

IMPACT OF LEATHER INDUSTRIES IN UNDIVIDED VELLORE DISTRICT A BRIEF STUDY

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Abstract : Environment plays a pivotal role in the life of modern society which has been affected due to various activities in the name of industrial development. Not only single part of a country, but the whole world is under threat of environmental effect. In this connection, through this paper I try to place on record the impact of leather industries in Vellore District in Tamil Nadu. Thus this paper studies on the recent intensity of environmental impact because of thrashing of leather industries in the district. My study simply highlights (1) present world market for leather industry (2) role of India in the production and development of leather industry in world, (3) role of Tamil Nadu in domestic leather industry, (4) leather industries in Vellore district and its contribution in GDP of Tamil Nadu (5) the ecological changes being confronted by the district Vellore due to the increased establishments of leather industries (6) groundwater contamination in the district of Vellore due to effluents from leather industries (7) the remedial actions to be implemented for retrieval of the ecological health Vellore district. In form of reciprocation victimizing the atmosphere, any kind of development could not be accepted. On the one part of the country, while we are establishing a number of such industrial units, we are forced to face its impact on the other side. In particular, there are number of dangerous effluents are found in leather industries and Chromium is one among the most dangerous chemical effluents being found in leather industries. It not only affects the workers in leather industries, but also affects people in and surrounding area as well as contaminates the ground water in final stage.

Introduction: Environmental defect along with climate change is one of the major threats being confronted by the present society. Even though, the whole world are phasing towards next generation in technological upliftment, but the price given for such upliftment is unparallel. We can categorize the impacts due to establishments of various industries like, atomic plants, coal mining, and electricity generation through thermal plants, dying, fertilizers and other chemical industries and among them functioning of leather is also a lethal threats to the environment. I have taken the topic impact of leather industries in Vellore District because of the fact that Tamil Nadu is one among the seven states and the state of Tamil Nadu stands in first place is the country having 53% of total leather units in the country. In particular, the belong to the Vellore District which is the major hotspot of leather industry in Tamil Nadu and this district has been facing the impacts of leather industries over many decades.

1. PRESENT WORLD MARKET FOR LEATHER INDUSTRY

Leather is one of the most widely traded commodities in the world. The leather and leather products industry plays a prominent role in the world's economy, with an estimated global trade value of approximately US\$100 billion per year.¹ In 2016, world leather exports and imports totaled around US\$2 billion. The largest exporter and importer of leather goods were Italy and China respectively. It is a matter of positivity that leather industry plays significant role in economy of a country through employment and export earnings; but resulting pollution from tanning process causing severe environmental degradation. Many small tanneries in poorer countries cannot afford proper pollution control, so they discharge their waste directly into dump sites which affects ground water besides spreading contaminating air in and around the places of the industries. Effluence of chromium is the major pollutants which affects water and air and it leads to asthma, bronchitis etc. The workers and people residing near the place are the major victims of those diseases.

2. ROLE OF INDIA IN THE PRODUCTION AND DEVELOPMENT OF LEATHER INDUSTRY IN WORLD

As far as India is concerned, it accounts for around 12.93 per cent of the world's leather production of hides/skins. The country ranks second in terms of footwear and leather garments production in the world and accounts for 9 per cent of the world's footwear production. India's leather industry has grown drastically, transforming from a mere raw material supplier to a value-added product exporter. In 2016-17, total exports from Leather & Leather Manufactures recorded export value worth US\$ 5325.85 million. During April 2016-January 2017, the major markets for Indian leather products were US (15.69 per cent), Germany (11.82 per cent), UK (10.85 per cent), Italy (6.61 per cent), Spain (5.27 per cent), France (5.02 per cent), Hong Kong (4.71 per cent), UAE (3.69 per cent), China (3.16 per cent), Netherlands (3.01 per cent), Belgium (1.78 per cent) and Australia (1.44 per cent)².

3. ROLE OF TAMIL NADU IN DOMESTIC LEATHER INDUSTRY

70% of the Indian tanning capacity is in Tamil Nadu and about 40 % of the total export from India is from Tamil Nadu with approximate earning of Rs.10,000 crore with 2.5 million employment and major portion of leather products are manufactured only in Vellore District³. In India, Tamilnadu is the only state that enforced Zero Liquid Discharge on leather processing units. The major production centers of leather and leather productions in the state are Chennai, Ambur, Ranipet, Vanniyambadi, Perambur, Trichy and Dindigal.

4. LEATHER INDUSTRIES IN VELLORE DISTRICT AND ITS CONTRIBUTION IN GDP OF TAMIL NADU

The contribution of the district Vellore in GDP of Tamil Nadu is significant and is one among the top 10 contributors to GDP of the State, it contributes USD 3.8 billion in GDP of Tamil Nadu⁴. The district accounts for more than 37% of the country's leather export. In the past few years with around 3000 industrial units established with an investment of \$ 51 Million⁵. Some of the prominent MSME clusters are leather, textile and handloom & safety match industries. The district also has 12 large scale and 300 medium scale industries and majority of them are engaged in the leather production. The Vellore District has a dominant presence in the Leather and leather based industries. It accounts for more than 37% of the country's export leather and leather related products. Even though many large scale industries like, BHEL, EID Parry, Tirumalai Chemicals and Greaves, SAME-DEUTZ, TVS-Brakes India, Mitsubishi, Greaves Cotton, MRF, Kramski Stamping and Molding India Pvt Ltd., RSL Industries Ltd, Farida Shoes Ltd etc are functioning, there are 12,396⁶ micro and small Enterprises functioning in Vellore District and majority of them are being engaged in leather processing are thrashed with the entire district of Vellore.

