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IMPACT OF CHANGING DRESS STYLE IN ENERGY CONSUMPTION:AN INDIAN PERSPECTIVE

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ABSTRACT:

India is well known for its diversity. The traditional Indian wear is incredible. Indian traditional wear had earned admirers around the globe. The craftsmanship and artisan work gains prestigious image to India. Due to its varied physical features and climatic conditions every state in India had its own style of dressing. for women. Worldwide popularity had been gained by Indian Saree. Due to the influence of foreigners traditional dresses have been replaced by western wear. Modernity brought many changes in women wear. Today, textile production is the world's second most polluting industry. The total greenhouse gas emissions from textile production currently stands at 1.2 billion tonnes annually. More than 60 per cent of textiles are used in the clothing industry and a large proportion of clothing manufacturing occurs in China and India. Both the countries rely on coal-fuelled power plants, increasing the footprint of each garment.(Source:Down to Earth). This paper reviews on change in Indian dress style with respect to change in their lifestyle. The current study aims to compare traditional wear with modern style of dressing in energy aspects. The main focus is to go through the Indian textile production, materials used, garment manufacturing industries and their impact on energy consumption and environment.

Key Words : Green House Gases emission, Energy , Traditional wear, Textile, Modern life style.

Introduction:

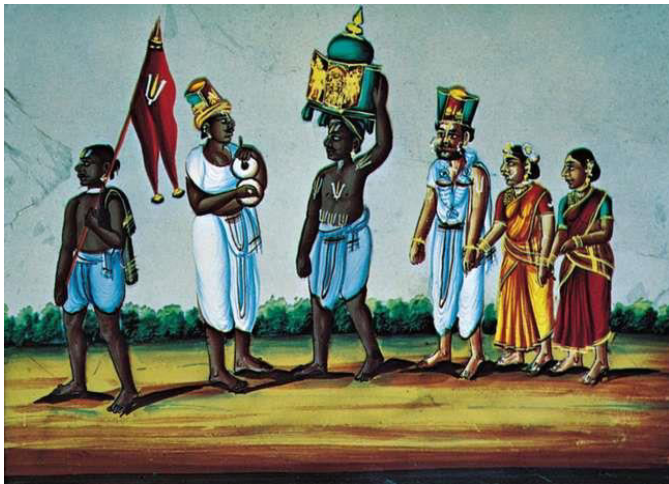
Clothing is one among the basic human needs. Depending on their choice it is considered as one means of communication. India had a special role in textile industry . Textile sector is one of the oldest industry in Indian economy. Unique ancestral handicraft techniques have been used in designing of clothes. India is one of the best country in modern supply chain of

textiles. Starting from cultivation of cotton to manufacturing clothes every step of textile processing was done in India. Even though India facilitate skilled labour at low cost textile manufacturers started using advanced and automatic technology, which had become a major source of energy consumption in textile industry. Advanced technology had impact on environment.

With the evolution of fast fashion Indian environment had great influence on energy consumption.

Background:

The Indus Valley people consisted of loin cloth for men wrap skirts and shoulder shawls for women, sandals made of cloth and wood and clothes made of cotton and woolen yarn.



Source: Britannica

In olden days Indians clothing was very simple. Most of the times it was untailed. Dhoti was worn by men. Above the waist the body remains bare and in cool weather they use a shawl and in hot conditions they wear a turban on head. Sikhs, and urban dwellers generally are more inclined to wear tailored clothing, including various types of trousers, jackets, and vests.

Indus valley civilization tended to be quite simple. The men worked outside often wore a loin cloth and women wear dresses cover most of their bodies. Occasionally they were depicted as topless. Fibres were often used in manufacturing textiles. Generally used fibres were cotton, flax,

silk, wool, linen, leather, etc. During Vedic period the garments worn were single cloth wrapped around the whole body. Uttariya was worn by both women and men. Cloth size and manner of wearing were different for both sexes. Poor people wore loin cloth as lower garment extended to their feet.

Historical evidences from the statue of Mother Goddess of Mathura show the stitched clothing of female. Ladies wore embroidered fabric during Maurya's period. Uttariya worn either thrown over or draped over the shoulders showing difference in wearing style. Cotton, Silk, Linen, wool and muslin were used as fibres during this period. Archaeological evidences on coins proved that ancient Indians wore dhoti wrap and tight fitted, half sleeved stitched shirts like kurtas.

During the period of Guptas Stitched garments were worn as a sign of royalty. Dancers wore clothes with many folds and swirling effects as evidenced from Ajanta Paintings. Most of the people wore cut and sewn clothes during this period. Clothing in the Gupta period was mainly cut and sewn garments. People started wearing long sleeved clothes and String attached blouses which starting consuming more clothes. In 8-10th century certain evidences prove that Ancient Indians wore kurta and salwars. Modern sari was evidenced through Alchi paintings which is an art of 900 years old.

