Chapter III  
Research Methodology

“All progress is born of inquiry. Doubt is often better than overconfidence, for it leads to inquiry, and inquiry leads to invention” is a famous Hudson Maxim in context to the significance of research.

**Research methods** are the various procedures, schemes and algorithms used in research. All the methods used by a researcher during a research study are termed as research methods. They are essentially planned, scientific and value-neutral. They include theoretical procedures, experimental studies, numerical schemes, statistical approaches and others. Research methods help us collect samples, data and find a solution to a problem. It is also defined as the study of methods by which knowledge is gained. Its aim is to give the work plan of research.

**Research methodology** is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. In it we study the various steps that are generally adopted by a researcher in studying his research problem along with the logic behind them (Kothari, 1985). Essentially, the procedures by which researchers go about their work of describing, explaining and predicting phenomena are called research methodology. It is necessary for the researcher to know not only the research methods/techniques but also the methodology. Researchers not only need to know how to develop certain indices or tests, how to calculate the mean, the mode, the median or the standard deviation or chi-square, how to apply particular research techniques, but they also need to know which of these methods or techniques, are relevant and which are not, and what would they mean and indicate and why. Researchers also need to understand the assumptions underlying various techniques and they need to know the criteria by which they...
can decide that certain techniques and procedures will be applicable to certain problems and others will not. All this means that it is necessary for the researcher to design his methodology for his problem as the same may differ from problem to problem. When we talk of research methodology we not only talk of the research methods but also consider the logic behind the methods we use in the context of our research study and explain why we are using a particular method or technique and why we are not using others so that research results are capable of being evaluated either by the researcher himself or by others.

**Questionnaire and pre-testing**

Pre-testing gives a pre idea to the researcher regarding his research. After pre-testing the data, researcher can make many changes which are useful for the study. It saves time and energy of the researcher. The researcher has conducted a pre test among 20 respondents in the sample villages of the universe. After the pre test some the researcher translated the questionnaire into the language used by the local people so that they can understand the questions.

**Design/ Method:**

*Survey research* is a specific type of field study that involves the collection of data from a sample of elements drawn from a well-defined population (e.g., all adult women living in the United States) through the use of a questionnaire (for more lengthy discussions, see Babbie, 1990; Fowler, 1988; Frey, 1989; Lavrakas, 1993; Weisberg, Krosnick, 6 Bowen, 1996).

A "survey" can be anything from a short paper and pencil feedback form to an intensive one-one to one in-depth interview.
In this study, the survey method was used with the help of a structured questionnaire for the rural population in the selected districts of Raebareli and Varanasi. A separate questionnaire was also prepared to examine the views of administrative government officials involved in rural development programmes. Survey method is considered as a very popular and scientific method these days for discovering the relevant impact and inter-relationships of socio-psychological variables from given populations. This method was quite significant in making valuable contribution to the study and has directly helped in the improvement of the sampling procedures and their applicability to real world situations besides also suggesting improvements in resolving the complex situations to unambiguous experimentation with a view to obtaining research findings.

**Merits and Demerits of Survey Research:**

**Merits:**

1. “They can be used to investigate problems in realistic settings. Newspaper reading, television viewing, radio listening, and consumer behavior patterns can be examined where they happen rather than in a laboratory or screening room under artificial conditions.

2. ‘The cost of surveys is reasonable when one considers the amount of information gathered. Researchers also can control expenses by selecting from four major types of surveys: mail, telephone, personal interview, and group administration.

3. ‘A large amount of data can be collected with relative ease from a variety of people. Survey allows researchers to examine many variables (demographic and lifestyle
information, attitudes, motives, intentions, and so on) and to use a variety of statistics to analyze the data.

4. ‘Surveys are not constrained by geographic boundaries; they can be conducted almost anywhere.

5. ‘Data helpful to survey research already exists. Data archives, government documents, census materials, radio and television rating books, and voters registration lists can be used as primary sources (main sources or data) or as secondary sources (supportive of data) of information. With archive data, it is possible to conduct an entire survey study without ever developing a questionnaire or contacting a single respondent.”

While survey research has many advantages over other research approaches, it also bears some disadvantages.