5. THE ECOLOGICAL CHANGES BEING CONFRONTED BY THE DISTRICT VELLORE DUE TO THE INCREASED ESTABLISHMENTS OF LEATHER INDUSTRIES

The workers of the leather industries are the immediate victims to the changing atmosphere and the most dangerous part of modern tanning is handling chromium, which causes a myriad of ailments depending on how it is absorbed. If it merge with the respiratory systems of our body, it acts as a lung irritant and carcinogen, affecting the upper respiratory tract, obstructing airways, and increasing the chances of developing lung, nasal, or sinus cancer. Chromium normally is absorbed this way as fine particulate dust that is produced when both raw and tanned leathers are buffed, smoothed, and ground up. Chromium has been linked to increased rates of asthma, bronchitis, polyps of the upper respiratory tract, pharyngitis, and the enlargement of the hilar region and lymph nodes. The tanning industries in Ambur, Vaniyampadi, Pernampet and Ranipet of the Vellore District lead to both the environment of these areas and respiratory problems to those who are working. The primary environmental threat involves the dumping of solid and liquid waste that contains leftover chromium and other hazardous compounds. 40 per cent of tannery workers in this district have health problems because they are in direct contact with the chemicals.

6. GROUNDWATER CONTAMINATION IN THE DISTRICT OF VELLORE DUE TO EFFLUENTS FROM LEATHER INDUSTRIES

Groundwater contamination is prevalent in Vellore District due to the excessive number of leather industries in the district. It has become another major threat to the human community in the district. The process being undertaken by the leather industries leads for huge consumption of water along with dangerous chemicals like lime, sodium carbonate, sodium bi-carbonate, common salt, sodium sulphate, chrome sulphate, fats, oils, dyes etc. Contaminations of the groundwater lead to availability of unhealthy drinking water, limited quantity of water availability and other health issues. In addition to this, it is very sad that the existence of river Palar has become questionable because of water pollution by a cluster of tanneries which are distributed along its banks. Tannery industries in Tamil Nadu concentrated more than 70% tanneries are located in Ranipet, Vanaiyambadi, Dindigul, Ambur.

This industry is one of the major consumers of fresh water and most of the water is discharged as wastewater. The quantity of total wastewater discharged for 100 kg of skins and hides processed varies from 3000 to 3200 liters. Common salt is the biggest polluting material in the tanning industry. The amount of wastewater generated by the tanneries is approximately from 2.5 to 3.0 million liters per day, which in turn collected in irrigation lakes. Then the pollution penetrated vertically and makes it unfit for drinking, irrigation and for general consumption. According to a report, a sole tannery is capable of causing the pollution of groundwater in a scope of about 7 to 8 km in radius.

As per current analysis, this is observed that the groundwater get polluted, drastically because of industrial activities, because of which, water borne diseases has been seen which a cause of health problems a lot. The results of the study shows that the water in and around Ranipet industrial area is significantly contaminated. This indicates those groundwaters are significantly degraded and suffer from extensive salinization. It may cause laxative effects on health of the people consuming that water and it is not suitable for domestic purpose. The pollution from tanneries has caused irrevocable deterioration of quality of groundwater in vast area. Hence proper water treatment is required in terms of community health

7. THE REMEDIAL ACTIONS TO BE IMPLEMENTED FOR RETRIEVAL OF THE ECOLOGICAL HEALTH VELLORE DISTRICT

The effluents of the leather industries, usage of the chemical fertilizers for agriculture and small scale dyeing industries falls heavily on the quality of the drinking water. There are a large number of unorganized leather processing units are functioning in this district resulting to more contamination

atmosphere and groundwater. Therefore, it is the responsibility of the local administration for restricting the number of leather processing units in the district. It is pertinent to ensure the residential areas are located at adequate distance from the units. The discharge of waste water is high by these leather processing units and therefore there is a need for setting up of water recycling units with modern technology. Even though there are significant numbers of traditional processing methods, the present industries are only following the system use more amount of chromium and other chemicals. It would be ameliorative method, if the concerned authorities identify environment friendly tradition methods with limited use of water. It would not only reduce water contamination but also pave way for creating healthy atmosphere atleast in future.

Conclusion : Any development without health of community is not acceptable. Any kind industrial or economic growth after victimizing the life of the public will not provide any fortune to the nation. Therefore, we must understand that such kind of contamination is creating cascade effects to the present generation as well as the generations in future and there is a need to discover the traditional form of leather manufacturing and even the same should not be established in residential area. It is the responsibility of the local administration to ensure health atmosphere by monitoring the functioning of leather manufacturing units and reduction of dangerous chemical residues. I hope my paper will fetch the attention of the concerned authority and encourage them to design adequate modalities to save the district at least in future.

References:

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