CHAPTER III

OBJECTIVES, DATA AND METHODOLOGY

3.1 INTRODUCTION

In the first chapter, the changing employment and unemployment scenario at the global as well as at the Indian level was explored and the causes of unemployment were discussed in detail. Irrespective of the causes, the consequence of interrupted employment were also analysed through existing studies. In the second chapter, various studies conducted at global as well as India level on the workers who have lost the jobs were reviewed and presented. From these, the reasons and need for the present study are pointed out. In the present chapter, data and methodology used in this study are presented.

3.2 PURPOSE AND OBJECTIVES OF THE STUDY

The purpose of the study is to explore extent and magnitude of interrupted employment due to mergers/closures/downsizing at the national, regional and Mumbai city levels as well as to study the economic and social impact of interrupted employment at the individual and family levels and to find out the coping mechanisms and resilience measures used to keep the family sustainable.

The specific objectives of the study are as follows:

- 1) To study the levels, trends and pattern of employment and unemployment at the global, national, regional and the study area (Mumbai) levels.
- 2) To investigate the magnitude of workers with interrupted employment at the national, regional and the study area (Mumbai) levels.
- To study the demographic and socio-economic characteristics of the families of the workers for whom employments were interrupted.

- 4) To study the economic impact of interrupted employment on the family and to identify the coping mechanism adopted to overcome the economic crisis.
- 5) To explore the social impact of interrupted employment in terms of changing social status, familial roles and relationships before and after employment interruption.

3.3 HYPOTHESES OF THE STUDY

The study starts with two hypotheses, as follows:

- Hypothesis-I: Interrupted employment motivates to use human resource in the family as an asset and forces women, children and/or elders to enter labour force Added Worker Effect (AWE).
- Hypothesis-II: Majority of the workers, whose employment were terminated in the formal sector take employment in informal sector.

	Worker	Spouse (Wife)	Children	Outcome The hypothesis is
Before	W	NW	NW	-
After	W (Another job)	NW	NW	False
	W (Another job)	W	NW	True
	NW	W	NW	True
	NW	W	W	True
	NW	NW	W	True

Table 3.1 Checklist to Validate Hypothesis-I with Outcome of the study

Table 3.1 shows how hypothesis I will be validated. It is assumed that at the time of job loss only the worker was working and the spouse and children were not working. It was the situation before job loss. The situation of work participation in the household was observed after the job loss is presented in the second section of Table 3.1 under

'after'. By the outcome of work participation of the household members, the hypothesis is tested. If the work participation before and after job loss were same, then the hypothesis can be considered as 'False'. Whereas, if the work participation of other members in the household increases after job loss, then the chosen hypothesis I is considered as 'True'.

3.4 SCOPE OF THE STUDY

It is a retrospective study at a micro level. The aim is to study the effects of an event that happened earlier, i.e. interrupted employment or job loss. Here job loss is taken as the adverse event and the study explores its (job loss) impact/effect on family members and the coping mechanisms adopted by the worker and his family to overcome this situation. Interrupted employment/ discontinued employment in this study is defined as those workers whose employments are terminated due to employer's preference for mergers or industrial closure. Here unemployment is involuntarily forced on the worker irrespective of the current employment status. The definitions and concept used in the study are given below.

3.5 DEFINITIONS AND CONCEPTS USED IN THE STUDY

Secondary data on employment and unemployment was obtained by various sources, such as, Population Census, and National Sample Survey (NSSO), however the concepts and definition were different for different sources and in the same source also, it has changed over time.

3.5.1 Worker

The economically active persons are generally termed as workers. However, different approaches are used to collect information on the activity status of persons during census and surveys. They are explained below.

3.5.1.1 Census: The Census of India, defines work as participation in any economically productive activity with or without compensation, wages or profit.

Work force: Census enquired all people of India, what was their activity in one year preceding the date of enumeration. Reference period was used as a point in determining a person as worker or non-worker. Hence, every one in the country is divided into two

categories, workers and non-workers. Persons in the age-group 0-4 years have been treated as non-workers.

