CHAPTER 3

RESEARCH QUESTIONS, CONCEPTUAL FRAMEWORK AND METHODOLOGY

3.1 Introduction

This chapter discusses the research questions, conceptual framework and methodology of the study. Section 3.2 deals with the research question, followed by the description of the conceptual framework used in this study, in Section 3.3. The conceptual framework is developed by drawing insights from cluster development, subsector analysis and value chain approaches to small enterprise development. Section 3.4 provides description of the study area and rationale for choosing the same. Section 3.5 describes the research methodology, incorporating the sampling, methods of data collection and the process of data analysis. This is followed by description on construct validity and ethical considerations.

3.2 Research Questions

Drawing insight from the value chain approach to small enterprise development and other related development fields such as clusters and subsector analysis, this research is guided by questions on three key aspects of value chain: inter-firm relations, governance and upgrading practices. The research questions addressed in this study are the following.
• What are the nature and functions of inter-firm relationships in the handloom value chain and how do these relationships facilitate or hinder integration of small scale handloom enterprises into productive markets?

• What are the incentives, constraints and risks for the small-scale handloom producers to engage with other firms in the value chain?

• How do trust and power relations among the firms in the value chain effect inter-firm relations?

• What kind of governance structure exists in the handloom value chain?

• How do inter-firm relations shape the governance structure and affect the overall competitiveness of the handloom value chain?

• What kinds of upgrading take place in the handloom value chain?

• How do inter-firm relationships and governance structure affect firm level upgrading?

3.3 Conceptual Framework

The conceptual framework for analysing the process of integration of small firms into productive markets is developed by drawing insights from cluster literature, subsector analysis and value chain approaches to small enterprise development (Kula et al. 2006; Jones 2011). The framework incorporates three key aspects of the value chain, i.e inter-firm relations, governance structures and firm level upgrading. The framework show that, a combination of these key elements, along with other factors of firm relations, such as trust in relations, incentives and risks and transaction cost facilitates firm’s integration into productive markets (Figure 1). A description of key concepts used in the framework and their inter-relationships is explained in the following lines.

Firms in the value chain are linked both by horizontal and vertical relations. The horizontal relations involve the interaction between the groups and associations and the members within the groups and associations. The vertical relations involve the relations between firms and input suppliers, vendors, BDS providers, financial institutions, exporters, wholesalers, retailers and final consumers. The value
Chain literature offers insights on structure of firm relationships and distribution of power between firms. Recent studies on the link between inter-firm relationships and firm performance reveal that, firm’s performance is influenced by by inter-firm dependencies, trust in relations, power in relations and other co-operative/competitive dimensions, such as collective efficiency and reduced transaction cost, information sharing, knowledge transfer, etc. in which inter-firm relations have an important role (Scott 1994; Meyer-Stamer 1998; Ramya and Smith 2003).

In value chain analysis, chain governance is central to the understanding of inter-firm relations, especially the vertical relations. Governance is the characteristic of the vertical relations of the firms in the value chain. It refers to the co-ordination of the activities along the value chains. In most cases, the activities along the value chain are co-ordinated by a lead firm. An understanding of chain governance helps to discern how the competitive strategies of the firms in the value chain lead to particular governance structures. Chain governance involves a continuum consisting of arm’s length relations, modular, relational, captive and hierarchical relations (Gereffi 1999). Governance play an important role in reducing the risks in transactions and bringing stability in relationships, thereby facilitating sharing of knowledge and information, business services and technology among the chain participants.

Value chain approaches consider the importance of upgrading as a source of competitiveness. Upgrading is defined as innovation that increases value added. It occurs at value chain and at firm level and involve four types comprising product, process, functional and inter-chain upgrading. Individual enterprises improve competitiveness by adopting innovations and upgrading along the value chains. Upgrading in value chain is primarily attributed to the external linkages, especially with the buyers and lead firms, who transfer information and knowledge along the chain (Knorringa 1999). Recent researches confirm that, this knowledge transfer has implications for upgrading practices in the chain (Nadvi 2009; Rabellotti 2009; Schmitz 2009).

