CHAPTER -TWO

RESEARCH METHODOLOGY

Research is a careful and systematic investigation of a phenomenon with an objective of advancing knowledge. Social research is carried out both for discovering new facts and verification of the old ones. The object of every science of course, is the discovery of new facts, new relationship, and new laws governing the phenomena. But constant verification of the old concepts is also needed, especially in case of dynamic sciences. Verification is needed because of two reasons. First, there may be an improvement in the technique of research and it is necessary to test the old concepts by this improved technique. Second, the phenomena under study might have undergone a change and it may require testing the validity of old concepts in the changed circumstances. In social science a lot of research is being carried out for both purposes and has resulted in the discovery of new facts as well modification of old concepts (Sharma 2007: 4). For the purpose of scientific research, methodology is regarded as an important component. Therefore, methodology is involved in selecting particular observational techniques assessing the data and relating it to theoretical postulations. Durkheim (1966) stressed that doing empirical research involved theory on the one hand, and the tool kit of enquiry, the strategies and techniques of empirical investigation, on the other. Sociological research aims at establish a body of systemic, reliable, and valid knowledge about the social world by undertaking empirical investigation of institutionalised human behaviour using research procedures and techniques.
Keeping in view the nature of the study, the research has been undertaken with experimental method. This method is used to know about the community with comparison, i.e. prior to its displacement and later displaced to a new setting. The current study is, therefore, based on both primary and secondary sources. The primary sources basically consist of first hand information collected through household survey and interview of the people. The study has, however, used secondary sources like books, journals and other such materials published relating to Jadugura displacement issue, extensively to deal with the theoretical propositions and to substantiate the empirical data that is collected through fieldwork.

2.1 My Field of Research

The term ‘field’ refers to the place where the members of the community the investigator plans to study reside. It can also refer to the relatively enduring ‘context’ of modern institution such as the school, hospital, office and so on which the researcher studies by staying there, if possible, or by spending a long time with people who work there. The process of collecting data by living with people, having a firsthand experience of their lifestyle, is termed fieldwork (Srivastava 2004: 11). Malinowski laid the foundation for intensive fieldwork and emphasised on the method of participant observation to have a good insight of the community. The fieldwork method that he developed is quite indispensable even today. He pointed out that the goal of all fieldwork is to grasp the native’s point of view, his relation of life, to realise his vision of this world.

The ‘field’ can alter strategies and techniques of data collection; improvise newer methods, and follow up new leads that arise because fieldwork provides immense flexibility to the investigator. He can devise ‘on the spot strategies to come to grips with
unforeseen challenges of fieldwork’ (Madan 1995: 112).

The present study is conceived with an academic exercise mainly consisting of field work in a place called Jadugura that comes under the state of Jharkhand and at a distance of 25 km from Ranchi. I first tried to collect available literature on Jadugura from different sources including libraries before going to the field. Discussion with my supervisor and other experts enormously benefited me to limit the focus of my study.

There are many reasons for choosing Jadugura as my field study. While doing my M. Phil on the issue of displacement and rehabilitation during 2002-2004, I came to know that people were displaced in large numbers in Jharkhand due to mining related project. It came to the knowledge of the researcher through newspaper about the suffering of Jadugura people due to displacement as well as from radiation. The plight of the displaced people attracted me to work on this topic. Uranium Corporation of India Ltd. (UCIL) has opened India’s first Uranium mining for helping and developing nuclear programme. The issue of displacement of a large number of indigenous people from their natural habitat then became an agenda of popular intellectual discourse. A documentary film entitled "Buddha weeps in Jaduguda", made by Kritika, and also vividly depicted the plight of the people of this region as their ecology is affected by mining which brought health hazards to them. I myself was astonished to find during my field visit the way Chatikocha village houses were bulldozed by UCIL management for construction of third tailing pond and made them miserable, nowhere to go.

Being trained in the discipline of Sociology, I started for my sojourn to Jadugura as a field researcher. Though the 25 km journey from Tatanagar to Jadugura was tiresome, the picturesque beauty of the place captivates me as well as keeps me refreshing. As my bus
crossed Jamshedpur, I saw Narwapahar mines, Bhatin mines and thereafter the bus reached Jadugura. From the bus stop I had to walk to reach Jharkhand's Organisation against Radiation (JOAR) office. There I came to knew about "displacement" which occurred due to opening of new mines and construction of tailing ponds. Some local people said that displacement is acceptable only if the UCIL gives jobs to them.