Demerits.

1. ‘The most important demerit is that independent variables cannot be manipulated the way they are in laboratory experiments. Without control over independent variables, the researcher cannot be certain whether the relationships between independent variables or dependent variables are causal or non causal.

2. ‘Inappropriate wording or placement of questions within a questionnaire can bias results.

3. ‘The wrong respondents may be included in survey research. For example, in telephone interviews, a respondent may claim to be 18 to 24 years old but may in fact be well over 30 years old.
4. ‘Some survey research is becoming difficult to conduct. This is especially true with telephone surveys, where answering machines, call blocking, caller IDs, various state and local regulations against calling people at home, and respondents unwilling to participate lower the incidence rates (the percentage of people who agree to participate in the survey).’ (Wimmer & Dominick, 2003, pp. 167-168).

*Justification of selecting survey design*: The survey is described by Edwards & Talbot (1999, p. 88) as being like an onion, with data from questionnaires similar to peeling off some outer layers of skin, but being supplemented by interviews to get to the in-depth layers.

Bell (1987, p. 13) has suggested that a representative selection of the population can be targeted by a survey.

The survey method is used to investigate problems in realistic settings and one more big advantage of survey is that the cost of survey is reasonable when one considers the amount of information. Surveys are not constrained by geographical boundaries. We can conduct a survey almost anywhere. It is very easy to conduct surveys through different media. Mail, telephone, personal interview and group administration can also be used.

The present research is related with the participatory communication strategy adopted by the government agencies and its effectiveness. At the same time the researcher has collected data from the government officials and common people so that it is quite easy for the researcher to compare and arrive at conclusion as to who are more effectively doing their work in the field of rural development. For this, the survey method is the best way to find out the result. Most of the developmental studies are easy when the survey method has been
used. It is now a day very popular and widely used in media studies. It has also been observed from the literature review that many researchers have preferred this method of data collection for investigating and resolving the same nature of problems relating to communication strategy and its effectiveness in rural development. In fact, surveys have become such a vital part of our social fabric that we cannot assess much of what we read in the newspaper or watch on television without having some understanding of survey research. Other researchers also used the survey method as part of their study. In mass media research, survey is widely recognized by the researchers as well as the institutions. Some of the research which was conducted by using the survey method is as follows:

- “Investigating the Effects of Mass Media on Students Modernist socio-political attitudes (A case of Isafahan University’s students)” by Hamid Dehghani and Seyyed Alli Hashemianfar (2014)\(^{10}\). This study was carried out by using survey method and investigates the effect of mass media on the student’s modernist socio-political attitudes. The investigator reports that mass media have contradictory impacts on attitudes of students.

- “Evaluating harm associated with anti-malarial drugs: a survey of methods used by clinical researchers to elicit, assess and record participant-reported adverse events and related data” by Elizabeth N Allen (2013)\(^{11}\) published in an online Malaria journal. Participant reports of medical histories, adverse events and non-study drugs are integral to evaluating harm in clinical research. However, interpreting or synthesizing results is complicated if studies use different methods for ascertaining and assessing these data. To explore how these data are obtained in malaria drug studies, a descriptive online clinical researcher was conducted during 2012 and 2013 (Allen, 2013, pp. 1-7)\(^{12}\). 

90
Louis Lam (2012) in his study “An Innovative Research on the usage of Facebook in the Higher Education context of Hong Kong” examines how these Facebook benefits relate to student motivation in learning. For this study the survey method has been used. The results revealed that Interrelationship, Communication, Social Relationship, and Participation influence significantly on student learning motivation.

**Sampling Technique**

“Mass media researchers frequently use non-probability sampling, particularly in the form of available samples. An available sample (also known as convenience sample) is a collection of readily accessible subjects for study, such as group of students enrolled in an introductory mass media course or shoppers in a mall. Although available samples can be helpful in collecting exploratory information and may produce useful data in some instances, the samples are problematic because they contain unknown quantities of error. Researchers need to consider the positive and negative qualities of available samples before using them in a research study,” (Wimmer & Dominick, 2003, pp 87).