The following figure illustrates conceptual framework showing the inter-relations between the three key elements i.e inter-firm relations, governance and upgrading.
Figure 3.1 Conceptual Framework

Access to high value market:
Improved competitiveness/ Increased return
Inter-firm Relations

Access to
Information BDS, Technology
Reducing risk

Trust in Relations & Power

Vertical Relations: Input Suppliers, Consumers
Reducing Risk,
Transaction costs

Incentives, Knowledge and skills transfer
Horizontal Relations: Groups & Associations
Reducing Transaction costs
Costs

Improved competitiveness

Upgrading:
Process,
Product,
Chain &
Functional
Governance:
Arm’s length
Modular
Hierarchical
Relational
Quasi Hierarchical
3

3.4 Study Area

3.4.1 Description of Study Area

This study was carried out in the Kannur district of Kerala. Located in North of Kerala, the district has a long tradition of handloom production, starting from 16\textsuperscript{th} century. Although, the exact history of handloom weaving in the district is unclear, weaving has started as a traditional occupation of Tamil migrant workers, who has established their weaving settlement under the patronage of the local raj\textsuperscript{s} during 16\textsuperscript{th} century. These weaving centers were mostly populated by Chaliya community and much of the weaving work was carried out people of other communities including Ezhavas, Christians and Muslim as well. Until 19\textsuperscript{th} century, the weavers were involved in production of coarse cloth used for local consumption. The Kannur weavers were famous for a particular type of towel cloth, which was used in the region by both men and women as a towel and as an upper garment.
At the end of the nineteenth-century, a different weaving industry started emerging in Kannur under the Basel Mission during British rule. The Mission has setup the first handloom weaving factory in Mangalore in 1844; and subsequently in Kannur and Kozhikode in 1852. The missionaries introduced the frame loom with imported frame from Germany. This innovation enhanced the production and the productivity. Later, the British and the Dutch had supported the development of the industry with imported looms and by setting up of factories. The British had set up a factory at Calicut in 1929 under the Common Wealth Trust, and this factory was the first to start exporting handloom products from the region. This has motivated the local entrepreneurs to set up their weaving factories. One of the pioneers among was Mr Sammuel Santhosh, who had set up a weaving factory in 1890.

At present, the Kannur handloom cluster is characterised by the co-existence of unorganised (independent home weavers), organised (co-operatives), and private manufacturers-cum merchant exporters. The unorganised sector constitutes the traditional weavers from the Hindu *chaliya* caste working from their homes and subcontracting to local companies and co-operatives. The co-operatives represent almost 90 per cent of the weavers. At present, the co-operative sector consists of 40 units. These 40 units are functioning with an infrastructure of 3390 working looms with nearly 3000 producers. The unorganised sector employs nearly 600 producers, who work from their home.

The private manufacturers from Kannur started exporting of handloom fabrics in 1955 creating international reputation for Kannur handloom products, especially for the *cheese* cloths, locally known as *kroa*. Motivated by the increased demand for the *cheese* cloth from the Western markets, many factories were opened up in the 1970s.

The handloom sector in the district has faced many ups and downs and has survived several crises. When the handloom sector has faced stiff competition from power looms, during 1980s, the merchant exporters from the district reacted to the crisis by subcontracting the production and shifting their focus to home furnishing products and made-ups that are highly demanded in export markets. At present, over 90% of the value of exports from this cluster is ‘made-ups’.
Kannur has the distinction of being the handloom export hub of Kerala, especially in home furnishing products. It has been designated as one of the towns of export excellence in 2006. The units are largely engaged in the production of export variety fabrics suitable for apparel and home textiles like quilt, duvet covers, quilt mattress, kitchen linen, curtains, cushions and sofa covers, table linen etc. The uniqueness and richness of Kannur handloom fabrics were accepted and appreciated Worldwide. One of the specialties of Kannur fabric is its colour fastness, due to the excellent dyeing quality. Another recent milestone in the development of the handloom cluster is the winning of Geographical Indicator status for its Home Furnishing Products, in 2009.

Kannur handloom cluster produces products valued at Rs.3180 million in a year\(^2\). Of this, Rs. 2320 million is exported. The cluster accounts for almost 90 per cent of the export value of handloom products from Kerala. Home furnishing and made-up items like bed linen, kitchen linen, curtain, table linen, table mat, cushion cover, napkins and aprons are the major export items from the handloom cluster. The handloom cluster is spread over in the 37 Grama Panchayats and five Municipalities in the district.