Like every field researcher, I too faced certain problems like time management for field study, reciprocate friendly gesture, understand local terms and gestures, and so on. I spent the initial days in getting acquainted and interacting with the people and tried to make my presence felt in the village. Later on, I chalked out the routine in an organised manner depending on the convenience of the people. After having some conversation in the evening with the workers who worked in the field, I gathered information according to my research needs. Collection of data began with a pilot survey followed by a field study conducted in the newly rehabilitated villages in 2008 from January to June. Subsequently, I revisited my field during the Jharkhand state assembly election in 2009 and also during 15th Lok Sabha election in 2009.

2.1.1 The Objective of Study

The Jadugura Uranium mining project, that displaced people systematically over a period of time, disrupting their social fabric and economic bases and impoverishes them, is unacceptable. But, if after a holistic and judicious cost benefit analysis with effective people’s participation at all levels, a project is cleared, a comprehensive and people oriented resettlement and rehabilitation policy with proper legislation and implementation can become an opportunity for sustainable development for the project effected people. Keeping this framework in mind, I set my research objectives as follows-
(a) To study the process of displacement and rehabilitation and assess the extent of socio-economic environmental consequences for the displaced person,

(b) To study the status of resettlement and rehabilitation of the displaced person and compare their socio-economic status before and after displacement,

(c) To examine the role of displaced people’s organisation in the resettlement and rehabilitation process,

(d) To examine critically the problem of women after displacement and how far they are able to cope up in new setting, and

(e) To examine the resettlement and rehabilitation policy from the displaced person point of view and to suggest oriented policy measures.

2.1.2 Hypothesis

Hypothesis may be defined as a proposition or a set of propositions set forth as an explanation for the occurrence of some specified group of phenomena either asserted merely as a provisional conjecture to guide some investigation or accepted as highly probable in the light of established facts. Quite often a research hypothesis is a predictive statement; capable of being tested by scientific methods that relates an independent variable to some dependent variable (Kothari 2002: 223). Hypothesis of this study are:

- The mining project of Jadugura has become a counter product for tribal and in the process women have become more vulnerable than the men.
- The anticipated economic development from mining could not yield positive results; on the contrary, it has reduced the indigenous people to receiving end.
• Such projects could hardly produce any impact of sustainable nature for the life and culture of tribals.
• Marriage are delayed and joint family are broken because of displacement and rehabilitation
• The agency/institution displacing people remain apathetic about the possible consequences of displacement and hence they take the task of rehabilitation and resettlement casually.

2.2 Universe and sample selection

For any comprehensive appraisal of the socio-economic conditions of the oustees, the main focus should be on the measurement of standard of living before land acquisition as well as the level of impoverishment of those who are displaced. Hence, I took every possible care during the survey to collect information from households pertaining to their social, economic and demographic conditions for two distinct periods - before land acquisition and after land acquisition.

The persons selected for interview by the researcher are the people who are displaced due to construction of UCIL mining and the third tailing pond. It is worth noting here that UCIL had begun uranium mining first at Jadugura village with a population of 60 household (nearly about 250 people). Out of 60 household, 25 household settled at Dungridih. They were again displaced for construction of second tailing pond and later it extended its mining at Banduhurang with a population of 200 household (nearly about 900 people) and Bagjata with a population of 41 household (nearly about 150 people). UCIL had selected Chatikocha for constructing the third tailing pond which had a population of 75 household (nearly about 250 people). Accordingly, I have selected my
samples for the study in the following manner: 200 household from Banduhurang uranium mining, 41 household from Bagjata uranium mining, 25 household from Dungridih and 75 household from Chatikocha. In other words, without opting for any particular sampling frame, I have included all the people who are displaced due to construction of UCIL mining and tailing ponds at Banduhurang, Bagjata, Dungridig and Chatikocha village. The small number of the displaced households in the selected locations made my task possible though difficult. It took nearly one year for me to collect data from displaced people from these four sites.