Again those who were working were again divided into two categories, main and marginal workers.

Main Workers: Those workers who had worked for the major part of the reference period (6 months or more) were termed as Main Workers.

Marginal Workers: Those workers who had not worked for the major part of the reference period (6 months or more) were termed as Marginal Workers.

The workers, both main and marginal constitute the total workforce in the given point of time according to Census.

3.5.1.2 National Sample Survey Organisation (NSSO): According to NSSO, persons who are engaged in any economic activity or who, despite their attachment to economic activity, abstained from work for reason of illness, injury or other physical disability, bad weather, festivals, social or religious functions or other contingencies necessitating temporary absence from work, are termed workers.

Worker by principal activity status: The activity status on which a person spent relatively longer time (i.e. major time criterion) during the 365 days preceding the date of survey is considered as the usual principal activity status (ps) of the person. On the basis of the major time criterion if a person pursued economic activity for a major part of time, s/he is considered as worker by principal activity status.

Worker by subsidiary activity status: The activity status on which a person spent relatively shorter time throughout the reference year of 365 days preceding the date of survey or for a minor period, which is not less than 30 days is considered as subsidiary activity status. On the basis of subsidiary activity status if a person pursued economic activity for lesser part of time, s/he is considered as worker by subsidiary activity status (ss) of that person. The workers by both principal and subsidiary activity status are considered as total workforce in the given point of time.

The main and marginal workers mentioned by Census can be compared with that of principal and subsidiary workers mentioned by NSSO.

3.5.2 Unemployed

According to ILO, people who are willing to work and actively looking for work without employment (ILO, 2004).

3.5.2.1 Census: Since year 1981 the information on 'job seekers' were asked by Indian Census. According to Census, those who were 'seeking/available for work' during the reference period are unemployed. In the 1981 census, information on 'seeking for job' was asked to all non-workers. Later in the censuses 1991 and 2001, this information were asked to the marginal workers also. Hence, from Census data one can study the unemployment⁸ one can study the different components of unemployment, i.e. open unemployment⁹ and under employment ¹⁰.

3.5.2.2 National Sample Survey Organisation: NSSO from 1955 onwards started collecting information on employment and unemployment, from the Ninth Round. Persons, who owing to lack of work, had not worked but either sought work through employment exchanges, intermediaries, friends or relatives or by making applications to prospective employers or expressed their willingness or availability for work under the prevailing condition of work and remunerations are considered as those who are ' seeking or available for work' (unemployed). The usual activity status of each member is presented in NSSO data sets which are categorized into 21 levels of usual activities (For details see NSSO, 2006 p. 11). Codes 81 (seek work) and 82 (available for work) were considered as unemployed. This information for subsidiary workers also, however this study used the usual principal activity status (for major part of the reference period). The unemployment can be termed in three ways; viz., under employment, open unemployment and total unemployment. There were three reference periods used in these surveys; viz., one year, one week and each day of the reference week. Based on

⁸ Unemployed: Those who are seeking or available for work (among marginal workers and non-workers) are termed as unemployed.

⁹ Open unemployment: Those who are seeking or available for work among non-workers are termed as openly unemployed.

¹⁰ Under employment: Those who are seeking or available for work among marginal workers are termed as under employed. Since 1991, Census started collecting this information.

the three periods, three different measures of unemployment status can be drawn; viz., usual status, current weekly status and current daily status.

i. Unemployed by usual activity status: The usual activity status relates to the unemployment status of a person during the reference period of 365 days preceding the date of the survey.

Ii. Unemployed by weekly status: The current weekly unemployment status of a person is the activity status obtaining for a person during a reference period of 7 days preceding the date of survey.

iii. Unemployed by daily activity status: The current daily activity status for a person was determined on the basis of his/her unemployment status on each day of the reference week using a priority-cum-major time criterion (day to day labour time disposition).