3.4.2 Context of the Study

Kannur handloom cluster offers as a suitable context for the study of integration of small-scale handloom enterprises into the productive markets because of the following reasons:

- it comprises a large number of small-scale units engaged in production and export of handloom products;
- it is the largest export oriented handloom cluster in the state, and the products from this cluster have presence in international markets for a long years;
- it serves multiple value chains including local, national and global value chains;
- it is an example of buyer-driven value chain, and it specialises in home furnishing fabrics and made-ups that are mostly demanded in international markets.
The small scale handloom producers from this cluster are integrated to the value chains of international store chains like Walmart, Tesco, Marks and Spencers, Ikea and international distributors like the Crate and Barrel, the Malabar, etc. through direct export and subcontracting relationship with the merchant exporters within the district.

3.5. Research Methodology

3.5.1 Research Approach

In consistent with the research questions and objectives of the study, this research adopts a case study approach with embedded case study design (Yin 2009). Case study is used in addressing when, how and why questions; and when the focus is to understand contemporary complex social phenomena within a real-life context (Yin 2009; Creswell 2009). Broadly, this research addresses how value chains facilitate the process of integration of small-scale handloom enterprises into productive markets. The focus of analysis is on the process of integration of small enterprises into productive markets. The context is the handloom value chain. The integration of firms into market is influenced by a host of factors including quality of inter-firm relations, trust in relations and other risks and incentives of participating in the value chain. Compared to other research methods, such as survey or experiments, the case study is found to be more suitable for exploring a contemporary phenomenon like the process of integration of small firms into markets, in its real life context (Yin 2009).

As the primary aim of this research is to explore the process of integration of small enterprises into productive markets by examining the nature and functions of inter-firm relationships, the governance structure and its effect on firm level upgrading, case study of a particular value chain (single case study) is found to be most suitable. According to Yin (2009), the use of single case study is justified, ‘when the objective is to capture the circumstances and conditions of everyday or commonplace situations or on the ground of its revelatory nature’. As the value chain typically involves a number of actors and processes located in different places with varying perspectives and knowledge about how things operate, use of the case study approach helps in the collection of required information at different levels and individual actors and understanding the nature and connections with each others.
Single case study with embedded design has been used in similar kinds of research situations (Naves-Aleman 2011).

3.5.2 Unit of Analysis

The study involves multiple unit of analysis. The main unit of analysis is the handloom enterprises in the value chain. Although these enterprises constitute the main unit of analysis, it requires that, data to be collected from the sub units such as producers, BDS providers and buyers. Consistent with case study design (Yin 2009), managers and secretaries of producer organizations, producers, BDS providers and merchant exporters are the key informants for this study.

3.5.3 Sampling

The small scale-handloom producers in Kanuri handloom cluster are spread in both organized and unorganized sectors. The organized sector consists of co-operatives and the unorganized sector comprises of producers working from home and cottage units. The sample for this study has a representation of the producers working with co-operatives and home based/cottage units. The samples were selected by using a multi-stage sampling procedure in the following manner. In the first stage, the area was selected. The Kanuri handloom cluster was selected purposively, considering the presence of a large number of handloom producers and exporters and the suitability of the cluster for studying the process of integration of small enterprises into the productive markets. In the second stage, the enterprises were selected purposively. The sample included the firms that produce handloom products which are sold both in local and global markets. The co-operatives are the major producers of handloom products. The list of these co-operatives was collected from the office of the District Industries Center, a government department that facilitates registration and other support facilities to the producers. The list included 40 co-operatives. A discussion with the industries promotion officer revealed that 10 of them are dysfunctional as of now. The study covered all 30 co-operatives. The producers in the household enterprise category are associated with 10 production centers under Hanveev. All 10 production centers were included in the sample. In the final stage, the producers
were selected. Purposively 20 home based producers and 20 producers from Cooperatives were chosen for in-depth interviews.

### 3.5.4 Methods of Data Collection

A major strength of case study data collection is the opportunity to use many different sources of evidences. Yin (2009) discusses six sources of evidences including documentation, archival records, interviews, direct observations and physical artifacts, that are commonly used in doing case studies and suggests that, a good case study will therefore want to use as many sources as possible since, multiple sources of evidences allow the researcher to address a broader ‘range of historical and behavioural issues’. However, any of these sources of evidences can and have been the sole basis for entire studies. According to Yin (2009), the most important advantage of using multiple sources of evidence is the ‘development of converging lines of inquiry’, a process of triangulation and corroboration that makes case study findings or conclusions likely to be more convincing and accurate. Relying on multiple sources of evidences also improves the construct validity, since multiple sources of evidence provide multiple measures of the same phenomenon (ibid). Further, case study data may involve qualitative, quantitative or both which demands varying methods of data collection.

