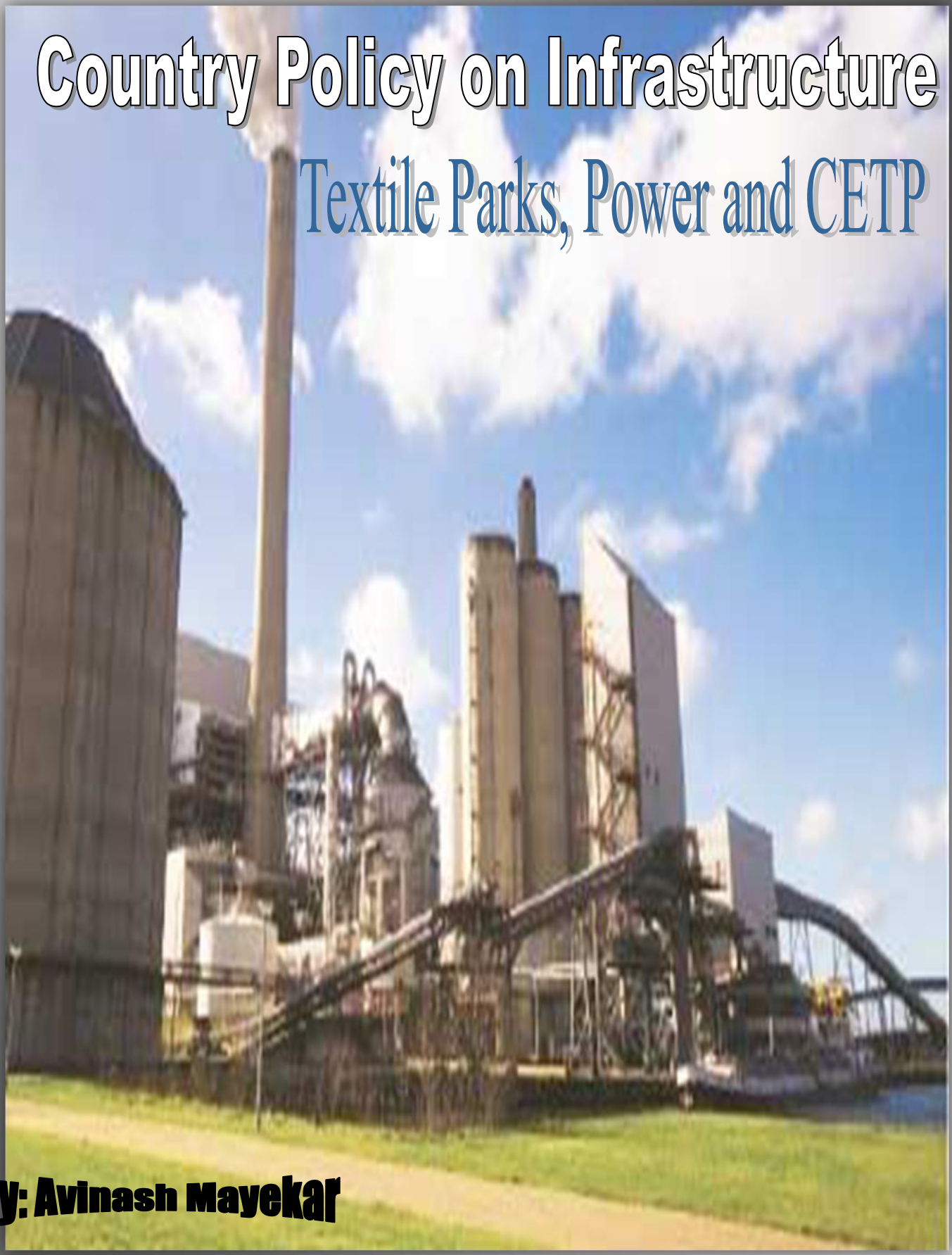
Country Policy on Infrastructure

Textile Parks, Power and CETP



By: Avinash Mayekar

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- **Introduction**

Textile industry in India is one of the major sectors of Indian economy largely contributing to the growth of the country's industrial sector. This industry being one of the major sectors contributing to export earnings has its own importance. However, in order to nourish this industry there has to be facilities like road network, power, water and other infrastructural aspects. Somehow, Indian Government has yet not focused on policy framework required by the industry and hence it is being created by the industrialists of themselves. However, it means delays in getting land parcels, many obstacles in liasioning with Government bodies, a lot of bottle necks in the systems and procedures.

In order to give major thrust on development of textile industry in India, now Government has come out with schemes like SITP, which should create good infrastructure with state-of-the-art facilities as per the guidelines.

- **Scheme for Integrated Textile Park (SITP)**

The 'Scheme for Integrated Textile Parks (SITP)' was launched by merging two schemes, namely, Apparel Parks for Exports Scheme (APES) and the Textiles Centre Infrastructure Development Scheme (TCIDS) with the primary objective to provide the industry with world-class infrastructure facilities for setting up their textile units and facilitate textile units to meet international environmental and social standards. The total project cost shall be funded through a mix of Equity/Grant – from the Ministry of Textiles, State Government, State Industrial Development Corporation, Industry, Project Management Consultant and Loan – from Banks/ Financial Institutions.

The Government of India's (GOI) support under the Scheme by way of Grant or Equity will be limited to 40% of the project cost, subject to a ceiling of Rs. 40 crore. GOI support under the Scheme will be generally in the form of grant to the SPV unless specifically decided to be equity. However, the combined equity stake of GOI/State Government/State Industrial Development Corporation, if any, should not exceed 49%. However, GOI support will be provided @90% of the project cost subject to a ceiling of Rs. 40 crore for first two projects in the States of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura, Sikkim and Jammu & Kashmir.

- **The prerequisites for SITP:**

