

A Model to Develop Small and Medium Enterprise Sector in Sri Lanka: Subcontracting Linkages in the Sri Lankan Garment Industry¹

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Abstract

Subcontracting is recently one of the most important features of industrial networks and industrial development. There are few studies in the area of subcontracting in garment industry in Sri Lanka. Jayaweera and Dias (1989) have only analyzed nature of subcontracting activities in the Sri Lankan garment industry. They however only focused on the impact on women. The proposed paper investigates the main characteristics of subcontracting activities and the nature of subcontracting linkages in garment industry in Sri Lanka in which subcontracting challenges will be identified. We use data from field survey of garment firms in Sri Lanka in 2011. Field survey was conducted by the researchers and final year undergraduate students of department of Economics, Faculty of Arts, University of Colombo. In addition, case studies were conducted to get a deep understanding about subcontracting activities in the sector.

Keywords: Garment Industry ; Networking and Cluster ; Subcontracting

1. This paper has based on data from field survey of garment firms in Sri Lanka, 2011.

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Introduction

Subcontracting is one of the most important features of industrial networks and industrial development. Jayaweera and Dias (1989) have only analyzed nature of subcontracting activities in the Sri Lankan garment industry but their study also focused on the impact on women. With the phasing out of the Multi Fiber Arrangement (MFA) in January 2005 and the withdrawal of Generalised Scheme of Preferences (GSP+) facility in 2009, many small and medium sized factories were closed down. This had bad repercussions on thousands of garments workers who are mostly women, who later joined with agents who are into sub contracting. Hence, it is necessary to undertake a study to identify the opportunities and threats faced by the subcontractors. The current paper investigates the main characteristics of subcontracting activities and the challenges faced the garment industry in Sri Lanka. The first section provides a brief overview of various types of business linkages. The second section presents the nature of subcontracting activities particularly among small enterprises. The third section of this paper presents a brief review of the garment industry in Sri Lanka while the section four analyses the challenges and issues of subcontracting linkages in the Garment Industry in Sri Lanka. The fifth section will conclude the paper.

We use data from field survey of garment firms in Sri Lanka in 2011. Field survey was conducted by the researchers and final year undergraduate students of Department of Economics, Faculty of Arts, University of Colombo. In addition, case studies were conducted to get a deep understanding about subcontracting activities in the sector.

Business Linkages

Four types of business linkages can be found in the existing literature².

1) Production Linkage

These include forward and backward linkages. While backward linkages are created due to the demand from the

2. In addition, some argue that there is another type of linkage namely consumption linkage (Harris, 1987).

Small and Medium Enterprises (SME) and other domestic firms for intermediate goods, forward linkages are created as a consequence of the supply of products of a firm to other firms.

2) Macro-Micro Policy Linkages

These linkages relate to the multitude of effects that governmental policies -macro level policies such as fiscal policy, monetary policy and exchange policy have on small enterprises' operations.

3) International linkages

These linkages deal with the interdependencies of national and international markets in which the small enterprises functions.

4) Institutional Linkages

These involve the relationships among the different types of individuals and organizations that operate and interact with small enterprises.

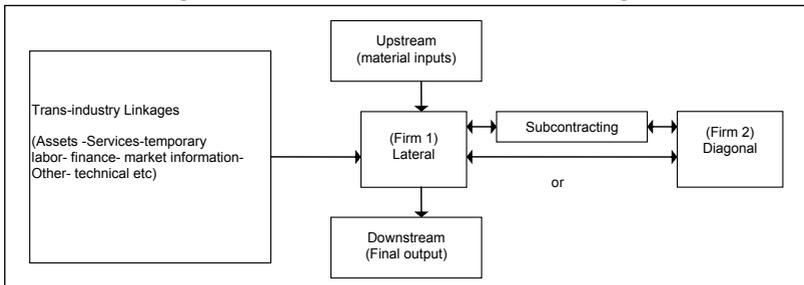
However, different writers have described business linkages in different ways. For example, Hirschman (1958) identified two categories of production linkages: backward linkages and forward linkages. The interesting area of the production linkages is sub-contracting.

Hirschman (1958) further defines backward linkage per productive branch the ratio of the total value of purchases from other branches to the value of total production, and of forward linkage the ratio of the value of sales to other branches to the value of total demand; namely interdependence ratios. Meanwhile, Amsden (1991) identifies three types of linkages between big and small business: (1) Capital, (2) Technology and Labour, and (3) Intermediate. According to Amsden (1991), to the extent that the formal banking sector is reluctant to lend to small scale enterprises for reasons related to transaction costs and risk aversion, the presence of big business, in its capacity as financial intermediary, may be helpful to smaller-scale firms. Secondly, technology transfer between large and small

enterprises has been facilitated by the movement of people³, who leave big business to set up their own companies or work for other firms. Another step in the technology transfer process is a movement of skilled personnel from big to small enterprises, for example through sub-contracting. Finally, intermediate inputs create other types of business linkages between big firms and small firms through sub-contracting.

