

**DIAGNOSTIC STUDY
JEAN MANUFACTURING CLUSSTER, BELLARY**

1. Description of the Cluster:

1.1 Geographical location:

Bellary, popularly known as Jean capital of India is situated at 320 kms from the state capital of Karnataka, Bangalore and 54 kms from Guntakal, an important railway junction in Andhra Pradesh. Bellary is a district head quarter. Bellary district is situated along the mid-eastern border of Karnataka. Western part of Bellary district is hilly and rich in iron ore deposits. Bellary district falls under semi arid zone with dry climate and the average rainfall is 636 mm/annum. Temperature ranges from 13 Celsius during December to a maximum 44 degree Celsius in summer. Agriculture, horticulture, animal husbandry and mining, paddy processing are the other important economic activities at Bellary other than garment manufacturing. Bellary is the second important center for manufacture of ready-made garments in Karnataka.

1.2 History :

History of garment industry in Bellary dates back to First World War period. "Darji" community with its native skill in tailoring migrated from Maharashtra to stitch uniforms for the soldiers stationed at Bellary. After the withdrawal of troops, they started manufacturing uniforms to the school children, which was once famous for its perfection all over the country. With the change in fashion and dress culture of men in India, they started manufacturing trousers for men mainly Jeans during early 70's. The industry took the noticeable growth only during last two decades.

1.3 Product:

The cluster mainly manufactures men's casuals like jeans and formals made of Khakis, Chinos, Gabardine Cordrayal and polyester /cotton/viscose blends and half pants for boys. Very few manufacture pants for ladies and girls. Recently three manufacturers have started manufacturing shirts for men but they are very much in the nascent stage. Garments manufactured at Bellary have got very poor image for its quality, design and finishing. Because of its inherent deficiencies it is unable to get reasonable price in the market.

1.4 Core Cluster Actors:

1.4.1: Merchant Manufacturers:

Merchant manufacturers are the nerve lines of the cluster. They procure order for the trousers and them get manufactured through various sub-contractors. They purchase fabrics required for making the trousers either from the local fabric suppliers or from the sub-dealers in Bombay and give it to the garment-stitching units after cutting the fabric as per the patterns available with them for the different sizes.

Very few have merchant manufacturers have the in house manufacturing facilities. But it is not sufficient to meet at least 50% of their requirements. Others are only outsourcing their entire requirements. Trousers received are sent for washing or bleaching and dyeing as per the requirements. Washed / dyed garments are sent back for ironing after trimming the threads. Ironed garments are labeled and packed by these merchant manufacturers, after inspection before dispatching them to their customers. Even ironing of the trousers is outsourced by most of the merchant manufacturers. It is estimated that there are around 160 merchant manufacturers in the cluster.

Flow diagram for the production process appear as annexure –1

1.4.2: Sub – Contractors for garment making:

Most of the garments making units are functioning in the houses of the owners or in slightly bigger premises. Very few units have the facilities to undertake the entire CMT (Cutting Machining and Trimming) work under one roof, because of their limitation to invest in high value machines like eye buttonholing, bar tacking, feed of the arm which are costing from two to six lakh rupees. It is estimated that only 50 units in the cluster have such machines. The total number such stitching units who do subcontracting to the trader-cum- manufacturer is estimated around 500.

1.4.3 Washer and Dyers:

Washing and dyeing is another important operation in the production, which is mostly outsourced. Cotton trousers like khakis, chinos require only washing before finishing. Terry cotton, polyester /cotton/viscose blended trousers require neither washing nor dyeing. Denim clothes, which are available only in indigo blue color require bleaching and dyeing to make the color demanded by the market. There are 45 washing and dyeing units in the cluster.

1.4.4 Finishers:

The washer man communities who traditionally undertake the ironing of the garments controls the finishing work at the cluster. They are scattered around the town. Some have preferred to put their units at the doorsteps of the merchant manufacturers to avoid transport. Many of them are using the age old coke iron boxes while some of them are using electrical iron boxes at the instance of the merchant manufacturers who provide such facility in their own premises. Others are using age-old coal iron boxes.