  - The Integrated Textile Park (ITP) should have at least 50 units
  - The ITP should have maximum of 8 SPV members
  - The land area should be minimum 100 acres
  - The aggregate investment in land, factory buildings and plant & machinery by the entrepreneurs in ITP shall be at least twice the cost of common infrastructure proposed for the ITP
  - The main promoters in the ITP would be Industry Associations/Groups of Entrepreneurs
  - At each ITP, Separate Special Purpose Vehicle (SPV) shall be formed with the representatives of

    - Local Industry
    - Financial Institutions
    - State Government
    - Central Government

The scheme targets industrial clusters/locations with high growth potential, which require strategic interventions by way of providing world-class infrastructure support. An ITP will have components like Land, Common Infrastructure, buildings for common facilities, factory buildings for production purposes and Plant & machinery with flexibility in setting up to suit the local requirements. The project cost will cover common infrastructure and buildings for production/support activities (including textiles engineering, accessories. packaging), depending on the needs of the ITP. The following are the elements of the project cost eligible for the grant:

Factory Buildings & Common Infrastructure
• Factory Buildings in case it is individually owned • Compound wall • Roads • Drainage • Water supply • Electricity supply including captive power plant • Effluent treatment • Telecommunication lines etc.

Common Facilities
• Testing laboratory (including equipments) • Design centre (including equipments) • Training center(including equipments) • Trade center/display center • Ware housing facility/ raw material depot • One packaging unit • Crèche • Canteen • Workers hostel • Offices of service providers • Labour rest and recreation facilities • Marketing support system Backward / forward linkages

- **Advantage India**

Abundant availability of raw material (like cotton, silk, jute etc.), growing domestic market, investor friendly government policies and availability of skilled manpower makes India an ideal location for investment in textiles. The major factors affecting the viability of the textile park are availability of raw material and labour in the vicinity, well-equipped infrastructure in and around the park, availability of market and investor friendly government policies. Hence while selecting a location for a textile park; we need to consider the following parameters:

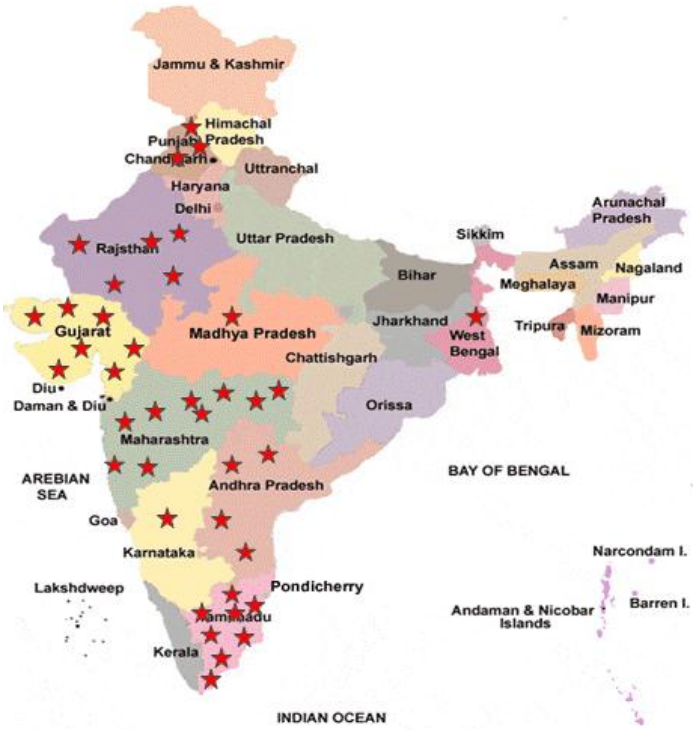
- Logistics – well connected by road, rail, port and air
- Abundant availability of raw material
- Availability of skilled labour and supervisory staff
- Nearness to targeted market (E.g. textile processing units planned in the textile park around Bangalore to supply processed fabrics to the garment manufacturers in Bangalore), well connected by

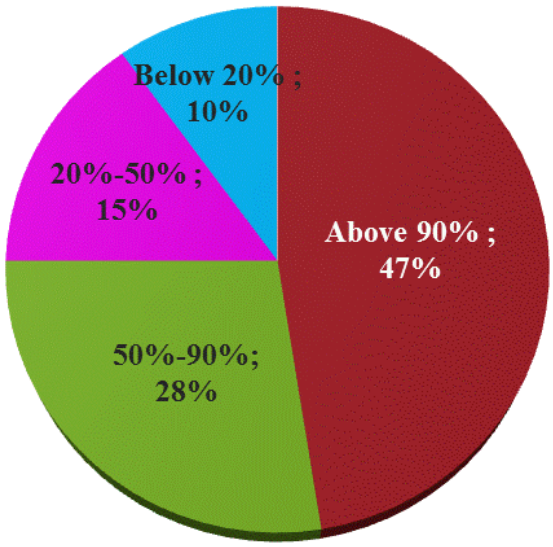
Presence of back-end resources, targeting suitable customers, customer profiling, catering to customer needs, creating state-of-the-art infrastructure are some of the differentiating factors for a textile park. Some of the strategies to be adopted to create a techno-economic viable textile park are

- Conducting market research globally and domestically to understand the current demand-supply situation, assess any gaps in demand-supply, target new market segments and identity key growth areas, key product segments & key business requirements
- Creating state-of-the-art infrastructure with facilities matching the international standards
- Determine the product mix of the park with appropriate land location & its details, location analysis, arriving at the most beneficial investment and understand the overall requirement of infrastructure like CETP, power, water, marketing hub and other facilities
- Mapping the quality of infrastructure provided by the competitors against the price offered by them and positioning ourselves to be competitive

- **Existing parks under SITP:**

Till date 40 parks (Locations of which are shown in the map of India below) have been sanctioned under the 11th Five Year Plan of which 24 have already started operations and have attracted investments of over Rs.18,880 crores. Below is the graph showing the grant in percentage received by the 40 textile parks.





