

Positioning Indian Leather Industry in Global Landscape : Technology Way Forward

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India in Global Leather Sector

LEATHER INDUSTRY

- ❑ Respected source of high quality finished leather
- ❑ Valued globally for compliance to environmental & eco-norms
- ❑ Positioned strongly in mid and High priced product segments

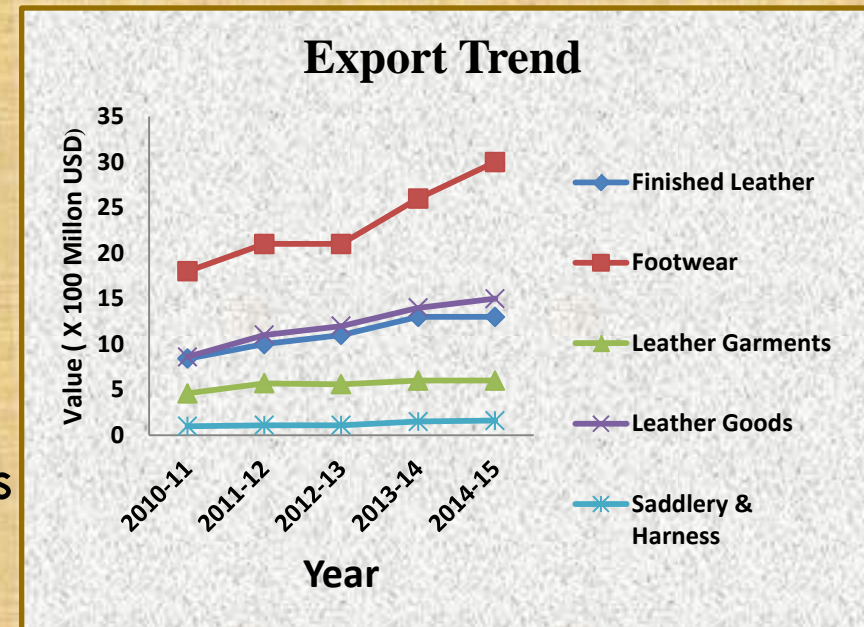
CSIR – CLRI

- ❑ Largest and Empowered Institute
- ❑ Strong talent and Knowledge base
- ❑ Non -pareil Partnerships

***Strong Academy - Research – Industry – Partnership
: USP of Indian Leather***

Leather sector in Indian Economy

- ❑ A large volume employer
- ❑ Strong source of export earnings
- ❑ Expanding product segments



***India in global leather :
Although small, progressively increasing in share***

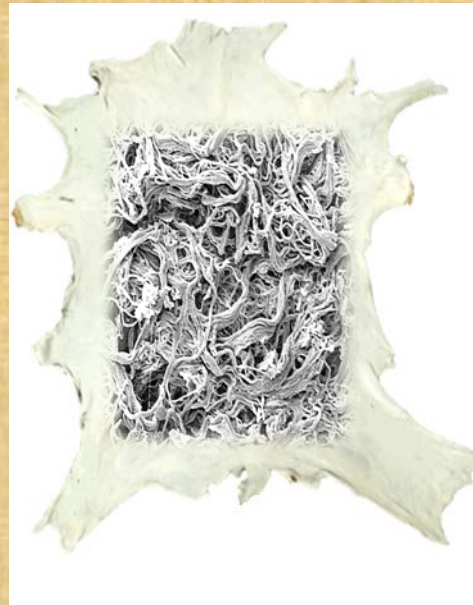
Leather: Transformational Changes

- # 1948 to 1990 - Transition from raw material to reliable finished leather supplier
- # 1990 - Gained recognition as quality leather product manufacturer
- # 1996 - When challenged on environmental pollution issue, unlike leather sector elsewhere in the world, Indian Leather Sector underwent intense transformation
- # India has emerged a prominent supplier of leather and leather products with environmental safeguards including ZLD
- # CLRI aided in this transformation

**Intractable issues
and initiatives by CLRI
for Sustenance and Growth**

Initiatives in Leather Processing

- ❑ Salinity Reduction
- ❑ Process intensification
- ❑ Maximizing area
- ❑ Substance building to minimize rejects