In consistent with the case study research design, this research mainly used interviews and direct observation as methods for collecting the data. As observed by Rubin and Rubin (1995), interview is one of the most important sources of case study information, since interview will be guided conversations rather than structured queries. The case study interviews allow the investigator to operate at two levels i.e ‘why and how questions’, satisfying the needs of the inquiry by use of ‘friendly and non-threatening questions in open ended form’ (Yin 2009: 106). Moreover, in-depth interview allow the investigator to ask the key respondents, about the facts of a matter as well as their opinions about events.

In addition to the interviews, other data collection method involved direct observation. Observation evidences are often useful in providing additional information about the topic being studied (Yin 2009). Observation could be both direct and participant observation. In this research, insights from
direct observation were used. The data captured through observation pertain to production process and workflow, infrastructure facilities, working condition, work spaces and lay out, machinery and equipment, office building and observation on peoples’ actions and reactions etc.

3.5.5 Data Collection

The data collection for this study was organised in two phases. The first orientation visit for this study was made in February, 2013. During this visit, the research areas and the sector were selected. In line with the majority of value chain studies, handloom cluster with significant level of exports was chosen. The data collection was carried out during two fieldwork periods. The first field work took place from April to August, 2013 and the second fieldwork period was from October to December, 2013.

3.5.5.1 Field Work Phase-1

The first phase of the fieldwork began with interviews of managers/secretaries of co-operatives, producers associated with the co-operatives and those working from homes and merchant exporters from the district. The objective of the first phase of field work was to understand the structure of the handloom value chain in terms of its actors and functions.

Interview of Secretaries/Managers of Co-operatives: To start with, the list of the handloom co-operatives in the cluster was collected from the office of the District Industries Center, a government department that facilitates registration and other support facilities to the handloom producers. The secretary/manager of the co-operatives were interviewed for collecting the organisational level and business related data. The aim of the interview was to get an initial overview of the organisation and their position and functions in the value chain. These interviews, a total of 28 interviews, were conducted with the help of a checklist (Appendix-I) which contained a range of details consisting of background of establishment of the organisation, number of producers working with them, infrastructure facilities, trends in production and sales, access to inputs, BDS, sales and marketing, linkage with input suppliers, buyers etc.

Interview of producers: On completion of the interview of the managers/secretary of the co-operatives, the interviews of the producers were conducted. The interview covered producers working with co-
operatives and home-based producers. The producers associated with the co-operative were interviewed at their work place and the producers working from their home were approached through Hanveev, a government organisation providing support facilities for the weavers in unorganised sector. Permission was sought from the regional office of the Hanveev, for the data collection from these producers. First, the center facilitator was interviewed to understand the details of functioning of the center and the support facilities provided to the producers. Secondly, the producers associated with the production centers were visited at their home. Forty producers, both from co-operatives and home-based, were interviewed with the help of a checklist, that consists of questions ranging from background of their entry in to the current work, educational level, investment machinery and equipment, production, number of days of works, working hours, production, income from weaving, support services from facilitating agencies, social security benefits, production organisation, investment in machineries, access to BDS, raw materials, weekly production, number of days work, access to market etc. (Appendix-II)

**Interview of Exporters:** The co-operatives and the producers working from the informal sector have very long years of business relationship with the merchant exporters from the district. The exporters from the district were approached through the office of Kerala Cotton Textile Association. The association has 40 members; out of which 20 are currently in the export business. Through the discussion with the secretary of the Association, 10 export firms were identified, who deal with handloom products from the district. The owners of these export firms were contacted for appointment and interview. The owners were interviewed with the help of a checklist, which covered a range of questions consisting of the back ground of their entry in the business, number of years in business, production facilities, export destination, buyer-supplier relations, price/contract and negotiation, payment terms, length of business relations with buyers, enforcement of contracts, etc. (Appendix-III).