According to Visser (1996) linkages constitute the functional environment of firms. Functionality means that one firm fulfils a task, which is part of the business process of another firm. Visser (1996) has classified linkages according to their direction in the supply chain: upstream linkages, downstream linkages, trans-industry linkages, and lateral and diagonal linkages Figure 1. Upstream linkages refer to the supply channel of material inputs. Downstream linkages connect producers with consumer markets, either direct, through traders or other industry branches. Trans-industry linkages relate to the supply of supplementary goods and services such as repair services, equipment, training, financing, book-keeping, legal advising, market research and design services. Lateral linkages incorporate producers who sell to the same market segment - e.g. competitors. By contrast, diagonal linkages include producers who do not compete directly due to product differentiation and / or market segmentation. According to Visser (1996), subcontracting linkages emerge when a producer decides to outsource part of the transformation process to other firms.

Figure 1 : Overview of Firm - Level Linkages



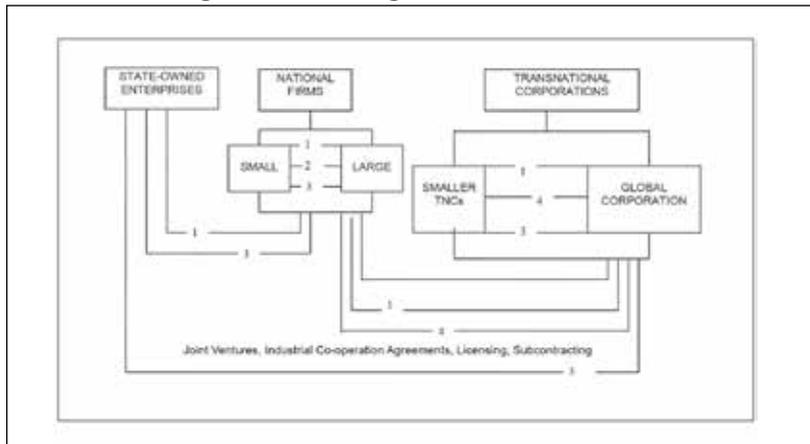
Source: Visser, 1996

3. A migration of people is evident from state enterprise, to private big business, to small and medium-size firms; or directly from state enterprises to small-and medium-size firms and then a recycling among the lower firm size distribution (Amsden,1991), Big business and urban congestion in Taiwan: The origins of small enterprise and regionally decentralized industry, *World Development*, 9, (9) 1127.

Inter - Firm Relationships

In this regard, a linkage is defined as any transaction, which takes place between two firms. It usually implies a continual relationship involving recurrent transactions. The term inter-firm linkage is traditionally used to encompass all possible forms of economic relationships between firms operating within an economy (Wong, 1991 & 1992).

Figure 2: Inter - Organizational Relations



Notes: 1. Arms Length Transactions, 2. Licensing 3. Subcontracting
4. Strategic Alliances

Source: Dicken, 1992

Types of Inter-Firm Linkages

a) Contractual Arrangements

Inter-firm linkages can be divided into different forms of contractual arrangements in accordance with the degree of control one party has over the other. A typical classification is as follows (Williamson, 1975; Casson, 1987; Wong, 1991).

- a) Outright equity control - parent 100% subsidiary
- b) Joint venture - majority, 50-50 or minority
- c) Industrial co-operation agreement
- d) Licensing and franchising

- e) Arms length market relationship
 - i) 'sopt' market transaction
 - ii) 'longer-term' recurrent contractual supplier-buyer relationship.

The 'shitauke' subcontracting system of Japan can be said to be an intermediary from supplier-buyer contractual arrangement that is largely market transaction in nature, but is nonetheless characterised by long-term, stable relationship (Aoki, 1988).

b) Economic Roles

- a) Direct vertical backward linkages -buyer-induced
- b) Direct vertical forward linkages -supplier-induced

c) Interaction of Contractual Forms and Roles

The vertical backward linkage relationships involving essentially arms-length market transaction between a large buyer and a SME supplier; subcontracting linkages are possible within these relationships. Any one of the contractual arrangements can be combined with either economic role to produce a matrix of different linkage forms and subcontracting; buyer firm procuring supplies from suppliers through market transactions. One of the focal areas of this study is sub-contracting linkage. The next section of this paper will deal with subcontracting linkages with a view to broaden the understanding on various types of subcontracting linkages.

Sub-Contracting Linkage

As already pointed out above, sub-contracting is one type of inter-firm linkage. They can be vertical chains⁴ and horizontal chains⁵. It has been viewed by many as a necessary component of industrial development, particularly in small-scale firms. Subcontracting means to enter into, to make or to let out a subordinate contract under which the supply of materials, services, or labour is let out to or accepted by someone other than a party to the main contract (Sit et al.,

4. Vertical chains describe hierarchy of the production cycle. For example, a large company subcontracting out to a small firm.

5. Horizontal chains is when a firm subcontract out to sibling firms in the same tier.

1991). Simply, it is specific form of outsourcing that involves intimate relations and information exchange between firms (Heshmati, 2003). In sub-contracting systems, parts and components, or sometimes, completed products, are made by sub-contractors in accordance with others placed by contracting firms. Studying of subcontracting linkages among SME and garment industry is still at the early stage of development (Kongmanila & Takahashi, 2009).

