CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Statement of the Problem

In a small State with 32 million people having high density of population 819 per sq km as against the national average 324 (Census, 2001) development projects affect negatively 552233 persons till the year 2000. Since independence, as per available data, the number of displaced families’ resettled in Kerala is 5461 (Murickan, Jose & Pillai, 2003). By taking the average family size in the Kerala this comes to 28943 persons. That means only 13.18 percent of the displaced persons (DPs) in Kerala benefited by resettlement offered by the projects (Murickan, George, Emmanuel, Jose & Pillai, 2003). The density of population in Ernakulam district is 1012 (Census, 2001) and half of the total population displaced for three airports of Kerala is the same. Cochin International airport limited (CIAL) displaced 820 families and 4336 persons (Dhanam, 1999 & State Public Relation Officer, CIAL, 2010). The CIAL had their own resettlement schemes like six cents of land in the housing colony and a sum of Rs.10, 000/- as relocation cost to ousted families besides the payment of compensation fixed by thahsildar, but their adequacy is questionable considering the statement of current Indian Prime Minister ‘development with human face’ because people had to build their own houses at new site after they were evicted. Whether it addressed impact of project at individual, household and community level? But the present
The resettlement package of CIAL is the result of the organized movement by social activists (Murickan, Jose & Pillai, 2003).

The CIAL project is first in India; construct an airport with Public-Private Partnership without assistance from international funding agencies. The implementers claim that the displaced people are ‘fully compensated and resettled’. Development projects, though promise and aim at advancement of the society, lead to impoverishment of four fold capitals, especially the ignored social and cultural capital. It is due to delve deep into extent of ‘social costs’ paid by the displacees leading to social capital’s impoverishment i.e. Social disarticulation. Cernea (1999a) has rightly argued that displacement dismantle social networks that once mobilized people to act around common interest and to meet their most pressing needs for neighbourhood ties. Downing commends that the people may physically persist, but the community that was - is no more, because its spatial temporal and cultural determinants are gone and the heaviest cost of all of personal ties in familiar surroundings, to face new economic and social uncertainties in a strange land (Downing T., 1996). It is human touch in heart and soul, which are intrinsic to human beings give birth to human culture and value systems of the society. It is right to scale, therefore, how displacement alienated social bonds, interpersonal ties, family relationships, culture, and level of community participation without regard to class, sex, and creed thereby cause depletion in social capital/social disarticulation of the once articulated community/people of the land which is never measured before in the project period or even after 10 years of project completion. It is desirous, therefore, to
analyse the loss of social capital or social disarticulation of the displaced community in the development-induced displacement which is often undermined by the development project managers resulting creation of ‘new poverty’.

3.2 Objectives of the Study

3.2.1 General Objective of the Study

The general objective of the study is to bring out a comprehensive and in-depth knowledge about social disarticulation of the displaced people in the development-induced displacement and efforts to promote community reconstruction.

3.2.2 Specific Objectives of the Study

1. To understand socio-demographic and economic profile of the respondents.

2. To study the hiatus/break effected in the interpersonal ties and neighbourhood relationships of the development-induced displaced people after displacement.

3. To find out hiatus/break in the family relationship of the development-induced displaced people after displacement.

4. To bring forth the hiatus/break in the social organizations of development-induced displaced people after the displacement.

5. To examine the effects of cultural adaptation on the development-induced displaced people after displacement.
6. To study involvement/participation of oustees in the cultural sensitive social planning in the displacement and resettlement action plan/programme.

7. To assess resettlement agency’s and oustees’ initiatives to promote community reconstruction.

8. To bring out the socio-economic and physical problems/difficulties faced by the development-induced displaced people after displacement.

9. To suggest measures to prevent social disarticulation in displacement.

3.3 Hypotheses

The researcher designed the following hypotheses:

1. There is a significant difference with regard to culture and value related practices (Cultural adaptation) of oustees of development-induced displacement before and after displacement.

2. There is a significant difference with regard to interpersonal ties and neighbourhood relationships of oustees of development-induced displacement before and after displacement.