1.5 Other Cluster actors:

1.5.1 Fabric suppliers:

Fabrics manufactured from various leading textile mills from Bombay, Hyderabad, Paddi are stocked by the local suppliers for the timely supply to the merchant manufacturers. It was learnt that most of the fabric suppliers prefer to bring the fabric to Bellary which are out dated in design and the stock lots from the mill depots which did not move for long period for various reason as the merchant manufacturers demand only the low value fabrics.

Most of the merchant manufacturers prefer to source the fabric locally for the reason of their convenience to get the required quantity and color with out any stipulation of the minimum quantity to be ordered and the extension of credit facility. There are 25 such fabric suppliers

1.5.2 Accessory Suppliers:

Accessories like pocketing clothes, buttons, labels and threads are available locally. Although the merchant manufactures say that there is no dearth of supply, they admit that they have to depend up on the source of supply from Bombay or Bangalore if they want to source good quality accessories and labels. It is estimated that there are 15 such suppliers.

1.5.3 Dyestuff and Chemical Suppliers:

There are around 10 Chemicals and Dyestuff suppliers who meet the requirements of the dyeing and washing units and extend credit facility to retain the customers with them.

1.5.4: Machinery Suppliers:

Nearly ten indigenous sewing machine manufacturers 'Usha', "Singer' 'Panther', Darby', 'Perry' have their dealers at Bellary. But there is no dealer for the supply of modern garment manufacturing machines. Lack of interest by the garment manufacturers to invest in new and modern machinery was quoted as the reason for non-opening of their branches at Bellary by such machinery delayers.

Lower cost of the machines and spare, availability of servicing facility locally were quoted as the reason for their preference to indigenous machines by the garment manufacturers

Machineries required by the washers and dyers are sourced from Bangalore, Bombay, and Delhi.

1.5.5 Machinery Repair Service provider:

Technicians are avilable locally to service the indigenous machines. Two garment manufacturers who have few imported modern sewing machines are depending up on the technicians from Bangalore for servicing them. Washers and dyers are also not facing problem for getting their machines serviced locally.

Current Cluster map of Bellary appears as annexure - 2

1.6 Local Institutions:

1.6.1 District Industries Centre (DIC):

District Industries Centre is the only organization, doing some contribution for the development in the cluster by extending loan under PMRY, providing training for the

rural artisan and women under VISWA, YESHASWINI apart from granting subsidies, issuing certificates for the SSI units under the administrative control of Ministry of Industries and Commerce, Government of Karnataka.

1.6.2 Centre for Entrepreneurship Development of Karnataka (CEDOK):

CEDOCK is an organization promoted for conducting entrepreneurship development programme, creating awareness among the unemployed, women and providing training for the existing entrepreneurs apart from preparation of project report, prospective development plan and potential survey report at taluk and district levels. It is an autonomous body under the control of Ministry of Industries and Commerce of the Government of Karnataka having its head quarter in Dharward, a nearby town. An official designated as Deputy Resource Person has his office at the premises office of the DIC, Bellary and works in close co-ordination with DIC.

1.6.3 Department of Handlooms and Textiles:

Department of Handlooms and Textiles of the Government of Karnataka has an office of the Assistant Director at Bellary. But the department is now concentrating only on the issues relating to handlooms and power looms. There is no co-ordination or exchange of information between the Department of Handlooms and Textiles and other agencies at Bellary which have so far taken some initiatives to develop the jean manufacturing cluster.

1.6.4: Syndicate Institute of Rural Entrepreneurship Development (SIRD):

SIRD at Bellary is one of the five institutes set up by the Syndicate Rural Development Trust promoted by Syndicate Bank for the purpose of providing training and guidance for the unemployed youth for self-employment. SIRD is at present providing training on tailoring, automobile servicing, plumbing and electrical wiring. But the training provided in tailoring is on a conventional method; it is not suitable for making garments under the industrial manufacturing process.

1.6.5 Bellary District Chamber of Commerce and Industry (BDCCI) and The Bellary KIADB Industries Association (BKIA):

These are the two prominent industrial associations at Bellary. BDCCI is more than 40 years old and BKIA is more than a decade old. But these associations do not have organic linkages with the garment industry. No one from the industry has representation in the board or executive committee of these associations nor do they have any say for taking the industry's cause to the appropriate authorities. So far these associations have not taken any initiative to develop the industry.

