Chapter 3

Methods & Materials
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I. About Kalyani: Locale of Study

The study has been conducted among the population in Kalyani Township, Nadia, W.B. Kalyani is situated in the delta region of river Ganges Kalyani township established in 50s witnessed various demographic changes because of the partition of the India in 1948 and the creation of Bangladesh 1971. The influx of the refugees both urban and semi-urban in nature who lives in an around Kalyani township in one hand and large number of highly educated people working university colleagues and educational institutions makes Kalyani as an interesting place of study regarding the sociological angles. The literacy rate of the Kalyani is above 96% and sex ratio female and male is 926:1000.

II. Area chosen for study

Kalyani is a sometimes referred to by the urban planners as satellite city or counter magnetic zone with all demographic and urban characteristics and potentials. The concept of empowerment as a global phenomenon is very much related to urban culture, urban ethos and urban style of living. It is generally presumed and it is perhaps an accepted rationale that urbanisation is a starter and end product of globalisation. Particularly in the third world countries globalisation fails to touch the heart of rural pockets and appears to them as a misnomer concept or buzzword. So, on the basis of such a speculative rationale we have chosen Kalyani township on the basis of purposive sampling. Kalyani is very much overhoused with urban phenomena and it has already swallowed total urban culture of calcutta metropolis.
Choice of topic

As, with all research, the first decision to be made is the choice of topic and group to be studied. This choice will always be made as a result of the wider interests of the researcher and there is the usual interplay between theoretical assumptions, areas of research interests and research method chosen.

Paradigm:

Conceptual framework and hypotheses

Globally and for the Asia and Pacific region, the social change of societies modernising, family ties becoming less supportive, migration becoming more common, work becoming more demanding, global culture becoming more influential and more relative poverty, are leading to negative consequences for people's mental well-being. Unfortunately, the model of globalisation and development is not increasing society's experience of satisfaction and happiness. For the future, the WHO warns that one in four people will be affected by a mental disorder at some stage in their life. On top of these general social determinants, women experience almost double the incidence of depression and greater anxiety than men. Theories on depression point very strongly to the overwhelming significance of severe life events and difficulties especially those involving loss, humiliation, entrapment and a sense of lack of control and inferiority. Women's social status, greater poverty and subordinate gender roles thus place them at greater risk of such
sadness, loss of confidence and self-esteem and less energy. The levels of violence against women in a society are key indicators of the extent to which gender equality exists in the society and the family.

Empowerment is "the process of challenging existing power relations and of gaining greater control over the sources of power". "The goals of women's empowerment are to challenge patriarchal ideology ..... to transform the structures and institutions that reinforce and perpetuate gender discrimination, and social inequality .... and to enable poor women to gain access to and control over, both material and informational resources." (Batliwala, 1994).

It is important to consider which of the strategies developed and used by women have empowered them. The strategies considered effective are those which increase the quality of women's lives by enabling them to contribute to the decision-making processes in their communities and societies, to achieve a more equal status with men, and to participate in changing their environments in the direction of greater social justice and democracy (Bystydzienski, 1992).

**Different Dimensions of Empowerment**

**Personal**: developing a sense of self and individual confidence and capacity, and undoing the effects of internationalised oppression.

**Rational**: developing the ability to negotiate and influence the nature of a relationships and decisions made within it.

**Collective**: where individuals work together to achieve a more extensive impact than each could have had alone. This includes involvement in political structures, but might also cover collective action based on cooperation rather than competition (Rowlands 1997).
Key originating questions of the study are -

1) In what may the women status is related to the socio-economic variables.

2) In what may the role conflict of working women is related to the socio-economic status of the respondents.

3) How are women's socio-economic status is related to their decisions regarding income, savings, fertility and family affair.

4) In what way health awareness and practices, educational achievement and aspiration and past time activities are related to socio-economic affiliation of the respondents.

5) How are opinion of the respondents regarding empowerment and gender equality related to socio-economic status of the respondents.

Analytical focus

The major valuables which have been analysed by the present researcher as an interactive variables of socio-economic demographic, cultural, health related and empowerment related value judgement of the respondents are

1) Variables identifying age, ethnicity, income education, occupation, size of family, types of family, types of marriage family planning awareness and marital status.

2) Variables identifying fertility status.

3) Variables describing role-related aspects of the respondents.

4) Variable locating nature, causes and extent of role-lanflict.

5) Variables identifying economic fertility and family related decision making of the respondents.
6) Variables (in the form of statement) describing attitudes of the respondents towards empowerment and gender inequality.