The 40 ITPs is estimated to have an investment of Rs. 18,425 Crores with combined project cost of around Rs. 4,486 Crores and annual production of Rs. 33,964 Crores. The grant sanctioned to the ITPs is around 1,385 Crores with Rs. 825 Crores of grant released to these ITPs. The total no. of entrepreneurs or units in the ITPs are 1,893 and the total employment generated in the park is 6,16,388 (Direct: 2,82,576 & Indirect: 3,33,812).

Government has sanctioned Rs. 2,100 crores to set up 21 new textiles wherein ITPs would leverage an investment of over Rs. 9,000 crores, provide employment to nearly 4 lakh workers. Of the 21 units approved, 6 are in Maharashtra, 4 in Rajasthan, 2 each in Tamil Nadu and Andhra Pradesh and 1 each in Uttar Pradesh, Gujarat, Tripura, Himachal Pradesh, Karnataka, Jammu and Kashmir and West Bengal.

Some of the established ITPs are Islampur Integrated Textile Park (Maharashtra), Latur Integrated Textile Park (Maharashtra), Gujarat Eco-Textile Park (Gujarat), Palladam HiTech Weaving Park (Tamil Nadu), Karur Textile Park Limited (Tamil Nadu), Madurai Integrated Textile Park (Tamil Nadu), Komarapalayam Hi-tech Weaving Park (Tamil Nadu), Baramati Hi-tech Textile Park (Maharashtra), Doddaballapur Integrated Textile Park (Karnataka) and Vraj Integrated Textile Park (Gujarat).

Some of the solutions proposed for the Government are to understand requirement of the industry, reserve land parcels at appropriate places for Textile parks, and develop schemes for mini parks of about 25 acres which can be developed for specific requirements and to support the industry on merits.

- **Common Effluent Treatment Plant (CETP)**

The textile processing industry which takes care of value additions in the fabric is characterized by the high volume of water required at various stages of processing and the range of chemicals required for the various processes. These processes generate tremendous amount of waste, the nature of which depends on the type of textile facility, the processes and technologies being involved, and the types of fibres and chemicals used.

The waste generated from these processes needs to be disposed of. If this waste is not treated properly, it can cause serious damage to the environment. This necessitates the need for effluent treatment plant wherein the effluent generated in the process house can be treated to such a level that it can be disposed of without causing any damage to the environment.

The best case study to emphasize the significance of effluent treatment plant is the Tirupur textile industry. In Tirupur, the effluent generated from the bleaching and dyeing units was discharged into the River Noyyal & River Nallar. The two rivers are natural drainage courses that only carry water in the monsoon period. During the remainder of the year, they used to carry only industrial effluents that stagnate in the riverbeds and percolate into the groundwater. As a result, the groundwater quality around the cluster of bleaching and dyeing units was polluted to such a level that it was unfit for domestic, industrial and agricultural activities.

Due to public pressure (especially the farmers), the court intervened and closed the dyeing units several times since 1997. Recently, in June 2005, this took an ugly turn, when the Chennai High Court ordered complete closure of the dyeing units and slapped crores of rupees of compensation to clean the environment on the dyeing units. This created a furore in the whole textile industry as this lead to more problems when the demand for the processed fabrics was increasing.

However, at present all Dyeing & Processing units are using 100% Zero Discharge technology and units in Tirupur created and generating more than 2000 MW in Wind Mill Energy. Both Common Effluent Treatment Plants (CETPs) and Individual units are following this ZLD technology and are meeting the requirements of the trade and servicing the requirements. More than 50% of total units are running, 494 Dyeing units and 162 bleaching units were there before closing down due to court order. There are 16 CETPs under operation out of 18 now.