1.6.6: Bellary Dress Manufacturers' Association (BDMA):

Merchant manufacturers in the cluster formed BDMA during the year 1977. During its existence BDMA was playing an intermediary role to settle the disputes between its members, representing issues relating to sales tax to State government, apart from settling the issues relating to payment of wages for the workers and piece rates for the sub-contractors. It is defunct now.

1.6.7: Bellary Jean Washers Association (BJWA):

BJMA is an association formed by the washers and dyers, primarily to negotiate the charges to be collected from their services from the merchant manufacturers during the year 1999. But it did not even hold regular meetings during the last three years. Other than a workshop for treating the effluents from the dyeing units conducted in association with DIC and Karnataka Cleaner Production Center, Bangalore, the association took no other initiative. This association also is defunct now.

1.7 Current Institutional Linkages:

Small Industries Development Bank of India (SIDBI), Bangalore took the initiative to develop the cluster under National Programme on Rural Industrialization (NPRI) programme during October 2000, through CEDOK. During the last two years two training programmes to improve the pattern making and design development and exposure visit to other cluster to have exposure on the benchmarking manufacturing practices were conducted. Expertise of the National Institute of Fashion Technology (NIFT) and BDS provider were availed for conducting these programme. One BDS provider visits the cluster once in a quarter to follow-up with the units, which implemented the suggestion made earlier.

Current Institutional Matrix appear in Annexure-3

During the interventions efforts will be made to make the linkages with the support institutions and the cluster actors.

- NIFT-Bangalore: For product and design development programmes
- ATDC-Bangalore; For providing technical assistance for running the training institute for the shop floor workers in garment making
- Textiles Committee: For testing, calibrations and other technological interventions
- CEE: For providing technical assistance to establish cleaner production technologies, energy and resource conservation techniques and treatment of effluents
- SITRA & ATIRA: For extending technical assistance to improve the processing techniques and treatment of effluents from the dyeing units
- SIDBI & KSFC: For extending financial assistance for the infrastructure development and common facility centers
- CMAI & FKCCI: To submit the issues and problems relating to the industry to the decision and policy makers
- Zilla Panchayat & DIC: To provide necessary infrastructure and financial assistance for running the training institute for the shop floor level workers
- AEPC: To provide support for the export related activities

2.Value Chain analysis:

The value chain analysis for three major variants in the trousers, which the cluster mainly produces at present, has been done to understand the difference in the process of production.

*Jeans and casuals – (Annexure 4)

*Cotton formals – (Annexure 5)

* Formals made up of polyester cotton/viscose blends – (Annexure 6)

It would be seen from the above there is not much of value difference in terms of labor and other inputs other than the value of fabric used. The other important variation in the production process is bleaching and dyeing of the denim fabric to produce the colors required by the market. While cotton formals require only washing, terry cotton/polyester/viscose blends do not require any further processing other than finishing and packing.

It can further be seen the value of the product goes up only due to the high profit margin fixed by the traders. Higher rate of rejections and return of goods due to poor workmanship, soiling and discounts to be allowed for moving the non moving goods due change in fashion and styles were quoted as the reasons for the need to have such high profit margin.

Good scope to make value added products like wrinkle free, microbial free, odor free, and stain guard trousers exists through up gradation of the technology level in processing and finishing.

3.Problems identified:

Problems currently faced by the cluster are as follows.

3.1.Issues relating to production:

3.1.1 Inconsistency in quality:

Non-uniformity in quality of the products manufactured is the major problem the merchant manufacturers are facing to day. Since the garment is passing through different manufacturing houses, no sub-contractor is taking responsibility for the quality of the stitching made. There is no system in operation to monitor and control the quality of goods produced.

3.1.2 Low productivity level:

The garments are manufactured in houses of the owners of the units or in slightly bigger places mostly by their family members or by the unskilled laborers. Therefore the productivity level is very low. Use of the second hand indigenous sewing machines, is another reason for the low productivity level. There is no commitment among the such sub-contractors to keep the productions schedule.

3.1.3 Poor washing and dyeing technologies:

Technology level in the washing and dyeing units are very old. Entrepreneurs and supervisors in the industry do not have any formal education in processing techniques. No records are kept or efforts being made to control the quality of the good processed or optimum utilizations of chemicals and resources used. The other

important reason due to which the cluster has got poor product image is the non-availability of proper technology to improve the dyeing and processing technique.

