

## Need of Adoptive Textile Research centre needed in India

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### Abstract

Industry driven applied research to adopt the Technological developments happening in National and International Innovation center all over the world. Example, China could succeed in Silk mass production and is number one in the world due to high level research by scientist in china. All the scientist did TOT (Transfer of Technology - lab to land) successfully because they worked hand in hand with farmers. Similar, success story in rice and other agriculture products happened because Scientist worked in the field with farmers to produce high yielding agriculture products. First they addressed problem of the food for all in the Chinese revolution. Since the country is huge they created plan for the development of the other Industrial zones in different province by creating huge infrastructure for Auto, Steel, Textile, Cement, Electronic Goods, computer IT etc. Phased manner they built Chinese Industrial corridor with Industrialization.

### Theory they adopted

- 1) Food for everybody in work place: This is required in rural India to develop itself into technical human capital
- 2) Discipline in work place.
- 3) It concentrated on developing Infrastructure Electricity, Water and Transportation to connect supply chain of the business in the entire world.
- 4) Developed all major universities for the basic & adoptive research with Industry and academia participation.
- 5) Large scale production was the main theme of Industrial revolution in china to capture world market
- 6) Now they are focusing on creation of brand, quality and value addition.
- 7) Their focus is on Green Technology, energy conservation and solar power for automation.
- 8) Sustainable development,

### India need investment in research

China focus is on developing new innovative products and creation. Their R and D investment is about to match R& D investment of the developed world. Investment in R and D will be 600 billion by 2018. Global world is facing biggest transformation since the start of Industrial revolution in 18<sup>th</sup> century. China is gearing to change itself into manufacturing based industry to Innovation based products development Industry. They are working for the slogan "Created in china" in all segment of the Engineering field. Participation of the Industry in academia is major missing link in development of the country. Following stake holders need to be part of research. Industry, Academia, government and society to be part of the research and development in each segment of the manufacturing

### Textile Research and Education programs

Education and research programs in India gets poor response from the students as well as Industry Viz all branch of engineering. It is pathetic as far as textile research & Institutes are concerned in the country. I am of opinion that Textile Technology program receives poor response, in all universities in India. This is so because they are unable to compete with other Engineers in Academics and Innovation. Since there is less scope for R and D and Innovation in Textile Industry in India. Further there is no proper linkages and support for the International exposure to innovation and research in textile Engineering. Textile Research and education needs special attention by Textile Industry and government since it is second largest Textile Industry in the country. Textile Industry needs modernisation program to survive in the Textile business. Technology up gradation is needed in decentralised sector whose contribution is 90% of the total contribution. India needs huge no of technical personnel to work as Entrepreneurs in modernising to produce new value added products. As on date highly qualified technicians are not available for the Industry to work on production floor. Fresher's are not ready to work on the production floor in the corporate Textile Industry also. Attrition of the textile graduates is very high in Indian Textile Industry they go for service and sales segment of the textile Business. Students easily migrate to other engineering specialisation in advanced country for higher studies. Acute shortage of the technical personnel's to work on production floor both Corporate and Decentralised sector. This is mainly due to poor encouragement to Research in Textile field in India by the Industry. Technological gaps in Industry and academia is major hurdle in poor Technical ability and skills to work in the present Industry by the graduates coming from present Institutes. Few institutes are economically not viable and have no full time teachers to run the program. Important factors to be considered in developing research are

- 1) Human capital development with Educational programs

- 2) Industry Participation in Engineering education
- 3) Mentoring new breed of Entrepreneurs to connect corporate Textiles with decentralized sector to work in Tandem to develop Textile Industry.
- 4) Formation of Industry clusters to support and identify R and D institutes' mandate.
- 5) Link the textile cluster with good basic vocational & educational programs for different category of the people in the society

#### **Size of the investment**

Textile research needs investment of Rs 500 crore in each of textile cluster for basic and adoptive research with clear objective of production of New Innovative Product, design to make creative Textiles and value added Textiles. Industry driven research is a must in association with academia to boost Technology up gradation in the Textile Industry. Large scale manufacturing of the quality Textiles in decentralised sectors is the need of the country. India needs to encash benefits of Technical textiles application in developing the society at large especially in rural India by producing large quantities of the Technical Textiles for development of Agriculture, Industry, Infrastructure, Automation, and health care products etc. India needs to create production facilities and Entrepreneurs to complete value chain in Garment manufacturing for entire world as well as local domestic market. Production of Ready garments for the various segments

#### **Needs to be done to rope in Industry/Academia/Research**

There is a necessity to initiate research in following area

- 1) Design and development of the Textile Machinery to produce quality products.
- 2) Need for the development of the shuttle less weaving sector to provide quality Textiles, linked to readymade garments complete value chain
- 3) Textile wet processing Industry needs up gradation in decentralized sector to help traditional products and develop new products with value addition in traditional sector in India.

Institute will facilitate any number of R&D programmes involving different organisations specialising in diverse parts of the textile and apparel industry. Primarily, though, it will concentrate on three types of scheme. There will be platform research programmes open to interested parties including universities, institutions, and trade and industry associations. These should have the support of at least two industry sponsors willing to contribute no less than 10 per cent of the project's costs. In addition, private companies can take part in collaborative research programmes, and companies or consortia can request and pay for consulting and research services to assist them in specific areas. New R&D centre will provide plenty of scope for local and overseas experts from different academic backgrounds and with expertise in many different fields. "Since there will be a great number of ongoing projects, we can continuously look for experienced professionals and project managers to be involved in developing the Textile Industry.