Although some writers prefer to use the term subcontracting in a more narrow sense to denote a specialized form of backward linkage, whereby the subcontractors provide largely labour services in processing raw materials given out by the buyer firm, we chose to use the term in this paper in the broader sense to encompass a wide range of forms of backward linkages. However, more accurate definition cannot be used here since the most subcontracting relations among the small enterprises especially in developing countries like Sri Lanka are informal and unwritten agreements and, therefore, the accurate concept of subcontracting are not defined in the questionnaire. Instead of trying to adopt an accurate definition, we discussed with respondents about their product-sale links. Nevertheless, this does not imply that subcontracting means simply a market transaction. Market transaction can be taken place at anytime and anywhere without pre-arrangements or without pre-order. Subcontracting arrangements always take place according to pre-orders and pre-arrangements (Watanabe, 1974; Wong, 1991; Voeten, 1993). Both formal and informal contacts are taken into consideration in this study. It does not matter whether the prime contractor is either a wholesaler or retailer on the one hand or a producer on the other hand. The former is defined as commercial subcontracting and the latter as industrial subcontracting (Watanabe, 1974; Dicken, 1992). Therefore, the broad distinction can be made between industrial subcontracting and commercial subcontracting. Commercial sub-contracting involves the manufacture of a finished product by a sub-contractor to the principal's specifications. The subcontractor does not play a part in marketing. The product is sold under the principal's brand name. Sit et al., (1991) mentions that this kind of subcontracting is efficient as it leads to a better use of resources. Industrial sub-contracting can be further subdivided into three types i.e. specialty sub-contracting, cost-saving sub-contracting and complementary or intermittent sub-contracting according to the motivation of the principal firm.

According to Dicken (1992), elements of the subcontracting relationship are as follows:

1) Technical Aspects of Productions

- a) Industrial subcontracting
 - i) Subcontracting processes
 - ii) Subcontracting components
- b) Commercial subcontracting
 - i) Subcontracting whole products

2) Nature of the Principal Firm

- a) Speciality subcontracting
- b) Cost-saving subcontracting
- c) Complementary or intermittent subcontracting

3) Types of Relationship Between Principal and Subcontractor

- a) Long-term, short-term, or single batch
- b) Principal providing some or all materials or components
- c) Principal providing detailed design or specification
- d) Principal providing finance (e.g.: loans or grants)
- e) Principal providing machinery and equipment
- f) Principal providing technical, general assistance and advice
- g) Principal being invariably responsible for all marketing arrangements

4) Geographical Scale Involved

- a) Within border or domestic subcontracting
- b) Cross-border or international subcontracting

According to Michalet (1980), the international subcontracting can be divided into; (1) Direct international subcontracting and (2) Indirect international subcontracting. However, previous research (Hovi, 1994) found that very few small subcontractors are involved in international operations due to some internal as well as external barriers such as government policies, high transaction costs, lack of information, lack of suitable product, lack of foreign market connections, higher risks etc. The current paper does not focus on international subcontracting.

According to the nature of the principal firm, industrial subcontracting⁶ can further be divided (Dicken, 1986) into three types: specialty, cost-saving and complementary sub-contracting. Specialty subcontracting involves the carrying out, often on a long-term or even a permanent basis, of specialised functions which the principal chooses not to perform itself but for which the subcontractor has special skills and equipment. This is a type of monopolistic or oligopolistic subcontracting. However, the primary reason for resorting to this type of subcontracting is that subcontractors are more specialised in a given line of production than the contractor. This type of subcontracting most probably takes place among the small firms because of the lack of skill staff for various fields. For instance, they cannot recruit a person for a specific field, which is very importance part of the product line but production cost of it is less than the unit labour cost⁷. This is specialty subcontracting, on the other hand, cost saving subcontracting as well.

Cost saving subcontracting is self-explanatory. It is based upon differences in production costs between principal and subcontractor for certain processes or products. If $P(LAC) > S(LAC)$, this type of subcontracting exists. Where $P(LAC)$ is the long-run cost function of the principal firm and $S(LAC)$ is the long-run cost function of the subcontracting firm. Complementary or intermittent subcontracting is a means adopted by principal firms to cope with occasional surges in demand without expanding their own production capacity (Dicken, 1992).

However, most of the small entrepreneurs in developing countries like Sri Lanka are engaged in so-called 'slave-trade' subcontracts. In such cases, subcontractors offer low prices by taking unfair advantage of their workers. The term of payment of these types of businesses is obviously not standardised. Cash is the most common form of payment. In addition, the mode of transaction is unsophisticated. Formal and written contacts can be rarely found among the transactions. Neither do contractors nor subcontractors worry about high standards of production or work hazards. Much of their work is unreported in an attempt to escape from paying

6. Meanwhile, Holmes (1986) identifies three major types of production subcontracting: namely, capacity subcontracting, specialization subcontracting, and supplier subcontracting.

