Revamping The Value Chain of Tirupur’s Hosiery Industry in the Context of Global Competition

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Abstract

The value chain provides a tool for understanding the sources of cost advantage. Successful cost leaders draw advantages from throughout the value chain by optimizing the linkages and by operating in close coordination with suppliers and channels. Value chain also exposes sources of differentiation. Differentiation results from the way a firms’s product, associated services and other activities affect its buyers activities. The value chain also allows a closer look at the role of competitive scope in gaining competitive advantage. Scope shapes the nature of firm’s activities and by choosing a narrow target segment a firm can tailor each activity precisely to suit the segment’s needs and thereby can achieve lower cost or differentiation. On the other hand choosing a broad scope can lead to competitive advantage if the firm can share the activities across industry segments or even while competing in related industries. Firms gain competitive advantage if they choose a different scope than their competitors. This article analyses the structure of the value chain of the hosiery units in Tirupur. Tirupur a small town in Taminadu, India, became a major exporter of hosiery products to most of the developed countries of the world after 1985. The industry suffered a set back when the Quantitative Restrictions (QR) on textile trade was totally phased out by the WTO in 2005. This article sheds light on the areas that need to be revamped in the supply chain inorder to sustain Tirupur ‘s status as a town of Export Excellence.

Key Words: Hosiery , Value Chain, Global Competition

Introduction

Tirupur’s hosiery manufacturing was confined to the domestic market for decades until the time the first export was made in 1985. White was the only colour, inner wear was the only design and manual operations with limited machines remained the structure of the industry when the focus was on domestic market only. The following few years after 1985 witnessed an eye for exports and a willingness to adopt better practices in technology, design and quality to cope with
the global standards and to compete in the global markets. However, the scope remained limited thanks to the Quantitative Restrictions and the quota system. Now that the quota system is being phased out since 2005, both opportunities and challenges of exports have widened. Continued success of Tirupur’s hosiery exports would largely depend upon the firms managing the value chain efficiently and adhering to global standards in technology and manufacturing, design and quality. This article discusses the value chain of the hosiery units in Tirupur in the context of global competition.

**Methodology**

Both primary and secondary sources of information have been used for the study. Since organized data was not available on Tirupur most of the information was gathered from primary sources such as questionnaire and interviews. Primary data was collected from 50 hosiery export units in Tirupur through a questionnaire. The information thus collected has been used to analyse the structure of the value chain of the hosiery units in Tirupur.

**I The value chain**

In any market whether domestic or international, it is ultimately the firm that competes. This depends on the way a firm organizes and performs its activities which could be grouped into different categories called the value chain. A firm’s value chain is an interdependent system or network of activities connected by linkages[1]. Linkages occur when the way in which one activity is performed affects the cost or effectiveness of other activities. Linkages connect activities inside the firm and also create interdependencies between a firm and its suppliers and channels. Hence careful management of linkages can become an effective source of competitive advantage. The value chain provides a tool for understanding the sources of cost advantage. Successful cost leaders draw advantages from throughout the value chain by optimizing the linkages and by operating in close coordination with suppliers and channels.
The value chain contains two sets of activities namely, support activities and primary activities. Support activities provide the infrastructure in terms of finance, human resource, technology development and procurement facilities for the firm. The primary activities include the upstream and the downstream and the operations in between[2]. A firm’s competitive strength depends on managing both the sets of activities efficiently. A brief description of these components of the value chain and their structure in a typical hosiery firm in Tirupur are presented below.
1. SUPPORT ACTIVITIES [3]

a) Firm Infrastructure

Firm infrastructure is the context within which all the other value creation activities occur. This includes the organizational structure, control systems, and culture of the firm. Finance and efficient management play a crucial role in determining firm infrastructure. Through strong leadership, top management can exert considerable influence in shaping these aspects.

b) Human Resource Management

Human resource management is the recruiting, training and development of personnel. Every activity involves human resources and thus human resource management activities run across the entire value chain.

c) Technology Development

Technology development includes the activities involved in designing the product as well as in creating and improving the way the various activities in the value chain are performed. Technological development typically involves a variety of different discrete activities, some being performed even outside the R&D department.

d). Procurement

Procurement is the obtaining of purchased inputs, whether raw materials, services, machinery or so on. Procurement stretches across the entire value chain as it supports every activity. Every activity uses purchased inputs of some kind or the other.