This is the picture of River Noyyal at Tirupur which looks visibly cleaner downstream of Tirupur (inset) after the city's dyeing factories were shut in February:

CETP is the concept of treating effluents by means of a collective effort mainly for a cluster of small scale industrial

units. The main objective behind setting up of a CETP in a cluster is eliminating the need of effluent treatment plants in individual process house which has following advantages:

- Saving in capital and operating cost of treatment plants
- Availability of land at ease
- Disposal of treated waste water & sludge becomes more organized
- Reduced burden of various regulatory authorities in ensuring pollution control requirements

Some of the solutions are suggested to the textile industry for implementation of CETPs. The State Pollution Control Boards should prescribe standards for discharging effluent to CETP from each industry and enforce the same to achieve the designed inlet parameters of effluents at the CETP. Jar test should be conducted on daily basis to decide optimum dose. High TDS effluent should be treated in a proper manner, as it requires costly treatments. High TDS can be reduced at source i.e. controlling release of TDS contributing chemicals by adopting cleaner production technologies and recovery.

CETP operating agencies should engage expert consultants to advise them from time to time for proper operation and maintenance of CETP besides employing skilled manpower. Government should come out with CETPs at most of the State Industrial Development Corporations to facilitate good quality infrastructure. No industrial park should be allowed without CETP. Build–own–operate–transfer (BOOT) should be adopted for CETP as well. BOOT is a form of project financing, wherein a private entity receives a concession from the private or public sector to finance, design, construct, and operate a facility stated in the concession contract. This enables the project proponent to recover its investment, operating and maintenance expenses in the project.

- **Power Generation and Distribution**

Electricity is one of the major components contributing to the hassle-free operations of the textile units. Textile industry is bound to suffer if cost of power (diesel) increases or there is shortage of power. Shortage of power in textile cluster leads to load shedding thereby leading to drop in production. Small scale industries are unable to sustain in these conditions and this leads to the closure of the units.

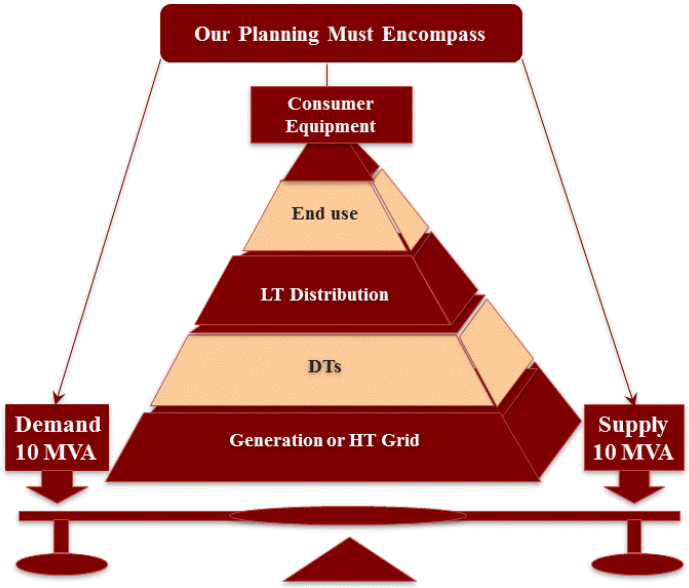
States like Tamil Nadu and Andhra Pradesh which are among the largest textile producing hubs of India have been facing power shortages. In Tamil Nadu, industry is losing about Rs. 300 Crores a day due to the fall in production, power holidays and other restrictions, and escalating costs due to the use of diesel generators.

Below is the table with power rate in different states with major textile industries:

States	Rs./Unit
Maharashtra	7.01
Punjab	4.95
Tamil Nadu	5.50
Rajasthan	6.25
Gujarat	5.00
Karnataka	5.50
Andhra Pradesh	3.97

The major costs incurred in the textile unit are costs of raw material, energy, process and labour. In today's situation, all these costs are increasing which in turn decreases the margin of the textile producers.