The term unemployment by 'Usual status adjusted' is mentioned in some section of the thesis. It means, that unemployment rates for the reference period of 365 days, i.e., in usual *principal status* (*ps*) approximate an indicator of chronically unemployed. Some of the persons categorised as unemployed according to the *usual principal activity status* might be working in a subsidiary capacity. Therefore, another estimate of the unemployed excluding those employed in a subsidiary capacity during the reference period can be derived. The former is called the usually unemployed according to the *principal status* (*ps*) and the latter, the usually unemployed excluding employed in *subsidiary status* or *usual status adjusted*, which would conceptually be lower than the former (NSSO, 2010 p.16).

3.5.3 Labour force

ILO defines the labour force as the sum of employed and unemployed. Census and NSSO also defines the labour force as the sum of persons who are either 'working' (or employed) or 'seeking or available for work' (or unemployed) during the reference period. These are explained in detail in the next section.

3.5.4 Person with Interrupted Employment or Ex-worker

Interrupted employed person is the one who has lost his/her employment. Unlike unemployment, which contains 'new labour force entrants' and 'never worked' population, this interrupted employment category people were ever worked in the past and looking for employment. This refers to the workers who ever worked in the industry selected for the study. This term is used in this study irrespective of his/her current work status. In the thesis, the terms interrupted employment persons and exworkers will be used interchangeably.

3.6 ANALYTICAL TOOLS USED

There are various formulae used in this study while calculating the data sets to fulfill the objectives of the study. They are given below.

3.6.1 Labour Force Participation Rate (LFPR)

LFPR is defined as the number of persons/person-days in the labour force per 100 persons /person-days. Labour force included workers and unemployed persons.

$$LFPR = \frac{W+U}{T} \quad X \ 100$$

Where, W = Workers

U = Unemployed (Those who were seeking job)

T = Total Population

3.6.2 Workforce Participation Rate (WFPR)

WFPR is defined as the number of workers per 100 persons.

$$WFPR = \frac{W}{T} \quad X \ 100$$

Where, W = Workers

T = Total Population

3.6.3 Gender specific Workforce Participation Rate

Gender specific WFPR is defined as the number of particular gender workers per 100 of particular gender persons. For example, Male WFPR is defined as number of male workers per 100 males.

$$WFPRm = \frac{Wm}{Tm} \ge 100$$

Where, Wm = Male Workers

Tm = Total Male Population

3.6.4 Age specific Workforce Participation Rate (AWFPR)

Age specific WFPR is defined as the number of workers in a particular age group per 100 of persons in that particular age group. For example, WFPR for 15-59 age group is defined as number of workers in the age group 15-59 per 100 persons in 15-59 age groups.

$$AWFPR (15-59) = \frac{W(15-59)}{T(15-59)} X 100$$

Where, W (15-59) = Workers aged 15-59 T (15-59) = Total Population aged 15-59

3.6.5 Growth Rate (R)

In simple sense, the growth rate explains the rate of growth from the 'past' to the 'present' in a given period of time. The growth rate can be adjusted as per the 'time' between two events. If wanted to know the growth rate between two censuses, then it will be called decennial growth rate. To get the annual growth rate the decennial growth rate has to be divided by 10 (time between two censuses). For example the annual growth rate of population between two years, 2009 and 2010 is given below.

Percent change (R) =
$$\frac{T(\operatorname{Present}) - T(\operatorname{Past})}{T(\operatorname{Past})} X 100$$

Where, T (present) = Total population in 2010 T (past) = Total Population in 2009

3.6.6 Proportion unemployed (PU)

PU is defined as the number of persons/person-days unemployed per 100 persons/person-days.

$$PU = \frac{U}{T} X \, 100$$

Where, U = Unemployed (Those who were seeking job)

T = Total Population

3.6.7 Unemployment rate (UR)

Unemployment rate is defined as the number of persons/person-days unemployed per 100 persons/person-days in the labour force (which includes both the employed and unemployed).

$$\text{UR} = \frac{U}{(W+U)} \quad \text{X 100}$$

Where, U = Unemployed (Those who were seeking job) W = Workers

3.7 DATA SETS

This study proposed to fulfill the selected five objectives using primary as well as secondary data sets. So the methods used while using secondary data sets and the methodology used while conducting the primary survey is explained in two sections.