Development of Dress style:

Luxury clothes were introduced during the Mughal dynasty included. Fibres were made with muslin. Mughals wore chudidar,

salwar, pajama along with a variety of ornaments. They had their own mark of clothing. Later [Rajputs](#) followed their own traditional life style. Rajput women wore transparent fabrics draped around their bodies. emerged in the 7th and 8th century as a new community of Kshatriya people. Rajputs followed a traditional lifestyle for living which shows their martial spirit, ethnicity, and chivalric grandeur. Women wraps their body with sari ending on right shoulder. Young Rajput girls wear pure cotton fabric as upper wear and lower a pajama. Widows and unmarried women wore Ghagras made of line satin, silk or organza and half sleeved upper ending at waist. Clothes undergo several changes during British rule. Europeans influenced Indian in dress style. Sherwanis were developed from combination of Indian and British style of dressing. There started the Western style influencing Indians. Clothing in Western style gained popularity in cities. The more-affluent and higher-caste men wore tailored shirts in Western style. Muslims, Sikhs, and urban dwellers wore various types of trousers, jackets, and vests. Later fashion industry had no boundary, Jeans, skirts, Tops, and many changes occurred with globalization.

Discussion:

Indian textile industry was very old and grown with human civilization. In 400 AD the silk was introduced in India and cotton traces were back to 3000BC. Depending on archaeological evidences and literature support the Clothing used was quiet and simple. Upto Mughal dynasty most of the

clothes used were unstitched these state that the energy consumption for clothing is very less Even though they wore tailored clothes they were hand stitched which demand no energy other than man power. This doesn't show any impact on environment. With the evolution of fast fashion and globalization there is a mass consumption of clothing. Due to the Industrial revolution usage of synthetic fibers like nylon was imparted in textile goods. Different types of materials like rayon, polyster entered changing the design of dresses and lead to consumption of energy. Supporting literature shows that the effect of dress style on energy consumption is very less in olden days.

Cloth manufacturing includes different cycles such as Fiber Production, Dyeing and Finishing and Yarn Preparation. These four largest demand more with drawal of water. In olden days water is required only for production of cotton. Later it was processed with the help of man power and simple machinery which contribute less intake of water. Increasing demand for clothing now demand more water and energy consumption. This leads to resource depletion and pollution effecting the ecosystem. The fibre production stage extracts and process the fibres with the help of machines to get required fibres for clothing. These machines run with energy and the transportation of raw material and processing demand energy for fibre production. Yarn preparation stage include spinning of yarn from filament and staple fibres. Different spinning techniques demand energy. The transportation of yarn

also consumes energy. Fabric preparation includes knitting and weaving. Different techniques were used in knitting which demand more energy for preparation of fabrics.

Dyeing and Finishing undergo bleaching and dyeing for fabric finishing. This process include fabric dyeing done with dyeing machines. It demands a huge source of electricity. Assembly and distribution are the final stages in cloth manufacturing which include cutting and sewing of fabric and distributing to retails stores and end users. Cutting and sewing was done with automatic cutting and sewing machine which demand energy. Distribution to end users need transportation which leads to consumption of energy. Coal and natural gas are used to generate electricity. It shows an impact on environment. Countries like India, China are largest manufacturers which demand more energy for cloth manufacturing. Literature available shows Hard coal and natural gas had an impact of 60% to 70% on climate change in the process of Dyeing and Finishing. 23kg of GHG are emitted from each kilo of fabric every year as per early research. Packing and cleaning are further processes done with machines and require a huge quantity of energy. The textile industry is one of the major energy consuming industries and retains a record of the lowest efficiency in energy utilization. About 23% energy is consumed in weaving, 34% in spinning, 38% in chemical processing and another 5% for miscellaneous purposes. The main usage of electrical energy in the textile industry is in the manufacture of yam and

cloth, amounting to nearly 3/4th or 4/5th of the total power requirement in a textile mill, where as hardly 15 to 20% of electrical power is consumed for running various machines in textile wet processing. 1. One bath bleaching may enable to save. (interscience.in)

Conclusion:

Clothing consumption had increased in modern fashion industry. Changing dress style demand more cloth manufacturers. Increased consumerism lead to impact on energy and environment. Well developed tailoring strategies may address the consumers but consumes a large portion of energy. Changed dressing pattern increase the Green house gas emissions and their disposal increases the huge quantity of Solid wastes in the environment. This current study examines consumption of energy at each cycle of cloth manufacturing. Hence sustainable clothing is essential and dress style should impart biodegradable fibres like linen. Promoting recycled fibres is another alternative to reduce climate change.

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