The researcher has adopted the sampling method for this study. The convenient sampling for selection of two developed blocks from each district was taken on the basis of villages in which the panchayats have worked and has utilized the government rural funds. Further, the method was also applied to access the beneficiaries of the rural development programs and collect useful information relevant for the study.

**Merits and Demerits of Sampling Technique**

**Merits:**
Very often sampling method is preferred to census method of collecting data, because of the following reasons.

i. The sample method involves less cost than the census method. Because here only a part of the population is examined. So it is economical.

ii. Sample study saves time and provides quick result.

iii. Sampling method often provides more accurate information than the census method. Because here we survey only a few items of the population. Sampling is generally done by trained and experienced persons. It facilitates intensive study and getting detailed information about the population.

iv. To get approximate or aggregate results sampling is generally preferred to census method.

v. In the case of large population, sample method is more suitable than census method for collecting information.

vi. Non-sampling errors can be better controlled in sample survey than in census method.

Therefore, sampling involves less time provides accurate informations in a scientific and economical manner in comparison to census method.

**Demerits:**

Sample method also has a number of drawbacks. Some of the important drawbacks of this method are given below.

i. If it is a question of deliberate selection, the result may be very much biased. This shall mislead the enquiry.
ii. All characteristics of the population may not be found in the samples drawn from the population.

iii. Information from sampling methods are relatively less accurate than that from census method.

iv. Sample survey needs proper planning and execution by trained personnel. Otherwise it may give wrong results.

v. The law of inertia of large numbers, accuracy and approximation are less accurate in this method as compared to the census type of enquiry.

In spite of the above demerits the sampling method is gaining popularity day by day. This is primarily because the method is theoretically more correct and practically more convenient.

**Study Universe and Sample Size**

The universe of the study is Unchahar and Dalmau blocks under Raebareli district; Chiraigaon and Haruha blocks under Varanasi District. One village each from the two blocks of the district has been taken into account for the purpose of selecting the respondents. In the first phase, the two villages covered in Raebareli are Kand Rawan, 3km from Unchahar and Aihar near to the rail coach factory. From the Varanasi districts, the villages covered are Bhabhanpura, on the outskirts of Varanasi, 7kms and the other village is Lamhi or Lamahi a known village where Munshi Premchand was born. In all the four villages, the researcher was able to get good response in terms of the field work questionnaire. In each village mentioned, the researcher has collected data from 125 respondents, thereby constituting 250 respondents from each district. In total 500 respondents have formed the sample size. An effort has been made to collect data from the
government officials who are involved with the rural development programmes and also to
gather an overall assessment of people’s participation and cooperation to make out these
schemes successful as well as empowered.

**Research tool of the study:** The researcher has developed a questionnaire as a tool for data
collection from the selected respondents. “This method of data collection is quite popular,
particularly in case of big enquiries. It is being adopted by private individuals, research
workers, private and public organizations and even by governments,” (Kothari, 1985, pp 100)\(^1\). Two sets of closed-ended questionnaires have been developed for data collection
from the respondents. In closed-ended questions, respondents select an answer from a list
provided by the researcher. These questions provide greater uniformity of response and the
answers are easily quantified. The researcher has developed separate questionnaires for
common man as respondents and government officials. The questionnaire of common
respondents consists three parts.

- Part A of the questionnaire for common man as respondents is about the general
  information, demographic profile, educational and economical status, and awareness
  about the citizen’s rights. It has total 12 questions.

- Part B of the questionnaire for common man as respondents is about the communication
  usage pattern and developmental strategy for communicating rural development
  programmes. The respondents’ awareness has been sought on the source of information
  for welfare schemes, level of satisfaction, obstacles to communication and corruption
  exposure. The total number of question in this part is 17 (Q.13 to Q. 29).
• Part C of the questionnaire for common man as respondents is about the credibility of information sources, means for approaching officials, feedback mechanism and coverage of development issues by media. Here respondents are asked to rate the performance of media on rural issues and give their critical opinion on the media’s role. The total number of question in this part is 7 (Q. 30 to Q. 36)

The questionnaire which deals with the government officials also consists of three parts:

• Part A of the questionnaire is about the basic demographic information of government officials. In this part, the total number of questions is 5.