3.7.1 SECONDARY DATA

To achieve the objectives 1 and 2, secondary datasets were used. These objectives were fulfilled by using the secondary data from ILO, Census (Registrar General, India) and National Sample Survey (Ministry of Statistics and Programme Implementation). The data on various parameters as collected from census and National Sample Survey (NSSO) are as follows:

3.7.1.1 Data for Workers

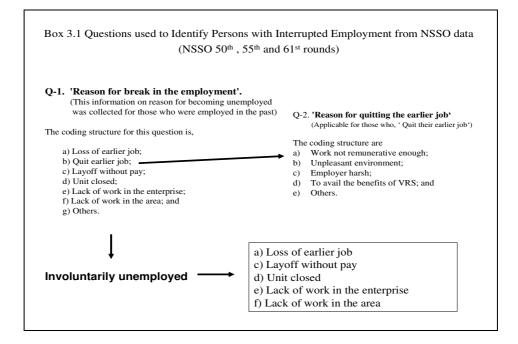
Workers' information was collected from the ILO and datasets of Census 1961 to 2001 were used to study the employment situation at various levels.

3.7.1.2 Data for Unemployed

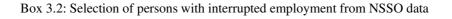
While studying the overall unemployment situation in the country, census datasets of 1981 to 2001 were used. NSSO datasets were used when some in-depth understanding was needed. NSSO datasets of 1993-2008 were used.

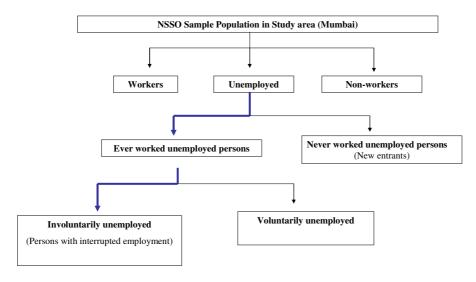
3.7.1.3 Persons with interrupted employment

To fulfill the second objective, data were collected from National Sample Survey 50th (1993-94), 55th (1999-2000) and 61st (2004-05) rounds. To capture the interrupted employment persons from the NSSO data, an indirect technique was used. NSSO on its some selected surveys of 'Employment and Unemployment situation' have asked questions on 'Reasons for break in the employment' to those who have ever worked and unemployed for the last 7 days, at the time of survey. Utilising this information, interrupted employment persons were captured. Those who stated that the reason for their break in employment as, loss of earlier job, layoff without pay, unit closed, lack of work in the enterprise and lack of work in the area were grouped as interrupted employment persons. It is explained in detail in the Box 3.1.



After identifying the interrupted employment persons, first the respective file was merged with the total 'persons file' of the NSSO data file so as to find the full background details of those employment interrupted persons with household characteristics. Secondly, the employment interrupted person's full family was isolated for further analysis with the general households in that area. The raw data from these data sets were re-analyzed as per the requirement of the objective in the study area. Using the 'relationship to the head of the household' criterion, all the families were identified. Using the same information, spouses, sons and daughters of the head of the household were traced. The some selected characteristics, especially work status of the children of the interrupted employment person's household compared with all the general households of Mumbai. Unit level of Mumbai district was used for this study. This study explored the impact of interrupted employment in the study area using the secondary data, as of the recent round of NSSO 61st round (2004-05) data. The path way used to capture the employment interrupted persons is presented in Box 3.2.