3. There is a significant difference with regard to family relationships of oustees of development-induced displacement before and after displacement.
4. There is a significant difference with regard to social organizations/associational life of oustees of development-induced displacement before and after displacement

5. There is a significant difference with regard to social articulation of oustees of development-induced displacement before and after displacement

3.4 Definitions of Concepts

3.4.1 Social Disarticulation

_Theoretical:_ Social disarticulation is the tearing apart of the existing social fabric by dispersing and fragmenting communities, dismantling patterns of social organizations and interpersonal ties, scattering of kinship groups disrupting life sustaining informal networks of reciprocal help, local voluntary associations and self-organized mutual services. This is a net loss of valuable social capital that compounds the loss of natural, physical and human capitals (Cernea, 2000a).

_Operational:_ In the present research, social disarticulation is the net loss of social capital of oustees of CIAL consisting of loss or break in the interpersonal ties and neighbourhood relationships, family relationships (kinship), association life, culture and value related practices in relation to tradition, value system, health practices, children, religiosity and customs that the oustees had before displacement.
3.4.2 Interpersonal Ties and Neighbourhood Relationship

Theoretical: Interpersonal ties and neighbourhood relationship are the result of interaction of oustees that created meaningful relationship expressed in traditions, customs, values etc. where individuals informally related each other and functionally related in the social systems, as members of the community and society based on reciprocal mutual helps that support each other and build bond between members of the community, who stay near to each one’s homestead.

Operational: In the research, interpersonal ties and neighbourhood relationship means the oustees of CIAL have good neighbours, receive help from those neighbours, share commodities with each other, know the where about of neighbours and without difficulty to establish new neighbourhood relationships, entrusting child to neighbours if they go out trusting in neighbours, and live without quarrel. It also means oustees have good friends, receive help from friends, and oustees visit friends regularly, feeling settled area as home and visit sick people. The oustees also feel safety in the area and even walk in the dark without fear and an assurance that people in the area are trustworthy.

3.4.3 Social Organizations/associational life

Theoretical: Social Organizations refer to the coordinated social relationship among the oustees which govern the social contract, the prevailing cultural systems of resource entitlement, family based systems or various associations like economic organizations, political organizations, educational organizations, religious organizations, cultural organizations etc. and corporate to pursues
certain common goals and members are prepared to accept roles and status as required following norms and mores of the society. Thus, social organizations are used in a wide sense to include all organizations of the society working for the common good of the people of the displaced areas.

**Operational:** In the study, social organizations/association life means oustees of CIAL have various associations like political, religious, social organizations etc of which membership is open to all. Local associations/clubs opening membership to all and they work for the development of the area. They work as unifying force in the local area and its membership is prestigious. There may be associations for each category of people including their family trust and for various age groups. Cultural fests are organized by organizations of various natures to keep traditions and customs of the area.

### 3.4.4 Family Relationship

**Theoretical:** It is the bond between groups of individuals horizontally and vertically in a family. This relationship normally consists of relationship between parents and their children, sibling which can also accommodate kinship relationship in broader terms.

**Operational:** In the study, family relationship means the members of the CIAL oustees' family having close relationship with each other receiving family help whenever needed. The family members are also present in family functions without fail. Personal and family friends visit them and they reciprocally visit their family friends regularly. They do not find difficulty to establish
friendship/relationships with relatives stayed nearby. As neighbours they have strong family ties between relatives which urge them to construct their houses close to their relatives.

### 3.4.5 Culture and Value Related Practices (Cultural Adaptation)

**Theoretical:** Cultural adaptation means accommodating and adapting alien cultures, practices and values which are unfamiliar to the displaced people of CIAL along with the existing new and changed living situations of their life after displacement. This harms the cultural fabric of the community displaced which is undesired but has no option other than adaptation. The cultural adaptation does not deny their options for traditions and culture existed prior to displacement but urges them to accommodate the outside practices in their life as they go ahead with tradition and culture related practices such as dressing pattern, child rearing etc.

