Improving the Sri Lankan Garment Industry

- Some Lessons from Germany -

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Production of Garments

The production of garments and the road to the end user changed during the past, and now the world is due to change the system drastically once again.

In olden days families made the garments for their own use. Then the tailors started to produce garments according to individual wishes. Currently in Europe and USA the tailors are so expensive, that the customer is not in a position to pay for their products. Presently the garment distribution system in developed countries could be shown as follows.

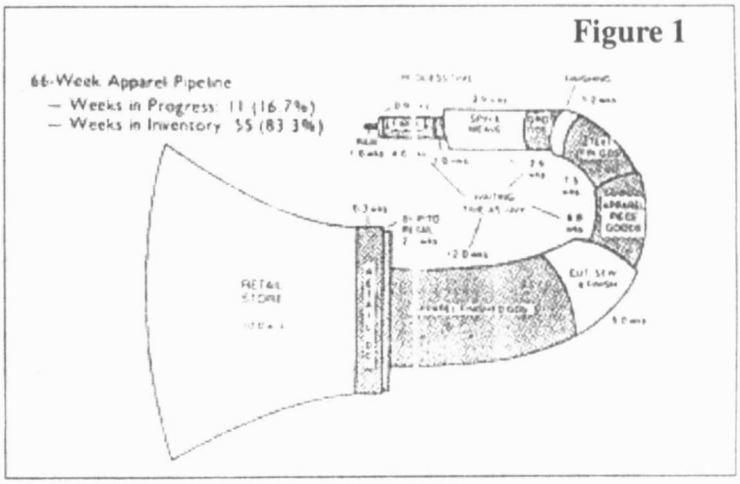
1. Today garments will be produced for a large number of customers by using large tables, and fabric producers can obtain information from special shops and boutiques through the Internet.
2. The decision to exhibit, ie. which garments are to be displayed in the shop windows, will be taken about 6 months before the season.
3. The number of garments and the sizes to be ordered will be decided according to the past experience of the firm.

This method has a number of advantages for offshore manufacture, especially for countries like Sri Lanka. A developed country such as Germany is not in a position to compete due to the high wages in their country. The following table shows how this has affected the German garment manufacturers in the past.

Year	Number of Garment Factories	Number of Employees in Garment Factories
1991	2,300	214,000
1994	1,500	125,000

An analysis of the apparel pipeline in the USA, (Figure 1), showed that, on average, it takes 66 weeks from the time raw materials are fed into the back end until the consumer buys the product at the front end. Of those only 11 weeks are needed for actual work while 55 weeks are spent on inventory - waiting to be ordered, waiting for a production schedule, waiting between operations, or for trim, or to be ticketed and redistributed. All of these wasted time costs money. The total annual waste in the system costs around 25 billion dollars per annum. About one half of the 25 billion dollars can be saved through the application of Quick Response strategies.

Figure 1



Countries such as Japan and USA have developed fully automated factories to produce garments using robots and automatic sewing machines (MITI project in Japan and TC^2 project in the USA) to counter the threat from the cheap labour countries. But these developments are not being used in the garment industry due to many reasons; some of which are:

1. These systems are not flexible enough to cope with the large number of style changes taking place in the garment production.
2. These systems are very expensive, and it is cheaper to produce the garments in a low labour wage country.

This does not mean that low labour wage countries can dominate the garment sector, because developed countries have already taken precautions to safeguard the industry. One of the main research projects

presently carried out in Germany has the following aims: -

1. To have a collection of material samples and models through the help of multimedia on a large screen.
2. Instead of taking measurements, to have a method of body scanning the customer.
3. The scanned body of the customer will be exchanged with one of the models and then different fabrics may be tried on it by using the computer.
4. The customer can see his own figure in the large screen, and he/she can select different models accordingly. Apart from materials, the customer can also select all the accessories according to his wish.
5. All the data will be transferred to the manufacturer, on-line.
6. The material will be cut using a single ply cutter.
7. The garment will be ready in 2 to 3 days.
8. The customer will receive the garments within one week. That means if he orders the items on Monday, he/she will receive them on Friday.

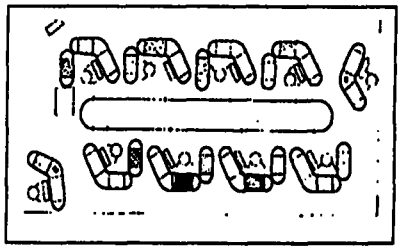
It is understood that we are not in a position to work in the above manner, because our lead times are quite high. The above explained system is advantageous for former socialist countries in Europe to produce garments for Germany, because the labour costs in those countries are lower than developed countries in Europe and also because they have local suppliers of quality fabrics.