• Part B of the questionnaire deals with citizen’s right, education, computer literacy, usage of medium of communication and work experience. This part consists of a total 11 questions (Q.5 to Q.15).

• Part C of the questionnaire deals with the communication strategies adopted by the government officials while dealing with the rural population. Their awareness level about development schemes, problems in pursuance of their communication with rural population. Questions were also related to possibility of corruption and whether significant change at grass-root level observed as the positive outcome of their communication strategies. This part consists of a total 18 questions (Q.16 to Q.33).

Primary and secondary sources of data: The researcher used both primary and secondary sources of data. The primary sources of data were identified by the researcher himself for the survey and the secondary sources of data comprised of government data sheets, reports and memoirs.
Analysis of data: Percentage analysis has been used by the researcher for the analysis of data. “Percentage analysis is the method to represent raw streams of data as a percentage (a part in 100-percent) for better understanding of collected data.” It is quite easier and helpful for the researcher to do percentage analysis. On the basis of this method, the researcher has drawn the findings.

Justification for Area Selection

This study is based on the analysis of existing condition of rural development in the two districts of Uttar Pradesh (U.P.). It is an extensive study on the rural development scenario in Uttar Pradesh. The selected districts, Raebareli and Varanasi has been taken into account as the former holds the backward district tag and the latter as a fast developing district. Striking development gaps have emerged between the districts when compared with national and state level indicators. Further, the districts are largely rural in nature with relatively low level of urbanization. It could be seen that about forty three per cent of population in Varanasi and only nine per cent in Raebareli reside in urban areas. Raebareli is a political family domain with representation of National Congress Party: Feroze Gandhi (1951-52, 57) Indira Gandhi (1967, 71 80), Arun Nehru (1984) and Sonia Gandhi (2004-2014). It is an emerging industrial district with top educational and skill development institutes like National Institute of Fashion Technology (NIFT), Rajiv Gandhi Institute of Petroleum Technology (RG IPT), Footwear Design and Development Institute (FDDI), National Institute of Pharmaceutical Education and Research (NIPER) and foundation has been laid for All India Institute of Medical Sciences (AIIMS) centre. In addition, FM Rainbow channel, roads and over a dozen of bank branches has been inaugurated recently (The Hindu December2, 2013). Despite these achievements it suffers on national average literacy as the
all India literacy rate, according to 2011 census, is 82.14% for men and 65.46 for women, but in Raebareli, it is 79.39% for males and 58.06% for females. Varanasi or Benaras (also known as Kashi) is one of the oldest living cities in the world and is the cultural capital of India. It is well-connected by air, rail and road. Varanasi is Bharatiya Janata Party (BJP) bastion with representation in Parliament from the constituency: Shrish Chandra Dikshit (1991), Shankar Prasad Jaiswal (1996, 98, 99), Dr. Murli Manohar Joshi (2009) and Shri Narendra Modi since 2014, is the present Prime Minister of India. Besides a pilgrim town having historical background, a tourist place, it is a centre of knowledge and learning. Politically active Varanasi having showcase of several development projects from a holy city to grand makeover, film city (Hindustan Times, November, 22, 2014) is still under lens for ‘urban-rural divide’ as a barrier in the action plan for development. Both the districts reflect lower development indices though higher in terms of government schemes. Moreover, the communication policies or the participation strategies involved for rural development in the area were the major concern of the study as the flow of central and state government funds are unable to bring the optimum change in the rural livelihood.
Profile of the Study Area

The area selected for the present study includes two villages each from Raebareli and Varanasi districts of Uttar Pradesh, India:

- Kand Rawan (in Unchahar block) and Aihar (in Dalmau block) from Raebareli.
- Bhabhanpura (in Chiraigaon block) and Lamahi (in Haruha block) from Varanasi.