In the first phase of the survey, people directly affected by UCIL project were covered. A detailed interview schedule was used to enquire about the entire economic, demographic, environmental, geographical and social changes in the locality. I have prepared interview schedule in Hindi language and tried to make it so simpler that it can be understood by illiterate villagers. Other than that those who knew Hindi helped me in translating the question to the villagers in their tribal language. An investigation was also made to elicit their overall view about displacement, rehabilitation package, their impact of the health, livelihood, and assess the level of their awareness, perception, aspiration, and their protest movement. Displaced women were also studied separately and gender dimension of displacement were also investigated during the survey.

2.2.1 Choice of Informants

The choice of informants has been a well systematic process led by consideration. Regarding the selection of informant, I gave preference to those whom I could explain my question elaborately and who, at the same time, could comprehend their answer properly. Among these, preference was also given to those who were well versed with the people of
Jadugura region. I also utilised my familiarity with the local people as well as the leaders of JOAR to move across cross sections of respondents.

The researcher tried his best to furnish information from different age groups and particularly of those people who were displaced. Some of the JOAR women activities also selected as informants because they were well versed with all the required information. Moreover, they were really enthusiastic in sharing their information. Thus selection of informants was done keeping the requirement of this research and availability of a person.

2.3 Pilot Study in Jadugura

A pilot study is a small scale replica and a rehearsal of the main study. Pilot studies are concerned with administrative and organisational problems related to the whole study and the respondents. The design of pilot studies also varies with many factors, like availability of resources, nature of the study, type of methodology, nature of population and size of the sample. I had conducted my pilot study from 20th to 27th November 2007, which was being initiated with the help of JOAR members. The JOAR is an organisation closely associated with the people and well known for launching a movement against the displacement in Chatikocha village. The researcher followed the ‘network approach’ to gain familiarity with his respondents as his research involves collection of sensitive and critical data. Therefore, the pilot study commenced with the interviews and conversations where most of the participants were workers or activists of JOAR. This kind of relationship with JOAR indeed helped me to get an easy access to the displaced people.

The pilot study helped me in getting familiar with the field to a greater extent and modifies the interview schedule based upon the information being extracted by the study.
I did not know much about the field and people. The experience during the pilot survey helped in removing some apprehensions and organised my scattered ideas and gave it a shape. I found that in numerous occasions the respondents and their family members made all endeavours to make me feel comfortable. This helped me to conduct the study more efficiently during the rest of the days at field. The people of Jaduguda, like most other rural people, were not forthcoming and initially declined to share information. Gradually, as the conversation become more informal, they started joining in numbers and gave all pertinent information.

Prior to the pilot study researcher has a preconceived notion that extracting information from the people in rural area is a tough task and very often a risky job especially in relation to the issue of displacement; but the experience of pilot study forced him to reconsider his pre-conceived notion. Subsequently, it envisaged redrawing the objectives and reformulating the interview scheduled in the light of the experience being gained in the pilot study.

2.4 Rapport Building

The first and most daunting task of a field worker is to establish good rapport with the people. It is an important aspect of fieldwork. It means the harmonious relationship between the observer and the observed, followed by ties of intimacy with the people. It is essential to establish a good rapport as it helps in dissolving parapet of hostility, unfamiliarity and uneasiness. Without establishing a good rapport, the field technique is in foil. An investigation can initiate good relation with people who are being studied by showing respect to their traditional custom, showing enthusiasm in their vocalisation of emotional feeling and showing concern for it.
I stayed at Jadugura which is a developed village that is close to Talaitand and Bango villages. My presence indeed made those village people excited since I came from Kolkata to know about their socio-cultural problems. They were sympathetic towards me and extended all kinds of support. Initially JOAR people had doubt about me as they thought that I belonged to some NGOs; but my perseverance made it clear to them that I am a research scholar from Burdwan University. They then cooperated and extended full support in collecting data. Hence, I did not face much difficulty in establishing rapport after the initial hiccups, and JOAR members like Tika Soren, Kande Kurte, Bajo Besra, Mangal Soren and Ghanshyam Biruli helped me immensely and made me feel comfortable among the villagers. Rapport establishment continues during my whole field study in Jadugura. In the process of establishing rapport, I also talked to many senior citizens of that village who told me about the history of Jadugura and how gradual changes have occurred in their surroundings and how their life style have been affected over a period of time. Interestingly, during my field visit, JOAR was launching a movement against the UCIL for forcible displacement of people by constructing additional tailing ponds. My presence at the movement site allowed me to observe and collect data from this organisation as well as from indigenous people. Whenever I visited villages the children expected me to give something. I always carried toffees and chocolates for the children who flocked around me.