There are over 140 textile manufacturers in Sri Lanka, capable of supplying less than 10% of the raw material requirements of the country's Garment Industry. The rest i.e. 90% are imported and therefore the lead-time to get the material itself is about one month. We have to produce our own fabrics for the export garment market. It should be the first and also the most important step that we have to take without delay. There are many problems arising in the production of fabrics in Sri Lanka. Government has tried on many occasions to motivate the foreign investors to start textile mills in Sri Lanka, by offering a number of incentives and also waiving the bank loans taken by the leading manufacturers. Unfortunately these efforts were unsuccessful. It is not only the textile fabrics but also high quality accessories such as buttons, zippers and elastics etc. that needs be produce locally.

The next important factor is to train our staff to become more effective. Most of our manufacturers are under the impression that the people have to work hard and they should be in the factory until late night. Ideally staff should work smarter rather than harder. Working hard does not mean spending time in the factory, but rather to organise and plan things properly. In the present system the operatives will specilaise in a certain machine. As long as the order sizes are large, specialisation is useful, but gradually the number of pieces in an order is decreasing. Therefore the sewing machine operators should be multi-skilled.

A typical Quick Response layout, shown in Figure 2, may not be the appropriate system for Sri Lanka, because the optimum utilisation of machines does not take place. One operator has two to three machines around her, which is an expensive arrangement for a country such as Sri Lanka. Still there is a possibility of introducing team work to the Sri Lankan garments industry in a form of modular manufacturing system. Each operator has only one machine, but she carries out more than one operation, and will be seated around a table to minimise handling.

Figure 2



The growth from 1993 to 1994 of the garment industry in Sri Lanka and a comparison with former socialist countries is given below.

Country	Growth 1994 upon 1993 (%)
Lettland	112
Ukraine	97
Lituania	76
Slowakei	45
Sri Lanka	42
Tschechien	35
Rumania	31
Poland	25
Russia	14

This shows that the production growths in most of the former countries in the USSR are significantly high. As discussed earlier, these countries have more opportunities to serve European countries, with Quick Response approach because they are situated geographically in a better position than Sri Lanka.Former USSR is only about 1500 km away from Germany and in 3 to 4 days time a ship can bring finished goods to Germany. Further according to Temme and Kohleick, the personnel have the same qualifications as in Germany, and these factors are very positive for German manufacturers to invest in those countries. The following table shows that the costs of the salaries in most of those countries are also about 1/4 of those in Germany.

Klaus Stricker from Germany suggests the following methods for the German manufacturers to produce garments for a competititve price:

Country	Salary/Minute (Rs)
Germany	25.16
Horig Kong	10.88
Tscechien	7.48
Turkey	7.14
Hungary	7.14
Poland	6.80
Vietnam	6.12
(White Russia)	
WelBrüBland	5.78
Ukraine	5.78
Russia	5.78

1. To take a very short time for product and product development
2. Work in Progress to be minimised to a couple of hours by using modern planning and logistic systems.
3. To implement flexible working hours such as 32 hours per week in summer and 44 hours per week in winter season.
4. To use modern technology to improve the productivity.
5. To give up the present line production system and to introduce Team Working system which allows the operators to take more responsibility which also improves the productivity and flexibility.
6. To have consistent quality and to introduce total quality management system and get rid of customer complaints.

A country like Sri Lanka will have a number of problems to face if these Quick Response or Just in time strategies come into operation. Not only the European market, but also the American market (about 61% of our garments are exported to USA) is in danger because of the NAFTA agreement, Mexico is in a very powerful position. Mexico has now become the USA's biggest textile & clothing supplier in volume terms - overtaking China in the process. Mexico has the following advantages against Sri Lanka.

1. Mexico's geographical proximity to the US market gives the country a distinct advantage over Sri Lanka the goods can be trucked to USA within a matter of hours.
2. Mexico's labour cost is low.
3. Mexico is in a unique position as a supplier that has low wage rates and is able to meet the growing demand by retailers for quick response and just in time deliveries.