7. $S(AC)X < P(W/Q)X$. $S(AC)$ stands for Average Cost when X is produced by subcontractor. $P(W/Q)$ is Unit Labor Cost when X is produced by the principal company.

taxes. Without in-depth interviews⁸, these types of subcontract linkages cannot be identified.

According to the technical aspect of production, Nagraj also (1984) distinguished four different forms of subcontracting as follows: (1) Component subcontracting, (2) Activity subcontracting, (3) Assembly subcontracting, and (4) Product subcontracting. Component subcontracting is when the parent firm contracts out the manufacture of some parts or sub-assemblies to other firms. Activity subcontracting is when the parent firm having an integrated plant contracts out one or more activities and then sells the final product under its own brand name. According to Unni et al.,(1999), this happens in industries where the production process moves through a number of distinct separable activities or stages which need not, technologically, be taken place in the same premises. An example is the garment industry where spinning and weaving can be conducted by different units. Meanwhile, assembly subcontracting is almost the opposite of this and seen in the industries where production of components are capital intensive and requires high technology with economies of scale and high obsolescence. However, assembling of these components to produce the final product is highly labour and skill intensive and can be farmed out to small and even household units. Product subcontracting is a form of subcontracting where the complete product is produced by the subcontractor and the parent essentially performs the marketing function. The Garment industry is a classic example of product subcontracting.

There are three different theories of subcontracting, namely (1) Dualistic approach, (2) Development approach, and (3) Networking and clustering approach. The dualistic approach⁹ considers subcontracting as an unequal power relationship between large firms mainly multinational firms and small firms. Basically, large firms are contractors and small firms are subcontractors. Large firms particularly prefer to outsource production process through subcontractor. Large firms benefit from outsourcing in two different ways: flexibility and cost reduction, particularly low wages.

8. We visited the entrepreneurs two times. It helps us to gather accurate and reliable information. Further, we did not use the word 'subcontract' as its technical sound. Instead of using this word, we discussed with them about their sales procedure. These discussions helped us to identify subcontract arrangements.

9. Originally, the approach is based on the concept of 'dualistic economy', which includes two different sets of firms; the large firms and the small firms (Kongmanila & Takahashi, 2009).

The second theory - development approach, also considers subcontracting as a relationship between large and small firms, but regards as a tool for industrialization, modernization and employment generation; macro level development. This is a good tool for mass employment generation and industrialization in developing countries (Watanabe, 1971).

The third theory - networking and clustering approach, which is also recognized as 'Modern Approach' (Pyke, 1992; United Nations Conference on Trade and Development [UNCTAD], 1994; Premaratne, 2002), emerges as the best model for industrial development in developing countries, where small firms are key stakeholders in industrial development. According to this theory, small firms help each other (Ceglie & Dini, 1999; Premaratne, 2002). There is no dominant firm. From small firms' point of views, there are two major arguments small firm networking and clustering (Premaratne, 2002). Firstly, since market transactions tend to become costly, firms attempt to reduce transaction costs by networking. Secondly, in order to perform, firms need various kinds of resources. Small firms usually lack resources fully at their disposal. Firms gather these resources from 'outsiders' or other firms. Therefore, in order to perform economic activities, firms have to enter into relationships with the other firms (Premaratne, 2001a). Overall, networking and clustering is the best solution form small firm development (Johannisson, 1990; Szarka, 1990; Borg, 1991; Donckels & Lambrecht, 1995). A mutually well-developed inter-firm network is important for subcontracts because inter-firms networks help to reduce economic uncertainty (Premaratne, 2002).

Garment Industry in Sri Lanka

Garment factories in Sri Lanka can be classified into three main groups: (1) Factories operating within the Free Trade Zones (FTZ) and under the Board of Investment (BOI), (2) Factories operating outside FTZs and still under BOI, and (3) Factories operating under normal Company Law that are not covered under BOI. With the introduction of liberalized economic policy in 1978¹⁰, the garment industry became the key character of the industrial sector in Sri Lanka, which became largest single item of exports in Sri Lanka in 1986. Its share of total export earnings is 28% in 1986

10. The government opened doors for foreign direct investment and Free Trade Zones (FTZ) were established.

and still continued to maintain the position having a share of 42.2% in 2010. The composition of exports since 1978 to 2010 is given in Table 1.

The garment industry plays a vital role as a key driver of the national economy and has grown to be the most significant contributor to the country's economy over three decades of its existence. It is the largest industry accounting for roughly 40% of industrial production and two thirds of industrial exports. The industry employs nearly 340,000 workers directly and twice as many indirectly. Total employment is estimated to be in the region of 15% of the country's eligible workforce.

Sri Lanka's Gross Domestic Product (GDP) grew by a notable 8.0% in 2010 over a relatively low growth of 3.5% in 2009 while the industry sector recorded a growth of 8.4% in 2010 with the higher growth in all sub-sectors.