Source: NSSO, 61st round (2004-05)

Although it is possible to capture the persons with interrupted employment from NSSO datasets, they suffer from a number of limitations inherent with other large-scale sample surveys. Firstly, being quantitative in nature, the scope of the information provided is rather restrictive. Secondly, the sample size chosen in the proposed study

area, Mumbai city, is very small (Sample size for Mumbai was 5000 in the 61st round of NSSO). Hence the remaining objectives were fulfilled using primary data, collected exclusively for that purpose.

3.7.2 PRIMARY DATA

Objectives 3, 4 and 5 are fulfilled by using the primary data collected from affected families. For this purpose, a survey was conducted.

i.. Research Setting

Why an urban city centre? Cities, metropolitan regions function as the centres, nodes and gateways of global business, culture and social relations for their macro regions. They are the hubs where the global flows originate, to be channelled and arrived (Serbers, *et al.*, 2005). All the social groups living and working in city regions are exposed to some common challenges that have to be dealt with (Serbers *et al.*, 2005). A City serves as a catalyst for development within their respective wider regions. Demographic and non-demographic factors play important roles in the labour force changes in a region. High population growth directly affects the work participation in a region, as it can divert the government's effort to expansion of school infrastructures, healthcare and welfare services instead of developing the economy. Also increasing urbanisation could decline the work participation rate on one hand and increase the unemployment rates on the other hand (Rayappa and Erpenshade, 1975).

ii. Why Mumbai? Mumbai city with least economic activity some centuries back, has increased to the pinnacle of industrial activity over the years. Many migration studies have highlighted the heavy influx of migrants into the city looking for employment opportunities (Deshpande, 1983b). But since 1980, the manufacturing sector, which was a leading sector in Greater Mumbai, has declined. Large numbers of registered working factories are closing down. It can be seen from the Census figure that over a period of 1961-2001 there is a significant decline in the proportion of workers in the manufacturing sector, from 40.8 percent in 1961 to 26.6 percent during 2001 in Greater Mumbai (Census, 2001; Gupta and Yesudian, 2006). With global economy, many multinationals have opened up their companies here. Informal sector is taking the lead whereas organised sector jobs are declining overtime (Soman, 2002). In Mumbai alone, the pharmaceutical plants belonging to Ciba Geigy, Abbott Laboratories, Roche

Pharmaceuticals, Hoechst, Boots, Boehringer-Mannheim and Parke-Davis were closed, leaving many workers out of employment, especially women (Hensman, 2001). The decline in employment can be seen from the declining rate of migration into the city. Some studies also confirmed the declining share of migrants in city's total population as well as declining role of net migration in the city's decadal population growth rate (Gupta and Prasad, 1996; Mukherji, 1996; Singh, 2003).

Employment in the formal sector has been decreasing since 1981. The number of employment in private sector has declined from 638 thousand in 1971 to 436 thousand in 1998 (Gupta and Yesudian, 2006). While formal sector jobs are declining, there is rising employment opportunities in the informal sector (Soman, 2002). In Mumbai many industries have opted to outsource the work or subcontract stages of the production process outside the industry or use temporary laborers to reduce their production cost which increased the employment in the informal sector. Bhowmik (2000) has stated that in 1961 approximately 65 percent of the workforce was working in the formal sector and 35 percent in unorganized/informal sector but by 1991 the proportion has reversed, that is 65 percent in informal sector. Though the goods and services of informal sector are legal, their operations are not registered or regulated by governmental laws. Even though the security, wages and benefits are notably lower in informal sector many are working full time in the informal sector to meet their basic needs (Sundaram, 2001). Lack of education, the absence of regulations and lack of social security force the urban poor, mainly the rural-urban migrants to enter the informal sector for low wages (Garewal, 2005).