Uttar Pradesh:

Source: PHD Research Bureau, 2011
Uttar Pradesh, the most populous state of India is well known for its multi-hued culture, religion and variety of geographical land. It is endowed with natural wealth in abundance such as minerals, forests, flora and fauna. The state has to its credit the magnificent architectures and known for its rich arts and crafts. Uttar Pradesh is located in the Northern part of India and is surrounded by Bihar in the East, Madhya Pradesh in the South, Rajasthan, Delhi, Himachal Pradesh and Haryana in the West and Uttarakhand in the North and Nepal touches its Northern borders. The state is witness to numerous golden chapters of Indian history and has contributed to rich Indian mythology and tradition. It is garlanded by two pious river of Indian mythologies - Ganga and Yamuna. Uttar Pradesh is exquisite land of monuments of historic significance, renowned forts, museums, enchanting scenes of natural beauty, wildlife sanctuaries and inspiring religious sites.

As per details from Census 2011, total population of Uttar Pradesh is 199,812,341 of which male and female are 104,480,510 and 95,331,831 respectively. Literacy rate in Uttar Pradesh has seen upward trend and is 67.68 percent. Of that, male literacy stands at 77.28 percent while female literacy is at 51.36 percent. Total area of Uttar Pradesh is 240,928 sq. km. Density of Uttar Pradesh is 829 per sq km which is higher than national average 382 per sq km. Sex Ratio in Uttar Pradesh is 912 i.e. for each 1000 male, which is below national average of 940.

RaeBareli

The district of Raebareli, which was created by the British in 1858, is named after its headquarters town. Tradition has it that the town was founded by the Bhars and was known as Bharauli or Barauli which in course of time got corrupted into Bareli. Rae Bareli (area: 4,609 sq km) is one of the districts covered by the Poorest Areas Civil Society (PACS) in
Uttar Pradesh. The district is part of Lucknow division. The town of Raebareli is the district headquarters. The district has 6 sub divisions: Raebareli, Dalmau, Maharajganj, Lalganj, Unchahar and Salon. For development purpose the district has been divided in 15 development blocks namely – Harchandpur, Sataon, Rahi, Amavan, Dalmau, Jagatpur, Rahania, Lalganj, Sareni, Khiron, Maharajganj, Bachhrawan, Shivgarh, Unchahar and Deen Shah Gaura (http://raebareli.nic.in). As per census 2011, sex ratio in Raebareli stood at 943 per 1000 male with population of 3,405,559 of which male and female were 1,752,542 and 1,653,017 respectively. Average literacy rate were 67.2 Per cent and gender wise, male and female literacy were 77.63 per cent and 56.29 per cent respectively.

Varanasi

Varanasi, or Benaras, (also known as Kashi) is one of the oldest living cities in the world. It’s prominence in Hindu mythology is virtually unrevealed. Mark Twain, the English author who was enthralled by the legend and sanctity of Benaras, once wrote: "Benaras is older than history, older than tradition, older even than legend and looks twice as old as all of them put together". The holiest of all pilgrimages, Varanasi is renowned for its rich tapestry of music, arts, crafts and education. Varanasi (area: 1,535 sq km) is one of the districts covered by PACS in Uttar Pradesh. It is a part of Varanasi division. Varanasi city, one of the oldest urban settlements in the world, is the district headquarters. There are two main tehsils and one sub tehsil in Varanasi district. First one is Varanasi and another is Pindra and sub tehsil is Gangapur. Total area of district is 1535 sq. km. Out of this, 830 sq. km. (54.07%) is in Varanasi tehsil and 705 sq. km (45.93%) is in Pindra tehsil. There are 8 blocks in Varanasi district out of which 4 are in Varanasi tehsil namely Chiraigaon, Sewapuri, Arajiline and Kashi Vidyapeeth and partially Haruha and 4 are in Pindra tehsil namely Baragaon, Pindra,
Cholapur and Haruha. There are 108 Nyay panchayat, 702 Gram panchayat and 8 Assembly areas in the district. As per census 2011, sex ratio in Varanasi stood at 913 per 1000 male with population of 3,676,841 of which male and female were 1,921,857 and 1,754,984 respectively. The literacy accounts for 77.05 per cent where male literacy is 85.12 per cent and female literacy is 68.20 per cent (http://varanasi.nic.in/).
References


12. Ibid.


**Web Links:**

www.malariajournal.com/content/12/1/325

www.ejel.org.


http://www.sociology.org.uk/methsi.pdf

http://www.rangahau.co.nz/methodology/