**Operational:** Culture and Value Related Practices (Cultural adaptation) in this study means the oustees of CIAL is accommodating alien culture and value related practices in relation to:

*Traditions* – celebration of fares and festivals and considering them as part of their rich traditions which gives a feeling of loss if miss them. The customs and traditional practices are considered here are determinants of each one’s identity;

*Health practices* - going to teashop early morning to drink a cup of tea/coffee and exchange of news and ideas, use of firewood as main fuel for cooking instead
of depending upon liquid petroleum gas, use of water from well for drinking which is pure and safe than municipal / panchayath water supply. Making use of government medical services like PHC for treatment than private medical services is also considered;

*Relationship* - family including marriage celebration is organizing in their own houses than in the auditorium or entrusting to service teams and such celebrations receive assistance from kith and kin and neighbours who extended help on reciprocity and mutual trust. They have also common place for gathering;

*Religiosity* - people have their own worship centers are regular to visit to these and feel bad when they lose these centers. They have regular fixed time for prayer and never spare time for prayer even to watch television or to go out for movie;

*Children and child rearing practices* - permitting the children to move around and providing them enough space to interact with each other. Children are sent to nearby schools. Children’s exposure to new culture and imitation of other cultures and wearing of modern dresses are also considered here. The outsiders’ influx which may change the living atmosphere is also reckoned;

*Customs* – customs like respect for elders and helping strangers in need are considered as value oriented practices of culture which may be changed due to displacement.
3.4.6 Participation/Cultural Sensitive Social Planning

Theoretical: Cultural Sensitive Social Planning/Participation means planning the displacement and resettlement action plan/programme of the projects in consultation with and participation of the displaced oustees considering the culture and traditions so that they will be able to settle themselves as group-kin-units, extended families, neighbourhoods, religious groups etc- to reconstruct their life with the support of the project management who encourage and empower the creation of associational structures among resettlers for taking over self administration responsibilities at the new sites which will avoid cultural alienation or forced adaptation.

Operational: Cultural Sensitive Social Planning/Participation, in the research means that the oustees of CIAL were invited to participate in gram sabha where details of project and purpose of project were communicated and discussed. Decisions on displacement and consultation on adequacy of compensation were discussed with oustees. It also attempts to understand whether there was consensus among oustees and leaders of organizations and feeling of oustees in relation to leaders and their loyalty to people - that is, leaders deceived them or not. Whether there was organized protest against inadequacy of compensation and what was the response of project management to their demand is also included. Again, the awareness of oustees on land acquisition act, the consent of oustees, awareness of oustees on resettlement action plan, consultations on the same permitting the oustees to settle in resettlement colonies along with kinsmen
or neighbours are incorporated here. The time of displacement and payment of relocation cost are considered in the cultural sensitive social planning.

3.4.7 Reconstruction

**Theoretical:** Reconstruction can be defined as the ways in which oustees have sought to rebuild their social and community life including building of formal and informal social organizations existed in the society in order to provide the means for sustainability by absorbing the shocks and stresses of modern life and to take advantage of new and emerging opportunities for further advancement at Intra community level (oustees), Pan colony level (oustees) and Oustees and Host level.

**Operational:** Reconstruction efforts in the study included efforts of the oustees and management of CIAL to reconstruct community life after displacement including role of resettlement action programme and assurance of job as part of management’s efforts to rebuild the oustees’ community life. Associations formed by the oustees in the resettlement colonies and constraints they faced are enquired here. Are they regular participants in such organizations? The number of programmes and social associations sponsored or services provided to the oustees by ousting management to reconstruct their community life are also included. Efforts of oustees to contact their old friends and neighbours after displacement and feelings of oustees while they miss the fares and festivals they celebrated once are considered. The variable also attempts to identify efforts of oustees to celebrate fares and festivals in the resettlement.
3.4.8 Development-Induced Displacement

_Theoretical:_ Development-induced displacement can be defined as the forcing of communities and individuals out of their homes, often also their homelands, for the purposes of economic development project which can be geographical displacement or can be across long distances and boarders, sometimes economically, socially, and culturally quite different settings. In broader terms displacement includes move from economic activities and cultural practices without geographic moves and such move is a global phenomenon due to the increasing political, economic and cultural globalization (Boss, 2003).

_Operational:_ Development-induced displacement in the study can be defined as the forcing of communities, families and individuals out of their homes, often also their homelands, for the purposes of the economic development project, Kochi International Airport which is not desired by the people evicted.