2. PRIMARY ACTIVITIES [4]

a) Inbound logistics

Inbound logistics constitute the upstream activities which include identifying the sources of raw materials, procuring them at competitive prices, transporting them to production centers, storing them in warehouses and releasing them to the shop floor. When a firm performs all these activities at the lowest cost it is one way of gaining a competitive edge.
b) Operations (manufacturing)

This process is responsible for conversion of raw material into finished good and thereby adding value. The shop floor layout, use of technology and other resources like manpower, electricity, etc., are the critical factors in manufacturing. A firm can employ effective strategies to gain competitive advantage.

c) Outbound logistics

This constitutes the downstream and includes activities such as identifying the markets, transporting and storing the finished goods at dealer points and supplying them to the retailers for further sales to the consumers.

d) Marketing and sales

The marketing and sales functions of a firm help to create value in several ways. Through brand positioning and advertising, the marketing function can increase the value that consumers perceive to be contained in a firm’s product. Thus it can create a favorable impression of the firm’s product in the minds of consumers. Also marketing and sales function can create value by discovering consumer needs and communicating them back to R&D which can then design products to match the needs of the consumers.

e) After sale service

This function can create a perception of superior value in the minds of consumers by solving customer problems and supporting customers after they have purchased the product. This service is extremely valuable in an industry where downtime is very expensive.

II THE VALUE CHAIN OF A HOSIERY FIRM IN TIRUPUR

I. SUPPORT ACTIVITIES

1. Firm infrastructure

Even though Tirupur is one of the highest foreign exchange earning towns in the country it is crippled with financial constraints. Majority of the hosiery units in Tirupur have been set up
either as sole trader or partnerships. The primary data collected from Tirupur indicate that 68% of the units in Tirupur operate as partnerships, 20% in the form of sole trader, 6% private limited companies and another 6% public limited companies. The fact that 88% of the hosiery units are in the form of sole trader and partnership indicate the limited financial capability of the firms.

Table -1

<table>
<thead>
<tr>
<th>Type of organisation</th>
<th>a) Soletrader</th>
<th>b)Partnership</th>
<th>c) Private Ltd</th>
<th>D) Public Ltd</th>
<th>TOTAL</th>
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<tbody>
<tr>
<td></td>
<td>10</td>
<td>34</td>
<td>3</td>
<td>3</td>
<td>50</td>
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</tbody>
</table>

Source: Primary data

Size of a firm is a critical factor that determines its competitiveness. The small size of a typical hosiery firm in Tirupur was an advantage as the government policies favoured the SSI sector. It could thrive in the export market by resorting to outsourcing, and even using limited technology design and quality and still be profitable mainly due to the assured market under the quota system. After the quota removal the small size of the firm has deterred its competitiveness due to the following reasons

1. Inadequate investment
2. Inability to develop its own technology as R&D cannot be established by a small firm.
3. Inability to reduce cost using economies of scale
4. Inability to introduce professional management
5. Inability to invest in branding
6. Inability to invest in innovative design capabilities
7. Inability to invest in market promotion

2. Human Resource Management
The hosiery industry provides large scale employment to the people in and around Tirupur. Human capital is the backbone of this cluster. Entrepreneurs report that there had never been any labour problem or strikes in the past ten years. Cheap labour has been rated as one of the competitive advantages of Tirupur as indicated by the primary data.

| Table - 2 |
|---|---|
| **Sources of Competitive advantages of Tirupur** | |
| Cheap labour | 36 % |
| Cheap material | 46 % |
| Entrepreneurship | 2 % |
| Location | 40 % |

*Source: Primary data*

Owing to enormous volume of activities there is constant need for workers here. Everyday people visit Tirupur with the hope of getting some kind of job for the day. Despite this 90% of the firms have cited non-availability of skilled labour as a major problem in Tirupur while 74% have cited non-availability of labour itself as a major problem. 56% pointed out lack of trained technicians as a major hindrance to production. This needs attention otherwise Tirupur’s advantage in labour might get eroded.