#### **Main focus for R&D**

The following areas are the main focus of research and development in Textile Industry sector

- New materials, textiles and apparel products.
- Advanced textile and production technologies.
- Innovative design and evaluation technologies.
- Enhanced industrial systems and infrastructure.

#### **Example for development of the decentralized sector**

Cotton spinning capacity of the country could be better utilized if we can convert cotton yarn into garment to cater to the needs of the world requirements. Development of the value chain & supply chain by adopting appropriate Technology and R and D to develop world class brands. For this we as a country need to develop Technical human capital. Hence country needs to work for the development of the Human capital to work for the development of the following. Hence I request to develop research Centre in following area. Here, Surat needs to create and improve value chain by Research in Man Made Fibre as well as other natural fibres. Need based Diversification in Business and New products for National and International market. Market, Marketing and Market Development research needs to be established to help support Industry in the decentralised sector. We have not made any inroads into the development of the manmade fibre industry in different applications mainly due to lack of R and D on par with Developed countries like Japan, Taiwan, Korea, China etc.

#### **Need for developing Research Centre in rural India**

- 1) Development of the research center in Rural India by setting up Industry and academia hand in hand to create new world class products by involving all the Stake holders to develop world class business ventures. Professional ethics and sustainable development of the society
- 2) Create an opportunity for youth to become Technical manpower to work for the Industry. Technical manpower is sparse in all manufacturing sector in engineering field. Talented personnel will never join Industry and R and D in India. Honest living cannot be made by this person, because of his aspirations in life. R and D career is a big boon in developed world. Best talent is getting opportunity to work
- 3) NMIMS has developed world class MPTP campus in Shirpur mainly to create and employable Technical business Managers to develop economy of the Shirpur district Dhulia rural India. This Institute has developed socio economic development programs in the region to link and provide opportunities for the local educational institutes to groom and train their children to become competent person in all walks of science and technology in different field of engineering. Country needs this type of investment in rural India to help create reverse migration of the population. Hence, stop migration of the talented persons to metros by creating an opportunity in rural area.
- 4) Advantages we have as NMIMS is our Management programs are very well connected with National and International Business schools and Universities with strong alumina working in major Industries & universities all over the world.
- 5) Advantage of MPTP campus is it is attracting talented students from the Metros to study. Thus, talented pool of students networking with local people is really helping local personnel's to get good exposure to learn well and become relevant in national competition.

Shri Amrish R Patel Chancellor NMIMS Deemed to be university has taken up herculean task of developing MPTP campus in savalde District Shirpur. MPTP has created world class Engineering Institutions as an integral part of the Textile Industry hub in Tande Shirpur.

- 1) This is a boon to cotton growing farmers. MPTP campus has BTech MBA Tech Engineering and Pharmacy specialization with world class facility in infrastructure and laboratory.
- 2) Centre for Textile Functions (CTF) which is integral part of the Textile Industry has started unique program in 2007 offering Diploma with emphasis on practical. CTF has established class rooms on production floor and senior Industry technical personnel's mentor the diploma students. 4 batches are working in the Industry all over the country with 100% placement. I am very happy to place on records students with SSC and Diploma in Textiles are offered pay package of Rs 6.00 Lakh per annum corporate Textile Industry. CTF has initiated BTech Degree program from this academic year 2014 /15.

Shahlon India being the leading textile players in the country, I feel that your next level of growth will be driven by focus on R&D and innovation. Please take the lead in developing this centre of excellence. CTF –Shahlon can work jointly with your Industry support. Participating Industry and academia could be decided for the above R and D depending on the interest and programs. This centre should be part of the rural economy of the country to provide employment to youth. We shall adopt few villages in Gujarat to develop rural economy. With this view in mind, let Fair deal group set-up a research institute or Centre of Excellence in association with the academia, government and the industry associations. CTF NMIMS can take a role as an academy to connect the entire Major Textile Industries Innovation centre to proposed research Institute under your leadership. I have discussed this with Shri Amrish R Patel Chancellor of NMIMS. He has great pleasure in inviting you and your Team of Technical heads to visit MPTP campus Shirpur. Mainly to have a look at

- 1) Irrigation project Rain water harvesting ( Shri Amrishbhai's Shirpur pattern in Rain water harvesting )
- 2) SVKMS off campus center MPTP savalde District Dhule.
- 3) Textile Industry cluster

### Conclusion

These three things have changed economic structure of this part of the rural India. Let us create few more socio economic projects jointly with Textile Industry and government support to make unique model. We can take up such Model cluster Developments in Gujarat under this program. I want Fair deal to take lead in establishing this centre in Surat. Fair deal can Identify right technical personnel in the form of consortium and make this centre unique in the country. We need to do the team work. Shahlon can take a lead my best wishes for all Industry doyens in the Surat manmade textile Industry. On behalf of NMIMS Deemed to be university lets us jointly work for initiating this concept of "Industry& Academia driven world class research Institute" for development of the Textile Industry. Surat and Gujarat can take a lead in this.

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