According to the Central Bank of Sri Lanka, the textile, wearing apparel and leather products category which is the largest contributors to the export revenue of the country grew by 5.2% during 2010 compared to 0.6% in 2009. Even with the numerous challenges to this industry, (Dheerasinghe, 2003; Fonseka, 2004; Kelegama, 2005). such as, high level of competition from local manufacturers, withdrawal of GSP+ concession (Kelegama, 2005), high cost of skilled labor and imported raw materials, the industry remained competitive in export markets by producing high quality, eco-friendly and ethically manufactured products on time. Heavy dependence on GSP+ concession, weak backward linkages, and labour market issues such as inflexibility of labour market, labour unrest, and high cost of skilled labour are the key areas to be concerned by policy makers.

Table 1: Percentage of Agriculture & Industrial Exports in Sri Lanka 1978-2010

Exports	1978	1980	1985	1990	1995	2000	2010
Agriculture	78.8	61.8	52.5	37.7	21.8	18.2	24.6
Tea	48.5	35.1	33.2	25.9	12.6	12.7	16.6
Rubber	15.3	14.7	7.1	4	2.9	0.5	2.1
Coconut	12.9	7	8.5	3.6	2.7	2.2	2.1
Other Agriculture	5.5	5.1	3.8	4.2	3.5	2.8	3.9
Industrial	14.7	33.8	39.5	54.2	75.4	77.6	74.3
Textiles & Garments	3.6	10.4	22	32.8	48.7	54.0	42.2
Gems	4	3.8	1.6	3.9	2	1.7	0.9
Other	2.4	0.6	5.6	4.3	0.8	2.5	0.3
Total	100						

Source: Compiled by the authors based on the data from the Annual reports of the Central Bank of Sri Lanka

The garment industry in Sri Lanka has been mainly relying on two major export markets, United States of America (USA) and European Union (EU). The industry, therefore, focused on exploring niche markets in the Asian region in order to diversify their export destinations. New innovations in the apparel industry included the launching of Re-Engineered Design (RED) products by using waste fabric of local apparel industry, up-cycling and converting them into a fashionable clothing line catering to Western clothing brands.

However, several measures were taken by the government and various institutions to promote SMEs in the rural sector, in particular to safeguard the SMEs in apparel and textile industries from the impact of the global economic slowdown and increased competition. Also several measures have taken to expand the businesses in SME sector while taking several measures to develop the textile and handloom industries.

Joint Apparel Association Forum (JAAF) states that Sri Lankan clothing manufacturing and exporting sector is working towards a sustainable growth by meeting mid and long-term challenges. Accordingly, the immediate challenge in the next five years is to develop backward and forward linkages in the textile value-chain¹¹.

Also the apparel industry is aiming to reach US \$5 billion in exports from the sector by 2015. The major challenges faced by the industry will be to control costs, to operate within the current labor laws and to set up an effective supply chain.

Further it is necessity to develop trade relations mainly with China, Japan, India, and Brazil and also develop trade arrangements, particularly in the North American markets, along with which we need to increase productivity and offer something different in the markets.

However, Sri Lanka is a high quality reliable destination. Therefore it has to focus on ethical and green manufacturing, along with which we also need to focus on speedy deliveries.

11. However, the development of backward linkages in the garment industry in Sri Lanka was very slow for a number of reasons (Kelegama & Foley, 1999).

The supplies for the apparel industry are mainly imported. The machineries are imported from Japan, China, USA or Taiwan. The raw material like fabric, thread and accessories are mainly from China and Hong Kong. Therefore manufacturers, as a Sri Lanka has no power in bargaining.

Further, local outlets are the main target of small and medium scale ventures. Therefore such ventures always try to get a chance to cater them which definitely increases the bargaining power of high end shop owners.

The potential of new entrants are also high because the environment and the facilities promote the garment industry. Since the garments are essential item for human beings the substitutes plays a very insignificant role. However most of the factory owners have to compete with the imported high quality apparels came from all over the world.

Most of the factory owners were having practical experiences on raw material supply chain. The raw material base in Sri Lanka is still weak. The apparel industry currently imports a significant amount of its raw material requirements comprising woven fabrics and accessories. Backward linkages have been one of the weakest areas in the industry. Prior to 1970's Sri Lanka had a textile industry, which forms the largest input component in the garment sector, collapsed with the liberalization policies. Lack of trade competitiveness dependents on trade protection and lack of adequate adaptability to meet the new demand for textile inputs could be sighted as major factors responsible for the demise of this vital sector. Even after several decades of expansions in the apparel sector textile inputs have to be imported heavily. The industry's dependents on imported inputs are to the tune of 1.6 billion of which fabrics cost US \$1.2 billion while the balance was spent on yarn and other non textile inputs (JAAF). A major drawback of this situation has been the prolonged lead time, 90 to 120 days in Sri Lanka when more efficient competitors require only 30-60 days. Generally shipment process takes nearly 15 days. It also creates competitive disadvantages as it takes long lead times.

Subcontracting in the Garment Industry

Subcontracting firms play an important role in industrial development. It also generates employment and incomes in the economy. Subcontracting markets have grown at a greater rate than the industrial sector taken in its entirety for past 30 years (UNIDO, 2003). When large firms subcontract small and medium-sized enterprises both parties are mutually beneficial as large firms can enjoy the advantage of lower wage of small firms while small firms get opportunities to be in the business at low transaction cost from inter-firm corporation.