**3. Technology Development**

Generally diffusion of technical knowledge in India spreads through journals, trade publications, on-site plant tours, word of mouth among suppliers and customers, employee migration and internet sources. Recently technological transfers across national boundaries are taking place making the industries globally competitive. In Tirupur technical knowledge spreads mostly through word of mouth and local advertisements. Majority of the entrepreneurs here are either relatives or close friends and they operate in unison. All information except business secrets are commonly shared by the entrepreneurs. An entrepreneur inviting others to take a look at his new machinery or technology is a common feature here. Thus when exporters gain access to valuable technical know-how, they end up upgrading their manufacturing capabilities.
It is interesting to note that with an average educational background 66% of the entrepreneurs regularly visited technology exhibitions abroad while 76% stated that they visited technology exhibitions within the country. The countries they visit for this purpose are UK., USA, Canada, France, Dubai and Belgium.

Table - 3
Visit to Technology Exhibitions

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<tr>
<th></th>
<th>YES</th>
<th>NO</th>
<th>TOTAL</th>
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<tbody>
<tr>
<td>Within India</td>
<td>38</td>
<td>12</td>
<td>50</td>
</tr>
<tr>
<td>Outside India</td>
<td>33</td>
<td>17</td>
<td>50</td>
</tr>
</tbody>
</table>

Source: Primary data

Also 12% of the firms stated that they have technology transfer agreements with countries such as Canada, Italy, Finland, Norway, Sweden etc.

Table - 4
Technology Transfer agreements with other countries

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<th></th>
<th>YES</th>
<th>NO</th>
<th>TOTAL</th>
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<tr>
<td></td>
<td>6</td>
<td>44</td>
<td>50</td>
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</table>

Source: Primary data

4. Procurement

Raw material and labour are procured at cheaper prices from nearby areas. This reduces transportation and storage costs. Textile machineries are either imported or bought from Ludiana or Coimbatore. There are dealers positioned at Tirupur for this purpose. Accessories and other packing materials are purchased directly from companies or through dealer networks. Accessories and packing materials are also imported by the firms here.

II PRIMARY ACTIVITIES
1. Inbound logistics

Regarding the supply of raw materials to Tirupur, its location facilitates easy availability of cotton yarn – the basic raw material. Tirupur is surrounded by cotton fields, ginning factories and spinning mills and procurement of raw material has never been a problem to this cluster. Cotton yarn of different thickness is sourced from the spinning mills located in Coimbatore, Salem, Erode and Dindigul, which are within a distance of 50-150 Kms from Tirupur. Some exporters have their own spinning mills too. Further superior quality cotton is also purchased from other states like Andhra Pradesh, Karnataka, Maharashtra and Punjab. Availability of raw material at close proximity reduces cost of transportation cost. Accessories such as button, zip, laces and sewing threads and dye stuff & chemicals are manufactured in different parts of the country and are made available through dealer network and companies sales depot. Imported accessories are also used and Singapore based firm, YKK is the major supplier to this industry. Zips are also locally manufactured at Lakshmi Nagar in Tirupur while Zip India Ltd and Eastern Zippers are the other major supplier.

2. Operations (manufacturing)

Garment production consists of the key processes as illustrated in the following flow chart:

![Fig. 2 Process Flow Chart]
A brief explanation of some of the relevant processes is given below:

1. Yarn manufacturing: This process takes place at the spinning mills where the cotton thread is converted into yarn.

2. Knitting process: Here the knitting machines convert the yarn into garment cloth rolls.

3. Dyeing and bleaching process: In this process the clothes are bleached white first and then coloured using dyeing process.

4. Compacting and calendering process: In this process the clothes are dried and straightened.

5. Cutting: The clothes are cut into different sizes either by hand or machine as required by the design.

6. Stitching process: The cut clothes are then stitched into garments.

7. Fabric printing: The required logos and slogans are printed on the clothes using screen printing process.

8. Embroidery process: Embroidery designs are made in clothes if required by the design.

9. Labeling process: Labels of each brand are stitched on the clothes.

10. Checking process: Garments are checked for any faults like small holes, scratches, imperfect colour, stitching errors etc.

11. Ironing process: In this process garments are ironed.
12. Packing and shipment: All garments are uniformly arranged and each piece is packed in a polythene cover and then packed in cardboard boxes. They are finally loaded in containers and shipped.