3.4.9 Problems Faced

_Theoretical:_ The difficulties or constraints the ousted families or individuals of development projects faced after the displacement while settling in the new settlement area in relation to socio-economic and physical aspects of life, especially civic amenities, basic facilities, infrastructure etc.

_Operational:_ The socio-economic and physical problems, in the study means, various constraints the oustees of CIAL faced after displacement and in the process of resettlement. They are: financial strain, debt, unemployment, poor
market accessibility, poor transportation facility, inadequate basic amenities and toilet facilities, shortage of pure and safe drinking water, fuel shortage, disruption in the family relationships, social stigma attached to their life and social isolation by main stream society, poor education for children, hostile host population, and other related problems.

3.4.10 Hiatus

_Theoretical:_ Hiatus short pause in which nothing happens or is said, or a space where something is missing (Cambridge Dictionary).

_Operational:_ Hiatus, in the study, means break or interruption happened in the normal life that oustees of CIAL had before displacement as compared to after displacement.

3.4.11 Socio-demographic and Economic profile

_Operational:_ In this study socio-demographic and economic profile includes the details of oustees of CIAL at present (age, sex, religion, education, marital status, type of settlement, and separation of family members due to displacement), socio-demographic and economic profile before and after displacement (Panchayath/Municipality, type of family, income, and job category) and CIAL project related information (loss of assets, information about compensation, adequacy of compensation, knowledge about compensation criteria and compensation incentives, protest against land acquisition, organizations involved in protest, and facilities available both before and after displacement).
3.4.12 Conceptualization of Variables

Development-Induced Displacement

Land Acquisition Acts and Other Allied Acts
Resettlement and Rehabilitation Policy

DISTURBS

CAUSES

Social Capital

social Disarticulation

Impoverishment Risks

Leads to

Social Exclusion and New Poverty
Break in Social Geometry
Hiatus in Value System
Break Social Network - Interpersonal
Neighbourhood
Family
Loss or Break Social Organizations
Gender imbalances
Class Mobility
Cultural Change/ Adaptation

Poor Participation in Resettlement Action plan

Poor reconstruction effort/ Rearticulation
Proper Rehabilitation Approach Challenges to Rehabilitate Role of NGO and Community Benefit Sharing for Economics of Recovery
3.5 Research Design

The research design used in this study is descriptive in nature. The descriptive design helps to study in-depth the characteristics concerning individuals and community in their living situation. This study describes various dimensions like interpersonal ties and neighbourhood relationships, family relationships, associational life, culture and value related practices oustees both before and after displacement collected at a single point of time. The study also attempts to describe participation of oustees in displacement and resettlement action plan, community reconstruction efforts of both oustees and project management and various socio-economic and physical problems faced by the oustees. Along with the above the study reveals the association and differences between these variables and these associations and differences were interpreted statistically. In addition, focused group discussions with oustees and case studies numbering three are presented.

3.6 Pilot Study

A pilot study was conducted to test the feasibility of the study, to finalize the universe, and to decide the tools of data collection. The researcher held a series of discussions with the experts who were involved in the field, working among the displaced people and also with the experts in the research field. The discussion with the experts in the field and the information gathered through the review of literature formed the basis for limiting the area of study, tool
selection and finalizing the sample. Discussion with the author of Impoverishment Risk and Reconstruction Model through mails and experts who identified variables involved in social capital helped to finalize the tools. The researcher contacted the key functionaries of project implemented area and oustees of CIAL and briefed them on the nature and significance of the study. The CIAL authorities provided the list of oustees of the project which helped the researcher to select the respondents by appropriate sampling framework adopted for the study.

3.7 Universe of the Study

All Development-Induced Displaced families (820) of CIAL project (Kochi International Airport) in Ernakulam district, Kerala constitute the universe of the study. The geographical area of the study is restricted to displaced families resettled in resettlement colonies of CIAL spreading in Akaparambu, Parappuram, Edanadu, Kuzhipplam I & II, Thurithussery colonies of various Panchayaths like Sreemulanagaram, Kanjoor, Nedumbassery etc. and Kavaraparmbu and Nayathode in Angamaly municipality and displaced families settled outside the resettlement colonies of CIAL but within Ernakulam district of Kerala.