Considering the above mentioned change in the workforce pattern in Mumbai, the city was selected purposively as an ideal setting to fulfill the objectives 3, 4 and 5, of the study.

iii.Industrial Setting

Initially it was proposed to select a variety of industries from Mumbai to study the objectives such as industries of metal, power, chemical, textile, beverage and pharmaceutical. However, due to constraints in locating ex-workers from all these

industries¹¹, this study is restricted to industries like iron and steel, chemical industry, power generation industry and textile industry. A typical living pattern was observed among these ex-workers as they were living around the industries in clusters. In some of the textile industries, the workers were given accommodation in chawls in Girgaon (the residence for *girni* (mill) workers) and they continued to live in those chawls even after the loss of employment. In Tata Power, Mukund Iron and Steel and Rashtrya Chemical Factory (RCF), the workers were living in slums around these industries. Since they owned these slum structures, they continued to live there.

3.7.2.1 Sample Design

A two stage sampling technique was used. First, effort was made to document all the manufacturing sector units closed down in the study area in the reference period. Due care was taken to choose the units where larger number of workers have been retrenched or laid off.

i) *Sample choice*: First, purposively chosen the study area, and later selected industries closed down or retrenched workers, affecting the employment of many workers.

ii) *Reference period:* As this study explores the impact of the interrupted employment, a gestation period was needed. So the sample units/industry selection was based on the units which had been closed/retrenched workforce at least 5 to 7 year ago which would give a gestation period of 5-7 years. Initially it was decided to keep the closure/retrenchment period little flexible, however it was kept in mind that the gestation period should not be over 15 years and should not be less than 4 years. The selected industries closed at different years, and the total mean gestation period was around 7 years.

iii) *Sample size*: The universe for sampling was the past labourers of the chosen units which had closed down or retrenched labour force in the reference period. A sample of 250 ex-workers was selected from the selected units using purposive sampling method using snowball technique.

¹¹ Although, identified pharmaceutical and beverage industries which moved outside the city or retrenched workers, resulting into job loss for many workers, could not contact even one ex-worker who had worked in these industries, even after repeated attempts. Hence, these two industries were not included in the study.

3.7.2.2 Data Collection Tools

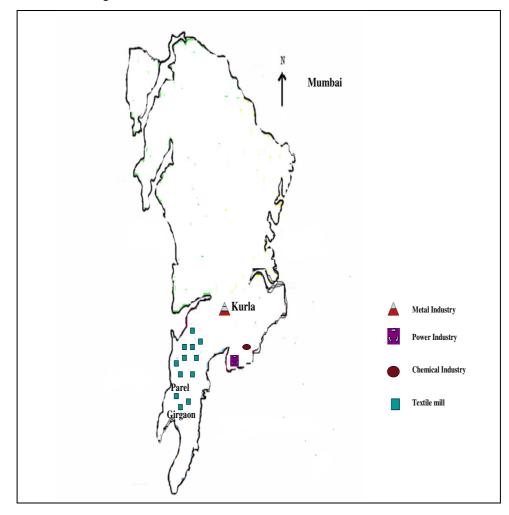
An appropriate structured interview schedule was prepared to tap information from the affected families. Different variables that addressed these objectives were first transformed into different items of information. Then each item of information was translated to coherent questions that elicited answer for the item of information. Each item of information had more than one question to gain complete knowledge of the item of information. Finally all these questions were organized in a logical and pragmatical fashion to elicit data from the respondents. Thus an interview schedule was prepared for the study and it was pre-tested with five interviews and modified as per the field requirements. For the in-depth Interview, an interview guide was used.

3.7.2.3 Field Data Collection

Initially, a strategy was worked out to collect the census of the labourers, and prepare a detailed list of all workers who were on the rolls of the unit on the day or period in which the industrial unit was **closed down or retrenched large number of workers**. But all efforts became futile and finally, through the contact of some NGOs who work for the welfare of the ex-workers and two union offices' assistance, contacted exworker from selected industries. Having contacted at least one ex-worker from each selected industries, using **snowball technique** the sample size of 250 ex-workers was interviewed. In addition to the survey, few in-depth interviews were conducted to strengthen the finding of the survey.

