and percentages). But quantitative information alone cannot adequately assess changes in the peoples' lives. The project may bring out changes in the level of thinking and perceptions of the people. Moreover, there may be changes, which were not intended in the project. It would, therefore, be a good idea to also attempt qualitative description of some key situations by doing case studies at the time of baseline study, and comparing these with similar case studies at a later stage.
- Sample your respondents carefully. The sample should be representative of the target population. Errors in sampling can spoil the value of the analysis e.g. sampling only farmers who are particularly likely to be changed by project interventions such as farmers with large holdings or educated farmers.

As already mentioned, information on the selected indicators originally documented in the baseline study is compared with that obtained on the same indicators after a reasonable lapse of time. The difference in the values indicates the effect of the project, as shown below:

Values on selected indicators	
Before	X
After	X <sup>1</sup>

$$\text{Effect of the project} = (X^1 - X)$$

It may, however, be argued that the difference in the *'before and after'* status may not necessarily be due to the effect of the project. The change might have occurred otherwise also with the lapse of time due to some external factors.

To meet this argument, a *'with and without'* experimental design may be taken up.

In the experimental design, a *'control'* group (not exposed to media intervention) is compared with the *'experimental'* group (exposed to the media intervention). Care, however, should be taken that the control group matches the experimental group in respect of all such possible variables as can influence the behaviour of the people such as education, socio-economic status, distance of the habitation from the town, etc. This is achieved by random assignment of the participants in the two groups. Baseline information is collected from both *'control'* and *'experimental'* groups. This is compared with the information obtained from both groups after the project is over.

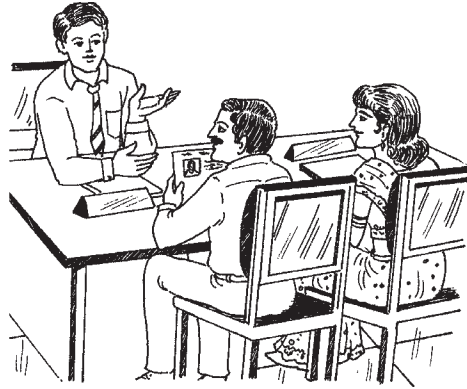
The difference in the net values of the experimental and the control groups gives true estimate of the effect of the project, as shown below:

Values on selected indicators		
	Control	Experimental
Before	X	X <sup>2</sup>
After	X <sup>1</sup>	X <sup>3</sup>

$$\text{Effect of the project} = (X^3 - X^2) - (X^1 - X)$$

As you start collecting baseline data from the field, it would be a good idea to develop audience profiles at the same time. The information on the characteristics of the audience will stand the programme producers in good stead and to prepare appealing and interesting programmes for the target population. How to go about developing audience profiles is dealt with in the next chapter.





## 6

## AUDIENCE PROFILES

*An important aspect of the audience research is to study the characteristics of the audience, and the context and the peoples' perception about their needs.*

### Why Develop Audience Profiles?

To be effective, programmes should be need based, interesting and appealing. Research studies have shown that the audience at once identify themselves with such programmes that depict their environment, values, culture, context, real situations and the people. In other words, the programmes should match with the profile of the people.

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Programmes should be need based, interesting and appealing

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As a researcher, you can help the producer a great deal to produce relevant, interesting and realistic programmes by making available to the producer profiles of the audience along with the assessment of their needs.

In India, the first systematic attempt to develop audience profiles was made in the seventies during the Satellite Instructional Television Experiment (SITE). Audience profiles were painstakingly developed for each of the six different clusters in six States included in the SITE Project. Similar efforts were made in subsequent educational broadcasting experiments, both in India and elsewhere.

However, the experience about the actual use of the profiles by the producers for programme production is mixed. While some producers in some areas make a good use of the information, others do not find these useful.

### Factors Affecting Utilization of Audience Profiles

Lessons learnt from SITE and similar media projects in other countries show that factors affecting the development and utilization of the audience profiles include:-

- Profile type - general or specific
- Understanding peoples' concept about the existing practices

- Involvement of the producers
- Functional document
- Simple style
- Visual support
- Usefulness and timeliness of the information provided

### **Profile Type - General or Specific**

The proof of a good profile lies in its potential for utilization by the producer in understanding the target audience. One reason why audience profiles gather dust in the cupboards is that researchers generally end up providing only one generalized profile touching briefly upon the various dimensions of the life of the audience and do not follow it up with the preparation of specific problem oriented profiles.

#### **General Profile**

It may contain the following pieces of information:

##### ***About the Region***

Location, geographical features, climate, topography, historical background, etc.

##### ***About the Audience***

*Social factors* such as religion, community, social organizations, housing, clothing and other lifestyles, customs, festivals, daily routines, leisure time activities, etc.

*Demographic factors* such as age groups, sex, family type and structure, size of families, whether nomadic, migrant, or settled, languages spoken, etc

*Economic factors* such as general income levels, spending and saving patterns, vocations and occupations, major and alternate sources of income and resources, etc.

*Health factors* such as general status, common health problems and diseases, medical facilities available, resources, status of maternal and child health, mortality rate and population growth patterns, and other health problems.

*Hygiene issues* such as general status, community and personal hygiene etc.

*Food habits* such as the staple food, the availability of food, cooking and storage habits, food consumption patterns, nutritional levels in the home and community.

*Learning factors* such as educational status, access to education, access to different media, availability of media, literacy levels of both individuals and community, visual abilities, listening abilities, time of availability for media exposure, type of content exposed to, programme preferences, etc.

#### **Specific Profiles**

General information about the audience, though necessary, is of limited use to the producer to help produce relevant and realistic programmes. Producers need specific problem oriented profiles, which are more elaborate and in-depth.

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What is required is that the first general profile giving an over view of the audience should be followed by specific problem-oriented profiles. The subsequent profiles should be focused and in-depth in character

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Let us say that the incidence of malnutrition is widespread and scientific information on nutrition has emerged as one of the needs of the audience. It then becomes imperative for you to inform the producer about the following with additional information:-

- Food processing methods
- Cooking habits
- Food storage
- Meal times
- Differential pattern of food consumption as per age and sex
- Locally available nutritious foods
- Existing knowledge about nutrition
- Motivation about nutrition
- Foods not compatible with culture and religious beliefs
- Myths, fads, notions about foods
- Fears, apprehensions about certain foods
- Gender bias in serving food
- Foods during illness, and other relevant information

It is the specific profiles in relation to identified needs that would help the producer sharpen the learning objectives of the communication and develop content which is at once relevant to the audience.

**Let us have no doubt that a general profile should only be a forerunner to more specific profiles in relation to different identified needs.**

### Understanding Peoples' Concept About the Existing Practices



Also try to understand and report the context in which certain practices are followed, which on the face may look traditional and backward. This is important so that recommendations about the alternative, improved practices could be framed in a more realistic manner.

For an example, researchers in a region observed that most farmers there followed the practice of planting mixed crops such as gram with wheat, and a leguminous pulse crop with millet. This was against the recommended practice of planting different crops separately and adopting improved cultural practices for each. But further probing revealed that the mixed cropping was based on the following perceptions of the farmers

- It involves minimum risk under rain-fed conditions; If one crop fails, the other may survive.
- It guarantees subsistence over a longer period as one crop matures earlier than the other.

- It is the most efficient use of land.
- Mixing a legume with a cereal crop sustains soil fertility.

Considering the setting, the context and the farmers' perception, the experts decided to suggest improved methods of mixed cropping itself rather than a complete change in the existing practice to start with.

### **Involvement of the Producer**

The profiles have a greater chance of being used, if you involve the producer from the beginning itself, for instance, by taking the producer to the field during data collection to sensitize them to the audience needs, and the realities on the ground.

It is a question of building trust with the producers. Let them be convinced that you are there only to share their burden, and obtain answers for their problems faced while communicating effectively with the audience.

### **Functional Document**

A profile is based on painstaking research but is not a research report in the strict sense of the term. It is rather a functional document for the reference of the producers. There is no point in describing the methodology of data collection in minute detail. Too much statistics, figures, tables will also inhibit the flow of the profile. Some unavoidable statistics and procedures may possibly go in the appendices. Essentially, the report should be based on understanding, interpretation of data, after digesting and absorbing enormous amount of information about the audience. Also, it should be presented in a manner that even a layperson may understand it, sparing in numbers and rich in description.

### **Simple Style**

As the main purpose of developing the audience profile is help the producer understand the audience, it should be written in a simple, easy to read, lucid manner, consciously avoiding technical jargon.

### **Visual Support**

Producers generally do not have the time, energy or desire to read the lengthy written material. It works better, if the written profile is well illustrated and supported by photographs, preferably coloured. Depending upon the resources, it would still be better, if the profile were supported by video. The visuals may be used to supplement the information and enhance understanding, not just for layout or decorative purposes.

The emphasis should be not so much on artistic presentation as on a realistic presentation. The purpose should be to make the information realistic, insightful, revealing, and absorbing to the producer, whether you use written word, photographs, video or a combination of all of them.

You will have to use various sources for collecting information for the purposes of needs assessment, baseline study and development of audience profiles. Major sources of information are discussed in the next chapter.

**Involve the producer**





## 7 SOURCES OF INFORMATION

*The more the sources of information, the greater the understanding about the audience, the needs of the people, causes of the problems, constraints and possible solutions. However, it is the primary sources of information that hold greater promise in this respect.*

### Quality of Information

After you have decided to assess the problems and the needs of the audience, and develop their profiles, the next step is to collect information. The programme planners and producers will use the information only when they are sure about the quality of information. You should, therefore, be concerned not only about the type and the amount of information but also about the quality of information. Some key criteria for quality information are given below :

**Accuracy or Validity:** It should show the true situation. For this, plan in advance, be clear and specific with regard to information needed, simplify your samples and research methods, use more than one method/ source for the same data and develop guidelines for analysis of the data.

**Relevance:** It should be relevant to the information users. Should reflect the commitment for the cause of the community, engage the target population in the process of information collection, try to know in advance who needs what information and how it will be used.

**Significance:** It should be important. Many a time researchers collect a lot of information, which is irrelevant, unnecessary and insignificant for the purpose.