3.8 Unit of Analysis

The unit of analysis is head/person aged above 18 years of the ousted/displaced family for Kochi International Airport.
3.9 Inclusion and Exclusion Criteria

3.9.1 Inclusion criteria

1. Oustees of CIAL project settled both inside and outside of resettlement colonies of CIAL

2. One respondent from one ousted family who are either head of the family or persons aged above 18

3.9.2 Exclusion Criteria

1. Oustees of other development projects in the Kerala State

2. Oustees of CIAL project settled outside Ernakulam district

3. Ousted families of CIAL Project which are non-cooperative

3.10 Sampling Design

Out of the 820 ousted families of CIAL, 492 families stay in 6 cent plots of the resettlement colonies arranged by the CIAL and others (328) stay outside of the resettlement colonies. From these 820 families 40% (328) constitute the primary respondents of the study. The respondents from the resettlement colonies of CIAL are selected using stratified and simple random method i.e., 197 families (head of the family or person responsible to give information) from resettlement colonies and 131 families (head of the family or person
responsible to give information) from outside the resettlement colonies, within Ernakulam district.

**Graphical Presentation of Sample**

```
820 Ousted Families of CIAL
  ↓
Stratified Sampling

492 Ousted Families Settled in Resettlement Colonies of CIAL

328 Ousted Families outside Resettlement Colonies of CIAL Within EKM Dist.

↓
40% (328) of the Ousted Families

↓
Simple Random

Ousted Families from Resettlement Colonies of CIAL – 197

Ousted Families outside Resettlement Colonies of CIAL Within Ernakulam District - 131

↓
Ousted Families of CIAL Propionate Stratified Random Sampling - 197 + 131 = 328
```

3.11 Methods and Tools of Data Collection

3.11.1 Methods of Data Collection

The methods used to collect primary data were like interviews, informal discussions, focused group discussions and case study.
In order to collect data from oustees interview schedule was used.

Interviews guides were used for interviews with key personnel such as the then Managing Directors of CIAL, Panchayath presidents, municipal chair person, and elected representatives of the project area during the time of implementation of the project so that study may be comprehensive. Focused Group Discussions with the participation of oustees were conducted using formats prepared.

Case studies were also conducted using formats among oustees settled both outside and inside of resettlement colonies of CIAL.

Informal discussions were held with oustees settled both inside and outside resettlement colonies in order to find out details of social articulation of the ousted community.

Secondary data were collected using methods like referring to secondary sources of data such as, books, journals, court verdict and other relevant documents related with the subject of study.

3.11.2 Tools of Data collection

Primary Data: Interview schedule was one of the tools used to data collect from primary respondents. The Interview schedule had 5 parts. The first part of interview schedule consists of 36 items used collect socio-demographic and economic profile of the 328 respondents under study, project related information and problems faced by the sample respondents. In the second part,
researcher referring to variables identified in the literature review (Conceptualization) and scale developed by Paul Bullan, used 4 point self constructed scales to collect data from the primary respondents to measure variables: interpersonal ties and neighbourhood relationships, family relationships, social organization life/association life and cultural adaptation. In the third part of the tool a self constructed scale to measure participation/cultural sensitive social planning was applied to 328 respondents (only once). In the fourth part, scale to measure reconstruction efforts after displacement was applied to 328 respondents (only once). In the fifth part, a two point scale was used to understand various socio-economic and physical problems faced by the respondents after the displacement.

Interview guide was also used to collect data from key personnel.

Formats for Focused Group Discussion and Case Study were also used for collecting primary data.

Secondary Data: The secondary data were collected from the documentary sources such as records, reports etc as per availability and other resources like books, journals, periodicals etc.

3.12 Testing of the Tools

The interview schedule used to collect data from the primary respondents has five parts.
In the first part, the researcher used interview schedule consisting of 36 items to collect socio-demographic and economic profile of the respondents and project related information from the respondents in relations to the displacement and resettlement.

