3.1. Introduction:

The methodology is the way that one adopts to interpret his feelings, experiences and facts all around him. The method is the way of observing, classifying and interpreting facts. The knowledge derived through the application of scientific methods constitutes natural sciences like physics, chemistry, biology, etc., the knowledge gained through the application of logical and to some extent scientific methods constitute social sciences like sociology, economics, political science, etc.

Methods are specific to the subject. The nature of methods is decided by the fields in which they are applied. Therefore, at large, the methods of natural sciences are different from those of the social sciences. It does not mean that the methods of both natural and social sciences could not be exchanged for academic purposes. We are passing through the age of science and technology. Each subject claims to be a science. The current trend is that social sciences are also borrowing and utilizing the concepts, tools and methods of natural sciences to gain greater objectivity and empiricism.

The study of society and social phenomena till the middle of the nineteenth century was made mostly on the basis of speculation, logic, theological thinking and rational analysis. In 1848, August Comte proposed the Positive Method in the field of social research. Within positivism, a branch called Logical Positivism was developed in the early twentieth century which claimed that science is both logical and also based on observable facts and the truth of any statement lies in its verification through sensory experience. Outside positivism developed schools of thought like symbolic interactionism, phenomenology and ethno methodology, etc. Today methodology of sociology is no longer based on positivist methodology as in the past but it has become a
body of diverse methods and techniques, all of which are perceived as valid and legitimate in social research.

Method is a tool or technique used to collect data. It is a procedure for obtaining knowledge based on empirical observations and logical reasoning. Methodology is logic of scientific investigation. Methodology means description, explanation and justification of methods and not the methods themselves. When we talk about methodology of any social science, say of sociology, we refer to the method(s) used by sociologists.

Methodology is a plan and procedure for carrying out the research. It refers to research techniques and strategies for obtaining valid information. It enquires into the potentialities and limitations of some technique or other. It is an approach to understanding phenomenon. It is a procedure of empirical investigation. It is not concerned with building knowledge but how knowledge is built, i.e., how facts are collected, classified and analyzed.

Methodology refers to philosophy on which research is based. This philosophy includes assumption and values that serve as basis (rationale) for research and are used for interviewing data and reaching conclusions. As the researcher has selected a survey method for the research it is the obvious way to get more information about this method.

3.2. Operational Definitions:

The following working definitions have been evolved for the purpose of present study.

**Schedule / Scheduled:** 1. A list, catalog or inventory of details, often as an explanatory supplement to a will, bill of sale, deed, tax form, etc.
2. A list of times of recurring events, projected operations, arriving and departing trainees, etc., time table.
[The dictionary meanings of the term ‘schedule or scheduled’ have not provided correct meaning of schedule or scheduled and it may be generalized from the above meanings that, the list as stated in the Indian Constitution, that list of tribes]

**Tribal** : Of, relating to or characteristic of a tribe or tribes;

**Tribe** : 1. Among pre-literate people, a group of persons, families or clans believed to be descended from a common ancestor and forming a close community a leader or chief; 2. a group of this kind having recognized ancestry; 3. any group of people having the same occupation, habits, ideas, etc.

**Change** : 1. to put or take (a thing) in place of something else; substitute for, replace with or transfer to another of a similar kind; 2. to give and receive reciprocally 3. to cause to become different; alter; transform; convert.

**Sociological/ Social** : 1. Of, or having to do with human society, its organization, needs, development, etc. 2. of sociology.

### 3.3. Sources of Data:

The present study is both theoretical and empirical. Hence, different sources of data are used for the present study. The sources of data are as under.

**Secondary Sources:**

It is essential to know about the modernization and impact of education on scheduled tribes in general and tribal women in particular. For this purpose, the researcher was searched secondary literature published in books, research journals, journal articles, news papers, magazines, web based sources, etc. These secondary sources helped researcher to provide a theoretical background to the research topic.
Statistical Sources:

It is essential to know about the extent of change and development made by scheduled tribe women in terms of education, employment, health facilities gained, etc at the national or state or regional level. For this purpose, the researcher was collected statistical data from different statistical sources. The statistical data collected reveals the population of scheduled tribe women in India and Karnataka, educational statistics, employment statistics, etc., are collected from statistical reports such as Annual Reports of different government departments, news papers, web sites like Indiastat, etc.