3.1.4 Poor finishing and packing facilities:

Good finishing and packing are adding value for the products. Unfortunately the cluster is in the clutches of traditional washer men community for finishing (ironing) the garment. They still use the coke iron boxes. Some of them use the electric iron boxes provided by the merchant manufacturers in their premises. The technology in use is age old. Interviews revealed that although the merchant manufacturers are aware of the draw back and the need to have their own finishing units to improve the technology level, they are afraid to do so because of the political clout the community has got in local politics.

3.1.5 Attitude of the workforce:

Indiscipline at the workplaces, lack of commitment in work, frequent absenteeism, lack of skill, non-availability of supervisory level workers were the reasons quoted by the merchant manufacturers for their reluctance to have their own manufacturing facilities.

3.2 Issues relating to marketing:

3.2.1 Seasonality in demand:

Products manufactured from the cluster have got demand only during the festival season, starting period from October – February when major festivals like Dusshera, Deepawali, Ramzon, Christmas and Shankaranthi take place. Non availability of continuous orders for the product and their inability to absorb the fixed overheads during the off season were quoted as the reason by a section of the merchant manufacturers for not going for their own manufacturing facilities.

Sub-contractors who undertake job work for the merchant manufacturers lay-off the workforce during the off-season. Therefore there is no certainty that the labor who worked in the previous season and got experience will join when the next season starts. This leads to cyclical problem of not having skilled labor for work..

3.2.2 Undercutting among the fellow merchant manufacturers:

Low pricing is used as the strategy used by many of the small merchant manufacturers in the cluster to capture the market. Merchant manufacturers who have very low production capacity and undertake the manufacturing activity through their family members are able to avoid sales tax and other overheads easily. They prefer to supply the garments at very low as compare their fellow suppliers. This leads to unfair competition. Therefore other merchant manufacturers are compromising the quality of the raw materials used to reduce the cost of production. Ultimately the cluster is suffering from poor product image.

3.2.3 Competition from other clusters:

The cluster is facing competition from the goods manufactured by other ready-made garment manufacturing clusters like Calcutta, Bangalore, Ahmedbad, Delhi and Indore. All merchant manufacturers in the cluster unanimously accept that the level of quality; design and finishing by their competitors are good as compared to the garments manufactured in the cluster. They also agree that the prices offered by them are very competitive. Enquiries revealed that the cost of manufacturing the trousers at Bangalore is comparatively cheaper by Rs.20 –30 per piece as compared to the cost of manufacturing at Bellary, due to its low productivity level. Some of the merchant manufacturers are thinking to out source their production from Bangalore.

3.3 Taxations and Regulations:

3.3.1 Excise Duty:

Government of India has imposed excise duty on ready-made garments on the turnover exceeding Rupees One crore (US \$ 0.2 million). Since the merchant manufacturers are struggling to establish their market based on low value product, they feel that the excise duty would increase their cost by 12%, if their turnover goes beyond Rupees one crore limit. Therefore they are reluctant to expand their business beyond one crore.

3.3.3 Labor welfare regulations and interference from the government agencies:

Many of the merchant manufacturers informed that increase in number of employees might compel them to pay ESI, PF and other terminal benefits, which in turn will increase their cost of production. As they are suffering from competition from supply of low value products from the fellow manufacturers it was not advisable to expand their operation or to establish in house production. Others quoted frequent inspection from number of government agencies and the need for submitting various returns and compliance of various rules are the reasons for not going for expansion of their business operations.

4 Issues observed:

4.1 Production and technical issues:

4.1.1 Poor raw material qualities:

Since the manufacturers are competing with each other to reduce price they are compromising on the quality of fabrics and accessories used. Manufacturers prefer to use old stocks, rejected lot or out of fashion stocks, which are almost 50% cheaper than fresh lots. Local fabric dealers justify that they prefer to bring such fabric, because the demand from the local merchant manufacturer is only for such fabrics. Chemicals and dyestuff used by the washers and dyers are no exception. Un remunerative charges offered by the manufacturers were quoted as the reason for use of low quality chemicals and dye stuff.