Leather: Changing features

✚ Positioning leather high in new material world with multi functional properties maximizing yield and value

❖ Leather with simple wearable sensors

❖ Intelligence

Chromic Materials

■ Reversible colour change based on external environment

■ From fashion to future utility

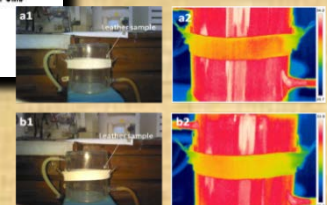
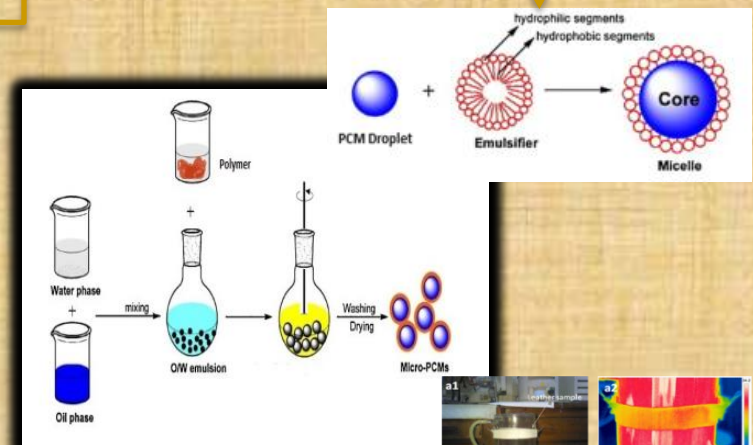
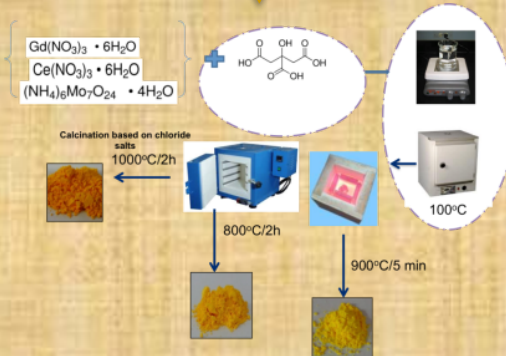
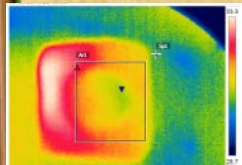
Chromic	Photo	Light
	Thermo	Heat
	Solvent	Solvato
	Gas	Gaso
	Electro	Electricity

Smart Leather – Smart Chemicals for Leather



Finishing

Retanning

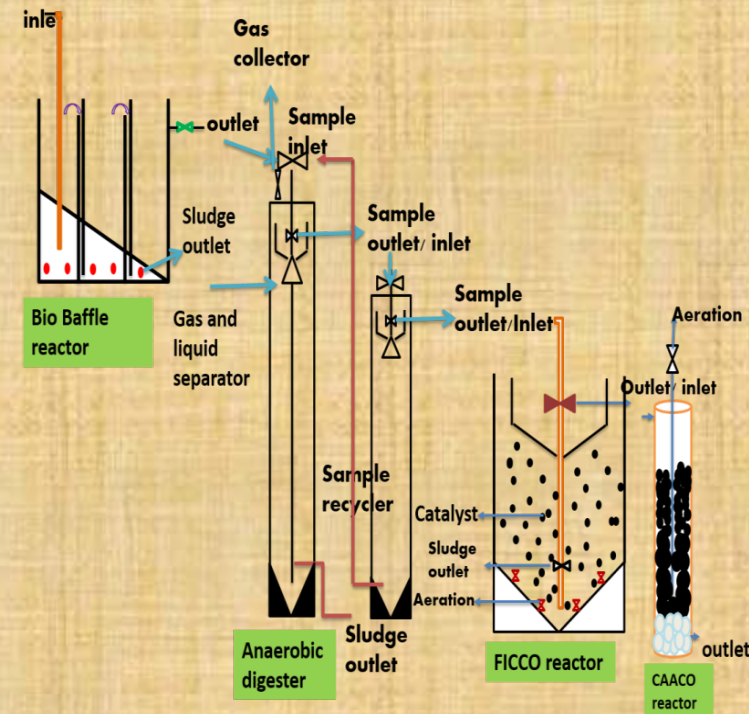


Initiative in Environment Management

- Wastewater treatment without sludge and greenhouse gas emission



- Scaling down the cost of compliance to Zero Liquid Discharge (ZLD)