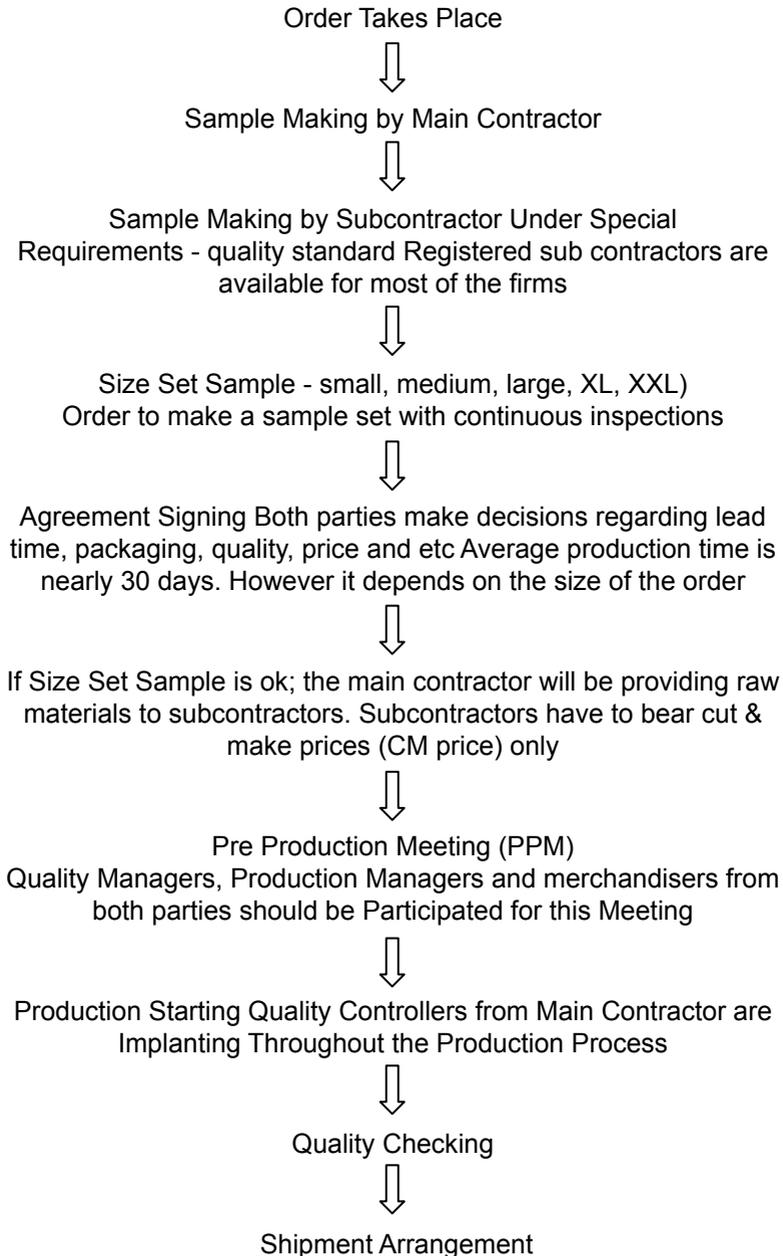
Subcontracting is usually defined as a situation where the firm offering the subcontract requests another independent enterprise to undertake the production or carry out the processing of a material, component, part or subassembly for it according to specifications or plans provided by the firm offering the subcontract (Holmes, 1986; Taymaz & Kilicaslan, 2005). In other words, subcontracting is a specific form of outsourcing that involves intimate relations and information exchange between firms (Heshmati, 2003).

The main reason why a firm prefers to outsource production is to minimize excess capacities to dispatch the order on time to avoid rejections. Second reason is related to cost reduction. Also, the large firms may seek to subcontract production, particularly for unskilled labor intensive production and to take advantage of lower wages in small firms.

Nature of Subcontracts in the Garment Industry

Firm size / capacity is usually influencing owners / managers of the firms make decision to be subcontract offering, subcontract receiving or both of them. In many cases small scale ventures tend to work as subcontractors while large firms may use subcontractors. In the Garment industry in Sri Lanka, subcontracting arrangements are informal but it is part of the industry. There is not a set policy or a formal system to deal with subcontracting businesses. Garment factories subcontract their production process for several reasons: (1) Dealing with the restriction on overtime, (2) Handling overload orders -seasonality, (3) Labor union and handle labor unrest, and (4) minimizing costs and maintaining high profit margin.

Process of Subcontracts Offering



Source : Compiled by the authors

This study identified four different ways of subcontracting engagements in the Garment industry of Sri Lanka:

- a) The work is subcontracted out to independent small firms or factories.
- b) The work is subcontracted out to a regular work of the same company. This worker is usually the line manager or team leader or supervisor of the company.
- c) The work is subcontracted out to another sibling company.
- d) The work is subcontracted out through a middleman. Middlemen get orders from factories and subcontract to other firms. They normally ask for a commission of 5-10 percent. In many cases, the middlemen are former employees; managers, line leaders, and supervisors of the mother company.

Subcontracting activities are spread between web of thousands of small business often taking the form of cottage industries which play an essential role as a source of employment and income.