**Credibility:** The information should be collected in a scientific manner to be believable. Researchers should be objective while gathering, analyzing and interpreting information, be transparent about the methods used to obtain information and draw conclusions.

**Timeliness:** Information should be available in time to make necessary decisions. There is little use in providing information after programming has already made a significant headway. For this you should plan in advance, use simple tools for collection and analysis, create a schedule with deadlines and stick to it.

**Representativeness:** It should represent the entire target audience and not just some part of it.

## Sources of Information

You can collect the required information from various sources. **If possible, use more than source and method for the same set of information.** This enables you to verify accuracy and gives more credence to the data.

Sources of information may broadly be classified as *primary sources* and *secondary sources*.

### Use more than one source and method



*Primary sources* refer to people or places where you can obtain new and raw information that does not exist. The new information that you gather from primary sources is referred to as primary data.

*Secondary sources* refer to sources that have already gathered information, possibly for reasons other than the purposes of your present concern. The information is already available, and is referred to as secondary data.

### Primary Data

Primary data are obtained by going to the field to collect new information for the purpose of your specific requirement. Typically, primary data are often needed for baseline study, assessment of needs and development of audience profiles. Examples of primary sources include:

- Target population
- Extension functionaries of government and non-government agencies
- Social workers, activists etc.
- Other interested parties working with the same or similar populations

By using primary sources, you can have full control over what, when and how the information is collected. In this way, it is easier to maintain control over quality of information and to do follow-up for any critical findings or missing information.

However, primary data have also certain limitations:

- Primary sources may not be easily accessible. For example, farmers during the sowing season would not be available to give you the information you need.
- Skills needed for successfully designing study and implementation of primary data collection are substantially greater than those needed for working with secondary data.
- There may be errors of judgment in selecting the respondents or places from which to gather information e.g. contacting persons of high socio-economic status from the villages along the main road only and thereby not reflecting the issues of the target populations of lower socio-economic status who live in remote areas.
- Costs of primary data collection can be high.
- It is more time consuming also.

**Despite limitations, primary sources are essential and important for audience research. Extensive interaction with them, particularly the target audience themselves, yields rich dividends. In fact, nothing can replace the information collected from primary sources. However, keep your data collection sharply focused for the reasons of time and costs.**

## Secondary Data

The term secondary data refers to information that already exists and that has been previously gathered by some other person or organization. You may find it useful for your purpose. Secondary data include many kinds of written and visual materials such as:

- Previous research reports
- Project reports
- Historical accounts
- Books and materials describing the region and the people
- Documentary films/photographs.
- Statistical reports/digests of various government agencies and other institutions
- Maps and other materials

Obtaining data from secondary sources is obviously cheaper and easier to access than going out to the field to gather fresh information. Therefore, gathering and using secondary data should generally be considered as a first option when it is available. You can use secondary data for various purposes:

- To serve as an independent piece of information.
- To select areas for further intensive study by you.
- To supplement the information gathered by you from the primary sources.

However, use the secondary data with caution, because these, too, have certain inherent limitations:

- May be out-dated and old.
- May be inadequate.
- If the methods and circumstances of data collection are not recorded, you cannot be sure of their quality.
- The definition of concepts used in the data may be different. For example, your concept of a small family may be different than what has been adopted there.

Nevertheless it is always a good idea to exploit the potential of the secondary data to your best advantage.

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Use simple and straightforward research methods

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**A central principle to keep in mind for undertaking audience research, therefore, is that after examining the available secondary data, primary data collection may be done by focusing only on most significant issues and using simple and straightforward research methods such as observations, in-depth interviews and focused group discussions.**

We shall discuss about various research methods for data collection in the chapter that follows.



## 8 RESEARCH METHODS FOR GATHERING INFORMATION

*More than the selection of the research methods, it is your involvement and conscious commitment to work for the cause of the community, which is of greater significance in understanding the audience. However, among different methods, observations, in-depth interviews, focused group discussions and such other methods as allow intensive interaction with the audience show better results.*

### Selection of Research Methods

Several research methods are available for data collection. They can be used singly or in combination with each other. In fact, very often, a combination of methods is used in order to improve both the reliability and validity of the data gathered. The following guidelines will help you in search of the best methods to use.

The first selection issue to consider is based on your specific information requirements: Does some or all of the necessary information already exist as secondary data?

If the answer is YES, then go in for appropriate secondary sources. These could be reports, documents, films, maps etc.

For extracting useful information from secondary data, go with a checklist of your information needs. In other words, the checklist should comprise a set of open ended questions to be systematically posed to the data.

If the answer to the above question is NO, or if the available secondary data does not completely answer your information needs, then, you will need to gather new information from primary sources. These could be target population, extension functionaries or other persons knowledgeable about the target population.

This leads to the second guiding question--what types of data are needed? Qualitative (descriptive or visual) or quantitative (numerical). Quantitative data are needed when a number or proportion of the population in relation to certain variables must be measured. Qualitative data are needed when the attitude, beliefs, perceptions and needs of the people, context, constraints and solutions to the problem must be known. Most of the time you would require collection of both quantitative and qualitative data.



The choice of the research methods also depends on whether you wish to take participatory or non-participatory approach to data collection. Resource mapping, group discussions and observation methods involve participatory approach.

At this point, one has to distinguish between research methods and research tools. Some methods may use more than one tool to gather data. For instance, surveys as a research method are done to gather a large volume of quantitative data from a large population under study by using the tool of written questionnaire. These are surveys at a macro level. Data that emerge from surveys are quantitative in nature. However, we might also use the survey as a method to gather information about a particular small community. The survey then becomes a micro survey and the tools we might use are structured interviews and also in-depth interviews of some selected cases.

Similarly, when we try to gauge cause and effect, and when we try to establish if there has been any impact as a result of our media intervention, we would use an experimental method. In this case, we design the method with control group (a set of persons who have not been exposed to the media intervention) and an experimental group (a group of persons similar in all respects to the control group but exposed to the media intervention). As tools to gauge the impact, we might use tests of knowledge, understanding, and application. We may also use attitude scales to measure any change of attitude. The tools would be administered before and after the intervention and the results compared---thereby helping us to determine the impact of the project.

**What bears repetition is that we often use different tools to enhance the quality of data that we gather while the research method may broadly remain the same.** For example, case study method may use a variety of tools to record both quantitative and qualitative data.

Widely used research methods for collecting **primary quantitative** data are:

- Surveys based on questionnaires
- Surveys based on structured interviews
- Experimental methods based on pre-post tests and attitude/opinion scales

The main research methods for **primary qualitative** data collection are:

- Observation techniques-participant and non-participant
- Case studies

For these methods, the tools most commonly used are:

- Questionnaires
- Observation schedules
- Diaries
- Structured and semi-structured interview schedules
- In-depth interviews
- Group discussions, and
- Depth examination of selected cases

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We may use different tools to gather data while the research method may broadly remain the same

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## Choosing the Best and the Most Appropriate Methods

A combination of methods is  
most effective

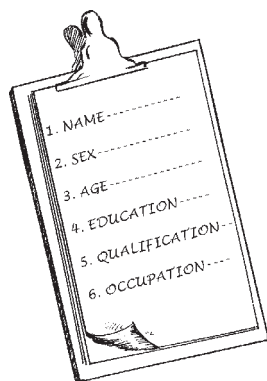


Select the most appropriate methods to do a particular task.

It is wise to combine different research methods and tools to give added dimensions to your findings. For example, you may find that structured interviews have ended up with answers that are rather superficial. You can overcome this by supplementing the information with some in-depth interviews of a smaller sub-sample.

Also, keep your data collection work sharply focused and precise in scope so that you do not end up with lot of unnecessary data, and spending extra time and money.

In the following pages, we shall examine different research methods in greater detail.



## 9

# SURVEY METHOD (QUESTIONNAIRE TECHNIQUE)

Surveys are probably the most common form of research method for collection of primary data, but not always properly understood and carried out.

The first purpose of a survey is to describe; to count the frequency of some event or to assess the distribution of some variables such as proportion of the population of different age groups, sex, religion, castes and languages, knowledge, attitude and adoption of practices about particular issues, and other information of similar nature about the population. You will conduct this type of survey for your baseline study.

The descriptive survey of the population is valuable in understanding the audience, and in the definition of the existence and magnitude of the problems.

The survey data are also helpful in determining cause and effect relationships between variables, for example, between level of education and frequency of watching educational programmes on TV.

The preliminary descriptive survey results can prove useful for planning more sophisticated survey studies with a view to identifying areas where problems occur or where changes are required, to understand why people behave in a certain manner and what can be done to provide alternate solutions to the problems. Here, an attempt is made to understand the relationships between different variables, and the purpose of survey becomes to diagnose or analyse the situation rather than just describe the situation.

Surveys may also be done to measure the extent and nature of effect and impact of a project after the population has been exposed to media for a reasonable length of time.

### **Salient Features of Survey Method**

Surveys are done to gather data from the field in order to generalize results from a sample to a larger population. The primary purpose and advantage of surveys is, therefore, generalization of the results.

In surveys, we are usually interested in gathering data from many respondents than in obtaining intensive, detailed information from a few individuals. Seldom does a survey consist of one or very few individuals.

## Choose a sufficiently large sample



While designing a survey research study, you have to take special care of the sample and the sampling procedure.

The sample size should be adequate to allow generalization of the results.

The sampling procedure should also be such that small sub-groups within the population (such as landless farmers) are properly represented in your sample. Errors in sampling procedures may not justify generalisation of the results, lowering the value of the survey.

Basic knowledge and descriptions of populations and geography etc. are preconditions for survey research, particularly for sample construction and designing of tools for information gathering. It is essential for you to first collect pilot data through case studies, observations and other methods before you mount meaningful survey studies.

Further, most survey data-gathering tools are structured to facilitate quantification of the responses. The major tools used for the survey consist of questionnaires and structured interviews. We shall first talk about the questionnaire as an information-gathering tool.

## Questionnaire as Data Collection Tool

When using the questionnaire, information is gathered by asking selected members of the audience to answer a set of questions posed to them in a written form.

