# **CHAPTER IV**

# Data exercise

### 4.1 Introduction

A radio program disseminates information to its audience during its broadcast. However, one needs to gather information at different stages of the radio project, for example: needs assessment, monitoring and evaluation. A number of techniques can be used to compile information, depending on time, money and other constraints. Common tools, used for information collection are: stakeholder consultation, secondary sources review, questionnaire survey, focus group discussion, in-depth interview and observation.

In the needs assessment of a radio project, information is collected to establish what the target population currently knows, believes and does about a chosen issue so that it can be compared with what professionals think the target population needs to know and do to make a positive difference to their health. For the purpose of needs assessment, this project includes the following data collection instruments: stakeholder consultation, secondary sources review, in-depth interview, focus group discussion and questionnaire survey.

For the purpose of data exercise also, in-depth interviews and focus group discussions were done. The purpose behind doing this data exercise was to use both tools; focus group discussion and in-depth interview, to identify the existing knowledge and practices of study population so that when these tools are used in the real situation for similar purpose these tools can be used more effectively.

# 4.2 Objectives of the Data Exercise:

- 1. To test and refine the data collection instruments.
- 2. To develop the practical knowledge and skills of data collection techniques.

### 4.3 Data Collection Techniques,

For the data exercise, focus group discussions and in-depth interviews were conducted. Both of these techniques are to be used as major techniques in needs assessment and evaluation of the radio project.

### 4.4 Focus Group Discussion

Two focus group discussions were done for the purpose of this data exercise. But initially only one focus group discussion was planned. One focus group discussion was done in 4 September, 1999 in the College of Public Health, Chulalongkorn University. There were five participants, all of them were students of the Master of Public Health Program (learning-at-the work place). All of them owned at least one vehicle. Although the participants cooperated well, it was later realized another focus group discussion was also needed as this focus group discussion did not have enough participants and participants characteristics were not similar to target

population. Moreover, importantly it was felt that some of the key issues to be explored did not surface in this discussion. After realizing this drawback, there was another major focus group discussion on the 25 October 1999 in Phahurat, Bangkok. However, the findings of both focus group discussions are incorporated in this chapter.

### 4.4.1 Sampling

The seven participants were selected purposively among the vehicle drivers of the Indian and Nepalese community of Phahurat, Bangkok for the data exercise.

Moreover the participants were chosen according to convenient of the key informant.

# 4.4.2 Field Preparation

Since, the target population of this project are taxi drivers in Kathmandu valley, Phahurat was chosen for the focus group discussion because the sample population has a lot in common with the real target population in regard to their origin, language, culture and religion.

Researcher visited the Phahurat areas four times before conducting the focus group discussion, in order to a build rapport with the local community. Consent is a necessary part of the focus group discussion. To obtain such consent, on the 16 October 1999, the researcher contacted with the gurudwara authority in order to inform him about the thesis topic, purpose of data exercise, required number of the participants, place for discussion and other facilities needed to conduct the focus group discussion.

#### 4.4.3 Field Activities

On 25 Oct 1999, there were 7 participants and one note taker (Mr. Suresh Tiwari, ) one observer (Mr. Ram Kandel) and moderator in the hall of gurudwara which is commonly used for meditation. The discussion was preceded by the introduction of all participants involved in that discussion to each other. The objective and purpose of visit were clearly stated to participants.

### 4.4.4 General Characteristics of Participants:

There were seven male participants, all of them drive vehicles. Two of them drive their scooters/ motorcycles. Two of them have their own cars. Three of them work as drivers for local travel agents. All of the scooter/motorcycle owners are shop keepers in Phauhurat. They use scooters basically to transfer goods. The car owners are local businessmen. All of them have monthly minimum incomes of around 20,000 baht, although the range of incomes varies greatly. All of them were Indian or Nepali in origin and between 20-50 years old. All of them were at least high school educated.