During peak season which is from September to May apparel industry is overloaded with orders. Especially during this period subcontractors make a lot of money. Subcontracting is highly labour - intensive important source of employment creation. Nevertheless, this informal sector needs measures and a structure for their continuation. The sector has extremely lean management structure unwilling to take action not connected directly with running the firm. According to industry sources sub-contracting has no major overheads as production, merchandising, and supervising are all done by the owner of the subcontract who is usually a line leader, factory manager or a supervisor with some experience in the trade. However, in some cases supervisory services are provided by the main factory for quality compliance. Hence, there is neither big hierarchy in the structure nor qualified people to operate the work. Usually standard products are given on subcontracting while the main factory focuses on high end products.

There are three types of subcontractors naming those who are not compliant with industry standards, those who are ethical in their work and those who just get away with basic operations only.

Challenges and Opportunities in Subcontracts

During the Multi-Fiber Arrangement (MFA) period garment industry had a heavy reliance on small and medium scale subcontracting enterprises. Several foreign buyers had maintained a cluster of suppliers. After the MFA being phased out foreign buyers began focusing on larger producers who are equipped to supply a wide range of market needs. As a result many local smaller producers either expanded their production, amalgamated with larger producers as partnerships while some enter into subcontracting arrangement.

Withdrawal of GSP+ concession has created so many problems in subcontracting field due to the close down of small scale garment factories. Therefore large scale manufactures has faced a big problem as they face difficulties in outsourcing their orders.

Subcontracting in the garment sector has been facilitated by the existence of a large labor surplus, composed mostly of young women workers with little training, education and skills. Therefore in subcontracts, labor can be used by employers at lower costs and obligations in order to maximize profits or increase competitiveness.

Sometimes in the small and medium scale garment sector companies outsource a part of the work to individual workers, who work at home. These workers are paid on a piece rate. Therefore outsourcing generates more profit and makes retrenchment easier. But on the contrary, many subcontractors are not equipped with latest technology, proper equipment, needle detecting machines, right ironing apparatus etc. Non compliance of standard requirements can lead to rejection of orders due to quality defects giving internationally bad reputation for the industry.

Subcontracting can be given on cutting and making, packing and finishing or either cutting or packing based on the complexity of the garment. Usual wastage of garments is calculated to be 3% while subcontracting can be 5%. It says that some subcontractors capitalize on the situation to make more garments and release them to the local market.

Weak raw material base in garment sector in Sri Lanka also makes another issue. In subcontracts, generally the main contractor provides imported raw materials to subcontractors. This raw material shipment process takes around fifteen days and it makes production delay. These impediments also make less machinery capacity utilization.

From the employees' point of view, there are various issues and challenges in subcontracting system. These include job insecurity, long-working hours, temporary employment, part-time works, non-availability of pension, leaves including sick leave and maternity leave, sexual harassment, bans on unionism and collective bargaining, and unhealthy working environment. The competitiveness of subcontracting in the textile and clothing industry in the European Union stress on flexibility and response, production by using just-in-time and rapid response methods combined with all round vocational training. In addition, quality, innovation, know-how and service have assumed growing importance in firm's strategy. Use of information technology appears an extremely important means of improving the competitiveness of firms in this sector, including sub contractors.

Conclusion

Subcontracting is a specific form of business linkages in the modern industrial theory on networks and clusters. In networks and clusters, studies suggest that subcontracting may boost economic efficiency and productivity though division of labor and innovations. SME sector is particularly benefited from such linkages. However, this study did not analyze the impact of subcontracting on performance of an individual firm.

Since garment industry in Sri Lanka has located in selected areas as industrial estates, subcontracting can be effectively developed if the regional development policies give a special emphasis on the factors that make firms enter into subcontracting relationships. Though networking and clustering approach is dominant in the garment industry in many countries for example, Pakistan, the approach is feebly applied by the industry in Sri Lanka. Trust building among the firms is critical importance. The development of subcontracting relations is one form of industrial network and cluster development. It is also the modern way for long term and sustainable development of industrial cluster.