In Jadugura, I was moved by the problem of physical deformities among children who used to flock around me during my visit. For them the world was so limited and exhausted that even little toffees and chocolates could bring full smile in their face. My field study ended with some gloomy memories. Most of the people living there were
without an access to the basic civic amenities and they were leading a life in precarious conditions. The field study was a learning experience for me about the causes and consequences of displacement and it aroused my conscience for an appropriate policy framework for rehabilitation and resettlement.

2.5 Tools and Techniques

A field worker should be well equipped with field kit. Sociologists do not require any hardware and gadgetry but are mainly based on two main senses - eyes and ears. Looking and listening not only contributes to the basic stock of any individual’s knowledge about social relations, but also afford the principle technique for gathering data in any modern investigation.

In the field study I have also adopted participatory observation method while to collect relevant information that can be used in my research. The techniques of observation and case study were also used to solicit information.

2.5.1 Observations

Observation may be defined as a systemic viewing, which is intentional and planned. The observer is aware of the fact that he is systematically viewing the unit under study. It is a method that employs vision as its main area of data collection. It implies the use of eyes rather than of ears and the voice. It is accurate watching and noting of phenomena as they occur with regard to the cause and effect relations. It is watching other person's behaviour as it actually happens without controlling it. It is also defined as a planned methodical watching that involves constraints to improve accuracy.

Observation may take many forms and it is most modern research technique. It
includes the most casual, uncontrolled experiences as well as the most exact film records of laboratory experimentation (Goode and Hatt 1952: 119). It is considered as a tool in social science and refers to the process of getting information about an object, person, and situation or even through sense organs at the time when the phenomenon of interest is occurring.

There are many observation techniques, each has its uses but researcher should choose those tools, which are most suitable for his research. Researcher has chosen participatory observation for his study. Participant observations introduced by Malinowski is like an intellectual assimilation to the unfamiliar culture and it is emphasised as it helps in better conceptualisation of the phenomenon and to the extent of having the same kind of feeling as the subject are feeling. In this research, I have lived in close proximity with JOAR leaders and members and observed their behaviour on a day-to-day basis. I could clearly observe and feel that the displaced villagers face the most important problem in term of survival resources. In order to sustain themselves, they try to make changes in certain social relationship. These changes were made due to practical consideration as they were thrown into a new environment and social set up where they find themselves exploited and marginalised. It also came to my knowledge that displaced people faced several hardships which ranged from practical problems like lack of fuel, wood, water to interpersonal problems of conjugal adjustment regarding selection of partner for marriage. The worst part of displacement is that the community network, which is built up over generation, got disrupted. After displacement, people are suffering from food insecurity. Their sources of livelihood have shrunken. They have lost their earning from forest and other common property resources. Involuntary displacement brought anxiety,
idleness and insecurity which resulted in increased drinking habit. It also alienated the tribal women from their land thereby destroying their means of livelihood. My persistence for using the technique of participant observation paid dividend in focusing on several day-to-day issues involving the people and the leaders of the movement.

2.5.2 Interview Schedule

The set of structured questions in which answers are recorded by the interviewer himself is called Interview Schedule. It can be used for the illiterate and educated respondent. Schedule is used when the respondents are located in a small area so that they can be personally contacted (Ahuja 2002:194). The sociologists usually apply the schedule, which is filled up by the researcher personally after asking question to the respondents.

The schedule prepared for soliciting information from 341 displaced people contained questions related to nature and source of displacement, rehabilitation package, their impact on the health, livelihood and environment of the people, and people’s response to the process of socio-economic changes in the locality. There were both open and closed type questions. There were thirty questions, out of which thirteen questions were further sub-divided.