3. Outbound logistics

The completed orders are dispatched to the buyers by air or sea depending upon the size and delivery schedule. Bulk of the export shipments from Tirupur are routed through the two Tirupur-based Internal Container Depots (ICDs), the Tirupur Container Terminals Pvt Ltd and the Continental Container Freight Station.[5] Shipments from these ICDs are again routed through the outbound port of Tuticorin and Kochi on the consideration of logistics, economy of operation and the instructions of the importers.

4. Marketing and sales

Brand promotion is a pre requisite for effective marketing. The industry has its presence both in the export and domestic markets. Despite its existence for more than 40 years, majority of the firms here have not established a brand name for their products in both the markets, the reason being that brand promotion was a long process and it involved huge investments. Most of the exporters were ready to invest in backward integration but were not interested in forward integration. Hence they stopped with just supplying to popular brands like Mother Care, Walmart, D&G, etc., But a few large firms have established their brands in the export market such as Classic Polo and Solo. They have retail showrooms abroad and some of them have even entered into marketing collaboration with other countries. Such firms resort to hoardings, advertisement in newspapers and magazines in foreign countries as their sales promotion techniques. The primary data collected indicate that only 16% of the export firms have retail showrooms in foreign markets, 21% have their own brand names and 14% have marketing collaboration with other countries and 64% with agencies. Also advertisement in magazines seems to be the widely used form of sales promotion in the export market with 48% opting for it. 30% use hoardings and only 8% depend on advertisement in newspapers.

5. After sales services
The very nature of the product does not necessitate any after sale service, but defective items may result in wholesale rejection and stoppage of future orders. This puts pressure on adhering to specifications and quality standards.

Areas to be revamped

1. The size of the organization is a critical factor in competitiveness. A large organization can gain the benefits of economies of scale which results in cost leadership. Tirupur’s units are undoubtedly small in size. Vertically integrated firms are a rare sight in Tirupur. Tirupur must look for ways to cut down costs by developing forward and backward linkages.

2. To increase investments the government of India has rightly reserved the knitting sector from SSI since 2005 and also it has permitted FDI into this sector. It is to be noted that so far no such investment has taken place. Poor infrastructure and high transaction costs seem to be major bottlenecks for attracting FDI. The industry and Government must take joint efforts to resolve this.

3. Lack of exposure to high fashion and technology apparels, inability to meet the highest quality standards, inadequate skills relating to high-end technology and absence of branding have been identified as the major hurdles for this industry to compete. A close look at the history of Tirupur shows that the cluster had come a long way in technology. Initially only hand operated knitting machines were used, after a while the cluster shifted to automated technology and today computer aided manufacturing is widely used. But still the industry must upgrade technology and quality so as to transform themselves to be on a par with international standards for which heavy investments are required.

4. Cheap labour is a major advantage of this industry but despite its significance it is sad to note that proper labour standards are not adopted by the industry for the workers. There is no proper wage structure and generally the workers are underpaid. Wages are fixed by the brokers, contractors or sometimes directly by the firm. Majority of the workforce are temporarily employed and appointment and removal of workforce seems to be highly
informal. Women constitute majority of the workforce. Owing to enormous volume of activities there is constant need for workers here and if this issue is not addressed properly Tirupur’s advantage in labour might get eroded.

5. Branding requires special focus. Majority of the firms have not established their brand name and have been supplying to popular brands. Since the industry is highly fragmented it can work towards establishing common brands in the international market.

**Conclusion**

It has already been emphasized that in any market it is the firm that ultimately competes. The exports of hosiery products having been under the SSI framework for long, suffers from all the maladies of small scale operations such as, traditional ways of running a business, hiring and firing of labour, extensive outsourcing, operating in low value segments, lack of cost awareness, lack of exposure to high fashion and technology apparels, inability to meet the highest quality standards, inadequate skills relating to high end technology and absence of branding. All this do not pose any problem as long as the going is good. But after the dismantling of the quota system in order to compete in an open environment, the firm should emerge as a modern business house, for this the hosiery firms in Tirupur must restructure their value chain by evolving appropriate strategies.

**References**

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