**Working hypothesis**

Hypothesis is usually considered as the principal instrument in research ordinarily, when one talks about hypothesis, one simply means a mere assumption or some supposition to be proved or disproved. But for a researcher hypothesis is a formal question that he intends to resolve. Hypothesis may be defined as a proposition or a set of propositions set for as an explanation for the occurrence of some specified group of phenomena either asserted merely as a provisional conjecture to guide some investigations 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 on independent variable to some dependent variable.

The validity of a hypothesis will be tested by analysing the sample. The procedure which enables us to decide whether a certain hypothesis is true or not, is called test of significance or test of hypotheses.

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1. Phenomena
  \downarrow
2. Observations/ideas
  \downarrow
3. Hypothesis (testable)
  \downarrow
4. Systematic observation and data collection
  \downarrow
5. Data analysis
  \downarrow
6. Test hypothesis
  \downarrow
7. Refute hypothesis
  \uparrow
8. Revised or reject hypothesis
  \downarrow
9. Confirm hypothesis
  \downarrow
10. Theory made up of confirmed hypotheses
  \uparrow
11. Prediction
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According to Hilway (1964): From the research Scholar's point of view, the hypothesis may be conveniently considered as a tentative or working assumption and the theory as the surviving or final hypothesis which is most defensibly supported by all the evidence. But since knowledge arrived at through the scientific method is subject to revision in the light of new data, a theory is in only one sense always only a working assumption, so that the conventional distinction between hypothesis and theory (on the basis of increasing adequacy of evidence and hence a greater certainty) is a relative one. For all practical purposes, the duality of the term hypothesis need not concern the research scholar except to serve as a salutary reminder that no conclusion reached by the scientific method is necessarily a fixed and final truth.

In the present research, the researcher has formulated the following hypothesis:

A difference in socio-economic affiliation leads to identify

1) attitude of the women towards gender equality and social status.

2) attitude of women towards socio-economic and socio-cultural discrimination.

3) Inequality in respect of getting employment in various sectors.

4) role set as mother and wife

A difference in socio-economic affiliation leads to determine

5) the freedom of fertility behaviour and decision

6) the capability of women's decision

7) the degree of empowerment in respect of educational motivation and opportunities.

8) the attitude of the women toward marriage with the educational and employment inputs
9) Attitude of the women towards late marriage

10) Attitude of the women towards gender discrimination in respect of:
   i) wage
   ii) educational opportunity
   iii) Power, and authority
   iv) Temperamental behaviour
   v) marriage pressure
   vi) fertility control
   vii) child care system
   viii) socio-psychological dependence
   ix) expression of emotions as an interactive process
   x) social mobility
   xi) taking active initiative
   xii) physical appearance
   xiii) getting scope for self actualisation
   xiv) sex object
   xv) sexual behaviour
   xvi) ego identity
   xvii) occupational choice
   xviii) degree of dominance
   xix) libido expression
The Research Design

The first task of a researcher to define research problem. The formidable that follows the task of defining the research problem is the preparation of the design of the research project, popularly known as research design.

To analyse the variable present piece of research the researcher has tapped the documentary sources from Kalyani Municipality Official Register and personal sources which provided her the information, the researcher failed the need to scrutinised literacy documentary and archival sources. Because their reliability of the research work can be determined only by reference to the primary sources which have been cited in bibliography. This has enabled her to make her self responsible for the fact the references to be original sources. The following list of reports of official and unofficial bodies refers to the secondary sources:

1) Districts census handbook Nadia district - 1999
2) Flopy of census of India, West Bengal, 2001.

The motive behind tapping such secondary sources was what is needed is not more documents but stronger roots for field exploration. With this methodological logic in mind she stepped into her study insofar as the study required survey and collection of information from working (both married and unmarried) and non-working (both married and unmarried) women in Kalyani township. Before stepping into the world of original work, the researcher visited six sectors (B-12, B-9, B-2, A-11, A.8, and A-9). During this period, non-controlled and non-participants types of field observation and unstructural type of
interview are made. The interview helped her to have prime information absent the attitude and reality of the women towards empowerment and garden inequality. Finally, the researcher has drafted an unstructured questionnair for pilot survey with intention of pre-testing the questions and such a method a means of detecting the mistake procedures. The pretesting is necessarily a trial and error procedure where in the successful trial are repeated and errors are omitted. The pre-testing provides not only a test of the clarity of the question but also efforts the possibilities of new dimensions of the problem of studies. The purpose of pilot student 24 urban households are selected and asked questions based on questionnaire and the respondents satisfactorily. The information that was collected during pilot survey helped researcher in designing the dissertation and constructing the final questionnaire consisting structured with closed ended and open-ended question.