4.1.2 Limited production capacity:

Sizes of the many of the sub-contractors garment making units are small and tiny. They are unable to invest to expand and modernize their units. Seasonality in demand is another reason quoted by majority of the sub-contractors as the reason for non-expansion. Because of such limitation they are unable to meet the peak season demands

4.1.3 Inability to keep delivery schedule:

Because of the limitation in the production capacity and non-adherence of delivery schedule by their sub-contractors, the merchant manufacturers are unable to keep their delivery schedule to their customers. Few leaders in the industry feel that although they are having very good order position and demand from their customers because of their quality and design, they are unable to execute them because of their limitation to manufacture and deliver in time. They do not have any control or influence over their sub-contractors to investment for expansion and supply. Therefore few manufacturers have started shifting their bases to Bangalore.

1.4 Longer production cycle:

Merchant manufacturers take 45 days on an average, to pack the garments from the day of sourcing the fabric. Since the value addition is only doing CMT (cutting, making, trimming) on the fabric sourced other than washing and dyeing, it is too longer period taken for production. Good scope exist to reduce the production cycle and inventory level.

4.1.5 Non diversification of product:

Even after decades of its existence the cluster has not seriously attempted to diversify the product for which market is good potential like children garment, shirts for men, and ladies wear.

4.1.6 No new design or product development:

Although the success of the garment industry purely depends up on its orientation towards the change in fashion trends, no efforts have so far taken by the cluster to develop new designs or products due to lack of technical and design support.

4.1.7 Lack of awareness about the need for testing and quality control:

Importance of testing to control the quality and its benefits are not in the minds of the manufacturers. The fabric suppliers and the processors catch them in between the arguments, when the disputes for the poor quality of the product arise

4.1.8 Non availability of quality accessories locally:

There was no complaint about the availability of accessories locally. However the merchant manufacturers admit that they have to source them only from Bangalore or Bombay when they need good quality of accessories..

4.1.9 Absence of system in operation for production and material control:

No record or system in place to keep track of the production, labor or materials used, waste, rejection, stock etc. Success or failure of the business is measured in terms of the profit or loss made at the end of the financial year when the annual accounts are closed. They do not have the knowledge of job or batch costing which would reveal the profitability for each order or batch to exercise necessary control when the next order or batch is taken for production.

4.1.10 Old and obsolete machineries:

Machineries employed in the cluster are indigenous and second hand machines. Their productivity level is 50% lower than the modern industrial garment making machines. Because of such machineries there is no uniformity in quality.

4.2 Issues relating to marketing:

4.2.1: Poor product image:

Image for the products manufactured by the cluster is very poor, because of its poor quality, design and inability to supply the goods in time. To overcome such image problem some manufacturers prefer to open an office at Bangalore to impress up on their customers that their products are manufactured from Bangalore and not from Bellary.

4.2.2 Price sensitive low income, rural market segment:

Merchant manufacturers are targeting to supply the low value products to low income earning, price sensitive, rural market segment, which makes the demand for the product seasonal.

4.2.3 Incorrect marketing strategy:

As there is no other USP among the merchant manufacturers, they adopt extension market credit as the strategy to capture the market other than lower pricing and under cutting.

4.2.4 No systematic approach to articulate demand:

There are number of 'brands' in the cluster which resembles the logo or name of the popular and established 'Brands'. Individually the members in the cluster do not have technical or financial capacity to create demand by competing other popular brands Few merchant manufacturers are advertising locally but their reach is very limited

4.2.5 Limited product and market segment:

Non-identification of new product and new area for marketing the products is another limitation for the growth of the cluster. The cluster is now marketing its product only

in the Southern States apart from neighboring Maharashtra and Goa, although opportunity exists in other states too.

4.2.6 Competition from cheaper imports:

The cluster is not free from the threat of open market competition after implementation of the Agreement on Textiles and Cloth (ATC) under the provisions of WTO. Good quality of fabric and better design are invading the market at competitive prices. Unless the cluster prepare itself to source the fabric directly from such countries and cut down its production cost by all possible means it will be difficult for the cluster to survive.

4.3 Issues relating to financial support system:

4.3.1 Reluctance to use regulated money market:

Investment in the business mainly comes from own resources of the owners or through borrowing from the friends, relatives or from other known sources. Because of easy and immediate delivery of funds, less documentation procedures they prefer borrowing from unregulated money markets even though the interest rate is comparatively high. Non maintenance of proper books of accounts is another reason for their inability to borrow from the organized banking sector.