References

- Amsden, A. H. (1991). Big business and urban congestion in Taiwan: The origins of small enterprise and regionally decentralized industry. *World Development*, 9 (9), 1121-1135.
- Aoki, M. (1988). *Information incentives and bargaining in the Japanese economy*. Cambridge: Cambridge University Press.
- Borg, E.A. (1991). Problem shifts and market research: The roles of networks in business relationships. *Scandinavian Journal of Management*, 7 (4), 285-295.
- Casson, M. (1987). *The firm and the market*. Oxford: Basil Blackwell.
- Ceglie, G., & Dini, M. (1999). *SME cluster and networking development in developing countries: The experience of UNIDO*. (Working paper No 2). Vienna: United Nations Industrial Development Organisation, Private Sector Development Branch.
- Dicken, P. (1992). *Global shift: The internationalization of economic activity*. (2nd ed.). London: Harper and Row.
- Dheerasinghe, R. (2003). Garment industry in Sri Lanka challenges, prospects and strategies. *Central Bank of Sri Lanka: Staff studies* 33, 33-72.
- Donckels, R., & Lambrecht, J. (1995). Networks and small business growth: An explanatory model. *Small Business Economics*, 7, 273-89.
- Fonseka, T. (2004). Forward integration and supply capacity of the garment industry. In S. Kelegama (Ed.), *Ready-made garment industry in Sri Lanka: Facing the global challenge* (pp.25-38). Colombo: Institute of policy studies.
- Hirschman, A. O. (1958). *The strategy of economic development*. New Haven, CT: Yale University Press.
- Heshmati, A. (2003). Productivity growth, efficiency and outsourcing in manufacturing and service industries. *Journal of Economic Survey*, 17, 79-112.
- Hovi, N. (1994). Internationalizing subcontractors: Is co-operation an alternative?, In J. M. Veciana (Ed.), *SMEs: Internationalization networks and strategy* (pp. 86-109). Singapore: Aveburg.
- Jayaweera, S., & Dias, M. (1989). *Subcontracting in industry: Impact on women*. Colombo: Commonwealth Secretariat of Colombo Sri Lanka.

- Johannisson, B. (1990). Economies of overview guiding the external growth of small firms. *International Small Business Journal*, 9 (1), 32 – 44.
- Kelegama, S., & Foley, F. (1999). Impediments to promoting backward linkages from the garment industry in Sri Lanka. *World Development*, 27 (8), 1445-1460.
- Kelegama, S. (2005). Ready-made garment industry in Sri Lanka: Preparing to face global challenges. *Asia-Pacific Trade and Investment Review*, 1 (1), 51-67.
- Kimura, F. (2002). Subcontracting and the performance of small and medium firms in Japan. *Small Business Economics*, 18 (2), 163-175.
- Kongmanila, X., & Takahashi, Y. (2009) Determinates of subcontracting in Lao garment industry. *Contemporary Management Research*, 5 (3), 273-286.
- Nagraj, R. (1984). Subcontracting in Indian manufacturing industries: Analysis evidence and issues. *Economic and Political Weekly*, 19, 31-33.
- Premaratne, S.P. (2001a). Networks resources and small business growth: The experience in Sri Lanka. *Journal of Small Business Management*, 39 (4), 363-371.
- Premaratne, S.P. (2001b, November). *The impact of entrepreneurial networks on subcontracting activities*. Paper presented at the fifth annual European Network on Industrial Policy (EUNIP), Vienna, Austria. Retrieved on November 20, 2001, from <http://www.eunip.com>
- Premaratne, S.P. (2002). *Entrepreneurial networks and small business development: The case of small enterprise in Sri Lanka*. Netherlands: Eindhoven University.
- Pyke, F. (1992). *Industrial development through small firm co-operation*. Geneva: International Labour Organization.
- Sit, V.F.S., Cremer, R.D., & Wong, S.L. (1991). *Entrepreneurs and enterprises in Macau: A study of industrial development*. Singapore: Hong Kong University Press.
- Szarka, J. (1990). Networking and small firms. *Journal of International Small Business*, 8 (2), 10-22.
- Taymaz, E., & Kilicaslan, Y. (2000, October). *Subcontracting: A model for industrial development?*. Paper presented at the ERF 7th Annual conference, Amman.

- United Nations Conference on Trade and Development. (1994). *Technological dynamism in industrial districts: An alternative approach to industrialization in developing countries*. New York: United Nations.
- United Nations Industrial Development Organisation. (2003). *International subcontracting versus delocalisation?*. Vienna: United Nations.
- Unni, J., Bali, N., & Vyas, J. (1999). *Subcontracted women workers in the global economy: Case of the garment industry in India*. Ahmedabad: Gujarat Institute of Development Research and Self Employed Women's Association.
- Visser, E. J. (1996). *Local sources of competitiveness spatial clustering and organization dynamics in small-scale clothing in Lima, Peru*. Tinbergen Institute Research Series. Amsterdam: University of Amsterdam.
- Visser, E. J. (1997). The significance of spatial clustering: External economies in the Peruvian small-scale clothing industry. In M. P. van Dijk & R. Rabellotti (Eds.). *EADI book series 20* (pp.155-172). London: Frank Cass.
- Voeten, J. (1993). *Beyond sub-contracting: Assessing linkages between large and small enterprises as small-scale enterprise development mechanisms*. An experts report of symposium: Symposium with special reference to Africa. Royal Tropical Institute (KIT), Swiss Center for Development Co-operation in Technology and Management (SKAT), Dutch Directorate General for International Co-operation (DIGS), Amsterdam.
- Watanabe, S. (1971). Subcontracting industrialization and employment creation. *International Labor Review*, 104, 51-76.
- Williamson, O.E. (1975). Transaction costs economics: The governance of contractual relations. *Journal of Law and Economics*, 22, 3-61.
- Wong, P.K. (1991). *Technological development through subcontracting linkages: A case study, Asian productivity organization*. Singapore: Faculty of Business Administration, National University of Singapore.
- Wong, P.K. (1992). Technological development through subcontracting linkages: Evidence from Singapore. *Scandinavian International Business Review* 1, 28-40.