**Sampling Frame**

What is sampling sampling may be defined as the selection of some part of an aggregate or totality on the basis of which a judgement or inference about the aggregate or totality is made. In most of the research work and surveys the usual approach happens to be to make generalisation or to draw inferences based on samples about the parameters of population from which the samples are taken. The researcher quite often selects only a few items from the universe for his study purposes. All this is low on the assumptions that the sample data will enable him to estilate the population parameters. The items so selected constitutes what is technically called a sample, their selection process or technique is called sample design and the survey conducted on the basis of sample is described as sample survey. Sample showed be truey representative of population characteristics without any bios so that it may result in valid and reliable conclusions.
Need of sampling

1) Sampling can save time and money.

2) It may enable more accurate measurement's for a sample study conducted by researcher.

3) Sampling remains the only way when population contains infinitely many members

4) It enables to estimate the sampling error and assists in obtaining information concerning some characteristics of the population.

To become alert regarding welter of irroleavances the researcher has built certain working hypothesis. The use of such hypothesis has prevented a blind search and indiscriminatiny gathering data some of which proved relevant and some of which proved irrelevant the problems under study. The researcher has tested hypothesis and accepted the both possitive and negative results true scientific spirit of enquiry. The selection of population in Kalyani for investigation was made through on the basis of purposive sampling followed by snow ball technique. For the purpose of locating the working women it was not possible for the researcher to adopt any other sampling method. Secondly, the official register and the census report do not provide us with the information of locating households with working women.

The total sample was fixed at the 200 household in Kalyani town considering the time within which the researcher completed her study.

The questionnaire was constructed to analyse not only socio-economic, cultural, fertility and role-related status of the women but also their attitude towards the extent freedom of decision making, extent of empowerment and gender inequality.
To make the final draft of questionnaire the researcher has borrowed a number of concepts and variables from different studies.

**Analysis**

Both qualitative and quantitative method of analysing data have been followed in the study and hypotheses have tested with the sense of logical reasoning. The data were suitably tabulated and statistical analysis (X² test) and percentage analysis were performed. Data were tabulated by usual tally marking. After completion of the tabulation, appropriate statistical test and percentage distribution were performed, and the tables were finally interpreted.

The X² (Chi-square test) provides us with a method to evaluate whether or not frequencies, which have been empirically observed differ significantly from those which would be expected under a certain set of theoretical assumption. This method is frequently applied in testing a number of cross tables in hypothesis formation for test of significance or association between the number of variables.

**Procedure**

1) The researcher set up a hypothesis

2) Chi-square (X²) has been computed after through modification of each table as the frequency of each is very less. For convenience, tables have been converted sometimes into 5 x 5 or 5 x 3 or 5 x 2 contingency tables and on.

3) Then computed X² (Chi-square) by the following formula

\[ X^2 = \sum \left\{ \frac{(f_0 - f_e)^2}{f_e} \right\} \]

Where expected frequency or \( f_e \) of any cell is given by

\[ f_e = \frac{\text{Row total} \times \text{Column Total}}{\text{Total frequency}} \]
4) Then computed 'Degrees of freedom'. The number of degrees of freedom can be defined as the number of cell values that the researcher can freely specify. The formula by which the degree of freedom is calculated if \( d.f. = (r-1)(c-1) \) where 'r' stands for number of rows and 'c' for member of columns.

5) Then the researcher found out \( P \) which gives the probability of exceeding the tabulated value of \( X^2 \) for the specific number of degrees of freedom.

6) Then, the researcher drew the statistical inference based on observed and table value of \( X^2 \)

7) Finally the researcher found out the level of significance.

Before drawing the inference the difference is significant, the researcher set up a hypothesis often referred to null hypothesis as constructed with the research hypothesis that is set up all alternative to null hypothesis. The null hypothesis assumes that there is absence of non-sampling error and the difference is due to chance factor. Then the probability of occurrence is such a difference is determined which indicate the extent and reliance that we place on inferences drawn. The table values of \( X^2 \) (Chi-square) are available at various probabilities levels which are called levels of significance. The value of \( X^2 \) at 0.05 or 0.01 level of significance from the given degrees of freedom is seen from Fisher's table and is compared with observed values of \( X^2 \).

Scope of the study

The question of women empowerment and the impact of globalization is most debatable issue in contemporary social issue. The women as the symbol of needle is metamorphosing into the symbol of sword. They are now not the entity with heart only but with the heart and head as well. Their multi-dimensional activities are flowering
gradually and the mobilisation of women resources along with their active participation and trend of de-alienation are accelerating pace and degree of development. The concept of power is the root of our society and our findings will be useful for planning effective socio-economic demographic, administrative and health related strategy for the women in our country and would be useful in widening the canvas of research.

Limitation of the study

The investigation has suffered from limitation of funds, convence sample, and rapport crisis. However, considerable care and thought have been exercised in making the study as objective and systematic as possible.