3.7.2.4 Data collection areas

Mukund Iron and Steel company ex-workers were living in groups in Mukand Nagar, Kurla, opposite the gate of Mukund Iron and Steel company. Tata Power ex-workers were traced from three four villages in Vasi Nakka, Chembur Colony and Sion. The chemical ex-workers were traced from Vasi Nakka area, Chembur and in slums near Mankurd. Textile ex-workers were first traced using the list of addresses collected from Sarva Shramik Union Office, Dadar. The ex-workers of the textile mills were interviewed in their homes in a slum near Mankurd, Spring Mill colony and some interviews were conducted at the Union office in Dadar.

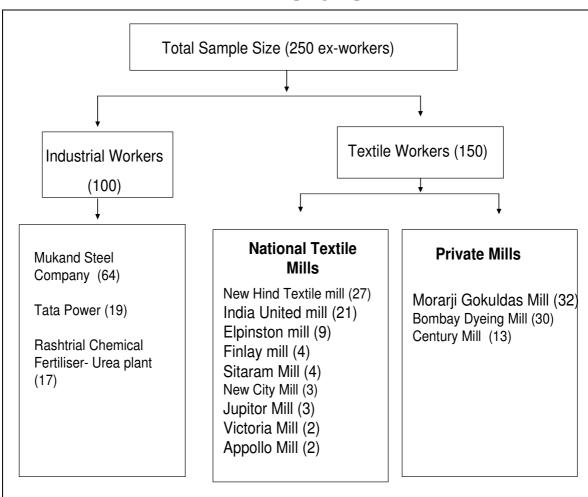


Map 3.1: Location of Selected Industries in Mumbai

3.7.2.5 Sample size and the selection of affected families

A total of 250 ex-worker's families were selected for the study. Among them, 100 were the ex-workers from metal, power and chemical industries. The remaining 150 were extextile mill workers. Among the textile workers, 75 were from the National Textile Corporation (NTC) mills ex-workers and the remaining 75 were from private mills. It is explained in detail in Box 3.3.

As per the information collected, among these 250 ex-workers, most of the ex-workers (86%) lost their jobs due to the closure of their industrial unit. Only 14 percent of these ex-workers lost their jobs due to retrenchment in bulk. Most of these ex-workers were forced to take VRS according to them. Hence they were assumed as 'employment interrupted workers'.



Box 3.3: Sampling Steps

This sample of all the 250 ex-workers were pooled together and analysed as per the objectives chosen. At times they were mentioned in two groups, 'non-textile workers' and 'textile workers'.

3.7.2.6 Period of data collection

Data collection period lasted from June – December, 2010. During this period, major festivals such as Ganesh Chaturthi, Diwali, Dandia, and Navrathri were observed. The data collection was slowed down during the festival periods.

3.7.2.7 Respondents of the study

Table 3.2: Respondents of the study				
Respondents	(N)	Percentage		
Sample	178	71.2		
Spouse	71	28.4		
Parent	1	0.4		
Total	250	100		
Source: Field survey data, 2010				

Majority of the respondents were the ex-workers (workers who have lost their employment). During some of the interviews the spouses were also present and actively participated, however those interviews were not mentioned separately. Little more than one-fourth of the respondents were given by the ex-worker's spouses. Twenty two of the ex-workers were dead at the time of the survey, but their spouses gave the required information. Only one interview was given by the mother of the dead ex-worker. In this case, the ex-worker committed suicide while demanding his job back. (self-immolated in front of Bombay House). The spouse of this ex-worker was not available for interview. The mother of the ex-worker was the respondent. This mother was living with him all through his life. Even at the time of interview she was living with the exworker's widow and children. Hence the information was collected from her.

3.7.2.8 Data analysis and Reporting

The SPSS software was used to process and analyse the collected data. Single frequency and bi-variate tables and appropriate statistical tests were generated to strengthen the findings. Ten case studies generated out of the in-depth interviews were used to find out the resilience and coping mechanism of the ex-worker and the family to manage the traumatic event of job loss.