### 4.4.5 Findings of Focus group discussion

# Knowledge of air pollution

All the participants attending the discussion were aware of air pollution. They did not have knowledge about specific pollution such as lead pollution and particulate matter pollution.

### Causes and Consequences of Air Pollution

They considered motor vehicles, industries, roadside cooking and construction as sources of air pollution. All of them were unanimous on the fact traffic is a major source of air pollution in the city. Most of them considered consequences of air pollution as similar to smoking. Few of them even thought that it did not make any difference whether one smoked or not in Bangkok because s/he is always breathing smoky air from pollution. They were quite worried about air pollution. Participants of Phahurat felt that their families were more susceptible to consequences of air pollution as they did not have air conditioners on their homes and work places. Motorcycle owners perceived more threat from consequences of air pollution as they are more exposed to air pollution.

#### Vehicle emissions and control

All the participants considered that until the number of vehicles are reduced and the problem of traffic jams is solved, all other efforts are insignificant. Most of the participants believed public buses with old engines were the major polluters in the city. Most of the participants agreed that vehicle condition plays a vital role in vehicular emission; however, a motorcycle owner felt that a motorcycle, being small, produces insignificant pollution.

### Maintenance

Most the participants knew maintaining their vehicles can reduce pollution.

All of them followed the maintenance guidelines as given in the manual when their vehicles were relatively new. As the vehicles become older, they maintained their vehicles only after they fail to run. Motorcycle or scooter owners felt that as a

motorcycle has a very small engine and it consumes relatively less oil than other vehicles, motorcycles and scooters are very insignificant polluters. Only those participants who drive cars as professional drivers knew that proper adjustment of the air filter, fuel filter, carburetor, tappet setting is vital to reduce emissions.

### 4.4.6 Findings of the Process

All the participants did feel some kind of hesitation to speak at the beginning of the discussion. But after a strong persuasion of moderator, all the participants started to express their thought. This fact suggests that if the research team is stranger to participants it will be better to start a discussion in an informal manner and also with indirect issues initially to drag participants on the discussion. Similarly as the discussion went along few of the participants seemed to be waiting for discussion to end and did not want to take part on it.

# 4.4.7 Limitation of Focus Group Discussion:

The target population of the project is the taxi drivers of Kathmandu valley. None of the participants of focus group discussion in Phauhurat, Bangkok was a taxi driver. Time is the another limitation as most of the participants were businessmen they were in hurry. The other main limitation was a lack of familiarity with participants, since the researcher was an stranger to most of participants, to some extent credibility was lacking.

### 4.5 In-depth Interview

The following findings are based on the two in-depth interviews. Interviewees were chosen on the basis on their profession and their ability to speak english. One of the interviewee is a student of Master degree and has his own vehicle and the other is a driver cum mechanic of an apartment.

# 4.5.1 Findings of In- depth of Interview.

# Knowledge of air pollution

Interviewees were well known about air pollution. Most of them gave more or less appropriate answer when they were asked "what do you mean by air pollution"? But nobody knew about specific air pollution ( $PM_{10}$  and lead pollution) and its health affects.

### Causes and Consequences of Air Pollution

Both interviewees blamed vehicles, industries, roadside cooking (by using coal) and households as the major sources of air pollution. They considered vehicles as the number one polluter in Bangkok. They had a basic idea about the consequences as they considered air pollution responsible for respiratory disease, skin diseases and lung cancer. Both of them emphasized air pollution, in particular, causes cough. Interestingly one even linked these diseases to the rise in carbon monoxide in the air because of air pollution. One of interviewee considered air pollution is similar to smoking in its health damage. The other interviewee also believed that air pollution can also cause diarrhea.

#### Vehicle emissions and its control

From the in-depth interview, it is known that interviewees considered buses, taxi and tuk-tuks as the major source of vehicular emissions. They believed buses created more air pollution than others. One of them considered this because public buses are not owned by any individual, no one is responsible for their maintenance. They thought their cars are also responsible for air pollution. They also belief that traffic jams are a major cause of air pollution in Bangkok. Hence, interviewees considered their cars playing a less significant role in polluting air. Interviewees considered that there would not be any significant improvements in air pollution until the problem of traffic jams is overcome. Interviewees even considered that there should be policy level intervention to reduce the numbers of car and traffic jams to mitigate air pollution.