**3.5.5. 2 Field Work: Phase-2**

The second phase of the field work was from October-December, 2013. The objective of this phase of data collection was to get an in-depth understanding of the functional relationship between the various
firms in the handloom value chain. The data collected during this phase was mostly qualitative in nature. This phase covered in-depth interviews of select value chain participants identified during the phase one of the data collection. During the first phase of the fieldwork, the importance of producer organisations, exporters and BDS providers were identified. Hence, it was decided that, this group would receive more attention during the second phase of the fieldwork. The participants during this phase of data collection were selected purposively because, as pointed by (Patton 1990), purposeful sampling helps in identification of information rich sources for study in depth. Following this logic, intensity sampling method was used for identifying the information rich sources, since the aim of the data collection during this phase was, to get an in-depth understanding on the functional relationships among the firms in the value chains. The participants for this phase of data collection involved twenty secretaries/managers of co-operatives, seven exporters and five key informants. The key informants included the cluster development executives, BDS providers, ex-employees/managers of the co-operative society, and office bearers of the export association. These interviews were open-ended and carried out with the help of interview guide. (Appendix IV).

3.5.6 Data Analysis

The data collected from the field work was analysed following the lines of inquiry, outlined in the objectives and research questions. The quantitative data were entered in the computer using Excel worksheet and processed with the help of tabulation and by generating graphs.

The qualitative data was analysed by employing qualitative content analysis (Schreier 2012). This method is preferred, considering three features characterise this method: qualitative content analysis reduces data, it is systematic, and it is flexible. An important advantage of using qualitative content analysis is that, unlike other qualitative methods for data analysis, which open up data, qualitative content analysis helps with reducing the amount of data. This method involves systematically describing the meaning of qualitative data by examining every single part of the material that is in any way relevant to the research questions and systematic description of data through coding. The coding process was managed by using Atlas-ti software. Various steps in data analysis involved making use of
a coding frame, generating category definitions, segmenting the material into coding units and final analysis (ibid). The data analysis process started with building a coding frame. In consistent with the coding process, both concept-driven and data-driven categories were employed. Following the strategy of combining inductive and deductive methods for developing categories (Schreier 2012), the main categories were developed in a concept-driven way and the subcategories in a data-driven way. Once the structure of the coding frame has been developed, the next step in the process involved defining the categories and assigning the categories for the segments of the materials in a systematic way. The coding process has generated the following six categories: typologies of inter-firm relations, quality of inter-firm relations, functions of inter-firm relations, governance pattern, power in governance relations, and upgrading practices. (Appendix V). The final analysis involved presenting the coding frame and illustrating these with edited quotes from the interview materials.

3.5.7 Validity and Reliability

Validity and reliability are two important issues in case study research (Yin 2009). Case study design provides several steps to ensure the validity\(^{23}\) and reliability of the research findings. In consistent with the case study design, several case study tactics were used to ensure the validity and reliability in various stages of research including research design, data collection and analysis. During the design stage, the conceptual framework has been developed by incorporating key concepts of the value chain and explaining their inter-relations. The conceptual framework was found useful in guiding the researcher during the data collection and analysis. Operational constructs for the key concepts that are explained in the conceptual framework has been incorporated in developing the data collection tools for ensuring the construct validity. The construct validity was also ensured by using multiple sources of evidences during data collection. The external validity deals with the problem of knowing whether a study’s findings are generalisable beyond the immediate case study. Although the case studies are criticised based on the problem of external validity, those criticism are based on the issue of generalization of the case study findings. This is because in survey research, we use statistical
generalisation, and in case studies the analytical generalization. In consistent with the case study design, the external validity has been addressed by using existing theories to generalise a particular set of results to some broader theory in the domain in which the study is embedded. In order to enhance the reliability, the researcher has followed a case study protocol, documenting each and every steps or procedures such as development of conceptual framework, data collection tools, data collection procedures and methods for data processing and analysis to be followed in doing case study research.

3.5.8 Ethical Consideration

The research process incorporated the common ethical practices in doing social sciences research. The field work for this research began after seeking permission for conducting the research from the respective organisations participating in this research and their willingness to share the required data. The participants, both individuals and organisations were assured that, the data collected during the fieldwork will be used only for this study and will not be made public domain without their prior consent. Individual consent was also sought before collecting data through interviews and direct observations. The names of the organisations mentioned in this thesis are real unless, it is specifically mentioned as masked; however, in order to make the anonymity of the sources of data, the names of the individuals are masked with pseudonyms, wherever it is required.