Gaining more from skin apart from leather

- ❑ Health care products
- ❑ Plant growth promoter
- ❑ Poultry Feed
- ❑ Pharmaceutical Gelatin



*Sustenance and Spin – off:
A reality*

Strategy for Positioning Indian Leather Sector



**Blending leather
with material
supplements for high
volume market**

**Emerge prominent
player in Niche –
genuine leather
market segment**

Changing global trends

- ❖ Demand for leather like materials would increase
- ❖ Production of leather would register marginal decrease as supply of raw hides and skins would degrease
- ❖ Leather in leather products would decrease
- ❖ Change in product segments and markets are imminent



Transformation to be initiated for Indian Sector

- Next Level transformation needed is to be a major player in global footwear sector and not a fringe player in volume space
- Indian Leather Sector plans a turnover of \$27 bn. This would call for a happy synthesis of blending leather and leather like material and leveraging technologies for footwear and other product sector
- Raw materials augmentation and choice of non-leather materials will gain significance

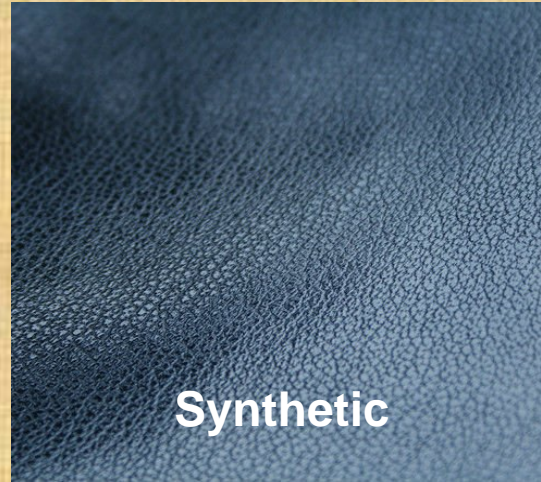
New sources and New blends

- Gainful utilization of marine & unconventional resources for leather
- Ability to mix creatively leather with other natural and man made fibers to be enhanced
- Material characterization of non leather material supplements to support product sector is necessary



Leather Genuinely

- ❑ Genuine all leather products would emerge as niche product segments



- ❑ Leverage on technology to retain natural characteristics meeting functional requirements.
- ❑ Focus on wet-end operations to ensure consistency and durability
- ❑ Enhancing consumer value space for Leather & Leather products is essential

Design as a strategy to enhance global share

☐ Design Mission for product sector

- Design studios
- Design incubators and
- Design entrepreneurs

Image building for leather sector and products

- ▣ Green Mark (Gold, Silver & Bronze)

- ▣ Compliance to safety and environment

- ▣ Environmental

- ▣ Restricted substance

- ▣ Energy

- ▣ waste Audits

- ▣ Genuine Leather Mark

- ▣ Facilitating domestic market by authentication

Skilling & Reskilling of workforce

- ❑ Different levels of skilling to enhance productivity
- ❑ Zero defect production system through reskilling



Technology Mission : Government Initiative

- ❑ Resource Augmentation
- ❑ Capacity Enhancement
- ❑ CETP upgradation
- ❑ Branding Support

Make in India Initiative

- ~ 2400 Crores outlay
- CSIR – CLRI implementing agency
- Major Technology dissemination & Empowerment activity

Needed Initiatives in Research

- ▣ Zero waste manufacturing
- ▣ Enhance yield and value by atleast 30%
- ▣ Cross barriers of substrates and species

Needed Initiatives by Leather Research & Industry together

- ▣ Advantages of technology and product credibility need to be leveraged for greater global share
- ▣ Technology to trade link to be strengthened
- ▣ Engage in Zero reject production system

LERIG need to be a regular event & be reviewed annually

THANK YOU