3.8 LIMITATIONS OF THE STUDY

This study cannot be generalized for every city of India as different regions were with specific characteristics. The study tried to cover as many types of industry as possible, there were difficulty in getting information from pharmaceutical and beverages industry. Hence, the primary data was collected from textile, power, chemical and metal industry ex-workers only. Therefore the sample of workers taken in this study cannot be generalized to all the interrupted workers employed in various types of industry as the impact could vary from industry to industry, skill level of the worker, region and gender. Secondly, the sample selection was snowball technique. Hence the impact cannot be generalized to whole of these type of workers they represent.

3.9 ORGANISATION OF THE THESIS

The thesis is organised in eleven chapters.

Chapter-I, discusses the problem of interrupted labour at the macro and micro levels and raises the research issues for the study. This chapter further develops the theoretical framework for the study and gives the rationale for undertaking the study.

Chapter-II, contains the full literature review with respect to the study objectives: employment and unemployment pattern and trend at global and national levels; causes of interrupted/discontinued employment and unemployment; consequences of employment loss on an individual and family in terms of economic and social impact and the changing roles and relationship within the family due to interrupted or discontinued employment.

Chapter III, gives the purpose and objectives of the study and discusses the data used. This chapter discusses the methodology used for the secondary data part of the study and the primary data part of the study separately. Further, it attempts to explain how each objective is studied.

Chapter IV, explores the levels and trends of work participation at national, and regional levels and in the study area (Mumbai). The factors studied included growth rate of workers in India, demographic and socio-economic characteristics of workers, distribution of workers by their employment and occupational level, levels and trends of unemployment at national and regional levels and in the study area (1981-2001), demographic and socio-economic characteristics of unemployed.

Chapter-V, explains the measurement of interrupted employment; reasons for loss of job from worker's perspective (unemployed persons who were working in the past, by their reasons for unemployment); magnitude of interrupted employment at different levels, India, India (urban), Maharashtra (urban) and in the study area, Mumbai; proportion of interrupted employment among unemployed; demographic and socio-economic characteristics of the past-workers whose employment was interrupted.

Chapter-VI, explores the study area, Mumbai city, its physical profile; demographic and socio-economic profile of the population; trends in employment status; profile of labour force; trends in work participation rate; distribution of workers by their industrial category (NIC); distribution of workers by their occupational category (NCO); trends in unemployment status; trends in interrupted employment; distribution of employment interrupted workers by their reasons for unemployment; demographic and socioeconomic background of employment interrupted workers; industrial units by size of workers in the study area; types of industries before and after the study; types of industries where more job retrenchments happened; reasons for closing the industry/units and reasons for worker shedding.

Chapter-VII, narrates the sample population in terms of sample size and the selection of affected families; family size, family structure, head of the household; demographic characteristics of age, sex, and marital status; socio-economic characteristics-educational level, skills attained, income level; landed property, type of house living, ownership of the house and household assets; source of Family income; and permanency of family income (Seasonal or daily wage).

Chapter-VIII, explains the economic impact of interrupted employment on the family. By using the information on the economic status of the family before and after employment interruption the economic consequences of interrupted employment are studied. The data used include information on occupational status of spouse, children's work status, total household income, source of income, net family income.

Chapter IX explains the social impact of Interrupted employment on the family. By using the information on the social situation before and after employment interruption the impacts are studied. This chapter describes the interrupted worker's communication within family and outside family; person making important decisions at home; role change pattern (head of the household); female employment; child labour; family move; household/family structure; gender preference while adopting to reduce expenditure; female autonomy and mobility; marital disputes; juvenile delinquency; domestic violence; family erosions; substance and alcohol abuse.

Chapter-X, explains the resilience measures adopted by the affected families. Additionally 10 case studies are presented.

Chapter – XI, the last chapter presents the major findings of the study, conclusions and policy recommendations.

So far, research problems, major objectives of the study, reasons for selecting the study area and industries, sample size are presented. Also the study plan on how the objectives would be completed and the sources of data are described in detail. In the next chapter the employment and unemployment situation is discussed, from global level till the level of study area, Mumbai.