The combined net profit of BSE Sensex companies in the sector fell from Rs 5,166 crore in 2010-11 to Rs 1,845 crore in 2011-12, which is a decline of 64%. As cited by DK Nair, secretary general, CITI, the financial results of 287 textile companies listed on the BSE for 2011-12 have shown a sharp decline in net profits during the year compared to the previous year, despite a growth in net sales. This is indeed a worrying trend that shows a combination of increasing input costs and declining profits.



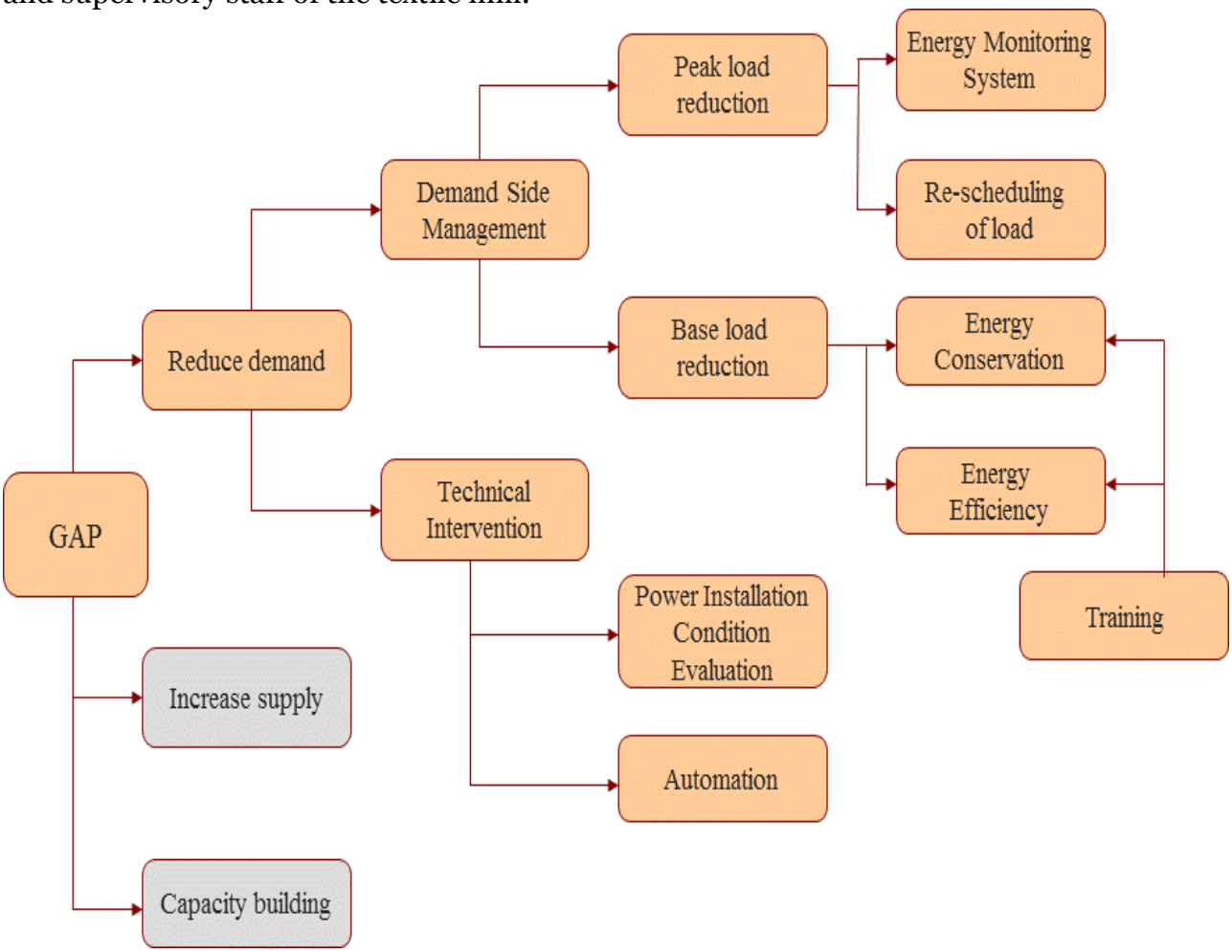
To balance our demand and supply of power, we must take into account the supply of power from the generation or HT grid to the specific machinery. We need to increase supply by selecting secure & uninterrupted power supply, checking the voltage profile and going for cost effective power. While planning the supply of power, we should also consider the cost of infrastructure required to bring the power from the grid to the factory premises, power losses and any other concern to the environment. We should reduce demand by monitoring and controlling demand, optimizing energy consumption, improving productivity, building capacity and training human resources.