As pointed out earlier, Sri Lanka cannot be categorised as a cheap labour country. This country has a shortage of good middle management personnel and if they are available, they are expensive. In a Team Work atmosphere the operator will be given a lot of responsibilities especially the quality of end product is one of their main responsibilities. Therefore there is a possibility of reducing middle management involvement. By visiting a number of small garment factories in Germany, the author has found that the salary scales of the sewing girls are not that attractive in comparison to the salary scale sof other sectors in Germany. Most of the sewing girls in former East Germany earn about DM.1000/= to DM 1200/= per month. It is about Rs 40000/=, but us a very low salary in Germany because the cost of living is high. Suprisingly their labour turnover figures are very low! (Some factories had 0% during the last few years). The main reason for this is because the operators know very well that if they leave a factory, it may be difficult for them to find a new factory as there are only a few factories existing. Unfortunately, labour turn over figures in most of the garment factories in Sri Lanka are quite high (in some big factories it is 50% to 60%). Some of the operators join a reputed garment factory, only to get a certificate and then join a factory in the hometown. This is not the main reason for the high labour turnover figures. A problem in Sri Lanka is that there is big resistance to female labour because of the customs and traditions in this country. The Sri Lankan male accepts the female as a housewife rather than a breadwinner. It may be not the custom in towns, but more than 70% Sri Lankans are villagers and for them the female has to do all the household work alone, without any support from the husband. Unfortunately the set-up in the garment industry comes into conflict with these customs. Therefore most of the female workers leave the job as they get married, especially after they become mothers. If the factories can start a creche for the infants, and also run a grocery for the employee's to purchase their daily needs at subsidised rates, it will take most of the burden off the employee's head. Then the employees can concentrate more on her work and automatically the productivity will be improved.

In Germany the set up in most of the garment factories is very attractive for female operators. Some of the small garment factories in Germany start at 6.00 a.m. and finish work at 2.45 p.m., and there are some operators who work only 6 hours per day. According to past data most of the operators who worked 6 hours have earned an amount similar to an operator who worked for 8 hours. If we have a set-up like this, the chances of improving productivity are quite high. Most of the factories in Sri Lanka start at 7.00 a.m. and work until 8.00 p.m.or 10.00 p.m. Though the operators are paid overtime, the quality of a garment mainly depends on the skill of the operator. It is impossible that a person can concentrate for 12 to 14 hours! According to research carried out in Germany, they have found that a female operator can concentrate only for 6 hours continuously. Therefore to improve the productivity, to reduce the labour turnover, and to make the garment industry more fruitful, Sri Lanka has to take the following steps.

1. The operators as well as the middle management should be given. high technical know-how. It is better to use multi-skill operators, and to carry out more than one operation, which reduces handling and increases the productivity.
2. The piecework rate with guaranteed minimum wage should be introduced.
3. More incentive schemes should be encouraged than overtime.
4. More authority should be given to the operators and their views should be taken into consideration and for useful suggestions a premium should be paid.
5. It is better to start early in the morning and finish early, because of the climatic conditions and also the workers can spend quality time with the rest of the family in the evening, especially with the children.
6. There should be more small factories and those factories should have a team working atmosphere rather than production lines.
7. We have to concentrate more on garments which require large amount of labour ie. Hand-made buttons etc.

It is clear, the industrialist think that 'After the L.C. is opened, we have to finish this work somehow, we have been following this method for the last 20 years and why should we change it now?' The main problem can be read in most of the leading magazines. Through calculations they have shown that the offshore finishing is no longer cheap. According to DiBars, the cheap layout countries will take the know-how from developed countries and make more profits than the contractor. According to him the salary structure alone is not a significant factor to decide whether it is cheaper to produce offshore.

There are so many other costs to be realised. Some of the important additional costs he has shown are as follows

1. Transport cost including insurance
2. Custom duty and formalities
3. Technical and quality control personnel (Foreign Experts)
4. Travelling expenses and hotel costs for foreign management and experts
5. Logistic costs
6. In some occasions it is necessary to give a finishing touch in Germany, to improve the quality
7. Lower material utilisation
8. Problems with material suppliers
9. Problems which creep into the delivery dates, due to internal problems in the country
10. Additional communication costs
11. Problem with training the staff
12. Cultural differences
13. Political instability

Apart from all this another problem that has appeared recently in Germany and most of the European countries is that the supply is higher than the demand. Therefore it is clear that Sri Lankan garments industry has to face many difficulties in the near future. The fact is that we have to face it and accept all these challenges. Especially we have to train our operators thoroughly and reduce the number of unproductive personnel from the factories. It could be clearly seen that unnecessary handling is very high and to cover it up we use helpers. We have to come out of this pattern slowly. It is also necessary to introduce a large number of attachments and microprocessor controlled machines to the industry, to increase the productivity. One of the weakest areas in Sri Lanka is our communication system. We have to use satellite links, Internet, Intranet etc. We have to cut down lead time and reduce the work in progress, which will automatically reduce the throughput time. This will lead us to take another step forward, which means we might be able to start doing fashion garments and have our own creations. We should have the trained staff that understands what our foreign designers and merchandisers require. This is not just the ability to copy a correct sample and give a quote, as most garment factories do today. There should be a sensible application of the "hustle" and "can-do" attitude always prevailing with the adaptation of technology to use their production-based knowledge so that they really understand whether the target price, delivery dates and quality requirements are achievable. We have to use internationally accepted time measuring systems such as General Sewing Data (GSD), and then only we can identify how efficient we are, internationally. This will also enable us to communicate with the customer with confidence regarding matters such as delivery date, cost etc.