Primary Sources:

The present study is mainly based on primary data collected from the scheduled tribe women surveyed in Koppal district. Hence, survey made on scheduled tribe women in Koppal district are primary sources for the present study.

3.3. Methodology:

Survey Method:

This method involves a systematic and comprehensive study of a particular community, organization, group, etc., with a view to the analysis of a social problem and the presentation of recommendations for its solution.

Variables:

An image, perception or concept that is capable of measurement-hence capable of taking on different values is called a variable. According to Kerlinger, a variable is a property that takes on different values. Putting it redundantly, a variable is something that varies. A variable is a symbol to which numerals or values are attached. Black and Champion define a variable as rational units of analysis that can assume any one of a number of designated sets of values’.
Knowledge of the different types of variable and the way they are measured plays a crucial role in research. Variables are important in bringing clarity and specificity to the conceptualization of a research problem, to the formulation of hypotheses, and to the development of a research instrument. According to S.S. Stevens (1946), there are four measurement scales used in social sciences: nominal, ordinal, interval and ratio. Any concept that can be measured on these scales is called a variable.

**Variables for the Study:**

For the present study variables are divided into dependent and independent variables.

**Independent Variables:** level of education, type of family, structure of family, family’s total income etc are considered as independent variables.

**Dependent Variables:** Age, type of employment, etc., are regarded as dependent variables.

According to Manheim (1977:270) (Ram Ahuja : 2001), —a sample is a part of the population which is studied in order to make inferences about the whole population. In defining population from which the sample is taken, it is necessary to identify target population and sampling frame. The target population is one which includes all the units (persons) for which the information is required. For making the target population operational, the sampling frame needs to be constructed. It should be noted that sampling frame is not a sample; rather it is the operational definition of the population that provides the basis for sampling. This denotes the set of all cases from which the sample is actually selected.

**Sample Size:**

Though sample size is depending on what type of sampling method has been chosen some considerations have to be followed i.e., - the size of the population, nature of population, purpose of study, employment/ unemployment, etc.
Considering all the above key points the researcher has selected the non-probability sampling—i.e., convenient of purposive sampling. As the researcher is interested in finding out the socio-economic change of tribal women has selected his sample accordingly.

**Sampling Procedure:**

Having decided the size of sample it was considered to select the sample units from among those representing different socio-economic and educational strata, rather than having a random sample, it was decided to survey respondents through purposive sampling taking care of individual community, culture, occupations, income of family, etc representation in the sample. Thus, the distribution of the respondents selected is shown in the following table.

**Table No. 3.1: Selection of Respondents**

<table>
<thead>
<tr>
<th>Talukas</th>
<th>Number of Samples from Villages</th>
<th>Number of Samples from Towns/ City</th>
<th>Total Number of Samples Interviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Working Wives</td>
<td>Housewives</td>
<td>Working Wives</td>
</tr>
<tr>
<td>Koppal</td>
<td>30</td>
<td>40*</td>
<td>40*</td>
</tr>
<tr>
<td>Gangavathi</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Kushtagi</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Yelaburga</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Total Samples</td>
<td>120</td>
<td>130</td>
<td>130</td>
</tr>
</tbody>
</table>

Note: As the Koppal city and taluka is big compared to all other towns, total 140 samples, of which 70 working wives and 70 housewives are selected to collect the primary data. It is observed that compared to villages, more tribal women are working in Koppal city and hence, more numbers of working respondents were selected from Koppal city.

Finally, the primary data is collected with the help of structured interview method. The interview schedule consists of seven parts. They are:

1. **Personal identification of Tribal Women:**

   In this part demographic variable such as age, sex, employment, location (rural or urban), level of respondent education, etc., are included.
2. Family background:

This part is devoted to the family background of tribal women. The aspects covered under this dimension are location background (rural or urban), type of house, size of family, structure of family, type of family, father and mother educational background, father and mother occupation, total family income, facilities of house have etc., comes under this section.

3. Working Conditions:

This part is deals with working conditions of working tribal women, which comprises of nature of occupation or employment, status gained from employment, problems faced at work places, etc.

4. Group Identification:

This part consists of group identification of tribal women. It throws light on caste based associations in which tribal women are engaged, culture, celebration of religious festivals, etc.