A questionnaire consists of a number of questions in a definite order on a form(s). The forms are usually mailed to the respondents who are expected to read and understand the questions, and to reply to these by writing in the relevant space provided for the purpose on the forms. The respondents are also expected to return the filled-in questionnaire.

In certain situations, you may hand over the questionnaire to the respondents individually or in a group, and get these filled personally, offering necessary explanations with reference to the questions, if and when necessary.

In other cases, you may put the questions as they appear in the schedule to the respondents, and also record their replies.

You may use your medium such as radio and TV in putting some questions across the audience, and requesting them to send their replies to you. Telephone is also used to conduct the surveys.

## Strengths of the Questionnaire as a Tool

- It is far more convenient and economical to collect information this way.
- Large amounts of data can be collected from small or large population groups in this way.
- It is a suitable method when it is intended to collect some specific information from a large number of people. (For example, information about what the women know about the childcare and early childhood diseases can be quickly obtained through a questionnaire).
- The questionnaire technique is impersonal, and avoids bias, which can develop as a result of interaction between the researcher and the respondent.



- It ensures some degree of anonymity to the respondents. The respondents feel free to express their views through a questionnaire than they would do personally to the researcher.
- It places less pressure on the respondents for immediate response. They can complete it at their own time and pace. They can also look through the whole questionnaire and form an idea of the nature and scope of questions before replying to these.

### Limitations of the Questionnaire as a Tool

- This can be administered only to the respondents who are able to read and write fairly well. Hence, it may not be appropriate for the rural people in general. However, it can still be very well used for organized literate groups in the rural areas such as students, teachers, government and non-government extension functionaries, social workers, NGOs etc.
- By itself, this is not a preferable method when you are trying to explore the situation, and doing an in-depth study of the needs, constraints, context and solutions to the problems of the audience.
- The respondents may not give their full attention to the job of replying to the questions. The answers may lack depth resulting in superficiality.
- If the respondent misinterprets a question, there is little that can be done to correct. There could then be inconsistencies in the replies.
- They may not reply to all questions for one reason or another and leave some blanks.
- Generally, mailed questionnaire survey does not produce a high rate of recovery. Quite a few respondents may not care to return the filled- in questionnaire even after reminders.
- Collection and compilation of information is time consuming.



### Forms of Questions

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The questions must be relevant, meaningful and easy to understand

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However, the more important matter for you when you use this tool is to design a really good questionnaire comprising relevant, meaningful and easy to understand questions. How you frame your questions makes all the difference in the quality of the responses. If a questionnaire is not well designed, the information gathered will be of poor quality. It will also affect the recovery of the questionnaires. Let us look at the main forms of questions, and the uses to which these are put.

#### Closed Questions

The usual format of a closed question is to ask a question, then provide the range of answers, and ask the respondent to tick the appropriate answer. It is also called **multiple-choice question**. An example is given below:

*What are your reasons for not going to the TV centre to watch TV?*

*Lack of time*

*Long distance*

*Not safe to move in the night*

- Programmes not interesting*
- No proper seating arrangement*
- Any other reason (Please specify)* \_\_\_\_\_
- 

Please note that the responses include a safety net in the form of the final response category namely, any other reason just in case anyone has a different stand.

### Open Ended Questions

Here the range of possible answers to the question is not provided. The onus is placed on the respondent who is expected to formulate and record answers in his or her own words. For example, the above mentioned closed question on reasons for not watching TV can be framed in the open ended form as under:-

**Q. If you don't go to TV centre to watch TV, what are your reasons for that?**

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Open-ended questions are good in eliciting the feelings and opinions of the respondents

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Open-ended questions may be used when you are not sure of all the possible range of responses, and you are trying to understand the situation. These questions can produce detailed answers to tricky situations and complex problems, and are, therefore, good in eliciting the feelings and opinions of the respondents.

However, open-ended questions are effective only when administered to the respondents who are good in expressing themselves and are willing to do so. Since it requires more effort from the respondents, the risk is that these are less likely to be fully attempted and completed.

It produces a wide range of answers posing difficulty for the researcher to categorise and analyse the responses.

It would, therefore, be better if your questionnaire combines both closed and open-ended questions according to the nature of the study. Indeed, it is often desirable to follow a closed question with one or two open ended questions to obtain an insight into the problem. Some examples are given below:

**Q. (Closed) Do you find TV programmes interesting?**

- Yes, most of the time*
- Yes, sometimes*
- No, mostly boring*

**Q. (Open Ended) If you find most or some of the programmes not interesting, why do you think so?**

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*Q. (Open Ended) Are there any suggestions you would like to make to make the programmes interesting?*

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### Rating Scale

Coming back to the closed questions, in some instances a simple range of responses is not adequate, if you are trying to get at the shades of opinion or the levels of importance. In such cases, it is profitable to use a rating scale. An example of a rating scale administered to teachers is given below:

*Q. You have been teaching standard V for quite sometime. Please indicate the difficulty level of different subjects as experienced by most students of this standard.*

	<i>Very difficult</i>	<i>Difficult</i>	<i>Somewhat Difficult</i>	<i>Easy</i>
<i>Arithmetic</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>English</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Hindi</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Social Science</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Science</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Ranking Scale

When the objective is to know the degree of preferences or the relative weightage given by the respondents to different items you may design a ranking scale. For example, to measure the credibility accorded by the farmers to different sources of agricultural information, a question may be framed as under:

*Q. There are generally four sources of agricultural information namely, demonstrations, television, radio and extension workers. Please rank these in order of credibility from the most credible to the least credible. Assign a score of 4 to the most credible and a score of 1 to the least credible.*

<i>Source of Information</i>	<i>Rank Order Score</i>
<i>Demonstration</i>	-----
<i>Television</i>	-----
<i>Radio</i>	-----
<i>Extension workers</i>	-----

The other way is to provide these sources in different possible pairs and asking the respondents to select one source over the other from each pair having more credibility. The question could then be framed like this:

**Q.** *The following list provides important information sources in different pairs. Please select one source over the other from each pair having more credibility.*

- |                      |                          |
|----------------------|--------------------------|
| 1. Television        | <input type="checkbox"/> |
| Radio                | <input type="checkbox"/> |
| 2. Demonstrations    | <input type="checkbox"/> |
| Extension workers    | <input type="checkbox"/> |
| 3. Radio             | <input type="checkbox"/> |
| Demonstrations       | <input type="checkbox"/> |
| 4. Extension Workers | <input type="checkbox"/> |
| Television           | <input type="checkbox"/> |
| 5. Demonstrations    | <input type="checkbox"/> |
| Television           | <input type="checkbox"/> |
| 6. Radio             | <input type="checkbox"/> |
| Extension workers    | <input type="checkbox"/> |

Yet another way to put the same question in a more simplified manner could be:

**Q.** *Which source would you choose from the following four sources for obtaining agricultural information if you could have only one of these? Please tick (✓) in the box against it.*

- |                      |                          |
|----------------------|--------------------------|
| 1. Demonstrations    | <input type="checkbox"/> |
| 2. Television        | <input type="checkbox"/> |
| 3. Radio             | <input type="checkbox"/> |
| 4. Extension workers | <input type="checkbox"/> |

There could be several ways of putting a question. Designing a good questionnaire, which is easy to understand, appealing and motivating to the respondents is a skill, which can be acquired with some practice and patience.

Some more hints on using the questionnaire method are given below.

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Designing a good questionnaire, which is easy to understand, appealing and motivating to the respondents is a skill

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### Hints on Using Questionnaires

- In the beginning, state concisely what the survey is about, and how the findings will be used. Request the respondents for their co-operation.
- Keep things short and to the point. You may have to edit and revise your questionnaire several times to make it concise or else you may end up collecting more information than what you need.
- Write the questions in plain and simple language, which is understandable to the respondents. Write as if you are talking to the respondent. Aim for a warm, friendly tone. Keep the sentences short.





- Avoid ambiguous questions. If need be, define certain words which can create ambiguity. For example, regarding the question on credibility of information sources in the previous section, the word credibility may be defined as ‘both trust worthiness and expertness’ for the respondents.

- In other instances, ambiguity can arise through the construction of a question. This often happens when a question contains double negatives. For example

*Q. Don't you think that telecast duration should not be reduced?*

- Avoid leading questions or questions, which encourage a particular response. For example, the following question is more likely to end with ‘yes’ responses.

*Q. Do you think the quality of TV programmes needs improvement ?*

- With ‘Yes/No’ answers, it may also be necessary to make provision for ‘Don’t know’ or ‘Can’t say’ response to enable the respondents to express themselves more precisely.
- While structuring the questionnaire schedule, proceed from general to specific.
- For developing a good questionnaire don’t forget to first pre-test and pilot-test the questionnaire. This is important not only to ensure that the questions are good and unambiguous but also to check that nothing important has been overlooked.

Pre-testing involves sending a draft to some expert(s) who can be trusted to give honest and constructive comments. Revise the questionnaire in the light of the comments.

The second draft may then be administered to a few respondents to check that the questions are really working. The questionnaire may then be again revised on the basis of the findings of the pilot- test.

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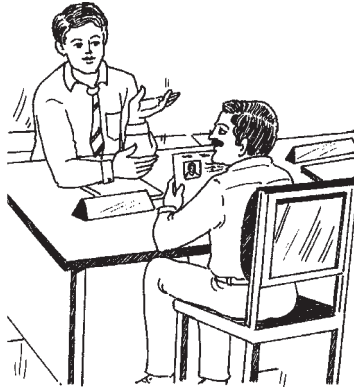
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Questions in the questionnaire are inappropriate if they:

- are not relevant to the study objectives
  - are not perceived by the respondents as logical and necessary
  - are threatening or embarrassing
  - are not geared to the respondents’ level-education, depth and range of information, knowledge and perceptions
  - require an unreasonable effort to answer
  - are vague or ambiguous
  - cannot or will not be answered accurately
- 
- 

Enclose a self-addressed, stamped or pre-paid cover with the questionnaire if it is mailed. This will help increase the response rate. There will, however, still be a need to chase the respondents. A polite reminder enclosing another copy of the questionnaire may help better recovery.

For designing appropriate questionnaire and structured interview schedules for data gathering, it helps, if you first know your audience and have good contact and rapport with them. It would therefore be better if you spend some effort in using relatively unstructured data gathering techniques - unstructured interviews, focused group discussions, observations, case studies etc. before moving to such structured techniques as survey methods. You will find discussion on these methods and techniques in the following chapters.



## 10 INTERVIEWS AS DATA COLLECTION TOOLS

Surveys are also conducted through interviews. Interviews basically consist of asking questions, listening to individuals and recording their responses. At times, you may find it more profitable to ask questions to a few individuals instead of carrying out a large-scale questionnaire based survey.

The interview can be done very informally, e.g. as conversations with people met in the fields, co-operative stores or block offices. In these settings, one question leads to the next based on the responses given to the previous one.

At the other end of the scale, highly structured interviews often rely on questionnaires or interview schedules with mostly closed-ended questions that allow the respondents only a limited range of possible answers.

In between these extremes are in-depth interviews and focused group discussions where questions on a given topic(s) are asked to probe and stimulate the respondents to think rather than just give quick answers.

Depending on whether you are more formal or less formal, the interview technique used by you may fall under one of the four types:

- Structured interview
- Semi-structured interview
- In-depth interview, and
- Focused group discussion

### Structured Interview

Structured interviews are built around an already prepared interview schedule. You ask the questions as they appear in the schedule, and also record the answers. You are, however, expected to provide explanations, wherever necessary, to clarify the questions. You may also do some probing and ask the respondent to explain the answers, if found vague.

When the answers to a question are in the form of alternatives as given in the following example, you either read these out or hand over a card on which these are printed, and ask the respondent to choose the one which is appropriate in his or her opinion.

**Q. If you don't take bath daily, what could be your reasons :-**

1. *I don't find time*
2. *There is scarcity of water*
3. *Have to fetch water from a long distance*
4. *Lack of privacy for taking bath*
5. *Any other reason*

Through prompting, you can make sure that the respondent has fully considered all possibilities before replying to the question.

This is good for getting information about prevalence and distribution of an issue from large numbers of people and the resulting data are quantitative. The interview can be completed rapidly in the field, and less skill is required on the part of the interviewers in such cases.

At the same time, much skill is needed to create the questionnaire or interview schedule. It requires much time for pre-testing of the questionnaire, and also training the field staff. Highly structured questionnaires yield little insight into how people feel about the issues involved.

### **Semi-structured Interview**

Semi-structured interview provides greater scope for discussion and learning about the problem, opinions and views of the respondents. While there are some fairly specific questions (closed questions) in the interview schedule, each of which may be probed or prompted, there are lot more questions which are completely open-ended. The latter questions mainly serve to explore different facets of the issue. The information thus collected is both qualitative and quantitative

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Semi-structured interview method being less formal is a better way of catching the point of view of the people, and getting inside information

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The structured and semi-structured interview methods allow you greater control over the sample of respondents. You continue and carry on until a fairly representative sample has been covered. Between the two methods, semi-structured interview method being less formal is a better way of catching the point of view of the people, and getting inside information. One can revise questions, if needed, during the process of data collection.

However, great sensitivity and skill is required of you.

It is important that you do not introduce bias, and influence quality and content of information as a result of your close interaction with the respondents, nor you are diverted from the original purpose of collecting information.

### **In-depth Interview**

It is much less formal than the semi-structured interview. While you have structured some basic questions on paper, the discussion on the issue is largely free- ranging.

When you intend to collect complex information, containing a high proportion of opinions, attitudes and personal experiences of the respondents, you go in for in-depth interview. As a technique, this is more popular in audience research.

For an in-depth interview, the sample is kept small. Only a few purposively selected people are subjected to a detailed interview. For example, you may want to know why farmers are not able to adopt new varieties and improved practices of cultivation for their crops and grow new crops. It may be profitable to find out what farmers know about how specific crops grow in a particular environment, what the key problems in obtaining high yields are, what they have done to solve these problems, what experiments they have conducted themselves and what they have found etc.

These are big questions. Putting these questions to a large number of farmers would not be necessary. Instead, all you have to do is to ask only a few thoughtful and experienced farmers a set of specific questions and about their life long experience in agriculture.

In-depth interviews with some farmers, agricultural extension workers and experts will provide you an insight to get the whole picture and will also tell you what can be done to improve the situation, which would be acceptable to a majority of the farmers.

For better results precede the in-depth interview by a more general information gathering and observation exercise. This will provide you the necessary background, from which it would be possible for you to identify critical areas, which are to be pursued in greater depth.

Conducting an in-depth interview, however, requires more effort and skill on your part. There will be greater need for you to repeatedly come back to the point, keep the discussion moving in the direction consistent with the original purpose of collecting information and record the information in an objective and logical manner. Over enthusiasm and less caution can generate enormous data, which may be later difficult to organize and analyse.

### Focused Group Discussion

In all the three types of interviews mentioned above, the individual constitutes the unit of response. Most often the researchers choose the heads of households or village headmen for the purpose of interview. It biases the data to the views of one individual in a family or a few in a village and ignores the views of other members.



Moreover, the individuals when removed from the dynamic interactive relationships among themselves may not come out completely and truly with strangers. The respondents also try to please the interviewer and say what the interviewer likes to listen.

These limitations can be overcome to a great extent by supplementing interviews with group discussions.

Group discussions are quite simply in-depth interviews carried out with a group of people rather than with individuals. It could be a large group (such as community meetings), a small focused group representing a particular background and interest (such as marginal farmers) or a natural group (such as talking with women while waiting in line at the well)

Small samples for in-depth interviews!



The advantage with group discussions is that information from one individual can be cross checked with others and more than one opinion gathered. As already mentioned, it removes the bias of individual views. In a group situation, members are prone to be open, and what they say may be in the prevailing socio-cultural context. Group interaction enriches the quality and quantity of information needed. These are quite good at disclosing the range and nature of problems, as well as eliciting preliminary ideas about solutions.

However, the disadvantage is that when multiple opinions arise in a group discussion, it can be difficult for the researcher to determine as to which ones are right. You can limit this by arranging a series of small focused group discussions. Each group represents people from a particular socio-economic background and interest, instead of a mixed large group comprising general audiences

Still your task is difficult while conducting a group discussion. The following guidelines will help you conduct group discussions effectively:-

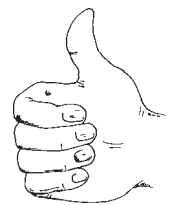
- Start with a faith that people have an innate ability to identify their needs, suggest solutions and create knowledge based on their long experience.
- Identify specific audiences such as houseworkers, elderly persons, adolescents etc, to discuss issues specific to them.
- Raise pertinent questions
- Ensure that all important matters are covered.
- Watch that the discussion does not drift away from the main issue. You may have to repeatedly bring the group back to the central issue.
- Encourage the participants to contribute ideas, articulate needs, bring out the context and the constraints, and also suggest possible solutions.
- See that most participants get the opportunity to participate, and that one or two individuals do not dominate.
- Do all that without expressing your own views and opinions or leading the group in any way.
- Avoid any show of your authority or superiority

In the end, group discussion should result in an educational process. It should be as much a learning experience for the participants as for you. They should feel liberated and empowered after the event.

Though more exerting, in-depth interviews and focused group discussions can prove useful in producing detailed understanding of particular issues confronting the audience.

### **Strengths of Interviews**

- Interviews make it possible to collect complete information from the different categories of sample. Assuming that sampling was done properly, this can ensure a fair degree of validity of information.
- It is possible for you to collect more complex information with greater depth and understanding, particularly when you use in-depth interviews and focused group discussions.
- Interviews are more personal as compared to mailed questionnaires, and tend to result in better response rates. As such, smaller sample will do than that of a questionnaire survey.



- You have more control over the flow and sequence of questions. It is sometimes important to ask a particular question after some other questions have been answered. With questionnaire it is impossible to prevent respondents looking ahead to see what is coming, and shaping their responses in the light of that.
- You are in a position to introduce necessary changes in the interview schedule after the initial results. This is not possible in the case of a questionnaire survey.

### Limitations of Interviews

- It is rather difficult to analyze data obtained through interviews, especially when there is more qualitative data in response to open-ended questions.
- Interviewing a number of people every day could be a tiring experience.
- Because of fatigue, and also because of the tendency of becoming too personally involved with the interviewees, there is a risk of introducing bias in the results.



### Hints in Conducting Interviews

- Design the interview schedule carefully with regard to the flow and sequence of questions. Write the questions in spoken, simple language. The early questions should be easy to answer and should aim to put the respondent at ease.
- Always pre-test, and pilot-test the interview schedule before finalizing it.
- The introductory statement should convey the purpose of study in such a way that it will encourage the respondents to co-operate. Build a rapport with them before you take up the schedule.
- Maintain neutrality and objectivity during the interview. You are likely to be carried away by the interview process. Remember, it is not an exchange of information, but obtaining of information.
- Arrange orientation of the interviewers about the nature of the study, intent of the questions, and administration of the questions, including probing and prompting and recording of responses before sending them in the field for creating common understanding and approach to the study.



### Test the interview schedule before finalising it



- Use of a tape-recorder during focused group discussion will be a useful aid. If this is not possible, more than one interviewer may be present so that at least one person is there to record the information.
- At the end of the interview, check the schedule to see that all is complete. Also thank the respondents, at the same time asking them if they have any questions or points.
- At the end of the day or any other reasonable period of working, call upon the interviewers to come together to exchange notes to bring about necessary changes in the schedule and approach in the light of their experience

In certain situations, it may be profitable for you to collect information through observation alone or in combination with in-depth interviews and group discussions. The next chapter presents a discussion on observation as a method for information gathering.



## 11

# OBSERVATION TECHNIQUES

Begin with a period of observation of the audience in their real setting



The simple process of observing and recording events or situations is probably the oldest form of research. There is a great deal that you can learn about the world of the audience just by careful observation.

In fact, all educational media research should begin with a period of observation of the audience in their real setting. It proves useful not only in forming an idea about the audience, but also in determining what other research methods need to be used. You will also know about the constraints that will be placed on the operation of different methods. If, for example, you propose to interview young houseworkers, a brief period of observation will show you the best place and the time to contact them without interference from other members of the family.