The research is conducted in three distinct phase. First, the researcher conducted a general survey on the socio-economic condition of the people affected by the uranium mining project; in the second phase, he concentrated on those who could delve deep into the problems related to displacement and rehabilitation. Finally, he has conducted interviews of local politicians, elected leaders, government officials and others involved in the mining project to get the ‘other side’ of the view.
2.5.3 Case Study

A case study is a tool, which permit us to penetrate in the life of an individual in his culture setting. It is an intensive study of a case, which may be an individual, community event or even entire culture, case study involves studying individual case, often in their natural environment and for a long period of time. It presents a holistic account that offers insight into the case under study. Ahuja (2002: 261) holds that “case study involves studying individual cases, often in their natural environment and for a long period of time”. It is a popular form of qualitative analysis and involves a careful and complete observation of a social unit. It is a method of study in depth. The case study puts more emphasis on full analysis of a limited number of events. Thus, it is essentially an intensive investigation of the particular unit under consideration. I have chosen case study method for studying displacement in Chatikocha village. The way people have been uprooted from their habitats became an interesting case for me. Also the JOAR movement, frictions and divisions among its members, the experiences of people, and their consciousness level - all provided interesting insights for this study. These cases enabled me to analyse the events leading to the displacement of the indigenous people from a holistic point of view.

2.5.4 Focused Group Discussions

Focused group discussions (FGDs) are held mainly to understand the conception and interpretation of displacement and rehabilitation by the society. Different groups are posed question to get a more holistic view on the topic. When the topic is raised, one can get a peripheral instantaneous reaction, which often led to a more, in-depth thoughtful discussion as people search for the answer to various issues. As a researcher, I have
divided selected respondents into two groups each consisting of 10 people for the focussed group discussion. The first group was of those people who were supporter of UCIL as it had provided them job in company. The second group included those people who opposed UCIL action for acquiring their fertile agricultural land and till date they had not yet received the required amount of compensation. The issues of this Focused Group Discussion were: (a) should the UCIL management provide free housing plot to each oustees? (b) Should the rate of compensation be revised according to the present land rent in the region? (c) Should each oustee be given permanent jobs in the company? (d) Should UCIL give priority to oustees in company jobs? (e) Should there be an independent study of the environment and health impact of the UCIL's operation in Jadugura? During the FGD sessions, there was disparity of opinion among both the groups which at times led to heated arguments; but the senior members solved the debate by giving their justifications of the argument. This also posed as a problem at times because everyone could not get a fair chance of expressing their opinion. Thus, this interview needed constant attention to maintain the focus of the topic. The researcher conducted 4 FGDs exclusively with selected groups of women from four different locations in order to get women's opinion on displacement issue.

2.5.5 In-Depth Interviews of Stakeholders

The researcher has also conducted several in-depth interviews of stakeholders like JOAR leaders, Management personnel, political party leaders and panchayat representatives. These interviews helped him to understand the issue critically and match these opinions with those of the displaced people. For instance, JOAR President Ghanashyam Biruli and Secretary Dumka Murmurm have opined that UCIL should not acquire more land for
mining related activities as company is not able to provide jobs and other livelihood sustenance to Project Affected Persons (PAPs). To them this is particularly the reason for which the tribals have decided not to surrender their land for any other project. JOAR secretary alleged that Jharkhand Mukti Morcha (JMM), Congress and Bharatiya Janata Party (BJP) – all have cheated them. It has been widely believed that political parties irrespective of colours are not taking any interest in solving the problems of displaced people.

The UCIL Manager Kandre Mahali who is in-charge of the displacement and rehabilitation argued that the company had taken adequate steps to absorb displaced people in the company, but they were given on the basis of their educational qualification and technical skills. He also reiterated that company had given compensation amount according to State Government and Central Government Land Acquisition Act, and after 2006 onwards, company is providing house to each oustees and taken some initiative to impart vocational training to local and tribal women. These training programmes have been primarily conducted for the women of Bhatin village so that it would facilitate the trained women to set up a production centre for those items.

The researcher also got an opportunity to talk to Jharkhand’s former Chief Minister Shibu Soren who told that he made personal visit to UCIL and requested the company authority to consider the displaced people’s problems. He supported the cause of displaced people. The Bharatiya Janata Party (BJP) leader Mr. Arjun Munda who won Jamshedpur Lok Sabha seat, also promised displaced people that he would raise “land acquisition and people suffering in parliament”, but till date no progress has been made in this connection.
2.5.6 Use of Mechanical Aids

A mechanical device like camera and tape recorder were used for in-depth interviews. Sometimes photographs and recorded statements proved to be tremendously helpful. Relevant photographs were taken whenever necessary, as it is not possible to visualise each and every detail. Photographs tell more about the appearance of native; it tends to present accurately mass of details which can escape the human report.