4.3.2 Extension of credit by the fabric suppliers:

Fabric suppliers extend credit facility up to 90 days for the interest rate of 20 –24% per annum. Credit beyond 90 days attracts more interest rate without any outer limit for settlement. Merchant manufacturers are able extend credit to their customers for period up to days because of such easy availability of market credit.

4.4 Issues relating environment:

4.4.1 Discharge of effluents from washing and dyeing units:

Effluents are discharged from the dyeing and washing units with out any treatment. It requires immediate intervention and awareness building. Technological support to, demonstrate appropriate treatment of the effluent is the need of the hour.

4.4.2: Energy and resource conservation:

Many washing and dyeing units use firewood as the fuel for the boilers. Loss of heat during the transmission in the absence of proper insulation is quiet common in the industry. Good scope exists to demonstrate cleaner production technologies and conserve energy in the washing and dyeing units.

4.5 Issues relating to infrastructure facilities:

4.5.1 Non-availability of buildings to set up the factories.

4.5.2 Non-availability of support institutions to provide training, testing, design inputs, product development, technology and advisory services.

4.5.3 Non-availability of facilities and support services required to make export.

4.5.4 Frequent power cuts and higher tariff

Based on the above issues the reality drawn appears as anneure-7

5. Market scope for the product:

Size of the Indian ready-made garment industry is estimated around Rs.50, 000 Crores.

India has two very big and distinct markets. One of them is very homogeneous and consists of the very mobile urban population which is bound to become increasingly brand conscious. They prefer to go for branded products, which give them certain amount of trust and credibility.

The other market is very large but relatively less mobile and highly heterogeneous. Consumers in this segment still believe in conventional way of shopping. Though the percentage of the mobile population is increasing very fast, a bulk of volume of business

comes from the non-mobile, non-westernized and non –English speaking, and rural and middle-income sector.

Share of the National and International Brands like Levi's, Lee, arrow, Van Heusen, Zodiac, Louise Phillipe, Park Avenue, Colour Plus are estimated around 6% of the market. Rest is dominated by relatively less popular brands like Shapes, Killer, Clipper, Black Berry, Newport, Mustache, Hoffmen, Numero Uno etc and unknown brands from unorganized sector.

Indian garment industry is expected to grow at 15% every year in terms of value. The trend has been very clear in the metros, mini metros and larger cities .Now it is catching even in the semi-urban and rural areas. Therefore market scope for the product from the cluster is very good provided the cluster responds to the changes required in the technology level, improves the quality and introduces new designs and products to cope the competition.

The share of the cluster in the overall market is negligible therefore there is good scope for the cluster to expand its market provide it is able to come out of the problems and deficiencies faced by it at present.

6.Cluster performance:

The cluster is growing in terms of value and quantity. But it is slow as compared to the over all growth of the industry because of its inability to exploit the market potential as explained earlier. Responses from the merchant manufacturers were mixed when the question relating to their growth rate was asked. While some feel that they have very good order positions and are growing steadily between 10 –15% annually, many units have been closed because of lack of orders. It was understood that the achievers who perform well are those who introduce new varieties quickly as compared to others and who deliver quality products. Similarity among the non achievers is their inability to respond to the market and their strategy to manufacture only low priced low quality products.

When comes to percentage of profit, all the respondents are unanimous in their reply that their profit margin is coming down every year because of stiff competition. They are able maintain the profit level by increasing their turnover. The annual turnover of the cluster is estimated around Rs. 100 Corers (US \$ 3 million) and it provide employment for 10, 000 people.

Merchant manufacturers are contended with their performance and achievements in the business. Because of such attitude the cluster is unable to grow, compete and innovate. . Although opportunities exist for the cluster to execute volume orders for the exporters at Bangalore and to make direct export, it has not been exploited.

7. Cluster Vision:

Improving the present market share and unit value realization of the product by upgrading the quality, design, human resources skill and technology level; by diversifying the product; by establishing in house manufacturing facilities in accordance with social and environmental norms and by exploring the opportunities in overseas market.