In the second part, researcher used 4 point self constructed scales to collect data from the primary respondents to measure variables: interpersonal ties and neighbourhood relationships, family relationships, social organization life/association life and culture and value related practices (cultural adaptation) and handed over to experts to check the content. The tools after the content analysis, making suggested additions and deletion of items by experts, was handed over again to experts to verify them which later approved by the research supervisor. The approved tool was tested in the field for its reliability. Each set of scales have got rating scale of .7 and above (Cronbach Alpha) in the test of reliability. The first set of tool was used to measure interpersonal ties and neighbourhood relationships contains 16 items. Each item, was given 4 responses in ascending degree – never, some extent, large extent and great extent. Each response was given value ranging 1-4 in ascending order. Thus the scale measuring interpersonal ties and neighbourhood relationships consisting of 16 items and can score values in between 16 (minimum) and 64 (maximum). The scale received Cronbach alpha .9164 (test of reliability). The scale to measure family relationship contains 11 items and can score values between 11 (minimum) and 44 (maximum). The scale received Cronbach alpha .7504 (test of reliability). The scale to measure association life/social organizations
consists of 14 items and can score values in between 14 (minimum) and 56 (maximum). The scale received alpha .8793 (test of reliability). The scale to measure culture and value related practices (cultural adaptations) has 35 items in five sub categories and can score values in between 35 (minimum) and 140 (maximum). The scale received Cronbach alpha .9250 (test of reliability). The above four scales summated together to measure social articulation of the community and the total score of the scale can be 76 (minimum) and 304 (maximum) and the tool received Cronbach alpha .8679 (test of reliability).

These tools were applied two times to the same respondents after the displacement to measure social articulation of the community before and after displacement.

The third part of the tool consists a self constructed scale to measure participation/cultural sensitive social planning contains 18 items scoring four responses in ascending order and assigned values 1-4 in ascending order was applied. The scale was applied to the respondents only once. The minimum and maximum score of the tool is 18 and 72 respectively. The response value was computed and converted into three levels lower (scored below 24), medium (scored in between 25-46) and high (scored 49 and above) of participation. The tool received Cronbach alpha .8556 (test of reliability).

In the fourth part, scale to measure reconstruction effort after displacement contains 13 items in two subsets, efforts of the oustees to reconstruct and efforts of the project management to reconstruct the oustees’ community life was applied to 328 respondents only once. Each item was given 4 responses
with values one to four in ascending degree – never, some extent, large extent and great extent. 7 items were used to identify effort of the oustees to reconstruct community life and 6 items identify effort of the project management to reconstruct the oustees’ community life. The minimum score in the scale is 13 and maximum is 52 in total. Considering two subset individually, the effort of the oustees can score $7 \times 4 = 28$ maximum and minimum 7 and for the management’s effort $6 \times 4 = 24$ maximum and 6 minimum. Score of each subset again was divided into three levels; low, medium and high. The computed reconstruction effort of the oustees was divided into three levels; low (scoring below 9), medium (scoring 10-18) and high (scoring 19 and above). The computed reconstruction effort of the management was divided into three levels; low (scoring below 8), medium (scoring 9-16) and high (scoring 17 and above). The tool received Cronbach alpha .8200 (test of reliability).

In the fifth part, a two point scale was used to understand various socio-economic and physical problems faced by the respondents after the displacement. The scale contains 15 items scoring two responses and assigned values 0 (no) and 1 (yes). The tool was applied to the respondents only once. The minimum and maximum score of the tool is 0 and 14 respectively. The response value was computed and converted into three levels lower (scored below 5), medium (scored in between 6-10) and high (scored 11 and above) of problems. Higher the score higher will be the problems faced by the oustees.
and lower the score lower will be the problems faced by the oustees. The tool received Cronbach alpha .8783 (test of reliability).

Since all the above mentioned scales used by the researcher have got rating of .7 and above (Cronbach alpha) they are found to be reliable.

3.13 Pre-Test

The researcher administered a pre-test of the tools among 15 families settled in the Akaparambu 6 cent resettlement colony of CIAL and 5 ousted families of CIAL settled outside the resettlement colonies.