Energy cost is based on two part tariff – fixed charges and consumption charges. Billing parameters are based on FAC charges, TOU charges, penalties/incentives and electricity duty. If we plot a load curve for the measured power data for entire day for a week, we

can observe from the graph that the power variations are with high troughs and crests which indicate fluctuations in the power received by the unit. The energy losses can be reduced by plotting the energy data against production and understanding the fixed energy consumption. One more graph can be plotted by plotting cumulative data of past 12 months of the production against cumulative data of past 12 months of the energy. With the help of these 2 graphs, power factor can be improved.

To understand the demand side of power, month wise data of maximum load (KVA), connected load (KVA) should be plotted in to a graph.

The actual gap regarding power issues should be identified. The gap can be decreased by increasing supply, building capacity and reducing demand. Demand can be reduced by technical intervention and managing the demand side. By evaluating the power installation condition and automating the equipment, the demand can be reduced to a certain extent. By reducing the peak load and base load, demand side can be managed. Peak load can be reduced by incorporating energy management system and rescheduling of load. Base load can be reduced by conservation of energy and efficient use of energy. Base load reduction can be obtained by imparting training to the workers and supervisory staff of the textile mill.



Renewable Purchase Obligation (RPO) has been enforced wherein certain % of total power consumed by Obligated Entities should be renewable energy based. If RPO is not complied with, then amount equivalent to the number of RECs at Forbearance Price should be deposited by Obligated Entity. For complying with RPO, three options are available:

1. Invest in Renewable Energy Power Projects
2. Purchase Renewable Energy Certificates
3. Purchase Merchant Power

Some of the solutions are suggested for power problems to be jointly considered by textile industry and government bodies. Textile industry should be given continuous and quality power supply. Government should ensure textile industry to have no power cuts and shut downs with uniform rates across country. Various sources of power and new energy development techniques should be explored. We should continuously monitor production and energy consumption and understand our needs.

- **Conclusion**

Looking at all these concerns, we need to devise country strategy for India taking in to consideration all variables and it should only be for betterment of the textile industry. The infrastructure requirements are huge and we need to consider various land parcels all equipped with infrastructure either for textile parks (or mini parks of 25 acres each) or through various industrial corporations. Government should give major emphasis on clearing all statutory requirements on fast track basis

- ITP scheme: ITP scheme is industry friendly, easy to implement and can generate interest in the industry. Hence this scheme should continue and generate investment and employment opportunities in the Indian textile industry. It also may have a module of land parcel of 25 acres which can serve as a Mini Textile park which can be created by existing textile entrepreneurs for their own expansions or for giving it to others as well.

- CETP: Government should be completely involved in developing infrastructure. CETP should be made mandatory in any industrial park/ textile hub. CETPs may operate on BOOT principal

- Power: Special focus on power sector needs to be given to fulfill industrial need which is 24x7 especially for textile industry. Entrepreneurs should focus on various methodologies to reduce power tariff. Renewable Energy Obligation could be made mandatory in the coming days.

Image courtesy:

1. Clctextilepark.com

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