5. Personal Behaviour:

The part gives the details of the personal behaviour of tribal women in the study area. The study focuses on socio-economic problems faced by tribal women in their families and their work places. It analyses the working conditions at work places and gender equality gained by tribal women in their families.

6. Health of Tribal Women:

This part consists of health problems faced by tribal women and nature of treatment got by tribal women. As the tribes generally believes in herbal remedies, it is essential to analyze the health of tribal women.
7. Social Change among Tribal Women:

Main focus of the present study is social change among tribal women. As such, there is change among tribal women due to impact of education and employment. The change or development is indicated in terms of education, gender equality, employment, income, change in family occupations, increase in properties owned by families of tribal women, etc.

Tools of Research:

Interview schedule was used as main technique or tool for the present study. The interview schedule was preferred to a questionnaire in view of a many of the respondents did not know reading or writing, although questionnaire would have been easier to introduce particularly in view of the respondents being located at distant places. The interview schedule was prepared keeping in view the objectives, the research questions and the hypotheses of the study was taken to see to it that none of the objectives were left out and irrelevant and superfluous data were not gathered from the respondents. Each question was picked for the information it generates in addressing the objectives.

Further, the interview schedule was divided into several sections each deals with objectives and the sections were so arranged as to lend it a rational structure and a logical sequence. There were separate section on personal profile, social change, educational development, economic development, etc. and the like. The questions were primarily structured so as to unable the schedule to be pre-loaded to the extent possible, which would case the tabulation process. The section of on social profile consisted of questions that would elicit information on age, education, income, marital status, family background and the like. There could be employed as explanatory variables in the analysis of the major findings of the study. Thus, care was taken to see that, the interview schedule was comprehensive enough to cover all the objectives and hypotheses as well as could be rationally and logically structure.
To collect the primary data, the investigator was personally approached tribal women and asked the questions listed in interview schedule. Tribal women at their respective work places and households by using interview schedule and also by carried out informal talking and discussion.

**Pilot Study:**

Pre-testing is necessary in data collection. No tool is put to use unless it has been tested before hand as to whether it will serve the purpose. With this idea the schedules prepared for tribal women were pre-tested for collection of reliable data, to cover the gaps in the information and to test the suitability and utility of the questions as well as their sequence and structure.

Accordingly, schedules were tested by conducting a pilot study in Koppal city on 20 tribal women, of which 10 are working wives and 10 are housewives. The pilot study helped to revise the schedules by inclusion of certain important items which were noticed. It has helped in anticipating problems that are going to be encountered during the study and also relevant factors associated with the questions. The pilot study has thrown light on the methods to be adopted for interviewing tribal women.

**Preparation for Field Work:**

In order to understand clearly the concept of scheduled tribe women and its related issues, a well structured interview schedule was prepared in two languages (English and Kannada) keeping in view that the spoken language of the study population was Kannada. The standardized interview schedule consists of four main sections.

I. Personal Profile
II. Social Changes
III. Education and Health
IV. Economic Change
Koppal being the district head quarter, where the researcher stayed and the interviews were conducted for employed wives at their work places such as schools, colleges, banks, etc., during lunch time and visited different households, when the tribal women were relatively free at lunch time. However, in some of the work places the researcher had to adjust the timing of the interview in such a way that whoever was free during their work was first interviewed and later on the scheduled tribe women were interviewed whenever they got free. Further, it also needs to be mentioned that, except in a few cases, the researcher had no difficulty in collecting information from female respondents. There were also instance where two respondents were jointly interviewed and this enhanced the reliability of the data collected. Since, the researcher himself collected the data, care was taken to get all questions answered. The interviews were conducted in Kannada and English which were the languages spoken in the study area and with which the researcher was also very familiar.

**Analysis and Discussion of Data:**

In the present study, the qualitative information obtained during the interviews, using a pre-coded sheet. Quantities information obtained from the structured interview schedules were edited carefully. The data were processed by SPSS package. Analysis of quantitative information consisted of producing simple frequency. In order test the hypothesis statistical technique of Chi-square is calculated. The data related to profile is presented in the form of percentage.

With the help of computerized statistical analysis, the collected data was classified, tabulated and analyzed using statistical tools like percentages, ratios and averages. The results so obtained have been presented through tables and diagrams at appropriate places.
3.4. References: