

### III. RESEARCH DESIGN OF THE STUDY

In generic terms, the search and gathering of facts/data and information for the advancement of knowledge is regarded as research. A research design encloses all the details pertaining to a chosen research work serving as a well thought of agenda (Krishnaswami, 1999) and considering this concept, the plan and procedure for the concerned research study on the topic entitled “**Empowerment and Sustainable Development of Senguttaiyur Village Irular Tribe Women on Eco – based Well – being Strategies**” was streamlined to include:

- A. Ethnographic and Exploratory Study**
- B. Psycho-Socio-Economic Study**
- C. Stature and Behaviour of Women in the Social Milieu**
- D. Existing Level of Empowerment**
- E. Action Research**

**A. Ethnographic and Exploratory Study:** Ethnography, a specific kind of observational science is presented in a written format. It is a narrative of a culture, society or community studied or observed and a procedure employed to provide descriptions of human societies, which as a methodology does not prescribe any particular method like structured interview, but rather formulates the character of the study, for instance, describing people through writing. It is also referred to as ‘**field study**’ or a ‘**case report**’ in biological sciences.

Acquiring information and deliberating social changes is what **Ethnography** is meant for. In ethnographic studies, part of the community’s shared knowledge is but reproduction of previous facts (Hymes, 1980). Most common method for collecting data in this kind of a study is direct, first hand observation of daily participation, combining conversation with different levels and involving small talks to long interviews. Ethnographers, in fact are participant observers.

Irular tribes are the ancient tribal group living in the lower slopes of Western Ghat Mountains, the second largest tribal group in Tamil Nadu; Irular are one among the primitive tribal groups in the State. There is a decreasing trend in population of the Irular tribes. Now there are only 23,116 Irular households in Tamil Nadu (Census, 2011). The name Irular is

derived from the Tamil word “Irula” meaning dark Which Refers to their Skintone“Irula” is a Dravidian language spoken by Irular tribe. This Language is Tamil and Malayalam and it has its own dialect. In comparison with other Tribal Population Irula’s are Still Backward in Education and Employment (Lakshminarayana 2006.) study of a tribal belt in Coimbatore district, Specifically the Karamadai block was attempted.

**Box : 4. Particularly Vulnerable Tribal Groups (PVTG)**  
The Dhebar commission (1960) and the Shilu A O (1969) team recommended the Government of India that primitive tribal communities should be taken as a special category for which special programmes would have to be initiated for their all-round development (Zacharias, 2003). As part of tribal sub plan, seventy five tribal groups have been categorized as **Particularly Vulnerable Tribal Groups (PVTG)** in India. As these tribes are in a very poor state of economy, a separate special Central assistance is provided to the State for their development

This block was selected for the ethnographic study by virtue of the presence of Tribal settlements, specifically ‘**Irular’ primitive tribal settlements** in this belt. Therefore this part of the study was channelized to gather information on the following lines:

**Feasibility Study**  
**Investigatory Study**  
**Exploratory study**

**Feasibility Study:** An informal survey of the three Panchayats namely Kemmarampalayam, Odanthurai and Tholampalayam set the stage for the feasibility study. Information was gathered (secondary data) from Government of India publications, Karamadai Panchayat Union Office, Coimbatore Forest Division and Range Officer of Karamadai Range Forest Office and Coimbatore Krishi Vigyan Kendra. The sampling method followed was **Purposive** that involves the selection of samples which in the viewpoints of the researcher are representative (Udofia, 2011), and will provide the required responses to the stated queries and thereby enable meeting the objectives of the study (Saunders, et al, 2009).

The ethnographic study revealed the feasibility to identify the status quo of three Panchayats. The following additional reasons and data presented in Table (1) aided in the selection of the specific area and the sample for the investigatory study that followed

- **All three are ethnic groups displaying an individualistic lineage and pedigree**
- **Availability of required sample size**
- **Lacuna felt with availability of tracer studies on tribal women and their issues**
- **Ease in approachability and communication**

Hence from a multi stage sampling method, information was gathered which highlighted the salient features of the three blocks as is presented under Table. (1) and the Geo-tag.

**Table: 1 : Scenario of the Chosen Panchayats**

2011 Census Parameter*	Status in the three Panchayats		
	Kemmarampalayam	Odanthurai	Tholampalayam
Total Population	6405	5399	6574
Total No of Houses	1906	1529	1901
Female Population (%)	50.8 (3254)	50.3 (2713)	50.2 (3300)
Total Literacy rate (%)	62.9 (4027)	64.0 (3454)	<b>59.8</b> (3934)
Female Literacy rate (%)	28.1 (1798)	29.1 (1571)	<b>26.5</b> (1742)
Scheduled Tribe Population (%)	9.4 (603)	12.9 (694)	<b>38.8</b> (2553)
Scheduled Caste Population (%)	15.0 (960)	20.2 (1089)	13.1 (858)
Working Population (%)	57.9	50.2	59.2
Child(0 -6) Population	479	556	473
Girl Child (0 -6) Population (%)	48.2 (231)	52.2 (290)	50.5 (239)
Number of hamlets	12	9	19
Number of families BC	943	798	925
Number of families SC	267	368	231
Number of families ST	76	169	<b>321</b>

- Most recent statistic

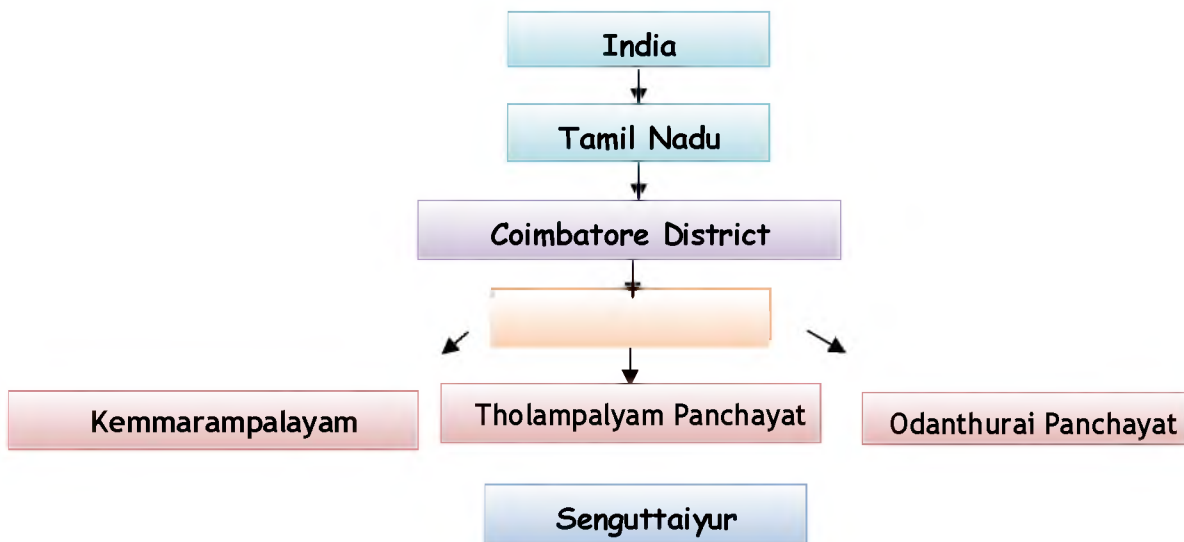


**Figure 2 : Map and Geo-tag of Karamadai Block showing Panchayats and Reserved Forest Area**

On all scores Tholampalayam Panchayat with the highest population of Scheduled Tribes was found to be the one showcasing a desperate scenario warranting action from all quarters ensuring possible prospects for their upliftment. As a major factor, population-wise (especially female) and tribal population family-wise, Tholampalayam ranked higher. From the selected Panchayat, this tribal settlement (in Tholampalayam) was selected.

**A.1.1. Selection of Irular Settlement** – To keep in with this aspect one Irular tribal settlement was chosen adopting **multi-stage sampling** and thus **Senguttaiyur village (Senguttai)** in Tholampalayam was selected as presented under Figure (1).

A multi-stage sample is one in which sampling is done sequentially across two or more hierarchical levels such as first the Country, followed by the census tract, block, household level and ultimately within-household level ([www.srmo.sagepub.com/view/encyclopedia-of-survey-research.../n311.xml](http://www.srmo.sagepub.com/view/encyclopedia-of-survey-research.../n311.xml)).



**Figure 3 : Selection of Tribal Settlement**

**Senguttaiyur is a homogenous primitive tribal settlement located in the Reserve Forests of Karamadai Block in Coimbatore district and inhabited by “Irular”.** This area was selected as it was found that the community, despite having indigenous resources, was not capitalizing on them to better their livelihood issues. The following Table. (2) Illustrates additional criteria considered for identifying the specific village.

**Table: 2.: Status of Selected Village (Senguttaiyur)**

Particulars Considered	Kemmaram palayam	Kallaar in Odanthurai	Senguttaiyur in Tholampalaya
Located in Reserved Forest	village	-	m Yes
Homogenous Population	-	-	Yes
Below Poverty Line	-	-	Yes
PVTG	-	-	Yes
Abundant Availability of NTFP	-	-	Yes
Access to Forest Resources	-	-	Yes
Conducive Government Policy on NTFP	-	-	Yes
Less Exposed to Government Welfare Programmes	-	-	Yes
Less approached by Government Officials	-	-	Yes
Traditional Skills for collection and process of NTFP	Yes	Yes	Yes
Less exposure to Training	Yes	-	Yes

Being a homogenous group, living within reserved forest limits and below poverty line formed the primary criteria showcasing Senguttaiyur village and villagers as feasible samples for the study. Availability in abundance and access to forest resources coupled with low level intervention by government officials augmented their unique nature which warranted in-depth studies. Knowledge on traditional skills for processing of NTFP but lacking support through training added incremental pep to the issue. Hence the **ethnographic study paved way to choose Senguttaiyur village with its Irular community women as the target sample for the investigatory study.**

**Investigatory Study:** An investigatory study is a type of field survey where the required information from the concerned sector is obtained by investigating details about the particular sample using specific methods. According to Covey (2002) **survey** is an effective way to collect details about individual's current behaviours, attitudes, beliefs and feelings. This study adopted the **survey strategy**. Hence this part of the study involved:

**a. Selection of Method:** To find out the required details on the status of Irular, especially women, their status, livelihood issues and the like, dependence was not vested entirely on secondary data, but mainly on **primary data**. Data collected for the first time with a focus on the needs of the study are primary data and can employ multiple methods to collect it (Ritchie and Lewis, 2003). Secondary data on the other hand is a summarized version of the primary sources. The demographic profile of the Irular was studied by mainly collecting primary data

from the village residents and secondary data about the Panchayats from Government of India Publications and Ward offices.

**b. Selection of Locale and Sample:** The specific locale selected for the study was **Senguttaiyur village** in Tholampalayam Panchayat. It was inhabited by ethnic Irular and was located in a remote area away from townships and commercial centers. A **sample** is a subset of the larger population that represents the entire group. A sample is defined as part of the target population, carefully selected to represent the total population (Cooper and Schindler, 2001). This village satisfied the required sample area. Hence this area was selected adopting **purposive sampling**.

According to Patton (2002), **purposive sampling** is used in qualitative studies where identification and selection of data-filled cases aid in the most effective deployment of available resources. This involves, add Cresswell and Clark (2011), identifying and selecting appropriate individuals/groups who are well informed with the phenomenon under consideration.

Though the selected village is near Coimbatore, a sophisticated City, developmental aspects had not reached the village appropriately. Hence the total village and its ecosystem were taken up for a multi-pronged study. The geographical area, ecosystem, bio-diversity, livelihood options and the like were observed. Primary data on facilities/provisions enjoyed, resources available etc. was collected from villagers and secondary data on provisions made available by local governance was obtained from ward offices and district headquarters. **The topic of the study decided the sample selection. On observation the women seemed to be less empowered on all scores. Hence only the women in the households formed the focus group.**

**c. Selection of Tribal Women:** The sample decided included **54 households out of 67 households residing in the village**. Reluctance to co-operate, shyness to communicate and single member households were left out from inclusion. Hence the selection procedure was purely purposive, which highlights the deliberate choice of a participant by virtue of the characteristics he or she possesses (Bernard, 2002). Unlike random studies, Spradley (1979) had emphasized this type of sampling to focus on the individuals with specific qualities and a better understanding to assist in the concerned research work. Hence a multistage, strategic approach was followed for selection of the samples. This paved the way for furthering the study which explored their living status

**Exploratory Study:** The exploratory research type was employed for conducting this part of the study. The objective of this type of research according to Kotler and Armstrong (2010) is tantamount to obtain a basic or fundamental knowledge about a research problem which in the course of study helps to evolve new ideas for a deeper exploration. It actually has the potential to gratify curiosity and enable better understanding, states Babbie (2010), analyze prospects for testing the feasibilities for advanced research and evolve practical oriented methodologies. To derive complete details about the selected tribal and their life patterns this type of a study was felt imperative which included the following stages

### **Household Survey**

#### **Engagement in Livelihood Tasks**

**Household Survey:** The family as a sociological concept portrays a bonded structure with a common stature. A household is where an entire family or a part of it lives (Krishnaraj and Chanana, 1989). '**Household**' is a term used in the Census that includes all persons who share the same hearth and is considered primarily as a unit of economic activity by the economists. Schminck (1984) defines households as co-resident group of persons, who share. Here material reproduction is ensured by sharing needs of consumption and resourced from a common pool. Hence this part of the study was scheduled on the following lines:

**a. Mode of Data Collection:** Only those samples which could be categorized under households were selected for the study adopting judgment sampling. As Kumar (2011) stated, this type of sampling is useful when a phenomenon needs description or where prospects for development of the aspect is less known about. This approach is adopted when a sample is drawn based on certain judgment about the entire universe and an underlying assumption that the units are representative of it (Black, 2011). **Thus the 54 families identified through the investigatory study satisfied the sample for the exploratory study too.**

Gathering of pertinent information regarding the selected samples included both collections of data from primary and secondary sources. In Lewis's (2003) opinion the **primary data** generated is need based and collected through interviews, questionnaires, surveys, focus groups, and observations. Secondary data was collected from census reports, annual reports of Government departments, various research reports by research scholars, books, journals, and websites. While the ethnographic study depended (entirely) on secondary data, the exploratory study articulated using both the sources. In situations where secondary data was found inadequate, primary data was used. **Unit of enquiry for the**

**present study was the 54 families of the tribal community residing in the selected area and the key informants were the women of the households.**

**Gathering Information: Interview** is the most reliable method of collecting data in field studies for their ability to draw information and for being highly flexible (Misra, 2001). There are two different forms of interviews: structured and semi-structured. According to Edwards and Holland (2013), **semi-structured interview** is open, allowing insertion of new ideas sequel to participant responses. The interviewer in such interviews bothers mainly to draft the framework of themes to be explored. Thus for the present study semi-structured interview was adopted.

**c. Selection of Tool:** To facilitate the process, the necessary tool – an interview schedule - was drafted (Buckley, et al., 2000), the most popular and extensively used tool in data collection. According to Best (2006), it is in a sense an oral questionnaire where the interviewee responds orally - a dual-way method, which permits interaction- a direct verbal interaction, dialogue between the interviewee and the interviewer.

The schedule framed for the study invited responses for the demographic (social and personal factors of the samples) and economic variables of the samples. Responses relating to their personal factors like age, education, occupation etc. and social factors like general family background, religion, size of the family, type of family, occupation of the head of the family, profile of head of family, etc. were elicited. Details pertaining to earnings, family income, and savings were also covered using the schedule. The schedule also helped suck out information about management of the personal resources like time, energy and community facilities. A sample schedule is presented under Appendix I.

**d. Conduct of the Study:** Large part of the time during the investigator's personal visits to



**Plate : 2 Rapport Creation**

the locale went in rapport creation and cajoling them to disclose facts. The samples (54 women alone) were approached during their leisure and the details collected as per the schedule, after several visits over a period of three months (as they were reluctant to disclose information), analyzed and the findings are presented under Chapter IV.

**Engagement in Livelihood Tasks:** Livelihood tasks are those works done as the means of gaining a living or a combination of the resources used and the activities undertaken in order to live. A descriptive analysis generally portrays a complex web of activities and interactions that emphasize the diversity of ways individuals make for a living. Hence this part of the study included the following stages:

**Selection of Locale and Sample:** The sample selected for the household survey, satisfied for this part of the study, as they were primarily selected only to decipher information on their level of empowerment as tribal women. Evidently all the **54 women formed the core group selected and studied adopting convenience sampling, as this technique enabled choosing a homogenous population**, i.e. population having similar behaviors and characteristics as Bernerd (2002) and Bornstein et.al, (2013) explain. The

locale naturally was the 'individual spaces' of the concerned sample - house, farm - where they engaged in some livelihood activity. Hence this aspect analyzed the work of people in their individual settings.

**Work Profile:** This part of the study aimed at deriving information on pertinent concepts that deduced details on:

**1. Domestic Activities Performed**

**2. Livelihood Options Preferred**

**1. Domestic Activities Performed:** Work done in the home is called domestic work. This part of the study included:

**a. Selection of Tool and Method:** With the help of an interview schedule details on the type of activities done by the samples as routine family activities was derived. A schedule is a proforma that contains a set of questions, and conducted as a standardized device or tool of observation to collect the data in an objective manner (Deepak, 2006). The nature of activities, time spent on it daily and the persons responsible for the activities and the like were enquired of by administering it (Appendix I ).This also exposed the resources that the selected samples had access to, at the household level and the freedom that they enjoyed in decision making and managerial activities. The method adopted was face to face interview. **Interview** is a process of communication or interaction in which the subject or interviewee gives the needed information verbally in a face-to-face situation.

**b. Conduct of the Study:** The samples were approached during their leisure, and details recorded and observed while at work. To this effect the samples were watched when they were in action, involved earnestly in relegating the duties related to their household, nature of activity done, time and effort extended, facilities available, housing conditions, access to fuel and water and method of procurement, type of effort involved and an assessment of all domestic chores undertaken by the samples were religiously recorded. Observation further helped to obtain minor aspects left out in the responses. Findings are presented under EChapter IV.

**2. Livelihood Options Preferred:** A livelihood is a means of making a living and encompasses people's abilities, capacity, property, income and activities required to maintain a secured life and becomes sustainable when it enables coping/recovering from shocks and

stresses and enhance well-being and that of future generations without undermining the natural environment or resource base (<https://www.ifrc.org/en/what-we-do/disaster-management>). Being tribal it was quite evident that their livelihood would depend on the resources available in their settlement area. Being the only group which resides in reserved forest settlement among the three Panchayats, their livelihood naturally should depend on the forest ecosystem. Hence the nature of activities taken up by the sample women to augment / contribute to their family income was enquired of and recorded.

**a. Productivity and Performance Issues:** Data requested on this score identified the nature of livelihood options preferred, the effort put in, in terms of human resources expended, abilities and the fruits of their productivity. Information on the complexity of the tasks involved and performed, resource access, sequence of activities, tools used, precision required, efforts put in, posture adopted, fatiguing conditions and the like were elicited using the same schedule. This facilitated a glimpse into their productivity and performance issues.

**i. Selection of Method:** Face to face interview along with **observation**, was the chosen method. They are also personal interviews enabling (Kothari, 2008) modification if needed and clarification of doubts plus cross – examination (Kothari, 2004 and Gupta, 2007). The schedule was administered on the same 54 samples. **Observation** involved the researcher watching, recording and analyzing events of interest. Angrosino (2005) recommends observation as a successful tool for quantitative and qualitative research in the fields where communication and interaction are predominant.

**ii. Documentation of Data:** Activities performed related to their livelihood issues, stage wise participant observation of activities involved, physical and mental effort involved, problems faced, satisfaction with the work done and the returns earned for the effort put in the details which was recorded. Problems faced and drudgery felt along with fatiguing conditions were inquired of and recorded. Management of physical and mental stress incurred was also found out and details on after effects of such instances (endured if any) was asked and recorded.

**iv. Conduct of the Study:** The schedule was administered on the samples when they were actively engaged in the tasks, enabling observation of the samples while at work and also scan their work environment and living conditions. Details were collected as per schedule, consolidated and is presented under Chapter IV.

**B. Psycho - Socio - Economic Study:** While the previous types of studies, dealt with the cognitive, affective and psychomotor issues of the samples, this aspect of the study related to identifying the socio - economic issues of the samples on the following lines.

**Quality of Life (QL) Status of the Sample:** Measurement of social well-being is the central objective of any indicator. To measure the extent of QL, one needs to have clear indicators. Since it is understandable that the socio economic profile of a cross section of the society represents its QL, the procedure was directed to include evaluation of the sample's status on this score on the following lines:

**Determinants of Levels of Living**

**Satisfaction of Social Indicators**

**Economic Status**

**Awareness on Rights and Amenities**

**Decision making Behaviour of the Women**

**Determinants of Levels of Living:** The living status of the sample for satisfaction of the indicators put forth by Ganguli and Gupta (1976) the pioneers who have attempted to measure well-being or development on a multi-dimensional framework was studied. Levels of living are defined as the satisfaction of human needs or wants. They divide human needs into two: primary and secondary indicators and components (an approach followed by Maslow and ILO). The findings obtained through the interview and observation was analyzed for satisfaction under the two classifications. Primary needs practically depend on the family's income (poverty) level. In absolute poverty the parameters stated under that category may not be fulfilled. The secondary components are those which do not have a priority without fulfillment of the primary needs (the Basic needs).

**Table: 3 Indicators considered in determining the settlement’s levels of living**

Components studied		Parameters studied	Specific Indicators
Primary indicators	Food requirements	Nutrition	Meal pattern and daily intake of calories, proteins and vitamins
	Nonfood requirements	Housing	Physical conditions – nature, type, and problems faced
		Health/ medical care	General conditions and specific problems
		Education	Literacy level
Secondary indicators	Nonfood requirements	Leisure/ recreation/ entertainment	Individual experiences
		Environment	Ambient and household – road access, type of road, nearness to Police station, Post office etc., electricity consumption
		Security	Personal and social

- a. **Selection of Method:** The same area and sample was chosen for the study. Many of the details needed was culled out from responses received for the exploratory study.

Literacy, occupation and nutritional status are the three indicators used for identifying the levels of living of the samples. As data on literacy and occupational status was already drawn, nutritional status was found out. In order to find the nutritional status, a 24 hour recall method of food intake for three consecutive days was requested from the samples. From the data obtained the nutrient intake of the selected sample was determined. According to Morrison and Hork (1999), the method of assessing dietary intake of individuals by asking them to remember and recall food consumed in the past three consecutive days is referred to as 24 hour food recall survey. This requires complete list of foods consumed (Mahan and Stump, 2008) using which the nutritive intake of the samples is calculated. The findings pertaining to satisfaction of these indicators are presented under Chapter IV.

**Satisfaction of Social Indicators:** The 2013 World Development Report on Jobs explains the important dimensions of economic and social development. The extent of satisfaction observed for the **sample’s access to salient indicators** (54 women) namely literacy, family size, infrastructure etc. and access to fuel, electricity, safe water, transportation, health, and nutrition was analyzed from the responses received for the interview schedule obtained as primary data (Appendix I) and details from Government

Offices as secondary data. As supplementary evidence, details from the Panchayat Ward offices and Anganwadi records were perused and documented. Hence this aspect of the study relied more on secondary data. The details obtained were compared with the standards projected by **Social Development Report 2011** (the most recent one). The existing status as per the findings is presented as a comparative Table (projected rates Vs existing rates) under Chapter IV. The facts eventually enabled to identify the sample's **social reproductive roles**.

**Economic Status:** The economic status of the samples was studied considering income earning potentials plus those on dependents' status. Further for a descriptive study on economic status just the family income details are insufficient. Considering this aspect the status of the samples on this score was analyzed on the following guidelines:

**Categorization of samples on their monthly income level:** Annual Income level of the samples was computed based on the classification proposed by Housing and Urban Development Corporation (HUDCO) and reported by Jain (2016).

**Per capita income of the family members** - in respect of National level statistics report by Rangarajan Committee (2014) and quoted by Singh *et.al.*, (2017).

**Computation of Socio-Economic Status (SES):** This exercise was done using the **modified** guidelines of Kuppuswamy Scale (1976) modified further by Singh et al.,(2017) which is the method followed even now by health personnel. This calculation takes into consideration education and occupational status of the head of the family and the monthly family income. Another method was also put to use, namely the modified BG Prasad Scale, duly modified by Singh et al., (2017). This considered only the per capita income of the family and was computed for 2017 Consumer Price Index (CPI).

The status quo of all the 54 samples on these scores (socio-economic level) was found out. These also facilitated in fitting them in the above or Below Poverty Line (BPL) categorization and the findings are presented under Chapter IV.

**Awareness on Rights and Amenities:** The previous stages, more or less gave a hint that the sample women failed to gain access to resources and benefit from them mainly because of their ignorance and lack of awareness on their basic rights and the amenities available to them. With this background a check list comprising variables on rights and amenities available on, economic, social, infrastructural, technological, communicative and

behavioural aspects was drafted based on the awareness indicators published by Sitalakshmi (1989) as guidelines. The sample and the area selected for conduct of the study remained the same. A copy of the modified checklist is given in Appendix (II). The responses to the indicators were *per se* recorded, analyzed for their awareness levels and the findings are presented under Results and Discussion.

**Decision making Behaviour of the Women:** Satisfaction of the above factors would decide the placement of women in any decision making situation. Personal footing on all variables, socio- economic status, availability and access to resources, satisfaction of social indicators and their personal awareness on developmental indicators – all determine the extent of **space the sample's receive even in their own households to express their opinion and participate in active decision making.**

To understand the existing situation an enquiry was made on the samples by administering a **modified version** of the check list proposed by Kapadia (1993) on “Personal self-control beliefs”, to suit the current study conditions on all the 54 samples of the settlement adopting convenience sampling. It presented 23 situations for which the samples were requested to respond as to who took the decision – self, self and others or others – to different situations. This exercise made it possible to analyze the specific and special situations where they had a free hand to decide on the decision under consideration. Further the proportion of samples that had such rights in matters common to them or different situations and the like could be adjudged. A copy of the modified checklist is presented under Appendix (III). The findings obtained are analyzed and presented under Chapter IV.

### **C. Stature and Behaviour of Women in the Social Milieu**

This part of the study was thought out subsequent to literature searches where genuine research on people, their environment and their interactions resulting in expression of the people's connections and indigenous capabilities leading eventually to their well – being have been studied in different contexts and dimensions and published by Russell et, al (2013) and Breslow et,al (2016). Significant cues have been borrowed and modified to suit present research work (in a social context) and has been used to evaluate the status of the Senguttaiyur tribe women in their environmental settings. Similarly the viewpoints of social scientists and behavioural scientists in the analysis of human behaviour in their native locales

have also been browsed and essences of it have been used to elicit the standpoints of the concerned sample on select important phenomena.

One's position in a community and reactions explicit to situational contexts and specific behavioural concepts are unique features that distinguish one tribal settlement from another. Hence this aspect of the study was streamlined to infer details on the following from the same 54 samples residing in Senguttaiyur on the following lines:

### **Probe into Behavioural Standpoints**

#### **Status of Well – being**

**Probe into Behavioural Standpoint:** Behavioural standpoints of the selected samples in the given milieu were found out to understand how far they reflected up on their behavioural aspects in the past and the influence they have had and the impacts of the same. They were, through frequent visits and personal talks, taught like students to reflect on their past experiences, visualize their position over time and space, events and episodes and blurt out what they learnt, endured, lost from such circumstances. They were made to think deep into their past life patterns and come out with aspects that they had earned and enjoyed or lost and suffered. Here the researcher had to maintain a teacher and the taught environment, pointing to factors that they would have experiences to share with. By this process it was intended to make them come out with their personal contacts, recall experiences through reflection and sensitize them to the present scenario and thenceforth examine their own responses to the present conditions. Evidently this called for reflection, reflectivity and reflexivity (Argyris and Schön (1974); Giddens (1990); Cunliffe (2009a); Holmes (2010) and Hibbert (2015) which in the meanwhile enabled introspection of the behavioural aspects and identifying the limitations and constraints they had come across or for positively contributing to their progress. The sample and the area again was the same.

**Selection of Methods:** The methods adopted to derive the necessary information on the sample's behavioural aspects included repeated forums on voluntary monologues, dialogues, participative forums, organized meetings to pinpoint the objectives and open meetings, which enabled them to voice out their responses. These methods in a way assisted in multiple recall episodes of the same events and get genuine reactions of the samples. In this instance the factors concentrated on getting details on the following lines from the selected samples:

- **Reflection:** questioning themselves and finding answers from past experiences/ events, and eliciting factors responsible for their limitations, constraints and what they are capable of
- **Reflectivity** – introspect on how they have changed as impact
- Make them realize what they are entitled to, the rights and amenities

These studies were mainly carried out on the premise that empowerment implies and reflects both – one’s feelings or perception and one’s experiences. At this juncture it was felt imperative to find out the intensity of these concepts in the sample’s day to day living, their reactions to different situations and their willingness to adapt. The findings on all these aspects are delineated under Chapter IV. Results and Discussion

**Status of Well – being:** This part of the study enquired on the sample’s access to or enjoyment of environmental resources - biotic and abiotic - in the settlement area (the reserve forest area). Abiotic encompassed physical conditions and non – living resources. Presence of these can provide **a platform for their livelihood benefits.**

**Selection of the Method:** Breslow *et.al*’s., (2016) model on assessing human well – being had defined “human well-being as a state of being with others and the environment, which arises when human needs are met, when individuals and communities can act meaningfully to pursue their goals, and when individuals and communities enjoy a satisfactory quality of life”. Related to this context they had proposed four major **social science-based constituents of wellbeing**, namely, connections, capabilities, conditions, and cross-cutting domains (the 4C’s framework, the assessment of which can bring out the status of well – being of a concerned group) - **the framework of which may be adapted** for other regions, management needs, and scales **with appropriate modifications.** They also refer to ecosystem services and culturally mediated benefits.

<b>Box.:5 Modified 4C’s concept</b>
Context
Capacity and Competence
Connective Links
Convergence

**Well – being** is a vague concept, comprehension of which depends up on the **given situation, individuals studied, the society concerned and the fruitful interactions taken up leading to benefic for the people concerned.** Here in this study it was considered as an entity **providing opportunities and access for the settlement to grow and develop.** The nature of resources provided by the biotic and abiotic resources can **enhance an individual’s capabilities and connections or access to resources,** thereby ensure rationalization in individuals, especially women to be self – determined and self – reliant to empower

themselves. **The framework was modified to suit the specific “social context” under consideration. The new model proposed for the study also studied the 4C’s in a different dimension and titles, placing emphasis on the cohort, their social status and position in the settlement, levels of socialization and networking maintained etc.** The constituents studied were **Context, Capacity & Competence, Connective links and Convergence** of intersecting factors, understood from the cognition the sample’s had on cognitive and physical domains.

**Collection of Data:** To locate the status of the concerned sample on access and further utilization of these elements in their settlement area, first an inventory on the biotic and abiotic elements the sample’s were aware of was found out. Access to tangible resources especially physical components (such as housing, transportation, entertainment and unique identification cards), social (utility and services) and natural (biotic and abiotic) elements was found out in their own versions of the 54 samples. For understanding the effective utilization of such resources, in terms of their tangibility or otherwise, the aspects contributing to their survival, especially livelihood aspects related to the environment in which they lived and the techno factor practiced were enquired of. Problems and positive features associated with these were studied.

**Selection of Method:** The methods adopted to decipher information included one – to – one interactions, two – way dialogues, participative forums, expression of distress sessions, group meetings, home visits and the like. These methods enabled culling out facts on the livelihood options taken up, access and capitalization of available biotic and abiotic elements in the settlement area, technology deployed, problems felt and suggestions for improvement. The findings of the study are delineated under Chapter IV.

#### **D. Existing Level of Empowerment**

Empowerment is a process of acquiring rights, developing self (personality development) and deciding independently by self (self – decision making process). Women need to raise their status pan men in the society. As an active multidimensional process, any empowerment strategy tried should enable them realize their full potential and power in all spheres of life. This part of the study was intended to probe into factors responsible for their existing empowerment status, thrash out vulnerabilities and arrive at possible solutions. As this part

therefore included understanding the status of the selected women it was streamlined on the following lines:

**Self - scrutiny of their Empowerment Status**

**Identification of Personal Limitations and Constraints**

**Problem Tree Analysis - Identifying Factors of Backwardness**

**Solution Blooms Analysis - Reducing Vulnerabilities**

**Self - scrutiny of their Empowerment Status**

One of the important criteria that can reveal an individual's status on social, economic, personal well-being is his / her beliefs which can have an immense influence on their personal aspects and a sense of control on aspects concerning the individual's lifestyle. They in many instances can be the **values cherished** and **their manifestations** on how the samples relate it as of high, low or medium level in their personal experiences. Responses received may reflect the standing of dependence – independence or awareness- ignorance dichotomies to various aspects enlisted with reference to specific situations mirroring their status of empowerment. This aspect of the study therefore included the following steps:

**Selection of Sample, Tool and Method:** The same locale and 54 samples were selected for conduct of the study. The method was direct personal interview and the tool was the Women empowerment Scale published by Tayde and Chole (2007) with necessary modifications to suit the tribal cohort under consideration. The scale contained 46 statements which included various factors of empowerment, categorized under social (16), economic (11), cultural (8), psychological (6) and political (5) headings. The scores were designated on a three point scale with High scoring the highest (3), medium (2) and low (1). The answers to specific indicators would place the empowerment of the samples in a particular empowerment level. Further computations for summarizing, results in finding the empowerment index and ranking for each factor of empowerment, namely social, cultural etc. and fitting each with a ranking that places the sample's empowerment status based on the ranking of factors. It was administered on three samples as a pre testing attempt. Based on the light of the pretest, alterations were effected and finalized. A copy of the Scale is presented under Appendix (IV).

**Conduct of the Study:** The scale which is expected to have viable implications on the strength and weaknesses of the selected sample was administered on the sample and the

responses recorded then and there. This exercise was done only after ensuring good rapport with the sample as incorrect or irrelevant responses may portray their status in the wrong. The samples were met during their leisure, the need for the study was well explained stating the investigator's good intentions to plan and improve their conditions and capabilities by introducing proper intervention strategies in future. The attempt further helped to identify pinch points that hindered with their access to resources (home level, village level, ecosystem based level, personal level) and the control systems which they highlight as hindrances. These aspects helped to decipher the lifestyle based on their value assumptions too and their perception on empowerment. The findings after analysis are presented for possible inferences and interpretations are presented under Chapter IV.

### **Identification of Personal Limitations and Constraints**

From all the above data the samples were made to comprehend the environment in which they lived, span their surroundings, specify and differentiate the factors which encouraged their actions and development and those which hindered with their progress. Evidently many methods used being open forums enabled women to blurt out their limitations, constraints and problems experienced with maintenance of a livelihood which had a negative impact on their well – being concepts along with the benefits they enjoyed and prospects for enhancement of the same, by virtue of the given conditions. The exercise was more on introspection or self – evaluation and their interactions in the given livelihood settings.

The study enabled finding out their awareness on factors contributing to their empowerment, the presence of which could be felt as tangible or non-tangible and those which are not that obvious, but vague for which prompting was required. It was mainly done to locate the presence and enjoyment of **type of empowerment** (De- facto and De- jure and subjective), the **scale of empowerment** (Individual or collective) and the type of **benefits accrued** from them like normative, substantive etc. The findings of the study are explained under Chapter IV.

### **Problem Tree Analysis - Identifying Factors of Backwardness**

The design of the study phased out until this level brought to light the empowerment status of the sample in its reality. Hence an attempt was made to find out the *raison d'être* for the sample's related position in terms of improvement and identify critical factors of contribution. Based on the factors culled out from earlier responses, forums, personal

interrogations, investigations done in actual field visits and the like the most significant critical factors for the sample's backwardness was identified and fitted appropriately with the associated sub factors and drafted as a **problem tree**. The findings highlighted the **deterrents to the actual realistic prospects for their improvement**. The details are discussed and the **Problem Tree** is also presented under Chapter IV.

### **Solution Blooms Analysis - Reducing Vulnerabilities**

Computing the problems evinced for the sample's backwardness at different levels helped to identify pockets of optimism which could be successfully implemented to reduce their predicament and vulnerabilities. Hence it was decided **to transform the adversaries to positive aspects which could act as determinants** for instilling improvements in their status. Subsequent attempts related to the study was therefore channelized to devise solutions to practical problems that had surfaced fitting them on a matrix involving strategies encompassing shift in two feasible paradigms, namely poverty reduction and gender oriented activities paradigms to be specific. To enable further action on those lines the feasible solutions were enlisted and presented as **Solution Blooms** under Chapter IV. The situations pinpointed spelt out strategies to be incorporated in the action research to follow

**E. Action Research:** The findings of the exploratory study conducted and later the survey done to analyze the psycho-socio-economic status of the samples revealed their profile as quite generic and as not satisfactory in terms of empowerment. Therefore it was decided to include an action study in the agenda of the methodology which can help augment their status considerably and also help mitigate a few lacunae. With this point in view, the final part of the study was channelized to include the following phases of intervention. The Cambridge Dictionary explains that an intervention is an action taken to intentionally become involved in a difficult situation in order to improve it or prevent it from getting worse. (<https://dictionary.cambridge.org/dictionary/english/intervention>).

### **Action programmes organized**

The following programmes with set objectives were chalked out to empower the selected women on social, economic, psychological and entrepreneurial aspects on the following aspects:

#### **Interventions on Eco- based Skill Development**

#### **Plans for Marshaling Supportive Services and Eco- resources**

## Endeavours for Settlement's Overall Development

### Catalyzing Cohort Cohesion

### Empowerment Status of Women (Post intervention)

**Interventions on Eco- based Skill Development:** The schedule drafted to impart training on skill up gradation is as tabulated (Table 5) which was implemented with all seriousness and good intentions.

All the endeavours were scheduled to empower the sample women on all factors of empowerment, namely social, psychological, cultural and entrepreneurial aspects on the first hand and community development at large using multipronged strategies on the other. It is hoped that the attempts made have been appreciably successful in achieving the set objectives (Table 5).

**Table: 4 Real Time Intervention for Empowering Women on Eco- based Skill Development**

Focus of the Programme	Specific activities		Beneficiaries
<b>Dynamize proactive participation</b>	Motivation to Become Self Reliant		7
	Instilling Leadership Qualities		8
	Creating Visibility		8
	Rapport Creation for Healthy Networking		12
<b>Focused Initiatives Drafted and Implemented</b>	Workshops on skill development	Functional and technical skill development for entrepreneurial empowerment	20
	Leadership training	Group cohesion and forming a Self Help Group (SHG) and establishing a Common Livelihood Group (CLG)	20
	Capacity building programmes	Imparting real time training on value addition and entrepreneurship related to MFP and NTFP, culminating in marketing of products	32
	Creating an Enabling Environment	Ensuring infrastructural facilities, stakeholder support and maintaining the CLG	20
	Practical Skills enhancement and Net working	Ensuring sustainability	35

The programmes were conducted with utmost sincerity to enable whole hearted participation as the sample had already realized that they should transform, exhibit attitudinal change to accept those presented with goodwill, improve their capabilities and enhance themselves. All the items devised were aimed at improving their capabilities and status of well – being. The findings presented under Chapter IV delineate the extent of change that such programmes could materialize.

**Plans for Marshaling Supportive Services and Eco- resources:** The offices of the Forest department and associated offices were frequently visited and good rapport was created to ensure an enabling environment for the sample's to access eco –resources from the forest area. Utilizing the friendships and relationships maintained necessary tools, machinery and accessories to run the SHG was ensured. A proposal to the Director, Women and Child welfare department requesting grant for starting the SHG account was done. To meet other expenses assistance from other stakeholders and philanthropists was taken care of.

**Endeavours for Settlement's Overall Development:** Considering the pathetic living conditions and the drudgery they endured to access basic needs of water and proper shelter, petitions and proposals were submitted to concerned Government Offices. Chapter IV presents a narrative on the success stories. These were accomplished with the ultimate aim of enhancing living conditions, improving health, hygiene and sanitation, livelihood diversification and safety and security – all factors which indirectly would enhance their well – being.

**Catalyzing Cohort Cohesion:** This part of the efforts aimed at Village Cohesion through community participation in observing **International Tribal Day in two consecutive years (2017 and 2018)**. The celebrations/ observations included a multi-pronged approach to lure residents of all ages in the settlement to actively participate and benefit. Both the days were filled with day long programmes involving not only the settlement people but also stakeholders from various sectors which also helped to create visibility, expand their connectedness and networking and initiate talks on business. Chapter IV gives a vivid description of the programmes organized on those two days.

**Empowerment Status of Women (Post intervention):** The Tayde and Chole Scale (2007) administered on the same sample before intervention programmes was administered again on the same sample to find out the extent of change the action programmes could create in them. The findings – the sample's responses for pre and post intervention - were statistically analyzed for possible association and the results are presented as interpretations in Chapter IV.

The study was therefore aimed at finding their existing status and channelized to recommend and implement interventions to improve the sample's status. The research design is presented as a flowchart in Exhibit (I).

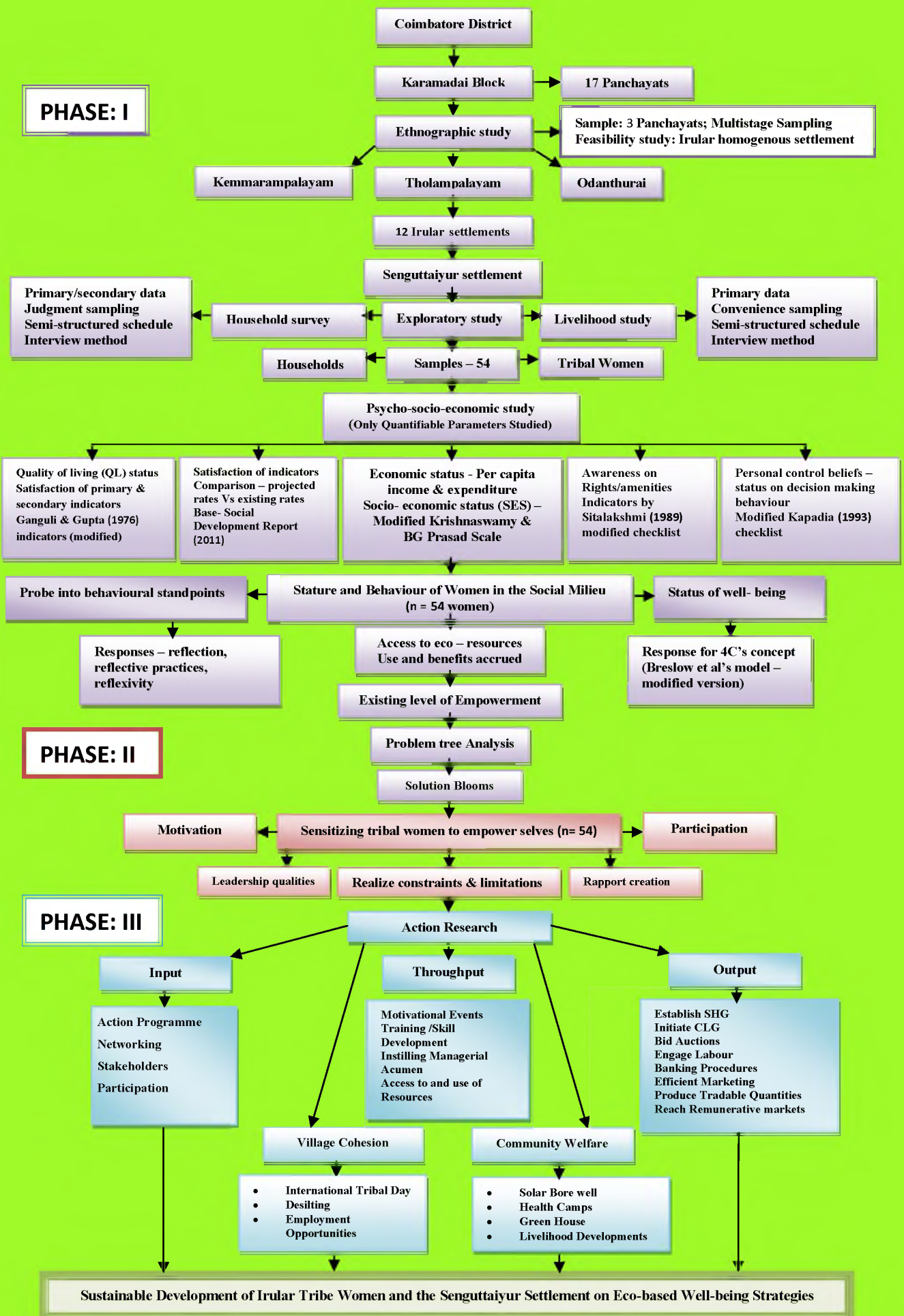


Exhibit (1): Taxonomy of the Study