Broadly, the observation techniques can be divided into

- Participant observation, and
- Non-participant observation

### Participant Observation

In participant observation, you, as a researcher, are concerned with putting yourself in place of the respondent and then seeing what happens. Here, you go and live with the community, group or family you want to study. You become one of them. Depending upon the situation, you may decide whether or not you are going to let the people know that you are conducting research by observing their behaviour.

**Overt participant observation** is when the subjects of research are informed they are being observed. **Covert participant observation** is what takes place when they do not know.

## Non-participant Observation

Here also, you take part in great many activities of the group, but you remain detached from the group and activity, and simply observe and record what is going on. The people may or may not know that you are conducting a study.

### Strengths of Observation Method

- Observation is a relatively straightforward method. When combined with some training and a little common sense, you can record the natural behaviour of the subjects and obtain a greater depth of experience than what is possible through other methods.
- You can also record the context in which certain behaviors take place. Such direct and in-depth experience frequently leads to useful insights into the area under study. The range of information collected will also be much wider since you will be observing different people doing different activities at the same time.
- This method can provide useful insights in the initial stages of needs assessment and development of audience profiles. It can open up certain critical issues for further study by you.



### Limitations of Observation Method

- You may find it difficult to enter a group, and find a place there unless you know some one in the group, or are introduced to them by some one known to them. Fortunately, rural communities in general are tolerant, and have no problem in accepting the presence of observers as legitimate. However, their behaviour may not be natural in the beginning, but you may find people opening up after some initial hesitation.
  - Another problem is that it can be very time consuming. At times you may have to wait for long for certain behaviors to take place. For example, if you are interested in studying the practices of rearing a child after its birth, and the diet given to the lactating mother, you may have to wait for the event to happen.
  - While it has the advantage of relying on physically observed phenomena, it can generate mistaken conclusions based on your interpretation of the situation. There would be a need to verify your interpretation by talking with the people, when in doubt.
- You have also to guard yourself against becoming emotionally involved with the people and the events as you establish close association with them. For example, you may be so overwhelmed with their poverty that you may forget to record your observations about its causes, its impact and the avenues that can be tapped for its alleviation.
- The observation methods are good in observing what is going on. But these are less effective in collecting information about the personal beliefs; feelings, opinions, motivations, expectations or future plans of the people. These are also of little help in knowing the past or private behaviors of the respondents.
- Finally, it is important to find a way to record the observed events accurately and on a regular basis. This becomes a problem when you are doing covert participant observation. Unless some aids such as daily diary are used for recording information, much of its value might be lost.





## Hints on Using Observation Method

- The first thing to do is to make sure that you are clear about what it is that you are looking for. So much might be happening but all might not be relevant. Unless basic plans of investigation and clear guidelines are drawn up, you are likely to end with a great deal of information that might not be necessary for your immediate purpose.
- The second thing to do is to work out an economical way of recording the information. This could take the form of a daily diary written under appropriate headings or a series of cards. For example, while studying the gender bias situations, the sub-headings could be on :

Household chores for the girl child,  
Scolding by parents,  
Aggression by male siblings,  
Differential treatment in serving food items (quantity, timings),  
Facilities for schooling and homework, etc.



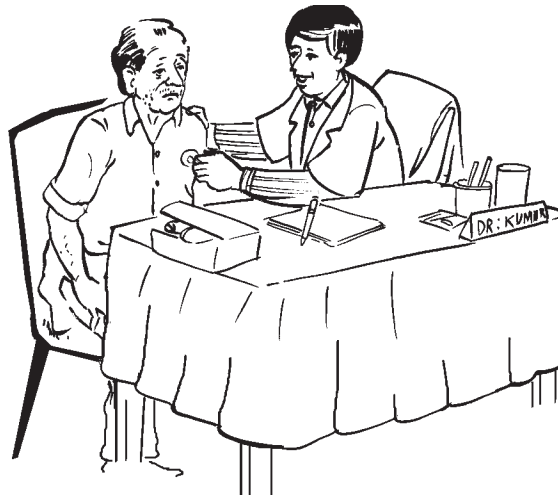
- Daily recordings will help you know whether the observations are in the right direction or are getting distracted to other issues and what more need be observed. It would be possible to correct the error while field-work is in progress.

**Be clear about what you are looking for**



- It would be equally desirable to transfer the notes and interpret the observations at the end of the day while the events and the context in which these took place are still fresh in your mind. It will avoid the situation where you are later faced with the enormous task of analyzing a mass of barely legible observation notes.
- It may also be profitable to leave the field from time to time to discuss the findings with other researchers and the producers to discuss the trends with them. Their added perspective might be useful in gathering further data.
- During the later part of the study, it may be profitable to supplement the observations by filling schedules of information. The schedules are drawn up before beginning the work, and subsequently are revised in the field, based on ground realities. Often the schedules contain such basic data as sex, age, education, caste, economic status, family pattern, size of the family, occupational structure etc. of the respondents observed. Even when these items are not the principal focus of research, the description of the respondents/group will help interpret the findings/activities against their background.
- Before leaving the field, it would be necessary to ask questions for clarification of your doubts. For example, an observer noticed houseworkers in a village boiling water and concluded that they were health conscious. When questions were asked for verification, it was found that water was heated for the bath of the husbands.
- Resources permitting, it would be a good idea to record the salient observations on video for providing a visual profile of the audience, and about the ecology, geography and economic features of the region.

Quite often observation is combined with case study method to obtain a wider and fuller perspective of the situation. You will find a discussion on the case study method in the next chapter.



## 12

## CASE STUDY METHOD

Case study method is used mainly to look in depth at a particular issue or problem in all its complexity, to understand the underlying phenomena, and to study the cause and effect relationships by taking up concrete events. For example, as you meet with the people you may hear stories how a particular village has solved its problem of water scarcity through collective water harvesting and management practices. You may then decide to take this village as a case for in-depth study.

Stories or case studies may also be on endeavors that were not successful. For example, why a particular poultry co-operative failed.

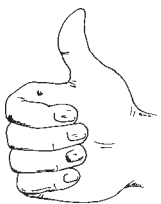
At times, a family or an individual may be the focus of a case study.

Case studies illustrate the general trend in the events that put in motion the process leading to success or failure of an effort. They cast the lifeless data into real-life settings and have a great learning and motivating influence on others in similar situations.

Case study method has no specific format. It just provides a frame work within which other methods like observations and tools like interviews are employed for specific purposes.

### Strengths of Case Study Method

- It provides a means of looking in some depth at situations which are novel or complex.
- It provides useful clues in understanding particular experiences or incidents which may have wider applicability in the region.
- It is more economical, as it is possible to reduce the scale of research by focusing on fewer units.



### Limitations of Case Study Method

- It may be difficult to select a situation, which is sufficiently typical or representative of the larger situation. As such it may not be sufficiently authoritative, and generalizations drawn from a case may not be completely valid. To overcome this



problem, more than one case study may be done representing different strata of the target population.

- It is not always easy to enlist the co-operation of the respondents for close observation and in-depth questioning.

## Hints on Using Case Study Method

- Establish an effective working relationship with those being researched, for you might be faced with initial suspicion or even hostility. For this, you may have to assure them by explaining the objectives and intention of your study in an appealing manner.
- When the ground situation is diverse, do more than one case study to ensure validity. For example, you may first select two villages, one progressive and the other less progressive. In the second tier, take three families, one each from the high, middle and low socio-economic status in each village. This way you can get a fuller range of information, and feel more confident to arrive at conclusions. In less diverse and more uniform situations, one or two case studies will do.
- Identify various factors affecting the situation, and study each factor thoroughly and completely.
- Since you will be interacting with the respondents rather closely, try to maintain a degree of neutrality and objectivity throughout. There is a risk of your being involved emotionally, and introducing a bias in your generalizations.



## Choosing Among Methods

You have different methods to collect information. Choosing methods is a process of matching.

**First**, match methods to the questions you want to answer. Collection of exploratory information as required in audience research would benefit more from observations, in-depth interviews, case studies and focused group discussions than large scale questionnaire or interview surveys.

**Second**, match methods to the resources and time available with you. Questionnaire and interview surveys need more money, human power and time to compile the data.

**Third**, match methods to your skill, training and experience. Holding focused group discussions require leadership skills to make the groups deliver.

However, using more than one research method and source is the best assurance of the validity, reliability and completeness of information. Compare the information collected by you with that gathered from secondary sources. Also, combine different techniques for data gathering. For example, a description of the way in which the community uses its natural water resources may be developed through a combination of observation surveys, interviews with groups, and a participatory mapping exercise with the community members

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Using more than one method and source ensures validity, reliability and completeness of the information

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The quality of audience research by you will go a long way in determining the quality of programme planning and production. It should be a painstaking exercise done in a scientific manner. Along with an understanding of the research methods, you must have a good idea about the sampling and sampling procedures. This will be discussed in the next chapter.



## 13

## SAMPLING

### What is Sampling?

It is not possible, nor it is necessary, to collect information from the total population. Instead, a smaller sub-group of the target population or a sample is selected for the purpose of study. Sampling is the strategy of selecting a smaller section of the population that will accurately represent the patterns of the target population at large.

### Why Take a Sample?

The main purposes of sampling are :

- **Economies on the resources** required for collecting and managing the data from a smaller sub-group
- **Improve quality of data** by focusing on a smaller group

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Sampling is like taking out and testing a few grains of rice from the cooking vessel to know if the dish is done or not

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### What is Sampling Frame?

First, define your sampling frame i.e. what group of persons or households or farms are relevant for you and will be eligible to be drawn for the sample? Is it only the farmers who have land holdings or the larger population of all farmers including landless farmers? Is it only the persons who watch TV regularly or all those including those who watch occasionally? The results would be different in each case.

### Sampling Procedures

Different procedures are used for selecting a sample for the purpose of data collection. Broadly, these are of two major types:-

- Probability Sampling
- Purposive Sampling

## Probability Sampling

In this, sample is taken in such a manner that each and every unit of the population has an equal and positive chance of being selected. In this way, it is ensured that the sample would truly represent the overall population.

Probability sampling can be achieved by random selection of the sample among all the units of the population.

If you intend to establish baseline data or want to assess the changes, effects or the impact that has taken place after the project has been in operation for some time, you go in for probability sample design. This design is generally used in quantitative studies. Random selection of the sample units enables you to confidently generalize results from the small sample to the larger population.

Major random sampling procedures are :

Simple Random Sample

Systematic Random Sample

Stratified Random Sample

Quota Sample, and

Cluster Sample

A brief discussion about each is given below.

### Simple Random Sample

For this, each member of the population is numbered. Then, a given size of the sample is drawn with the help of a random number chart. Random number charts of the type given below are easily available in the market.

Random numbers used in sampling					
10	27	53	96	91	76
00	97	79	08	21	64
28	41	50	61	11	30
34	21	42	57	29	16
61	81	77	23	45	78
71	15	18	13	55	66

The other way is to do a lottery. Write all the numbers on small, uniform pieces of paper, fold the papers, put them in a container and take out the required lot in a random manner from the container as is done in the kitty parties.

It is relatively simple to implement but the final sample may miss out small sub groups.

### Systematic Random Sample

It also requires numbering the entire population. Then every  $n^{\text{th}}$  number (say every  $5^{\text{th}}$  or  $10^{\text{th}}$  number, as the case may be) is selected to constitute the sample. It is easier and more likely to represent different subgroups.

## Stratified Random Sample

It is sometimes advisable to first introduce an element of structure into the population before taking the random selection. This is applicable when the population has a large variability in some characteristics such as level of education or socio-economic status, which could have a significant bearing on the results of the study. For example, only very few persons in the sample frame may be educated and a large majority may be semi-illiterate and illiterate. It is then possible to omit this small minority from the sample.

In such cases, the population is first divided into groups or strata each of which is homogeneous with respect to the given characteristic feature. From each strata, then, samples are drawn at random. This is called stratified random sampling. For example, with respect to the level of socio-economic status, the population may first be grouped in such strata as high, middle, low and very low socio-economic levels as per pre-determined criteria, and random sample drawn from each group. The sample size for each sub-group can be fixed to get representative sample.

This way, it is possible that different categories in the population are fairly represented in the sample, which could have been left out otherwise in simple random sample.

## Quota Sample

In this case also, the entire population is first divided into homogeneous strata with respect to the given characteristic. Then, you meet just a specified number of people from each strata as you come across them rather than selecting them through random procedure. The resulting samples are called quota samples

## Cluster Sample

In some cases, the selection of units may pass through various stages, before you finally reach your sample of study. For this, a State, for example, may be divided into districts, districts into blocks, blocks into villages, and villages into identifiable groups of people, and then taking the random or quota sample from each group. For example, taking a random selection of 3 out of 15 districts of a State, 6 blocks from each selected district, 10 villages from each selected block and 20 households from each selected village, totaling 3600 respondents. This design is used for large-scale surveys spread over large areas. The advantage is that it needs detailed sampling frame for selected clusters only rather than for the entire target area. There are savings in travel costs and time as well. However, there is a risk of missing on important sub-groups and not having complete representation of the target population.

## Purposive Sampling

Probability sampling is generally used in quantitative studies. Random selection of the sample enables you to confidently generalize results from a small sample to a larger population

However, sometimes it is desirable as in the audience research to purposively choose the region and the respondents for a specific purpose. For example, to study the life style of the young children of the construction workers near the construction site.

The power of purposive sampling lies in selecting information rich-cases for in-depth analysis related to the central issues being studied. Purposive sampling can be used with both quantitative and qualitative studies.

Represent different categories  
of the population




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The power of purposive sampling lies in selecting information rich-cases for in-depth analysis related to the central issues being studied

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Purposive sampling can be done in addition to probability sampling also. For example, after completing your baseline study based on a random sample, you may recognize that certain sections of the project area are quite different from other areas due to variations in landscape, geography, culture etc. You may then purposively select those areas to get representative information about how the variations have influenced the behavior of the people.

**Purposive sampling is particularly relevant when you are concerned with exploring the universe and understanding the audience. This means, using your common sense and the best judgment in choosing the right habitations, and meeting the right number of right people for the purpose of your study.**

Some purposive sampling strategies that can be used in qualitative studies are given below. Each strategy serves a particular data gathering and analysis purpose.

- **Extreme Case Sampling:** It focuses on cases that are rich in information because they are unusual or special in some way. e.g. the only community in a region that prohibits felling of trees.
- **Maximum Variation Sampling:** Aims at capturing the central themes that cut across participant variations. e.g. persons of different age, gender, religion and marital status in an area protesting against child marriage.
- **Homogeneous Sampling:** Picks up a small sample with similar characteristics to describe some particular sub-group in depth. e.g. firewood cutters or snake charmers or bonded labourers.
- **Typical Case Sampling:** Uses one or more typical cases (individuals, families / households) to provide a local profile. The typical cases are carefully selected with the co-operation of the local people/ extension workers.
- **Critical Case Sampling:** Looks for critical cases that can make a point quite dramatically. e.g. farmers who have set up an unusually high yield record of a crop.
- **Snowball or Chain Sampling:** Begins by asking people, “who knows a lot about \_\_\_\_\_”. By asking a number of people, you can identify specific kinds of cases e.g. critical, typical, extreme etc.
- **Criterion Sampling:** Reviews and studies cases that meet some pre-set criterion of importance e.g. farming households where women take the decisions.

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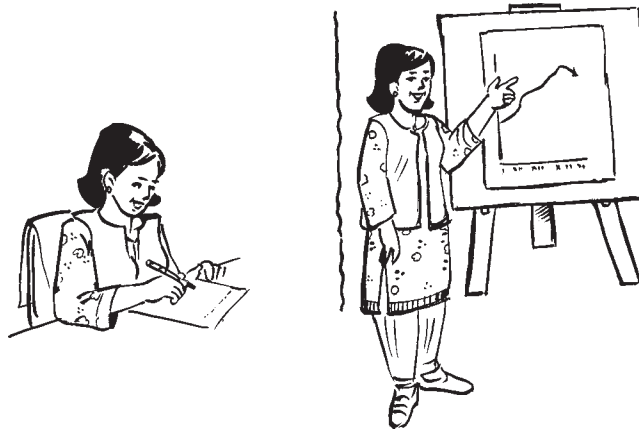
In audience research, common sense purposive sampling in most cases will suffice than randomly selecting respondents in a probability sample. This means choosing which respondents to contact, where and when so that necessary information is obtained about different segments of the audience

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In short, purposive sampling is best used with small numbers of individuals/groups which may well be sufficient for understanding human perceptions, problems, needs, behaviours and contexts, which are the main justification for a qualitative audience research.

Sampling having been done, and data collected through appropriate research methods, the next step is writing the report. The next chapter deals with this.



## 14 PREPARATION AND PRESENTATION OF REPORT

*The information you have gathered is less important; it is the use and action on the results, which matters more.*

Having collected the information, you are now faced with the task of assembling what you have gathered and making sense of it all. All this is to be done in time for facilitating decision-making. Many a time valuable data are rendered valueless by remaining unanalysed.

Steps for converting raw data into useful information are:

- Organizing data
- Preparing description and generating interpretation
- Drawing conclusions and making specific recommendations.
- Writing the report
- Presenting the report
- Disseminating the findings

### Organize the Information

- In order to organize the information, first check that the schedules and diaries are complete. Fill the gaps, if any, by going over your field notes.
- Go back to the original objectives and intention of the study. Just as the sources of information and methods of data collection should be in keeping with the objectives of the study, the same way the original purpose and problem should drive the analysis so that the conclusions are linked to the objectives. Regularly weigh the available information in relation to your objectives with a view to sifting usable data from that which is not of immediate relevance.
- Write out the list of issues (themes, indicators) including the key ideas.

### Organize the data





- Note down any emerging ideas that are repeating and substantive, but not included in the original plan of study.
- Organize the data around the assembled issues and ideas. Presumably, your schedules contain both quantitative and qualitative information. Different methods of analysis are used for the two types of data.

### Quantitative Information

It will be far easier for you to handle quantitative information given in response to multiple-choice questions or closed questions. Just transfer the data to different tables under the same choices or categories as provided against different questions, and count the responses. For example, in respect of the question on the reasons for not watching TV in the TV centre, (chapter 9) tally and count the total answers against each response category and tabulate as under:

**Table 1: Reasons for Not Watching TV**

S.No.	Reasons	Number of Respondents
1.	Lack of time	
2.	Long distance	
3.	Not safe to move in the night	
4.	Programmes not interesting	
5.	No proper seating arrangement	

You may find that answers to some closed questions are qualified against such response category as - 'Any other (please specify)'. Make a note of all such different responses. Club the responses, which are similar in nature. Enter the different response categories in the appropriate tables and record the frequency i.e. number of respondents against each response category.

If you continue with the above-mentioned example, after taking into account reasons given against - 'Any other (please specify)' the table may finally take the following form:

**Table 2: Reasons for Not Watching TV**

S.No.	Reasons	Number of Respondents
1.	Lack of time	
2.	Long distance	
3.	Not safe to move in the night	
4.	Programmes not interesting	
5.	No proper seating arrangement	
6.	Poor quality of TV reception	
7.	Disturbance due to people coming in and going out	
8.	Frequent interruptions due to erratic power supply	

Complete the tabulation work in respect of all issues, indicators etc.

Look again at the original proposal to see why exactly each set of information was collected. Go back to the aims and specific objectives of the study. For example, were you interested to see the relationship between the level of education of the respondents and the frequency of watching TV? If that was so, proceed to transfer the data from the master tables into specific tables as shown below :

**Table 3: Effect of Education on the Frequency of Watching TV**

Level of Education	Number of respondents				
	Frequency of watching TV				
	Daily	Once a week	Once a month	Less than once a month	Never
Graduation & above					
Secondary					
Middle					
Primary					
Illiterate					

In the same way, tabulate the entire information in specific tables as per the objectives you had set before the start of the study and those that appeared significant during the course of the study.

Once the data are stated in numbers, it can be handled with mathematical or statistical techniques. You do not require advance knowledge of statistics to do that. All you need to use is simple descriptive and inferential statistics.

### ***Descriptive Statistics***

These are relatively simple concepts used in everyday life like averages, percentages and distribution.

### ***Inferential Statistics***

These are somewhat more complicated, but can be learnt with some training. The two main categories are :

- Examining differences between groups such as ‘before and after’ or ‘with and without’ (see chapter 5), and
- Examining relationships between variables such as ‘cause and effect’ relations e.g. relation between distance of home from the TV centre and frequency of watching TV.

### **Qualitative Information**

There would also be qualitative data in the form of suggestions, opinions, attitudes etc., of the respondents. After going through the whole range of responses to each open-ended question, evolve a minimum number of broad categories into which different responses can be fitted. Then proceed to tabulate the frequency of responses against each category for each question separately as suggested above.

As regards in-depth interviews, focused group discussions, observations etc, read the full text of all data sessions from beginning to end. Look for passages (paragraphs or sentences) that relate to the original topics planned in the study, and emerging themes. Mark these passages.

Cluster the passages by their major themes.

Review the various sub-groups within the major themes, and see that listing is complete.

Also select unedited phrases or extracts from the text which most aptly describe the respondents' insights for quotation in the final report.

This way, you will find your data organized in a few tables and clusters of passages.

## Describe and Interpret the Information

Once you have organized the information and data, you have to interpret the same to see the interconnections.

- Look at the frequencies of different response categories and tables carefully. Taking one at a time, try to work out what is happening, and what exactly the evidence suggests. Preparation of graphs, charts etc based on the data can also help you think systematically and logically about the data. Look for a pattern or a trend.

### Put facts into context



- At times, the very fact that there is no pattern might be significant.
- As for the qualitative data, determine the significance of each piece of evidence, looking for anything that supports or rejects your original idea or which is relevant to your objectives.
- However, do not stop at the description of isolated facts. The facts need to be put into context for proper interpretation. For example, the finding that children come to school without taking any food is not of much value, unless the circumstances leading to the situation are also gone into.
- Consider what the findings mean. In other words, try to grasp and understand the data merging separate pieces of information into a composite body of knowledge. Working with qualitative data particularly requires capabilities to develop good insights.
- Feel comfortable to discuss the findings and the picture emerging from the analysis with your colleagues and other information users. Different perspectives can help clarify the picture and strengthen your conclusions.

## Draw the Right Conclusions

- Taking each specific aim of the study set down the conclusions that apply to each one.
- If the evidence is not sufficient, don't try to strengthen it artificially. Just say the things as you find them.
- If you are confident of drawing a conclusion on the basis of your experience and observations when the evidence is lacking, qualify your statement like this: 'while not entirely borne by evidence, the researcher feels this to be the case'.
- Having set out all conclusions, try to look at them as a whole to see whether there are any internal contradictions.
- After having sifted all the evidence, consider whether any additional information would be useful. It may not be possible to collect such information readily, but it may be desirable to recommend that such information may be collected in future.

## Make Specific Recommendations

Flowing logically from the conclusions, make precise recommendations. For example, the study on needs assessment should conclude with your concrete suggestions about specific themes and topics of the programmes, and treatment of the message.

### Be specific



The recommendations should also indicate who should be responsible for taking what action. For example, to simply recommend that schedule of telecasts should be planned in advance is not sufficient. Complete and self contained recommendation would read like this: *'The District Collector should set up a Co-ordination Committee of different user departments to plan the quarterly schedule of telecasts in advance to remove the element of ad-hocism in programme planning'*. And *'It should be the responsibility of each user department to inform at least one week in advance their respective beneficiaries about the dates and topics of telecast for better utilization of telecasts'*.

### Write the Report

No research study is complete without a written report supported by oral presentation and discussion with the concerned group of programme planners and producers.

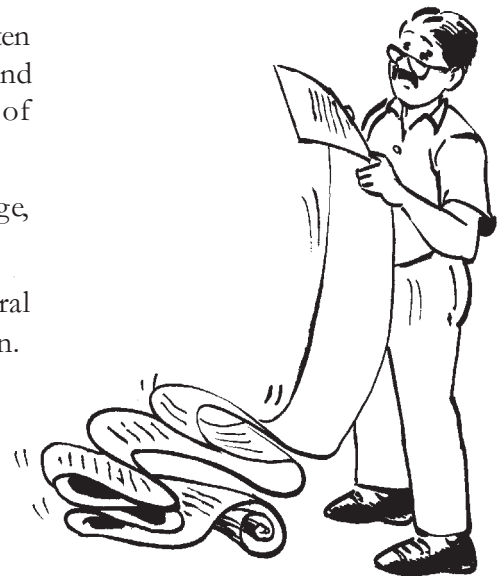
Write the report in a simple, clear language, following a fairly standard format.

First, in the introduction provide the general background and the context within which the study was undertaken.

Then, set out the purpose of the study, specifying the objectives and aims. Mention the limitations, if any, imposed in terms of time and resources in completing the study.

The next section should describe the overall design of the study, cover the methods used and any problems experienced in their applications. Mention the population size and the nature of the sampling frame.

Describe the sequence of events and problems experienced, during the study, for these may have implications for the future study.



### Keep things short and simple

It would also be worth to include copies of the forms and schedules used for data collection. But these can go as appendices to the main report.

Then, come down to the section giving findings or results of the study. The reader likes it better if the findings are contained in a discursive and logical narrative, flowing and easy to read style. However, mention the tables, which support a particular finding but like forms most tables may be given in the appendices

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The cardinal rule for you as a researcher is to dramatize and disseminate the findings, and mobilize all concerned to take action

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Discuss the findings, and give your interpretation of the results. However, it should be clear to the reader what exactly are results and what are your interpretations.

This should be followed by conclusions of the study concisely giving your specific recommendations and plan of action. In the end give a summary of the report.

## Presentation of the Report



Make it interesting and  
easy to read

The value of any completed research is realized only when the results are communicated to those who could make use of them such as programme planners and producers. Without it, the only person to benefit from the work will be yourself. Don't let your hard work disappear in the files. Reporting the findings has the explicit purpose of completing the circuit that takes the programme planners and producers from the process of knowing to a decision to do something about what they come to know.

However, merely making the research report available to them is no guarantee that it would be read by them. It is often worth providing an opportunity for all concerned to get together in a meeting to discuss the report.

Prepare yourself well to present the study before the group, and answer to their queries. Speak with conviction of experience. Bring out the power of information collected by you to generate concern and mobilize interest among all concerned.

Dramatize your presentation making use of transparencies showing tables, graphs, charts, figures, photographs etc. Show video clippings, if available. The more intensely you share your information, the more likely it is that it would be acted upon.

In the end, disseminate the findings and the recommendations with the suggested plan of action in the form of a summary, and follow it up as often as the opportunity comes your way.

## Disseminate your findings



## Construction of Knowledge Test

Knowledge are those behaviours and test situations, which emphasize remembering either by recognition or recall of ideas, materials or phenomenon.

You will be required to construct a knowledge test to evaluate the effectiveness of a programme or a project.

It consists of the following steps.

### Collection of Items

The test consists of questions called items. The first step is to collect all items, which are relevant in terms of the objectives of the programmes, and the ability of the respondents to answer. Take the help of subject matter experts in collecting and writing the items.

Select the items on the following criteria.

- They should promote thinking rather than rote memorizing
- They should be able to differentiate well-informed persons from the poorly informed ones. In other words, these should be neither very difficult nor very easy.

Collect all items to cover the entire universe of the relevant behavioural aspects of the knowledge of a particular issue.

### Types of Questions

The questions can be objective and explanatory type

Objective type questions may have two alternatives such as YES or NO. The respondents are required to tick the correct answer. For example, 'Is apple a good source of iron mineral?'

*Yes*

*No*

Or it may be a multiple-choice question, out of which one reply is correct. For example, 'which fruit is a good source of iron mineral?'

*Apple*

*Orange*

*Mango*

*Banana*

In the explanatory type questions, the respondents are required to write a few sentences in reply. For example, 'Why is it necessary to chew food well before swallowing it?'

### Pre-testing of Items

After collecting the items, send these to a few experts to get their comments on the selection and construction of the items, length of the test and whether any area of the behavioural aspect in terms of the stated objectives has been left out and needs to be incorporated.

Revise the test in the light of the comments.

## Scoring of Items

In the objective type questions, scoring is done by assigning the score of one to the correct answer, and zero to the incorrect answer.

In the explanatory type questions, the scoring is done in the following way.

	<i>Score</i>
<i>Correct and complete reply</i>	2
<i>Correct but incomplete reply</i>	1
<i>Incorrect reply</i>	0

## Item Analysis

Item analysis is done to determine the index of difficulty of each item. The idea is to discard those items, which are either very difficult or very easy, and are not able to discriminate well-informed persons from poorly informed persons.

For this, administer the test to a small sample of the respondents says 60. These respondents should be different from the respondents selected for the study, but similar to them.

Arrange the respondents in order of scores obtained by them from the highest to the lowest.

Divide them in six equal groups. Given that the respondents are 60, there will be 10 respondents in each group.

Take the upper two groups with the highest scores, and the lower two groups with the lowest scores, and discard the middle two groups.

Now, taking each item at a time, find out its index of the difficulty by using the following formula.

$$\text{Difficulty Index : } \frac{(G1 + G2) - (G5 + G6)}{N/3}$$

Where

G1, G2, G5, and G6 are the frequencies of correct answers in the four groups.

N is the total number of respondents.

For example, if the frequency of correct answers of a particular item in the four groups are :

G1	G2	G5	G6
10	7	5	2

Its difficulty index would be

$$\frac{(10 + 7) - (5 + 2)}{60/3} = \frac{10}{20} = .5$$

Generally, items with the difficulty index of .2 to .8 are considered for inclusion in the final test. The rest of the items are discarded.

## **Reliability Test**

Reliability of the test is determined in two ways.

### **Split - Half Technique**

Number the items. Divide the test in two equal halves, odd numbered in one half and even numbered in the other half.

Administer the two forms of the test to two separate groups of respondents. Let the sample of each group be small, say 20

Having two sets of scores, calculate the co-efficient of correlation. Significant co-efficient of correlation shows that the items have internal consistency.

### **Test - Retest Technique**

In this method, the test is administered twice to the same set of respondents after some interval say a fortnight or a month.

Calculate the co-efficient of correlation between the two sets of scores. Significant co-efficient of correlation shows that the items are stable in character.

The draft of the test would need revision if the co-efficient of correlations were not found significant. The test is revised accordingly and again tested for index of difficulty and reliability.



## Construction of Attitude Scale

Attitude is the degree of positive (favourable) or negative (unfavourable) opinion associated with some object, event or person. You may be required to measure or quantify the attitude of your audience at different stages of the media project such as

- To know the existing attitude of the people (baseline study)
- To find out the change in attitude of the people after exposure to media (summative evaluation)

### How Do We Measure Attitude?

Different techniques are available to measure attitude. One is to use a rating scale. A simple technique to construct an attitude rating scale is described below:-

#### Collection of Items or Statements

Informally discuss the issue with the people, extension workers, experts, NGOs and also consult secondary sources. Based on that, collect a set of such statements on the issue as the acceptance or rejection of each should imply a different degree of favourable or unfavourable attitude towards that issue. It could be a negative or a positive statement such as:

- TV is not doing any good to society (negative statement)
- TV is a good source of entertainment (positive statement)

#### Editing of the Statements

After having collected as many relevant statements as possible, the next step is to go through each statement carefully and edit them by keeping the following criteria in view:

Avoid such statements as

- Refer to the past (*At one time TV used to attract large number of people*)
- Are factual (*such as TV is a modern medium*)
- Can be interpreted in more than one way (*TV is good in some ways and bad in other ways*)
- Are irrelevant to the object under consideration
- Are likely to be endorsed by almost every one or no one (*Buying a TV set proves expensive*)
- Contain more than one thought
- Contain double negatives (*Most people do not think that TV does not entertain*)
- Contain words that may not be understood by the respondents (*TV is an electronic medium*)
- Contain such universals such as all, always, none, never, often etc as these introduce ambiguity
- Contain such words as only, just, merely etc.

On the other hand, retain such statements as

- Contain only one complete thought
- Are short
- Are simple, clear and direct

After editing and rewriting, take the help of your colleagues, experts and other informed persons to retain good statements. You may end up with 15-20 statements.

### **Selection of the Statements**

The next step is to remove those statements, which do not discriminate well between persons holding different attitudes. For this, administer the entire set of selected statements to a random sample of about 50-100 people representing your audience and asking them to give their reaction to each statement against five rating points or three rating points, as shown below:-

<b>Statement</b>	<b>Five point rating scale</b>				
<i>Schools with TV show better academic results</i>	<i>Strongly agree</i>	<i>Agree</i>	<i>Undecided</i>	<i>Disagree</i>	<i>Strongly disagree</i>

<b>Statement</b>	<b>Three point rating scale</b>		
<i>Schools with TV show better academic results</i>	<i>Agree</i>	<i>Undecided</i>	<i>Disagree</i>

Some people have difficulty in making a distinction on a five point rating scale, and feel more comfortable with a three point rating scale.

### **Scoring of Statements**

For the purpose of scoring, assign the numerical value of 5 to strongly agree, 4 to disagree, 3 to undecided, 2 to agree and 1 to strongly disagree in case the statement is positive or favourable to the object. In case the item is negative, reverse the order of scoring.

For the three point rating scale, assign the numerical value of 3 to agree, 2 to undecided and 1 to disagree for positive statement. Reverse the order of scoring for the negative statement.

If the total number of statements is 20, the maximum score that a person can obtain is 100 and the minimum 20 on a five point rating scale. Similarly, the maximum and the minimum scores on a three point rating scale would come to 60 and 20 respectively.

Work out the total score for each respondent by summing the weight of the individual item responses, and arrange them in the descending order.

Take twenty five percent of the respondents with the highest scores, and also twenty five percent with the lowest scores.

Now, work out the mean score of each statement for the high group as well as for the low group.

If the two mean scores of a statement are close to each other, it implies that the statement is not able to discriminate well between persons holding different attitudes, and you can safely reject those statements.

Retain only those statements where the mean score for the high group and that for the low group are distinct from each other. Reject the other statements.

For evaluating the responses of the high and low groups to the individual statements more precisely, you can go further and work out critical ratio or 't' value by using the following formula:-

$$t \text{ value} = \frac{\bar{X} H - \bar{X} L}{\frac{\sqrt{\sum (X_H - \bar{X} H)^2 + \sum (X_L - \bar{X} L)^2}}{n(n-1)}}$$

$$\sum (X_H - \bar{X} H)^2 = \sum X_H^2 - \frac{(\sum X_H)^2}{n}$$

$$\sum (X_L - \bar{X} L)^2 = \sum X_L^2 - \frac{(\sum X_L)^2}{n}$$

$\bar{X} H$  = Mean score on the given statement for the high group

$\bar{X} L$  = Mean score on the given statement for the low group

$\sum X_H^2$  = Sum of squares of the individual scores of the given statement for the high group

$\sum X_L^2$  = Sum of squares of the individual scores of the given statement for the low group

$(\sum X_H)^2$  = Square of the sum of the scores of the given statement for the high group

$(\sum X_L)^2$  = Square of the sum of the scores of the given statement for the low group

n = Number of respondents in each group

A rule of thumb is to reject items with critical ratio less than 1.75. Higher the 't' value, better the statement in terms of its showing the attitude of the people.

This is generally known as Likert Technique of constructing attitude scale.

An example of the rating scale for measuring attitude of farmers towards television developed by using Likert Technique is given below. It may be mentioned that in this instance TV was available for viewing for a limited period in the evening in the community set up.

S. No.	Statements
1.	Sometimes I feel our village was better without TV.
2.	After watching TV, one feels one has wasted one's time.
3.	TV has no place in the socio-cultural milieu of the rural set-up.
4.	If one can afford, one must buy a TV set of one's own
5.	TV viewing farmers are better informed about what is happening in the outside world.
6.	Everyday TV offers useful and good programmes.
7.	Whatever progress our village has made in the sphere of agriculture, it would have done so even without TV.
8.	It is better to do some work in the house rather than go to watch TV.
9.	Watching TV is a pleasant way to spend a few evening hours.

## Guidelines for In-depth Interviews with the Custodians of the TV Viewing Community Centers

**Objective :** To find out reasons for low attendance at the educational telecasts, and what can be done to improve it.

### Background Information

- Name
- Age
- Education
- Gender
- Do you belong to this village?
- Since how long telecasts are being shown in the village?
- Since how long you are TV custodian?
- What else do you do for a living?
- Requirements of your regular occupation in terms of timings, total hours? Any additional seasonal requirements?

### Nature of Duty

- What is the nature of your duty as a TV custodian?

*Operating the TV set*

*Reporting the fault*

*Maintenance of records*

*Any other (Probe)*

### Operating the TV set

- Were you given training in operation of the set? When? For how long?
- Was it enough? Do you think you need more training? For what purposes?
- What is generally the quality of reception on the TV? Sound? Picture? (Probe)
- How many days in a month electricity is not available? (Probe)

#### Number of days in a month

*All the time*

*Part of the time*

## Reporting the Fault

- What is the frequency of breakdown of the TV set? (days in a year) (Probe)
- To whom do your report?
- Facilities for reporting? Prepaid cards etc.
- How many days does it take to repair?

## Maintenance of Records

What different records are to be maintained by you? Period of reporting?. To whom sent? Difficulties in keeping records and dispatch of reports.

Nature of records	Period of reporting	To whom sent	Difficulties for keeping records and dispatch of reports

## Difficulties Faced by the TV Custodian

Are there any strains/difficulties faced by you in functioning as a TV custodian? If so, what are those?

### Reaching the Centre

- How far do you live from the centre? How much time does it take to reach the centre?
- Do you keep a watch? How do you mark time?
- Is it ok to move in the dark especially while returning in the evening?
- Do the people wait when you are late? (Probe)

### Honorarium

- What is your honorarium?
- Is the honorarium paid to you on time?
- How easy or difficult it is for you to collect honorarium?

### Clash with the Regular Occupation

How often these is a clash between your functioning as a TV custodian and your occupational and social obligations (days in a month)?

What arrangements do you make when there is a clash? (Probe)

### Other Difficulties

Operating and safety of the set

Accommodating the audience, maintaining order, controlling misbehaviour etc .

Any other

### Audience

On an average, how many people visit the centre on a single day?

- Children
- Women
- Men

Any seasonal variations? Winter/Summer/Sowing time/Harvesting time.

**Children**

Are there any programmes especially designed for the children? On what days? What are the themes?

**Women**

Are there any programmes especially designed for the women? On what days? What are the themes?

**Men**

Who are they?

Landless labours, farmers, other occupations. Among farmers are they mostly big or small farmers?

Do the people from limited households visit or do they represent the cross selection of the village population?

What distance do they come from? Are they from nearby neighborhood or from all parts of the habitation?

For what reasons people generally visit the TV centre? (Probe each reason)

- Just to pass time
- Entertainment
- Information & learning
- Any other

For what reasons people choose not to visit the TV centre? (Probe each reason)

- Distance
- Not safe to more in the dark
- Erratic power supply
- Unsatisfactory viewing conditions
- Programmes not interesting
- Social reasons
- Any other

**Suggestions**

What you think can be done to increase attendance? (Probe)

- Improve infrasture (bigger room)
- Assured power supply
- Better programming/themes
- More TV centers in the village
- Better timings
- More publicity to the service
- Co-ordination with the community leaders
- Any other

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#### **COL Mission**

Recognising **KNOWLEDGE** as key to cultural, social and economic development, The Commonwealth of Learning is committed to assisting Commonwealth member governments to take full advantage of open, distance and technology-mediated learning strategies to provide increased and equitable access to education and training for all their citizens.

#### **CEMCA Mission**

In consonance with the mission of the Commonwealth of Learning, the Commonwealth Educational Media Centre for Asia promotes the meaningful, relevant, and appropriate use of information and communication technologies to serve the educational and training needs of Commonwealth member states of Asia.



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