### Maintenance

The interviewees considered that vehicle condition is very important to reduce emissions. All of them agreed that maintenance of vehicles plays a crucial role in reducing emission. They admitted that their vehicles were regularly maintained when the cars were new, but one of the interviewees admitted that now he was maintaining his car only when it broke down. The other interviewee claimed he was maintaining his vehicle at regular interval of 5000 kilometers. Both interviewees knew that air filter, fuel filter, spark plug, contact points and carburetor have vital roles in the reduction of emissions and realized appropriate maintenance of these parts is essential. In –depth interviews revealed that maintenance of above-mentioned parts

cost 700- 1,000 baht varying according to model and company. Both interviewees were familiar with about other benefits of maintenance as that pointed out that maintenance can prolong vehicle life, adds safety and increase resale value.

### 4.6 Discussion

Most of the participants have the basic knowledge about the causes and consequences of air pollution, and some of them also had wrong beliefs as one of the in-depth interviewees said that air pollution can cause diarrhea. Most of the participants tried to make traffic jams an excuse for not maintaining their vehicles saying there would not be significant improvement in the present situation if the problem of traffic jams is not solved. Most of the participants seemed to be frustrated with air pollution in Bangkok as they expressed it does not make any difference whether one smokes or not as one is always breathing smoky air exhausted from vehicles. Cost does not affect maintenance as all the participants admitted that they maintained their vehicles when their vehicles were relatively new. Most of the participants did not know how much it costs to carry out maintenance of parts such as air filter, fuel filter, carburetor, tappet settings etc.

### 4.7 Conclusion

People are aware of air pollution, and they have superficial knowledge of causes and consequences of air pollution. They think until the traffic jams and the number of vehicles is controlled, maintenance of their vehicles is not going to be effective in reducing air pollution. They maintain their vehicles when they are relatively new irrespective of the cost involved in the maintenance; but, as the vehicle

gets old, they do not maintain the vehicle unless it stops running. This implies that cost may not be a barrier to maintenance in real term as the same owner maintains his/her vehicle regularly when it is new. Most of the participants considered that spending on maintenance did not get priority as long as the vehicle was running. Most of the participants do not know about what parts should they maintain in order to reduce vehicle emissions; moreover they do not know how much it would cost to maintain these parts.

### 4.8 Lessons Learned from Data Exercise

Both focus group discussions and in-depth interviews are effective instruments to explore the various issues involved. It was found that both instruments are very handy to explore different issues involved in knowledge, behavior and practices related to issue chosen. It is felt that before doing focus group discussions, it is essential to establish a good rapport with the participants. In absence of sufficient rapport, discussion will lose its effectiveness, and it seems that all the participants will take the discussion as a formal obligation without any real interest. Focus group discussions should be done at the leisure time of the participants. For real setting, the most suitable time for the participants should be chosen. There should be real effort to convince every participants about the importance of the project so that they will participate with genuine interest. Moreover, there should be some incentives to at least make up their time lost. It is felt that the role of moderator is vital, as it is often literate and vocal participants who dominate the discussion.

Moreover, the group of participants should be homogeneous in nature to minimize the domination of literate participants. One of the problems involved in focus group discussions is that it is difficult to gather participants especially in urban areas for a period of at least one hour as people in urban areas are busy and are not interested in joining a discussion without any remuneration. Thus, it suggests that in such situations, some kind of incentive should be provided in order to make up their time lost. It is also felt that interviews not only help to explore the chosen issue but it also helps to design guideline questions for the focus group discussion especially a researcher who does not have ground knowledge on the subject. Therefore, if in-depth interview precedes focus group discussion it will help to design guideline questions for the focus group discussion.