3.14 Data Analysis

Data processing was started with coding of the data. The socio-demographic and economic data sheet was a pre-coded one. For the scale items the score value for each item was given as the code. The coded data were then entered into excel worksheet. This was necessary as the factors of all the scales had to be counted separately for determining the values for each dimension independently. Once the data entry was over and editing done to check for mistakes, the excel file was converted into SPSS programme files for analysis in SPSS 18.0 Evaluation Version. Both descriptive and analytical/inferential statistical techniques had been used for data analysis. Descriptive statistics like frequency tables, diagrams, mean, median and standard deviation were used to present this data. The analytical/inferential statistical techniques include t-test,
One Way Anova, and coefficient correlation. These parameters are helpful to develop a basic understanding of the phenomenon under study.

### 3.14.1 Variable Mapping

<table>
<thead>
<tr>
<th>DEVELOPMENT INDUCED DISPLACEMENT</th>
<th>IMPOVERISHMENT RISKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>POOR RECONSTRUCTION EFFORTS</td>
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<tr>
<td>HIATUS IN INTERPERSONAL TIES &amp; NEIGHBOURHOOD RELATIONS</td>
<td></td>
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<tr>
<td>SOCIAL DISARTICULATION OF DISPLACED</td>
<td></td>
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<tr>
<td>LOW PARTICIPATION IN CULTURAL SENSITIVE SOCIAL PLANNING</td>
<td></td>
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<tr>
<td>HIATUS IN FAMILY RELATIONSHIPS</td>
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<tr>
<td>HIATUS IN SOCIAL ORGANIZATIONS/ ASSOCIATIONAL LIFE</td>
<td></td>
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<tr>
<td>LOSS OF CULTURE &amp; VALUE RELATED PRACTICES/ CULTURAL ADAPTATION</td>
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Development-induced displacement, as suggested by Cernea (2000) will lead to impoverishment risks unless they are carefully handled. Among these impoverishment risks social disarticulation is one among them. Social disarticulation is not the result of a single variable. Multiples of variables viz. interpersonal ties and neighbourhood relations, family relationships, social organizations/associational life, culture and value related practices (cultural adaptation), cultural sensitive social planning, and reconstruction efforts interact, reciprocally influence and contribute to each other when displacement takes place. This gradually triggers the downward mobility of the articulated
community after displacement which leads to social disarticulation, loss of social capital of a displaced community.

3.14.2 Statistical Tests Used

<table>
<thead>
<tr>
<th>Tests conducted</th>
<th>Purpose of Test</th>
</tr>
</thead>
</table>
| t-Test          | • To test the social articulation of the community both before and after displacement and to find out social disarticulation of the ousted community.  
• To test hypotheses of the study.  
• To test the social articulation of the community on the basis of socio-demographic variables viz. gender, family types, settlement types. |
| One Way ANOVA   | • To test the social articulation of the oustees on the basis of socio-demographic and economic variables viz. age group of the oustees, educational qualifications, marital status and income of the oustees. |
| Correlation     | • Correlation analysis was done to test the degree of relationship between the variables. |

3.15 Chapterization

The reporting of the study is presented in 5 chapters.

The First Chapter gives Introduction to the study.

The Second Chapter is divided into two parts. The First Part deals with Theoretical Background of the study concentrating Impoverishment Risk and Reconstruction Model and Second Part of the chapter contains a concise description about Literature on Development-Induced Displacement and Social Disarticulation.
The Research Methodology is given in the Third Chapter.

The Fourth Chapter presents the Analysis and Interpretation of the data which has four parts; Part 1: socio-demographic and economic profile of the respondents and frequency presentation of the dependent variables, Part II: analysis using statistical tools to assess the intensity and degree of social disarticulation in relation to socio-demographic and economic variables, Part III: the testing of the hypotheses and Part IV: report of focused group discussions and case studies.

The Fifth Chapter presents the major findings of the study and subsequent suggestions based on these findings. The General Conclusion is given at the end of the report.

3.16 Limitations of the Present Study

1. The study was conducted among ousted families of CIAL project only.

2. Families ousted by CIAL but settled outside Ernakulam district were not selected as respondents of the study.

3.17 Ethical Considerations

The respondents were informed about the study and the researcher’s intension. Prior informed consent of the respondents was also sought before data collection. Confidentiality was strictly observed regarding the responses and researcher’s assistance and guidance to the respondents were assured, wherever required (NASW, Code of Ethics 5b).