8.Strategy:

Strategy for developing the cluster will be changing the mindset of the important cluster actors viz merchant manufacturers first to establish in-house manufacturing facilities to improve the quality and delivery of the goods, which are the main bottlenecks for the development of the cluster, followed by creation of net work among them to undertake developmental initiatives and creation of necessary infrastructure. Technical support for improving the quality design, productivity and linkages with the support institutions will be provided when the industry is able to absorb such inputs, after establishing the in-house manufacturing facilities. Consortium for marketing will be created once the cluster is capable of delivering the quality goods in time. With the improved manufacturing and infrastructure facilities efforts will be made to explore the overseas market.

9.Future cluster map:

The future cluster map briefly describes the facilities that are likely to be created and the linkage that are likely to be established to provide continuous support on design & product development, testing and quality control and other technological inputs apart from the consortiums to be created to bridge the gaps identified and to reap the economies of operation to sustain in the open market competition.

The future cluster map is depicted as annexure -9

10.Action Plan for re-structuring the cluster:

Creation of necessary infrastructure is being the basic need for developing the cluster thrust will be given for creating necessary infrastructure and support services by creating network among the cluster actors and by motivating them to take lead role to get necessary technical inputs to improve the productivity, quality, design and

to establish necessary linkages with the technical support institutions before making efforts to improve the market position.

Therefore the action plan will hover around:

10.1 Creation of ambition:

- Interactions
- Providing technical knowledge
- Personality development
- Information sharing
- Exposure

10.2 Awareness building

*Business environment in which the cluster is going to operate

*Need for testing and quality control

*Need for compliance of various statutory regulations relating to social, environment and quality

*Need for creating productive assets to canalize the investment and expansion

10.3 Firm level interventions:

- Establishing in house manufacturing facilities to improve productivity and uniformity in quality.
- Imparting technical knowledge for production planning, cost reduction, line balancing, inventory control, design development, testing and quality control
- Training to upgrade the skill of shop floor workers pattern masters
- Motivational programmes for the employees to reduce absenteeism, enforce discipline and co-operation
- HRD programmes for the entrepreneurs to harness their skill in planning, decision making, finance, production, labor, material and marketing management
- Establishing linkages with BDS providers and technical institutions for technical support in production, design, pattern making and marketing
- Establishing network and co-operation among the merchant manufacturers for order sharing, sourcing of raw material and expertise
- Sourcing technical know how to improve the existing washing dyeing techniques and to make value added products
- Training for operators and supervisors in the washing and dyeing to upgrade their skill and to improve the quality
- Providing technical know how for proper treatment of effluents discharged from the dyeing and washing units
- Training for testing of chemicals and dyestuff
- Technical assistance to reduce consumption of energy fuel and power
- Exposure visits to other competing clusters to understand their expertise and competence
- Exposure visits to other competing countries and benchmarking production facilities.
- Exposure visits to technological and garment fairs

10.4 Cluster level interventions:

- Revival and strengthening of the industry associations
- Establishing training center to train shop floor level employees in modern garment making machines
- Establishing common facility center with latest technology in washing, dyeing and finishing
- Establishing testing center, design center, resource center and machinery service center
- Developing infrastructure with common amenities like stand by power generation facility, canteen, workers' rest room, crèches, common effluent treatment plant to establish the manufacturing facilities as per social and environmental norms
- Market survey for diversifying and expanding the market for the product
- Promotion of Common Brand
- Image building for the cluster through joint participation
- Establishing linkages with various apex trade promotion bodies like CMAI, FKCCI to represent the issues relating to the industry to the policy makers
- Establishing linkages with various support institutions, developmental agencies, technical and educational institutions
- Providing training and establishing system to enable the association to employ e-commerce

10.5 Proposed activities for the year 2002

The following activities are proposed to be carried out during the year 2002

- Exposure visit to other garment manufacturing cluster and bench marking production facilities
- Awareness programme on impact of WTO to garment industry and need for testing and quality control
- Revival of the industrial associations for the merchant manufacturers, washers and dyers
- Capacity building of the associations
- Starting of labour training institute to provide training in modern garment machines for the shop floor level workers
- Starting of machinery service center
- Training of the trainers for the institute
- Assessment of the detailed technical need for the washing and dyeing units