2.6 Field Diary

An extremely important aspect of fieldwork is ‘notes taking’, i.e. writing down details of observation, producing transcripts of conversational and interview sessions, describing the experiences of living in a different culture, and commenting on the usefulness of the techniques and methods in field situations and any improvisations made on them. Writing begins with the planning of research and should not be seen as the last phase (usually called writing up) that succeeds fieldwork (Srivastava 2004: 33). The fieldwork is incomplete without the field diary. The field diary is an account of day-to-day observations and experience. I used to write down my daily experience particularly at night. But, even during the day, my free time was devoted to diary writing. I found that the mode of conversation in market, shops and office was in Hindi language and it was easier for me to note down those points in my daily diary. Later it was translated in English by me. It was essential for me to write down confidential data as well as personal observation in the diary as people would otherwise become conscious if field note is taken in the open. This diary helped me to write my report, place things chronologically and substantiate my arguments without stressing too much on my memory.
2.7 Analysis and Interpretation of Data

The scientific analysis and interpretation of the compiled data is the creative aspect of research which makes possible the attainment of scientific inference and yield the answers to the research question and also verify the validity of the working hypothesis. The bewildering heaps of collected data do not lead to any scientific conclusions unless they are not generalised in a systematic manner. In fact, the collected data are so scattered, unsystematic and meaningless that no scientific generalisation of the problem in hand can be made unless they are not analysed (Bist 2001: 80).

The scientific analysis of data is a process which passes through the different measurable stages to acquire the generalised conclusion pertaining to the study problem. These are – classification of data, coding, tabulation of data, statistical analysis of data, inferences about causal relations among variables and report writing. Every study involves a number of responses of different kinds which cannot enable the researcher to draw scientific conclusions.

Viewing the objectives of the study, the researcher has classified the data compiled through primary and secondary sources. The classifications of data have been followed by tabulation, a technical procedure which arranges the data into columns and rows in an orderly way and elucidate the problem under consideration. In the present study the research findings drawn through the analysis of the data, have thoroughly been interpreted conjoining them with the results of the related studies conducted by many other scholars.

2.8 Personal Experience

It was very exciting experience for me to live among displaced people in Jadugura and
feel their emotion, agony and pain. Even though, sociologists need to be ‘objective’ and ‘value free’ in their research, field research does generate personal feeling and emotion of the researcher. In this sense, social science research cannot be totally value free and objective. It is also not desirable that one remains apathetic to the pains and sufferings of people. The people of Jadugura have extended wholehearted support and co-operation to me. JOAR people also helped me in collecting data. I am grateful to them for this. I however could not participate in some of the protest activities due to lack of time. Despite putting all endeavours, the study has addressed partially to the question of gender among the displaced people. Unlike their male counterparts, the female were not forthcoming to share the information, problems regarding the displacement and health issues. Yet, I have tried my best to address the gender question in the study by talking to the women in the newly rehabilitated area.

2.9 Limitations of the Study

There were some constraints in terms of transport facilities to the villages which are located in the nooks and corners. Hence a number of visits had to be made to meet one respondent whether official and non-official. All the respondents seemed to be very busy, which became a real constraint for the research. Much strain had to be taken to meet and interview many respondents. Despite my repeated disclosure of identity as a research scholar, I found that oustees were not willing to disclose their true reality. They often tried to present a concocted picture. This seriously hampered authenticity of the data collected at least initially. When researcher went to UCIL office and met General Manager (Personal) who was looking after displacement and resettlement issue, he vacillate to provide me displacement and compensation records. The General Manager
insisted that “it is sensitive matter and he cannot share all records with researcher”. East Singhbhum district land acquisition officer did not show any curiosity to talk to researcher in detail. It took me a couple of months to gather all the necessary information required for this research from JOAR, BIRSA and other sources. Despite several constraints and limitations, this research has tried to present a synoptic and holistic view about the processes and issues involved by combining various techniques and methods.

REFERENCES