We have to develop a good image with out customers by keeping the dispatch dates unchanged and giving them the confidence that our goods are 100% free of faults. We have to be flexible and should be ready to do special finishes. In other words we should be in a position to tell the customer "we are not cheap, but these are the garments that we can offer and we have a very clean history, by prompt and fault free delivery".

Sri Lanka has a very low productivity growth and one of the main reasons for this is the large number of holidays enjoyed by the Sri Lankans. A foreign lecturer pointed out that a Sri Lankan works only 83 days per year. It is an exaggerated figure but it is interesting to know how they arrived at this figure. The number of holidays, according to him, are as follows:

104 days - week ends,
24 days - full moon days, Christ mas, and other religious festival days
42 days - entitled leave

In an emergency a person can take one month (30 days) no pay leave

When we add all these together, it is 200, leaving 165 working days per annum. Due to late comers etc. the efficiency of the work force is around 50%. Therefore the net output is only 83 days per year. This means that when a foreign firm has a factory in Sri Lanka, the output per annum is similar to that country operators' work of only one and a half days per week! It is true that the employees in garment factories do not enjoy any of the above facilities, but then they compare with the rest of the workers in the country and will be totally demoralised. From the employer's point of view, it is difficult to get things moving because most of the service organisations such as Banks, Shipping Lines, Ministries etc. are closed on these holidays.

Hong Kong is a centre for the garment industry. They have the technology and the marketing know-how. They have good credibility and they upgrade their products continuously. If a customer is willing to pay, Hong Kong is ready to supply an order within four to six weeks! We are far behind the most of leading garment exporting countries, such as Hong Kong, Thailand, Indonesia etc. It is clear that they improve their productivity through automation. All the existing bilateral textile agreements coming under the Multi-Fibre Arrangement (MFA) comes to an end by the year 2005. The MFA has regulated the bulk of international trade in textiles and clothing for the last 25 years, outside normal trading rules, permitting developed countries to impose quotas against textiles and clothing imports from developing countries. After phasing out of the MFA, the buyers will select only the countries that can respond quickly with quality merchandise for competititve prices, and we will be left behind, if we do not face the challenge. Further, for most of the buyers, Sri Lanka is no more a cheap labour month which if compared to Europe and USA may be very low.However, the productivity in Sri Lanka is low and also the production cost in Sri Lanka is very high due to many reasons. The cost of energy and transport are two main factors that are responsible for the higher production cost. A recent article in Apparel International showed that operator in Sri Lanka is paid about $100/- per month, when the entire social securities etc. are taken into consideration. The same magazine has published an article about India and the salaries were significantly lower than in Sri Lanka. However, we should not forget that the present Asian financial crisis would also have a negative impact on the Sri Lankan garment industry, in the near future.

From the employees' point of view, the best years of their lives are spend slaving for establishments that have the least amount of concern imaginable for their welfare. According to the People's Forum for Development Alternatives (PEFDA) report, though Sri Lanka has a long history of Trade Unionism and Labour Regulations of fairly high standards, many of these are not applied in most of the garment factories. The government's attitude and policy since the beginning of the export-oriented growth strategy has been to satisfy the employer and not to look after the interest of the employees. It may be that Government has to do this to make Sri Lanka more attractive for foreign investors, but it is advisable to introduce more welfare facilities such as proper pension schemes, insurance schemes, scholarships and other benefits for the children of employees of the garment sector, through Government initiative. Recently the Government has started to build houses and parks for the Katunanayake Free Trade Zone employees, which is a great encouragement for them.

Only a handful of factories have introduced basic facilities to the employees, but a large number of employees do not enjoy them. The sustainability of the industry is dependent mainly on having highly qualified and motivated employees with less labour turnover. Government has introduced many welfare facilities for the Sri Lankan who work in foreign countries because they bring foreign exchange to the country. However, the employees of the local garment industry should be given highest priority to meet the challenges, since they too bring foreign exchange indirectly through exports.

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